









Final

Supplemental Environmental Impact Report
Civic Center Project

SCH # 2015041054

City of Long Beach

rincon

October 2015

FINAL
SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT

CIVIC CENTER PROJECT

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Civic Center Project SEIR

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EXECUTIVE SUMMARY

This section summarizes the characteristics of the proposed project, and the environmental impacts, mitigation measures, and residual impacts associated with the proposed project.

PROJECT SYNOPSIS

Project Proponent

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Project Description

This Supplemental Environmental Impact Report (SEIR) has been prepared to examine the potential environmental effects of the proposed Civic Center Project. The following is a summary of the full project description, which may be found in Section 2.0, *Project Description.*

The design of the proposed Civic Center project follows the guidance of the Downtown Plan (the "Downtown Plan"), which was adopted in January 2012. The City prepared a Program Environmental Impact Report (Final EIR) for the Downtown Plan in accordance with CEQA (SCH# 2009071006). The Downtown Plan Final EIR was certified in January 2012. The Downtown Plan project area covers approximately 719 acres in Long Beach. The Downtown Plan provides development standards and design guidelines for an expected increase in the density and intensity of existing Downtown land uses by allowing up to: (1) approximately 5,000 new residential units; (2) 1.5 million square feet of new office, civic, cultural, and similar uses; (3) 384,000 square feet of new retail; (4) 96,000 square feet of restaurants; and (5) 800 new hotel rooms. The development assumed in the Downtown Plan would occur over a 25-year time period.

The SEIR tiers from the Downtown Plan Final EIR. In accordance with CEQA, the SEIR is a focused study of key issues that were not identified at a project level as part of the Downtown Plan Final EIR. Specifically, the SEIR addresses issues about which potential impacts were not known at the time of preparation of the Downtown Plan Final EIR or for which Downtown Plan EIR mitigation measures stipulate further analysis on a project-by-project basis.

The proposed project would involve demolishing existing buildings on the project site and developing a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. In total, the project includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. Existing buildings that would be demolished include the former Long Beach Courthouse, Long Beach City Hall, and Long Beach Main Library. Demolition of the former courthouse was studied in the Long Beach Courthouse Demolition Project Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014. Construction is anticipated to begin in June 2016 and last approximately seven years, ending by approximately July 2022. The project would export a total of 380,000 cubic yards (cy) of soil and import a total of 68,200 cy of soil.

Specific project components are summarized below.

Civic Block

The Civic Block consists of three major components:

- **Port Building.** The Port Building would be up to 11 stories in height (approximately 164 feet tall), utilizing a concrete frame structure of up to 240,000 gross square feet (gsf).

- **City Hall Building.** The City Hall building would be an approximately 270,000 gsf, up to 11-story concrete frame structure (approximately 165 feet tall) that includes office space for City staff and elected officials. Located around and between the City Hall and Port Building would be a 73,000 square foot (sf) Civic Plaza, which would include hardscape and landscape elements appropriate for larger spontaneous gatherings as well as planned events.

- **Port and City Hall Foundations.** The Port and City Hall buildings would share a common underground parking structure with approximately 509 new spaces of underground parking in a 2 to 2.5 level below grade structure that includes a below grade loading dock.

Construction on the Civic Block would begin once the former Long Beach Courthouse building occupying the site is removed.

Lincoln Park and New Library Block

Improvements to the Lincoln Park and New Library Block consist of two primary components: a new Main Library and a new Lincoln Park.

- **Main Library.** A new two-story (approximately 42 feet tall) Main Library of up to 92,000 gsf would be constructed utilizing a wood frame structure built on top of the existing Lincoln Parking Garage roof deck. Lincoln Parking Garage would be renovated to include enhancements to the existing parking structure necessary to support the Library.

- **Lincoln Park.** After occupation of the new Library, the existing Main Library would be demolished and the site would be redeveloped into a new Lincoln Park. The new Main Library would be located in the park. The open space area, not including the library footprint, would be approximately 3.17 acres.

Third and Pacific Block

The project would include construction of a seven-story, multi-family residential complex on this 0.9-acre lot. The structure would have up to 200 residential units and be up to 235,000 gsf. The complex would also include a parking structure with up to two levels below grade and up to three levels above ground partially wrapped by the residential units. Up to 250 parking stalls would be included in this structure and the building would be serviced by at grade loading facilities.

Center Block

After the New City Hall is operational, the existing City Hall structure would be demolished and a mixed use project would be developed in its place. The Center Block commercial development would include up to 580 residential units totaling up to 650,000 gsf and up to 32,000 gsf of retail and 8,000 gsf of restaurant space. A 200-room hotel may also be included as component of the project. An underground parking garage would service this parcel with up to 725 new parking spaces and the two buildings comprising the new development would be serviced by at-grade loading facilities. The building adjacent to Ocean Boulevard (the Ocean Lot) would be approximately 85 feet in height and up to seven stories tall. The building adjacent to Broadway Garage would be approximately 432 feet in height and approximately 36 stories tall.

Implementation of the proposed project would require the following approvals:

- Long Beach Planning Bureau will review, comment and ultimately provide recommendations to the Planning Commission on the site plan, zoning and subdivision entitlement applications outlined above.
- Long Beach Planning Commission will review in a public hearing and consider approval recommendations for the entitlement applications and CEQA review documentation.
- Long Beach City Council will review in a public hearing and approve any Statutory Development Agreements related to private development site plans and other subdivision and zoning actions.
- Long Beach City Council will review in a public hearing (a portion of which may be in closed session) and approve project's transactional documents.
- Long Beach Parks and Recreation Commission will review and approve the Lincoln Park Design.
- Long Beach Gas and Oil will review and approve the gas service utility design.
- Long Beach Water Department will review and approve the water service utility design.
- Long Beach Traffic and Transportation Bureau, Traffic Engineering Division will review and approve the street and intersection improvement designs.
- Long Beach Department of Public Works will review and approve the utility excavation plans, management of traffic plans and work related to improvements within the Public Right of Way.
- Long Beach Building and Safety Bureau will review and approve the building plans and issue permits.
- Long Beach Fire Department will review and approve the building plans for fire and life safety issues.

In addition to the above City approvals, the Board of Harbor Commissioners will review and approve their components of the project, including any direct contracts between Plenary-Edgemoor Civic Partners (PECP), the City's development partner, and the Harbor Department that are not a part of the City's agreements.

ALTERNATIVES

As required by CEQA, this SEIR examines a range of alternatives to the proposed project. Studied alternatives include the following alternatives.

No Project (Alternative 1) – This alternative assumes that the proposed project is not constructed on the site. It assumes that the site would continue in its current condition and that the existing City Hall, Main Library, Lincoln Park, vacant former Long Beach Courthouse, and associated parking structures and parking lots would remain. However, implementation of the no project alternative at this time would not preclude development of the site at some point in the future. The No Project Alternative is required by CEQA also suggested by the Office of Historic Preservation during the SEIR scoping process.

Downtown Plan Buildout of Civic Center Area (Alternative 2) - The Downtown Plan EIR assumed development of up to 800 residential units, 460,000 gross square feet (GSF) of office/commercial floor area, 64,000 GSF of retail space and 16,000 GSF of restaurant uses for the Civic Center area in the Downtown Plan traffic analysis. This alternative assumes the existing Main Library and Lincoln Park would be retained and Lincoln Parking Garage would not be renovated. In addition, this alternative does not include the construction of a hotel. As the existing Library and Lincoln Park would be retained, grading would be reduced in comparison to the proposed project to 11,200 cy of import and 350,000 cy of export and the construction schedule would likely be reduced to 69 months. Similar to the proposed project, this alternative would include demolition of the former Courthouse and City Hall.

Adaptive Reuse (Alternative 3) - This alternative considers the potential impacts of rehabilitating the former Long Beach Courthouse to be adaptively reused primarily as City Hall and/or municipal offices. This alternative responds to requests from the California Office of Historic Preservation and others during the SEIR scoping process to consider an alternative that would preserve existing onsite historic resources. This alternative also considers the demolition of the City Hall-Library Complex to occur by means other than implosion.

The Adaptive Reuse Alternative assumes the former Courthouse building would be rehabilitated for a government office use in conformance with the Secretary of the Interior Standards for the Treatment of Historic Properties. Rehabilitation of the building would be conducted in accordance with the California Historic Building Code, which allows for more flexible application of building regulations when impacting a historic resource. It is assumed that all identified character-defining features of the Courthouse building interior would be repaired and maintained in-situ to the highest degree feasible and in accordance with the Secretary's Rehabilitation Standards and Guidelines. Nonetheless, the majority of these spaces would be altered to accommodate government office uses.

RRM Design Group conducted a conceptual feasibility study assessment to re-purpose the former Courthouse building for a government office use. That study is included in Appendix H of the Long Beach Courthouse Demolition Project Draft EIR. In summary, the assessment concludes that the building would require substantial upgrades to the building's structural, mechanical, plumbing, fire protection, lighting and electrical systems. To meet disabled access regulations several upgrades to the building entries, lobby, circulation, parking, and restrooms would require substantial renovation. While the gross building area is approximately 277,000 square feet, the net useable area for office conversion would be much less. The estimated usable

office area would be in the 60 to 70 percent range or approximately 180,000 square feet. Seismic strengthening of the existing building structural systems is needed to remain habitable after a seismic event. The study estimated that the probable cost for the rehabilitation of the former Courthouse and conversion to municipal office use would range from $124,650,000 to $138,500,000.

Reduced Density (Alternative 4) - This alternative involves reducing the amount of residential, commercial, and office/library uses proposed for the project site by five percent. Therefore, this alternative assumes the construction of 741 dwelling units, a 190 room hotel, 484,500 GSF of office uses, 30,400 GSF of retail uses, 7,600 GSF of restaurant uses, and 87,400 GSF of library uses. It is assumed that the footprint of proposed land uses would remain the same; therefore, this alternative would utilize 3.17 acres of Lincoln Park as open space and would have the same overall grading as the proposed project. The construction schedule would be shorter than the proposed project and would occur over approximately 71 months.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative (Alternative 1) is considered environmentally superior, since it would avoid or reduce the proposed project's potential impacts in all environmental impact areas and would have no environmental impact. However, this alternative would not meet any of the project objectives (stated in Section 2.0, *Project Description*) because it would not carry out the proposed project, nor would it meet the Downtown Plan guiding principles for the Downtown Plan Area.

Of the remaining three alternatives, the Reduced Density Alternative, which would reduce the proposed project's potential impacts in aesthetics, air quality, GHG emissions, noise and vibration, and traffic and transportation, is the environmentally superior alternative. The only environmental impact areas for which impacts would not be reduced is cultural resources, for which the Reduced Density Alternative would have impacts similar to those of the proposed project. This alternative would meet the basic objectives of the project because it would allow for replacement of seismically deficient buildings, reduce public safety hazards, locate the Harbor Department headquarters in the Downtown Plan Area, redevelop the Civic Center mega-block, redevelop the former Courthouse, improve connections between the new Civic Center and greater Downtown, redevelop the Main Library, revitalize Lincoln Park, cap the City's ongoing maintenance costs, increase energy efficiency, provide affordable housing, connect to surrounding businesses and residential uses, and activate the perimeter streetscape. However, because the Reduced Density Alternative would involve a reduction in the total amount of residential, office, and commercial uses developed, it would meet the project objectives to a proportionally lesser degree than the proposed project.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if any). Impacts are categorized by classes. Class I impacts are defined as significant, unavoidable adverse impacts which require a statement of overriding considerations to be issued per Section 15093 of the *CEQA Guidelines* if the project is approved. Class II impacts are significant adverse impacts that

can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the *CEQA Guidelines.* Class III impacts are less than significant impacts.

Table ES-1
Summary of Environmental Impacts,
Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
AESTHETICS		
Impact AES-1 The proposed project would alter site-specific visual features by replacing existing buildings and land uses, but would not substantially damage scenic resources, including those related to a scenic vista or state scenic highway, and potential impacts to scenic resources would be Class III, less than significant.	None required.	Less than significant.
Impact AES-2 The project would alter existing visual characteristics of the project site and surroundings, but would be consistent with the Downtown Plan and would not degrade existing visual character or quality. The Downtown Plan EIR determined that buildout of the Downtown Plan would result in a Class III, less than significant impact. The project would result in temporary construction impacts to visual character and quality that would be Class II, less than significant with mitigation.	**AES-2 Construction Screening.** Temporary fencing comprised of chain link or wood with screening material attached shall be used around the perimeter of the active construction site to buffer views of construction activities, as well as the staging of vehicles, equipment, and materials. In addition, the contractor shall affix or paint a plainly visible sign, on publically accessible portions of the temporary fencing, with the following language: "POST NO BILLS". Such language shall appear at intervals of no less than 25 feet along the length of the publically accessible portions of the barrier. The contractor shall ensure through daily visual inspections that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that such temporary barriers and walkways are maintained in a visually attractive manner, including the prompt removal of graffiti, throughout the construction period.	Less than significant.
Impact AES-3 The proposed project includes high-rise structures that would cast shadows onto adjacent properties. The Downtown Plan EIR determined that shadow impacts would be Class I, significant and unavoidable. However, shadows from project structures would not fall on sensitive residential, public gathering, and school uses for more than three hours during Winter months or for more than four hours during Summer months. The proposed project would not contribute to this Class I impact and would, therefore, have a Class III, less than significant impact.	None required.	Less than significant.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
AIR QUALITY		
Impact AQ-1 The proposed project would not directly or indirectly generate population growth beyond that anticipated in the Downtown Plan EIR and AQMP forecasts. Impacts relating to AQMP consistency are, therefore, Class III, less than significant.	None required.	Less than significant.
Impact AQ-2 Onsite construction activity would generate temporary emissions. The Downtown Plan EIR determined that construction emissions associated with buildout of the Downtown Plan would result in Class I, significant and unavoidable impacts. The proposed project would contribute to this impact; however, project emissions would not exceed SCAQMD regional thresholds or LSTs. However, if demolition occurs by implosion, the project would result in significant impacts related to localized PM10 emissions and asbestos exposure without additional mitigation. Impacts would, therefore, be Class II, less than significant with mitigation.	Downtown Plan EIR Mitigation Measures AQ-1(a) through AQ-1(c) would apply to the proposed project. In addition to these measures, the following mitigation measure would apply: **AQ-2 Air Quality Safety Plan.** If demolition occurs by implosion, the City shall approve an Air Quality Safety Plan that protects public health. The Plan shall be prepared with and approved by the South Coast Air Quality Management District. Public safety measures include: • A radius around the project site in which the public is prevented from being outdoors; • Advanced notification of potential particulate matter and asbestos exposure to all land uses within 1,000 feet of the project site; • Notice that windows should be closed at all buildings within the safety radius during the implosion until the City has provided notice that particulate matter and asbestos concentrations have reached background concentrations; • Air quality monitoring during the day of the implosion to confirm when particulate matter and asbestos concentrations have reached background concentrations.	Less than significant.
Impact AQ-3 Operation of the proposed project would generate air pollutant emissions in the long-term. Emissions would not exceed SCAQMD operational significance thresholds for any criteria pollutants, except ROG. The Downtown Plan EIR determined that operational emissions associated with buildout of the Downtown Plan would result in a Class I, significant and unavoidable impact. The proposed project would contribute to this impact and would be a Class I, significant and unavoidable impact.	Downtown Plan EIR Mitigation Measure AQ-2 would apply to the proposed project. In addition to this measure, the following mitigation measure would apply: **AQ-3<u>(a)</u> Low-VOC Paint.** The project applicant shall require all development operator(s) to use low-VOC paint on all interior and exterior surfaces. Paint should not exceed 50 g/L for all interior surfaces and exterior surfaces. **<u>AQ-3(b) Low-VOC Paint.</u>** <u>Provide electric and propane barbecue outlets in all residential outdoor areas.</u>	Significant.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact AQ-4 Project traffic would generate CO emissions that have the potential to create high concentrations of CO, or CO hotspots. However, project traffic would not cause the level of service (LOS) of an intersection to change to E or F, nor would it increase the volume to capacity ratio (V/C) by two percent or more for intersections rated D or worse. Therefore, localized air quality impacts related to CO hotspots would be Class III, less than significant.	None required.	Less than significant.
Impact AQ-5 The Downtown Plan EIR determined that implementation of the Downtown Plan could result in exposure of receptors to short- and long-term emissions of toxic air contaminants (TACs) from onsite and offsite stationary and mobile sources. Impacts from Port of Long Beach and offsite stationary sources, and onsite mobile sources were determined by the Downtown Plan EIR to be Class I, significant and unavoidable. Operation of the proposed project would increase mobile source emissions of TACs in the Downtown Plan Area, however, fewer than 100 trucks and 40 trucks equipped with transportation refrigeration units (TRUs) per day would be accommodated by the proposed project. Therefore, impacts from mobile source emissions of TACs would be Class III, less than significant; however, because the project would place residential uses within the Downtown Plan Area, impacts from Port of Long Beach and offsite stationary sources would remain Class I, significant and unavoidable.	Downtown Plan EIR Mitigation Measures AQ-4(a) and AQ-4(b) would apply to the proposed project.	Significant.
CULTURAL RESOURCES		
Impact CR-1 Construction of the proposed project would involve the demolition of the Old Courthouse and the Long Beach City Hall-Library Complex, which have been identified as historical resources for the purposes of CEQA. The Downtown Plan EIR determined that buildout of the Downtown Plan would result in Class I, significant and unavoidable	Downtown Plan EIR Mitigation Measure CR-1(b) would apply to the proposed project. In addition to this measure, the following mitigation measure would apply: **CR-1(a) Historic Artifact Collection Program.** Impacts resulting from the demolition of the City Hall-Library Complex and Courthouse shall be minimized through development of an archival identification and	Significant.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
impacts. Demolition of the Old Courthouse and the Long Beach City Hall-Library Complex would contribute to this Class I impact and would be a Class I, significant and unavoidable impact.	collections program. The purpose of this program will be to identify the existing historic artifacts, documents and other objects that are currently stored at the Main Library, City Hall and Port of Long Beach facilities, as well as key components of the Old Courthouse and City Hall-Library Complex to be demolished, so that these important relics can be utilized in the future by researchers and the public for educational purposes. As part of the program, the City will itemize, catalogue and rehouse the items, and establish appropriate conservation and storage measures for long-term preservation. One possible location for rehousing items would be as a museum in the proposed project's new Library. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Development Services Department. **CR-1(b) Building Documentation.** Impacts resulting from the demolition of the City Hall-Library Complex and Old Courthouse shall be minimized through archival documentation of as-built and as-found condition. Prior to issuance of the first occupancy permit for the project, the lead agency shall ensure that documentation of the building is completed in accordance with the general guidelines of Historic American Building Survey (HABS) documentation. The documentation shall include large-format photographic recordation, a historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to repositories that will make it available for current and future generations. Archival copies of the documentation also would be submitted to the City of Long Beach Development Services Department, the downtown branch of the Long Beach Public Library, and the Historical Society of Long Beach where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Development Services Department.	

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE		
Impact GHG-1 Development associated with the proposed project would generate additional GHG emissions beyond existing conditions from construction and operational activities. The Downtown Plan EIR determined that both construction and operational GHG emissions associated with buildout of the Downtown Plan would result in significant and unavoidable impacts. The proposed project would contribute to this impact; however, GHG emissions would not exceed the 6.6 MT CO2e per service population per year significance threshold as required by Downtown Plan EIR Mitigation Measure AQ-2 and no additional mitigation measures would be required. Impacts would therefore be Class III, less than significant.	Downtown Plan EIR Mitigation Measures GHG-1(a) and GHG-1(b) would apply to the project. No additional mitigation measures are required.	Less than significant.
Impact GHG-2 The proposed project would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals. Impacts related to consistency with GHG plans and policies would therefore be Class III, less than significant.	Downtown Plan EIR Mitigation Measures GHG-2(a) and GHG-2(b) would apply to the project. No additional mitigation measures are required.	Less than significant.
NOISE AND VIBRATION		
Impact N-1 Construction-related activities associated with the proposed project would generate noise that could exceed City of Long Beach standards at existing receptors. Residential uses proposed by the project may also be exposed to noise levels that exceed City standards. The Downtown Plan EIR determined that construction associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would not be feasible to reduce the impact to a less than significant level. This is a Class I, significant and unavoidable impact.	Downtown Plan EIR Mitigation Measures Noise-1(a) and Noise-1(b) would apply to the project. In addition to these measure, the following mitigation measure would apply: **Noise-1 Noise Control Plan.** If demolition occurs by implosion, the City shall approve a Noise Control Plan that protects public health and includes: • A site-specific map that delineates the hearing damage radius; • Safety measures to ensure that community members would not be within this radius during the implosion; • Control measures designed by an implosion expert to reduce noise at the source of the implosion; and • A statement that all demolition-related damage shall be repaired.	Significant.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact N-2 Operational activities associated with the proposed project would generate noise that could exceed City of Long Beach standards at existing receptors. Residential uses proposed by the project may also be exposed to noise levels that exceed City standards. The Downtown Plan EIR determined that operation associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would be required. This is a Class II, significant but mitigable impact.	**Noise-2(a) Loading Areas.** The applicant shall submit site plans to the Department of Development Services showing that all loading and unloading areas would be oriented away from existing sensitive receptors and/or shielded by the proposed buildings such that the line-of-sight would be broken. **Noise-2(b) Sound-Rated Windows and Glass Doors Near Commercial Uses.** The applicant shall install sound-rated windows and sliding glass doors on all residential units that are within 50 feet of commercial uses. Windows shall be at least STC 35 to ensure that commercial activities do not result in interior noise levels exceeding 35 dBA when the windows are closed.	Less than significant.
Impact N-3 Construction-activities associated with the proposed project could generate ground-borne vibration. The Downtown Plan EIR and Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to construction-generated vibration would be significant and unavoidable. The proposed project would contribute to this impact and construction-related vibration would therefore be a Class I, significant and unavoidable impact.	Downtown Plan EIR Mitigation Measures Noise-2(a) and Noise-2(b) would apply to the project. In addition to these measures, the following mitigation measure would apply: **Noise-3 Vibration Control Plan.** If demolition occurs by implosion, the City shall approve a Vibration Control Plan that protects public health and adjacent buildings, and includes: • A site-specific estimate of the potential zones of vibration perceptibility and building damage; • A pre-construction survey to assess the foundations and facades of buildings within the damage zone; • A post-construction survey to assess damage, if any, caused by implosion; and • A statement that all demolition-related damage shall be repaired.	Significant.
Impact N-4 Operational activities associated with the proposed project could generate ground-borne vibration. The Downtown Plan EIR determined that impacts related to operational vibration would be less than significant. The proposed project would not result in additional impacts beyond those determined in the Downtown Plan EIR and operational vibration would therefore be a Class III, less than significant impact.	None required.	Less than significant.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact N-5 Traffic generated by the proposed project is not anticipated to result in noise level increases along roadways in the project vicinity. Traffic-related increases in noise would not exceed the City's threshold at sensitive receptors along roadway segments. The Downtown Plan EIR also determined that traffic-generated noise increases resulting from the Downtown Plan would be less than significant. This is a Class III, less than significant impact.	None required.	Less than significant.
Impact N-6 Noise levels at proposed sensitive receptors may exceed City thresholds for interior and exterior noise. The Downtown Plan EIR determined that the Downtown Plan would result in a Class II impact, potentially significant unless mitigation is incorporated, as it would allow sensitive receptors to be located in areas exceeding the City's noise standards. The Downtown Plan required site-specific noise analysis and mitigation for individual projects. The proposed project would contribute to this impact and such mitigation would be required. This is a Class II, significant but mitigable impact.	**Noise-6(a) Mechanical Ventilation.** The applicant shall provide mechanical ventilation in all residential units proposed along Broadway, Pacific Avenue, Third Street, Cedar Avenue, Chestnut Avenue, and First Street, so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 35~~45~~ dBA Ldn. **Noise-6(b) Sound-Rated Windows and Sliding Glass Doors.** The applicant shall install sound-rated windows and sliding glass doors on the residential units that face Broadway, Pacific Avenue, Third Street, and Cedar Avenue, as well as the proposed library, such that interior noise levels would not exceed 35~~45~~ dBA Ldn when the windows are closed.	Less than significant.
TRANSPORTATION AND TRAFFIC		
Impact T-1 Implementation of the proposed project would increase traffic on the surrounding street network. The Downtown Plan EIR determined that buildout of the Downtown Plan would result in Class I, significant and unavoidable traffic impacts. The proposed project would contribute to this impact; however, project-generated traffic would not cause any intersection to exceed City standards under existing plus project traffic conditions. Impacts associated with the proposed project would be Class III, less than significant.	None required. The Downtown Plan EIR includes Mitigation Measures Traf-1(a) through Traf-1(d) that include traffic signal system improvements and traffic calming amenities designed to enhance traffic circulation in the Downtown Area.	Less than significant.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact T-2 The proposed project does not include any hazardous design features. Impacts associated with the proposed project would be Class III, less than significant.	None required.	Less than significant.
OTHER CEQA		
Demolition could potentially disturb vermin in existing buildings, which, if substantial, could pose a public health hazard.	**Other-1 Fumigation.** Prior to issuance of demolition permits, the project applicant shall fumigate all buildings.	Less than significant.

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1 INTRODUCTION

This document is a Supplemental Environmental Impact Report (SEIR) that examines the potential effects of the proposed Civic Center project, which involves the redevelopment of an approximately 16-acre site in downtown Long Beach with a mix of institutional, residential, and commercial uses. The proposed project is described in detail in Section 2.0, *Project Description*. This section describes: (1) the general background of the project; (2) the purpose and legal authority of the SEIR; (3) the scope and content of the SEIR; (4) lead, responsible, and trustee agencies; and, (5) the environmental review process required under the California Environmental Quality Act (CEQA).

1.1 PURPOSE AND LEGAL AUTHORITY

The proposed project requires discretionary approvals from the City of Long Beach. Pursuant to Section 15060(d) of the *CEQA Guidelines,* the project is subject to the requirements of the CEQA. In accordance with Section 15121 of the *CEQA Guidelines*, the purpose of this SEIR is to serve as an informational document that:

> *"...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, and identify possible ways to minimize the significant effects..."*

This EIR has been prepared as a Supplemental EIR (SEIR) pursuant to Section 15163(a)(2)of the *CEQA Guidelines*. A SEIR is prepared when minor additions or changes are necessary to make a previously certified EIR adequately apply to the project in the changed situation. This SEIR and the Final Program EIR for the Downtown Plan that was adopted in January 2012 comprise the environmental review documentation for the Civic Center project. A copy of the Downtown Plan Final Program EIR (SCH# 2009071006) is available for review on the City of Long Beach website at
http://www.lbds.info/planning/environmental_planning/environmental_reports.asp.

This SEIR is to serve as an informational document for the public and City of Long Beach decision-makers. The process will culminate with a City Council hearing to consider certification of the Final SEIR and approval of the project.

1.2 PROJECT BACKGROUND

The design of the proposed Civic Center project follows the guidance of the Downtown Plan (the "Downtown Plan"), which was adopted in January 2012. A Final Program Environmental Impact Report (Final EIR) was prepared for the Downtown Plan in accordance with CEQA and was certified in January 2012. The Downtown Plan project area covers approximately 719 acres in Long Beach. The Downtown Plan provides development standards and design guidelines for an expected increase in the density and intensity of existing Downtown land uses by allowing up to: (1) approximately 5,000 new residential units; (2) 1.5 million square feet of new office, civic, cultural, and similar uses; (3) 384,000 square feet of new retail; (4) 96,000 square feet of restaurants; and (5) 800 new hotel rooms. The development assumed in the Downtown Plan would occur over a 25-year time period.

The SEIR tiers from the Downtown Plan Final EIR. In accordance with CEQA, the EIR Supplement is a focused study of key issues that were not identified at a project level as part of the Downtown Plan Final EIR. Specifically, the EIR Supplement addresses issues about which potential impacts were not known at the time of preparation of the Downtown Plan Final EIR or for which Downtown Plan EIR mitigation measures stipulate further analysis on a project-by-project basis.

The City of Long Beach prepared a Notice of Preparation (NOP) of an SEIR and distributed it for agency and public review for the required 30-day review period on April 16, 2015. The Initial Study identified the following issue areas as having impacts that are "potentially significant" or "potentially significant without mitigation" and therefore require additional analysis in the SEIR:

- *Aesthetics*
- *Air quality*
- *Cultural resources*
- *Greenhouse gas emissions*
- *Noise*
- *Transportation and traffic*

The City received eight written responses to the NOP during the public review period, as well as one written response after the end of the comment period. The NOP is presented in Appendix A, along with the Initial Study that was prepared for the project and the NOP responses received. The intent of the NOP was to provide interested individuals, groups, public agencies and others a forum to provide input to the City regarding scope and focus of the SEIR. The City held an SEIR scoping meeting on April 30, 2015 during the public review period to solicit further public comment on the scope and content of the SEIR. The meeting was held at the Long Beach Main Library and began at 5 p.m. Four members of the public attended the meeting. Additional attendees included City staff and representatives of Plenary-Edgemoor Civic Partners (PECP), the City's development partner. Attendees were invited to share comments on the SEIR scope, including suggestions for analyses that should be included in the SEIR and project alternatives that should be considered. Issues raised in written responses to the NOP and by attendees at the Scoping Meeting are summarized below and where the SEIR or Initial Study addresses these comments are indicated in Table 1-1.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
Jillian Wong, Ph.D, Program Supervisor, Planning, Rule Development & Area Sources, South Coast Air Quality Management District	Recommends use of CEQA Air Quality Handbook for guidance in preparing air quality analysis and use CalEEMod for analysis.	The CEQA Air Quality Handbook was used for guidance (see Section 4.2.3, "Impact Analysis," in Section 4.2, *Air Quality*). CalEEMod used for air quality analysis.
	Requests construction-related and operation-related air quality analysis, including impacts from indirect sources, such as those that generate or attract vehicular trips.	Impact AQ-2 in Section 4.2, *Air Quality*, includes construction-related air quality analysis from direct and indirect sources. Impact AQ-3 in Section 4.2, *Air Quality*, includes operation-related air quality analysis from direct and indirect sources.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	Requests calculation of direct and indirect regional and localized air quality impacts and comparison to SCAQMD thresholds.	Impacts AQ-2 and AQ-3 in Section 4.2, *Air Quality,* include analysis of direct and indirect regional and localized air quality impacts and utilizes SCAQMD regional and local significance thresholds.
	Recommends preparation of a mobile source health risk assessment for vehicular trips, if the project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles.	Downtown Plan EIR Mitigation Measure AQ-4(a) requires a project-level health risk assessment (HRA) for commercial land uses that accommodate more than 100 trucks per day, or 40 trucks equipped with transportation refrigeration units (TRUs), within 1,000 feet of sensitive receptors. Impact AQ-5 in Section 4.2, *Air Quality,* includes analysis of project generated truck trips and determines that the project's impact on mobile source TAC emissions would be less than significant and a project-level HRA is not warranted. See Impact AQ-5 in Section 4.2, *Air Quality,* for additional discussion.
	Provides guidance on siting incompatible land uses in California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective.*	The *Air Quality and Land Use Handbook: A Community Perspective* was used for guidance (see Impact AQ-5 discussion in Section 4.2, *Air Quality*).
	Requests to be sent a copy of the Draft SEIR directly with appendices and all electronic files for CalEEMod and HARP (original modeling files and excel spreadsheets, not pdfs) to 21865 Copley Drive, Diamond Bar, CA 91765.	A copy of the SEIR with appendices and electronic CalEEMod files will be sent to SCAQMD with the Notice of Availability during the public review period.
	Requests utilizing all feasible mitigation measures to minimize or eliminate significant adverse impacts to air quality.	Section 4.2, *Air Quality,* includes mitigation measures required of the project by the Downtown Plan EIR and additional mitigation measures to minimize or eliminate significant adverse impacts to air quality, where feasible.
Scott Morgan, Director, State Clearinghouse	Confirms that the State Clearinghouse received the NOP.	No response required.
Kevin T. Johnson, Acting Chief, Forestry Division, Prevention Services Bureau, County of Los Angeles Fire Department	Confirms that the project site is not within the emergency response area of the Los Angeles County Fire Department and would not impact the Department's emergency responsibilities.	No response required.
	Confirms that although the project site is in close proximity to the jurisdictional area of the Los Angeles County Fire Department, the project is unlikely to necessitate a comment concerning general requirements from the Land Development Unit.	No response required.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	Requests that potential impacts to erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archaeological and cultural resources, and the County Oak Tree Ordinance be discussed.	Section VI, *Geology and Soils*, of the Initial Study (Appendix A) includes erosion related analysis. Section IV, *Biological Resources,* of the Initial Study (Appendix A) includes an analysis of the project's biological resource impact. Impact CR-1 in Section 4.3, *Cultural Resources,* includes analysis of impacts to cultural resources at the project site. Section V, *Cultural Resources*, of the Initial Study (Appendix A) includes analysis of archaeological resources and determined that the project's impact to archaeological resources would be less than significant. The project site is within urbanized, Downtown Long Beach. The project site is not within a Very High Fire Hazard Severity or Fire Zone 4 and would not require fuel modification. The project site is within the City of Long Beach and the Los Angeles County Oak Tree Ordinance does not apply to the project.
	States that the proposed residential component of the project would likely require environmental oversight of an authorized government agency prior to site grading activities.	The lead agency for the project is the City of Long Beach and the Initial Study and SEIR examine the potential environmental effects of constructing the proposed Civic Center project.
Adriana Raza, Customer Service Specialist, Facilities Planning Department, County Sanitation Districts of Los Angeles County	States that the wastewater flow from the proposed project would discharge to a local sewer line for conveyance to the District's De Forest Avenue Trunk Sewer, which, as of 2012, had a design capacity exceeding its peak flow conveyance.	Section XVII, *Utilities and Service Systems,* of the Initial Study (Appendix A) was revised to include an expanded discussion of wastewater treatment facilities.
	States that the wastewater generated by the project would be treated at the Joint Water Pollution Control Plant in the City of Carson, which has a design capacity of 400 million gallons per day (mgd) and an average flow of 263.4 mgd.	Section XVII, *Utilities and Service Systems,* of the Initial Study (Appendix A) was revised to include an expanded discussion of wastewater treatment facilities.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	States that the District charges a connection fee in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project and that expansion of facilities would be sized and service phased in a manner that is consistent with the Southern California Association of Government's regional growth forecast.	Section XVII, *Utilities and Service Systems,* of the Initial Study (Appendix A) was revised to include an expanded discussion of wastewater treatment facilities.
Gary Shelton, Advocacy Chairman, Long Beach Area Coalition for the Homeless	States that the project would displace 55 persons during the construction period, dismantling community cohesion at the project site, and that displacement should be analyzed in the Draft SEIR and considered potentially significant unless mitigation is incorporated.	Section XIII, *Population and Housing*, of the Initial Study (see Appendix A) has been revised to include a discussion regarding displacement of this population.
	Recommends potential mitigation could include the creation of "Day Shelters" to fill the gap caused by nighttime accommodations being closed during the day and the project site being unavailable during the construction period. Also recommends that social services be included to lead people to permanent housing.	Section XIII, *Population and Housing*, of the Initial Study (see Appendix A) has been revised to include a discussion regarding displacement of this population.
Ping Chang, Program Manager II, Land Use and Environmental Planning, Southern California Association of Governments (SCAG)	The commenter encourages the use of a side-by-side comparison of SCAG goals with discussions of consistency, non-consistency, or non-applicability of the policy and supportive analysis in a table format. Recommends referring to SCAG's 2012 RTP/SCS strategies when considering if the proposed project within the context of SCAG's regional goals and policies.	Table 4.4-6 in Section 4.4, *Greenhouse Gas Emissions/Climate Change*, is a side-by-side comparison between SCAG's 2012 RTP/SCS strategies and the proposed project.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	Provides SCAG forecasts for the region and applicable jurisdictions and recommends a review of the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance.	SCAG 2012 RTP/SCS forecasts for the Long Beach have been used for air quality analysis for the proposed project (see Section 4.2, *Air Quality*, Impact AQ-1 discussion). Downtown Plan EIR Mitigation Measure Traf-1(a) includes implementing transit facilities and programs to encourage public transit usage and Transportation Demand Management Policies, which is reflective of guidance in SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures, particularly Mitigation Measure AQ1, which recommends Transportation Control Measures, such as programs to improve the use of public transit. Downtown Plan EIR Mitigation Measures AQ-2(a) includes measures to require commercial development to promote a ride-share program for employees, and secure bicycle parking areas, which also reflects SCAG 2012 RTP/SCS Final Program EIR Mitigation Measure AQ1. Downtown Plan EIR Mitigation Measure AQ-1(a) requires construction contractors to implement Enhanced Exhaust Control Practices, which is reflective of SCAG 2012 RTP/SCS Final Program EIR Mitigation Measure AQ2, which recommends reducing emissions from in-use fleet and encourages cleaner construction equipment.
Dianna Watson, IGR/CEQA Branch Chief, Caltrans District 7	Requests that a Traffic Impact Analysis (TIA) be conducted to evaluate potential transportation impacts to the I-710. Requests that the TIA evaluate potential traffic impacts to the regional transportation system, including I-710 mainline south of the Anaheim Street interchange, nearest on-and-off ramps, and ramp intersections.	The Downtown Plan EIR found that implementation of the Downtown Plan would result in significant and unavoidable impacts to traffic and transportation, including to the I-710. Downtown Plan EIR Mitigation Measure Traf-1(a) required enhancement to freeway access to the I-710 from the Downtown area and Mitigation Measure Traf-1(b) required a series of traffic signal improvements. As discussed in the TIA prepared for the proposed project by Linscott, Law & Greenspan, Engineers (LLG) in July 2015 (see Appendix E), the proposed project would generate fewer trips than buildout of the Civic Center Area analyzed in the Downtown Plan EIR. Therefore, the project would not result in any new transportation impacts, or increase the severity of significant impacts to the I-710 beyond those identified in the Downtown Plan EIR. Additional analysis in the SEIR is not warranted.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	States that vehicle queues to mainline freeway lanes should be avoided and requests mitigation improvements if off-ramp storage capacity is exceeded.	See response above regarding the Downtown Plan EIR's determination that traffic impacts would be significant and unavoidable. Downtown Plan EIR Mitigation Measure Traf-1(a) requires enhancement to freeway access to the I-710 from the Downtown area and Mitigation Measure Traf-1(b) requires a series of traffic signal improvements.
	Requests that the TIA present its assumptions and methods and that travel modeling be consistent with other regional and local modeling forecasts.	The TIA prepared by LLG in July 2015 (see Appendix E) presents its assumptions and methods in Section 4.0, *Traffic Forecasting Methodology.*
	Requests inclusion of all appropriate, project and cumulative, traffic volumes. Including justification for vehicle trip reduction assumptions.	Section 4.6, *Transportation and Traffic,* includes project and cumulative traffic volumes. Justifications for vehicle trip reduction assumptions are included in Table 5-1, *Project Trip Generation Forecast*, of the TIA prepared by LLG in July 2015 (see Appendix E).
	Requests analysis of a.m. and p.m. peak hours for both existing and future conditions. Future conditions should extend to horizon year build-out of the Downtown Plan.	See Section 4.6 *Transportation and Traffic,* Impacts T-1 and T-2 for analysis of a.m. and p.m. peak hour traffic conditions. Future conditions extend to Year 2020, which is when the proposed project would be operational.
	Requests mitigation measures for traffic impacts, including specifics concerning improvements, schedule, and costs. Requests a plan of realistic mitigation measures or a specific percent of costs for mitigation actions undertaken by other agencies.	See response above regarding the Downtown Plan EIR's determination that traffic impacts would be significant and unavoidable. Downtown Plan EIR Mitigation Measure Traf-1(a) requires enhancement to freeway access from the Downtown area and implementation of transportation improvements. Mitigation Measures Traf-1(b) and Traf-1(c) require a series of traffic signal improvements. Mitigation Measure Traf-1(d) requires traffic calming and pedestrian amenities. Impacts T-1 and T-2 in Section 4.6, *Transportation and Traffic,* determined that impacts would be less than significant. No additional mitigation is required.
	Encourages the City to consider vehicle demand-reducing strategies, such as incentives for commuters to use transit, discounts on monthly bus and rail passes, and more.	Downtown Plan EIR Mitigation Measure Traf-1(a) includes implementing transit facilities and programs to encourage public transit usage and Transportation Demand Management Policies.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	Recommends that the City establish a transportation fund or a funding plan to implement improvements that may be too costly for one specific development.	Section 4.6, *Transportation and Traffic,* determined that impacts to traffic would be less than significant. Downtown Plan EIR Mitigation Measures Traf-1(a) through Traf-1(d) include transportation improvements for the entire Downtown Plan Area to reduce significant and unavoidable traffic impacts to the extent feasible. City decision makers may, nevertheless, consider establishing a transportation fund.
	States that Caltrans does not consider the Los Angeles County's Congestion Management Program adequate for analysis of transportation impacts to State highway facilities. Requests that Caltrans be consulted for the analysis of State highway facilities.	Caltrans does not consider the Los Angeles County's Congestion Management Program (CMP) adequate for analysis of transportation impacts to State highway facilities; nevertheless, the Section 4.6, *Transportation and Traffic*, considered the CMP methodology and standards in accordance with local CEQA requirements. Caltrans will continue to be consulted regarding impacts to state highway facilities.
Cheryl Perry, President, Long Beach Heritage	Asks what the impediment is to adaptive re-use for the court house. States that impacts to the cultural and physical environment should be assessed, as defined in 40 Code of Federal Regulations (CFR) 1508.14.	See Section 4.3, *Cultural Resources,* Impact CR-1 and the Cultural Resources Study (see Appendix C) for analysis regarding cultural resources. Section 6, *Alternatives,* includes analysis of an Adaptive Reuse Alternative.
	States that the State Historic Preservation Officer should be consulted about the project.	The State Historic Preservation Officer was included in the distribution list for the Notice of Preparation. The City received a letter from the State Historic Preservation Officer on May 19, 2015. That letter is discussed below.
	States that the City's compliance with Section 106 should be addressed.	The cultural resources assessment for the project did evaluated the buildings and structures within the project area for listing in the National Register of Historic Places, in accordance with Section 106 of the National Historic Preservation Act.
	Recommends that a project team comprised of preservation-architects and –engineers should demonstrate how the courthouse could be adaptively reused for the proposed Port building.	RRM Design Group prepared an Adaptive Reuse Study for the courthouse, which was included as Appendix H of the Long Beach Courthouse Demolition Project Draft Environmental Impact Report. Section 6, *Alternative,* includes analysis of an Adaptive Reuse Alternative based on the study prepared by RRM Design Group.

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	Requests that a Historic Structures Report be completed with recommendations on adaptive reuse of the courthouse and potential mitigation.	RRM Design Group prepared an Adaptive Reuse Study for the courthouse, which was included as Appendix H of the Long Beach Courthouse Demolition Project Draft Environmental Impact Report. The Adaptive Reuse Study is a conceptual feasibility assessment that provides recommendations on the adaptive reuse of the former Long Beach Courthouse. The Cultural Resources Study prepared for the proposed project (see Appendix C) includes analysis of the project's cultural resource impacts and recommends mitigation to reduce impacts to the extent feasible.
	Asks that the specific impacts of demolishing the old courthouse on Long Beach's cultural resources be assessed. States that the courthouse is the only link the city has to its traditional civic core.	Section 4.3, *Cultural Resources*, Impact CR-1, and the Cultural Resources Study (see Appendix C) include analysis of impacts related to demolition of the former Long Beach Courthouse.
	States that significant and meaningful mitigation/restitution be applied to the project, if the old courthouse is demolished. Suggested mitigation measures include: (1) the City building and funding a viable Long Beach History Museum with artifacts from the City and private collections, and (2) mitigation dollars be used for Long Beach preservation projects.	See Section 4.3 *Cultural Resources*, Mitigation Measures CR-1(a) and (b) for mitigation, which includes collection of historic artifacts and archival building documentation.
Carol Roland-Nawi, Ph.D., State Historic Preservation Officer, Office of Historic Preservation	States that the EIR should include an updated study of the project area to determine if the Civic Center meets the eligibility criteria for local, state, or national listing as a historic district, and should be considered historic resources. States that the study should meet the requirements of Public Resources Code § 5024.1(g) and include contributing resources and non-contributing resources and identify character defining features of the contributing resources.	A Cultural Resources Study was prepared for the proposed project, see Appendix C. The Study determined that the Civic Center area is ineligible for listing on the California Register of Historical Resources or as a locally eligible historic district.
	States that demolition of the City Hall, Library, Lincoln Park, and the surrounding designed landscape may be significant impacts to historical resources and should be analyzed in the EIR.	See Section 4.3 *Cultural Resources*, Impact CR-1, and the Cultural Resources Study (Appendix C) for analysis of impacts to historical resources.
	States that the historic resources survey included in Appendix D of the Downtown Plan EIR is insufficient to evaluate historic resources and impacts of the proposed project because it did not include a survey of the Civic Center	A Cultural Resources Study was prepared for the proposed project, see Appendix C. Section 4.3, *Cultural Resources*, is based on the findings of this study, not the historic resources survey included in Appendix D of the

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	complex.	Downtown Plan EIR.
	States that the Draft EIR should focus and seriously consider a range of feasible alternatives. States that Pursuant to *CEQA Guidelines* (§15126.6) the Draft EIR should fully explore the following alternatives: No Project Alternative, Alternate Site Alternative, Rehabilitation Alternative, Adaptive Reuse Alternative, Infill Alternative, and Alternative-use Alternative.	Section 6.0, *Alternatives,* includes a discussion of an Adaptive Reuse Alternative, or rehabilitation alternative, in subsection 6.3 and the No Project Alternative in subsection 6.1. An Alternate Site Alternative, Infill Alternative, and Alternative-use Alternative are discussed in subsection 6.5, Alternatives Considered But Rejected.
	Cites *CEQA Guidelines* §615126.6(b) and states that the alternatives discussed in the Draft EIR should not be discounted because they may be more costly than the proposed project. States that all feasible alternatives should be considered in the Draft EIR.	Section 6.0, *Alternatives,* includes analysis of four alternatives, No Project Alternative, Downtown Plan Buildout of Civic Center Area Alternative, Adaptive Reuse Alternative, and Reduced Density Alternative. The alternatives were selected for evaluation without consideration of building cost.
	States that the Long Beach Courthouse is eligible as a landmark building, but may be part of a larger historic district (the entire Civic Center complex) that should be evaluated.	The Cultural Resources Study (see Appendix C) and Section 4.3, *Cultural Resources*, include analysis of the entire project site, including the Civic Center as a historic district, the former Long Beach Courthouse, and the City Hall-Library Complex.
	States that the City of Long Beach Cultural Heritage Commission should be included in the environmental review process pursuant to Downtown Plan EIR Mitigation Measure CR-1a.	Downtown Plan EIR Mitigation Measure CR-1(b) requires the City's Development Services Department staff to refer properties to the Cultural Heritage Commission, if they determine that the property may be eligible for designation. Impact CR-1 in Section 4.3, *Cultural Resources*, and the Cultural Resources Study prepared for the proposed project (see Appendix C) determined that the former Long Beach Courthouse and City Hall-Library Complex are both eligible for historical designation; therefore, the Cultural Heritage Commission's involvement in the environmental review process is not required.
	States that mitigation measures should go beyond Historic American Building Survey (HABS) documentation, plaques, and/or incorporating design features into the new project. Requests that the City involve the Cultural Heritage Commission, local preservation groups, and other members of the public to develop meaningful mitigation measures. Suggests as mitigation: (1) additional historic surveys in parts of the city that have not been surveyed, (2)	As discussed in Section 4.3 *Cultural Resources*, although the State Office of Historic Preservation's recommendations may mitigate the impacts of potential future projects, they would not mitigate the impact of the currently proposed project. Consequently, there is no nexus between these suggested measures and the impact associated with the proposed project and these suggestions would not constitute "mitigation" under CEQA. City decision makers may, nevertheless, consider including one or more of these

Table 1-1
NOP Responses

Written Responses		
Commenter	***Comment/Request***	***How and Where Comment Addressed***
	development of design guidelines for future re-use of public buildings, and (3) creation of a Historic Preservation Mitigation Fund.	suggestions as conditions of project approval.
Scoping Meeting Comments		
Topic	***Comment/Request***	***How and Where Comment Addressed***
Cultural Resources	Expresses concern that many buildings that were built by locally famous Long Beach architects are being demolished.	Impact CR-1 in Section 4.3, *Cultural Resources*, includes analysis of impacts to historical buildings and resources.
	Requests that cultural resource impacts be mitigated as much as possible and the SEIR should identify creative mitigation measures beyond a history walk and photodocumentation/historic structures report of buildings to be demolished.	See Section 4.3, *Cultural Resources*, Mitigation Measures CR-1(a) and (b) for mitigation, which includes collection of historic artifacts and archival building documentation.
	Suggests dedication of some part of the new library to a museum documenting the history of the area. Also suggests that various artifacts stored at the Main Library, City Hall, and Port of Long Beach, and with private collections, as well as key components of the buildings to be demolished, could be included in this museum.	See Section 4.3 *Cultural Resources*, Mitigation Measures CR-1(a) and (b) for mitigation which includes collection of historic artifacts and archival building documentation.
Hazards	Expresses concern that during demolition vermin would invade adjacent properties. Requests mitigation, such as fumigation of buildings to be demolished, to address this impact.	Section 5.0, *Other CEQA,* includes Mitigation Measure Other-1, which requires fumigation prior to building demolition.
Population and Housing	Expresses concern regarding the large homeless population residing in Lincoln Park.	Section XIII, *Population and Housing*, of the Initial Study (see Appendix A) has been revised to include a discussion regarding displacement of this population
Aesthetics	Requests that sight lines from Third Street to First Congregational Church (at southwest corner of Third Street and Cedar Avenue), particularly of the church tower, be preserved.	Impact AES-1 of Section 4.1, *Aesthetics*, includes analysis of impacts related to scenic resources. Impact AES-1 found that the proposed project would obstruct the view of First Congregational Church currently available from east of the project site, however, Third Street is not a state scenic highway or a designated local view corridor; therefore, this view alteration would not be a significant impact.
Biological Resources	States that there are approximately 197 mature trees present on the project site and that urban forest loss should be considered in the SEIR.	As discussed in Section IV, *Biological Resources,* of the Initial Study (see Appendix A), the proposed project would involve the relocation of Lincoln Park, which would require the removal of vegetation, including mature trees. All vegetation within the park is ornamental landscaping that does not include native biological resources or habitats. The proposed project would include the

Scoping Meeting Comments		
Topic	***Comment/Request***	***How and Where Comment Addressed***
		planting of trees within the new Lincoln Park and throughout the project site. In accordance with the City's Tree Maintenance Policy, the project would be required to replace all trees within the public right of way with an approved 15-gallon tree. Therefore, the Civic Center Project would not result in any significant impacts to biological resources or increase the severity of significant impacts to biological resources beyond those identified in the Downtown Plan EIR.
Transportation and Traffic	Requests that traffic impacts to surrounding neighborhoods due to the changes to First Street, Chestnut Avenue, and Cedar Avenue be considered in the SEIR.	Impacts T-1 and T-2 in Section 4.6, *Transportation and Traffic*, include traffic impact analysis for key intersections in the vicinity of the project site, including Pacific Avenue at First Street, Chestnut Avenue at Broadway, Cedar Avenue at Broadway, Chestnut Avenue at Ocean Boulevard, and Cedar Avenue at Ocean Boulevard.
Hydrology and Water Quality	Requests details about where water supply for the project would come from and what water conservation measures would be included in the project.	For details related to the project's water supply in the context of recent drought conditions, see pages 46 through 48 of the Initial Study (se Appendix A). The Long Beach Water Department would supply water to the project site. The recent drought has led to restrictions on water use in southern California. The proposed project would be required to comply with any additional restrictions on water use implemented by the Long Beach Water Department.

1.3 SCOPE AND CONTENT/ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Section 15163(b) of the *CEQA Guidelines* states that, "the supplemental EIR need contain only the information necessary to make the previous EIR adequate for the project as revised." In accordance with CEQA, the SEIR is a focused study of key issues that were not identified at a project level as part of the Downtown Plan Final Program EIR. Specifically, the EIR Supplement addresses issues for which Downtown Plan EIR mitigation measures stipulate further analysis on a project-by-project basis.

The issues addressed in this SEIR are listed in subsection 1.2. This SEIR identifies potentially significant environmental impacts, including site-specific and cumulative effects, of the project in accordance with the provisions set forth in the *CEQA Guidelines*. In addition, the SEIR recommends feasible mitigation measures, where possible, that would reduce or eliminate adverse environmental effects. In preparing the SEIR, use was made of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and background documents prepared by the City. A full reference list is contained in Section 7.0, *References and Report Preparers*.

The Alternatives section of the SEIR (Section 6.0) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines.* The alternatives discussion evaluates the CEQA-required "no project" alternative and four alternative development scenarios for the site. It also identifies the environmentally superior alternative among the alternatives assessed.

The level of detail contained throughout this SEIR is consistent with the requirements of CEQA and applicable court decisions. The *CEQA Guidelines* provide the standard of adequacy on which this document is based. *CEQA Guidelines* Section 15151 states:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.*

1.4 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Long Beach is the lead agency for the project because it holds principal responsibility for approving this SEIR.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. There are no responsible agencies for the project.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the proposed project.

1.5 ENVIRONMENTAL REVIEW PROCESS

The major steps in the environmental review process, as required under CEQA, are outlined as follows. The steps are presented in sequential order.

1. **Notice of Preparation (NOP).** After deciding that an SEIR is required, the lead agency must file an NOP soliciting input on the SEIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing *(CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the proposed project could create significant environmental impacts.

2. **Draft SEIR Prepared.** The Draft SEIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and, h) discussion of irreversible changes.

3. **Notice of Completion and Notice of Availability.** A lead agency must file a Notice of Completion with the State Clearinghouse when it completes a Draft SEIR (*CEQA Guidelines* Section 15085) and prepare a Public Notice of Availability of a Draft SEIR. The lead agency must file the Notice of Availability with the County Clerk's office for a 45 day posting period and send a copy of the Notice of Availability to anyone requesting it *(CEQA Guidelines* Section 15087). Additionally, public notice of the Draft SEIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public, and respond in writing to all comments received (PRC Sections 21104 and 21153). The minimum public review period for a Draft SEIR is 30 days. When a Draft SEIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the Clearinghouse (Public Resources Code Section 21091) approves a shorter period.

4. **Final SEIR.** A Final SEIR must include: a) the Draft SEIR; b) copies of comments received during public review; c) list of persons and entities commenting; and, d) responses to comments.

5. **Certification of Final SEIR.** Prior to making a decision on a project, the lead agency must consider the previous EIR and certify that: a) the Final SEIR has been completed in compliance with CEQA; b) the Final SEIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the Final SEIR prior to approving a project (*CEQA Guidelines* Sections 15090 and 15163(e)).

6. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or, c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted *(CEQA Guidelines* Sections 15042 and 15043).

7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the SEIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible *(CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.

8. **Mitigation Monitoring Reporting Program.** When an agency makes findings on significant effects identified in the SEIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.

9. **Notice of Determination.** An agency must file a Notice of Determination within five working days after deciding to approve a project for which an SEIR is prepared *(CEQA Guidelines* Section 15094). A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA legal challenges [Public Resources Code Section 21167(c)].

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2 PROJECT DESCRIPTION

The proposed project would involve demolishing existing buildings on the project site and developing a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. In total, the project includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. Existing buildings that would be demolished include the former Long Beach Courthouse, Long Beach City Hall, and Long Beach Main Library. Demolition of the former courthouse was studied in the Long Beach Courthouse Demolition Project Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014. Details on the current state of the courthouse and its proposed demolition that are included below are from the Long Beach Courthouse Demolition Project Draft EIR. This section describes the project location, major characteristics of the site and the proposed development, project objectives, and approvals needed to implement the project.

2.1 PROJECT PROPONENT

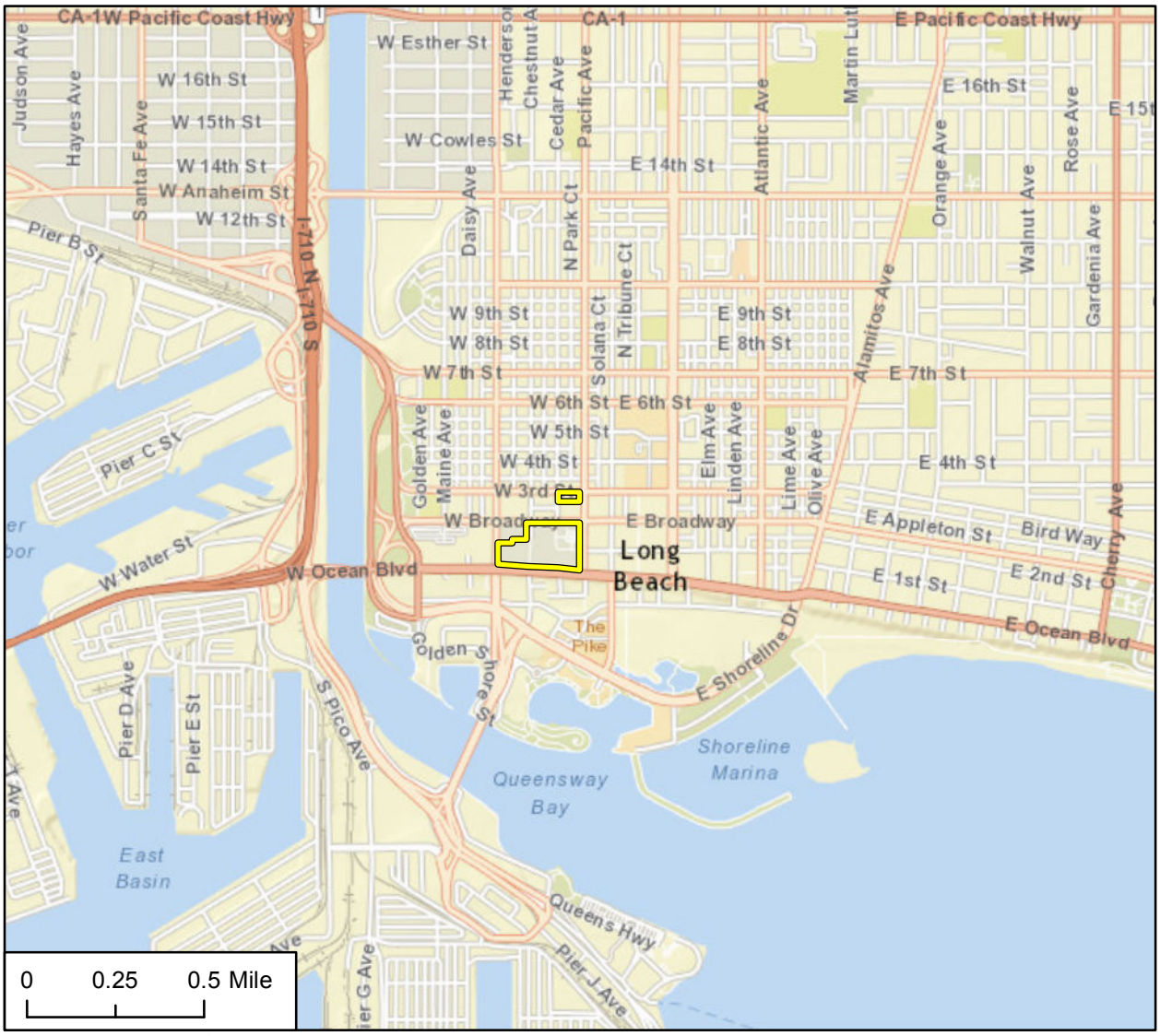
City of Long Beach
333 West Ocean Boulevard 5th Floor
Long Beach, California 90802

2.2 PROJECT LOCATION

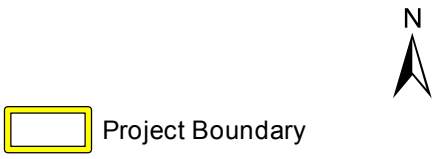
The project site is located within downtown Long Beach, Los Angeles County, California. The 15.87-acre project site is separated into two discontigous parcels and generally bound by Third Street to the north, Pacific Avenue to the east, Magnolia Avenue to the west and Ocean Boulevard to the south. The northern portion of the project site is rectangular parcel that contains a paved parking lot. It is bound by Third Street to the north, Pacific Avenue to the east and Cedar Avenue to the west. The southern boundary is adjacent to a vacant lot. The larger, southern portion of the project site is an irregular-shaped parcel bound by Magnolia Avenue and Chestnut Avenue to the west, Broadway to the north, Pacific Avenue to the east, and Ocean Boulevard to the south. Figure 2-1 shows the regional location. Figure 2-2 shows the project site location.

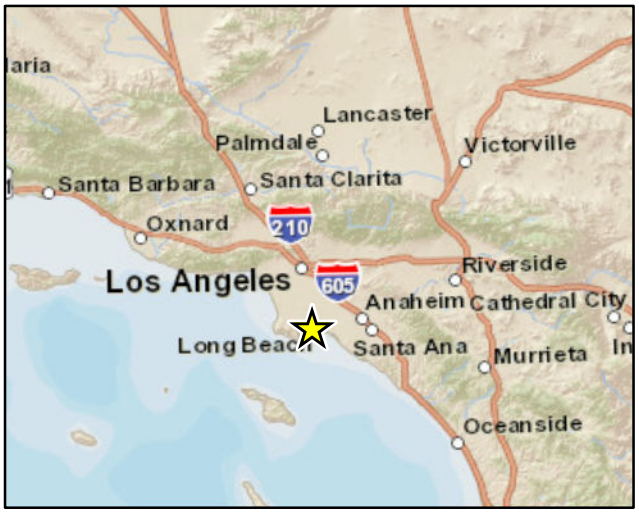
2.3 CURRENT LAND USE AND REGULATORY SETTING

Table 2-1 summarizes the existing characteristics of the project site, which are also described below. Maps showing the land use designation, Downtown PD-30 Land Use District, and zoning of the site and its surroundings are shown in Figures 2-3, 2-4, and 2-5.



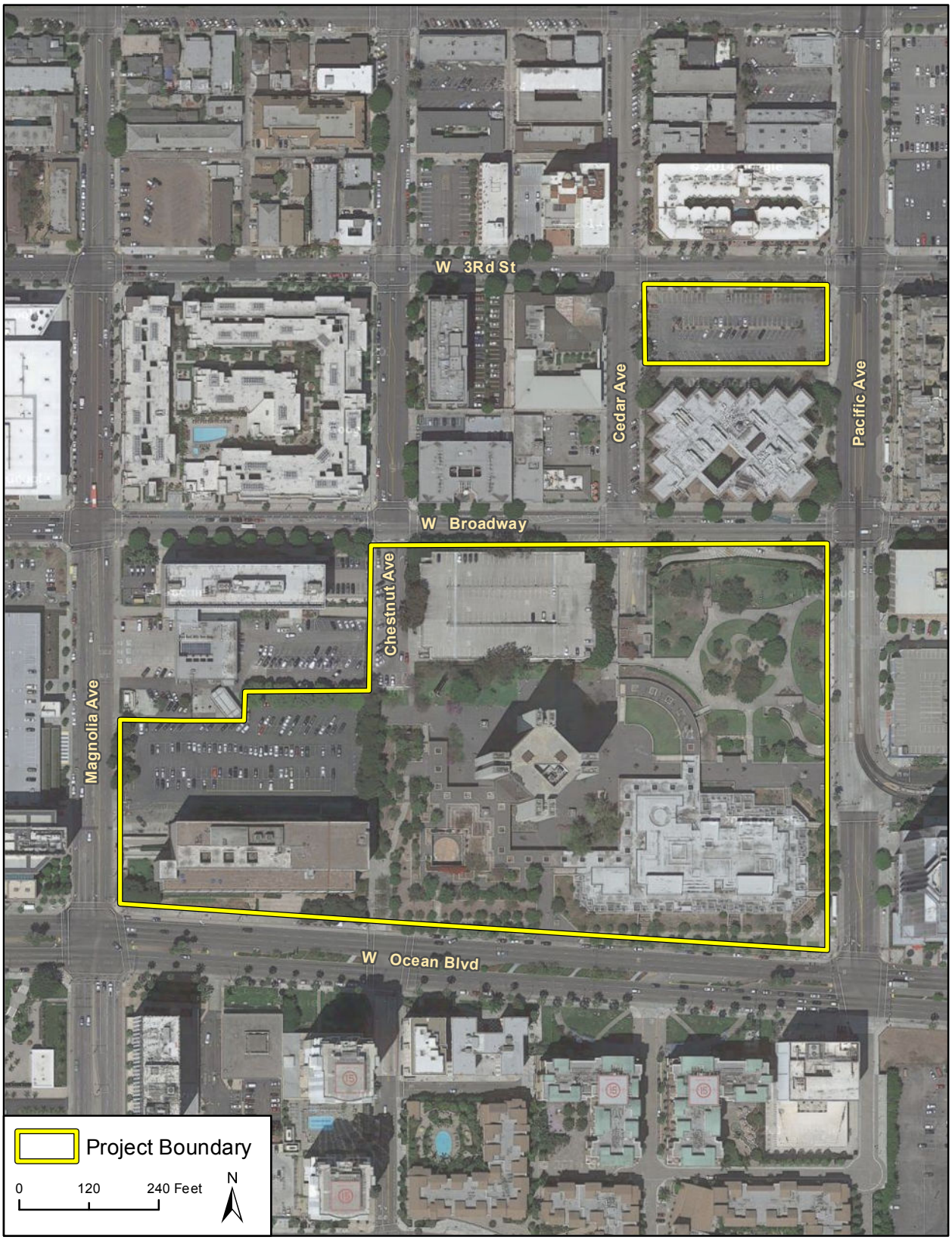
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Regional Location

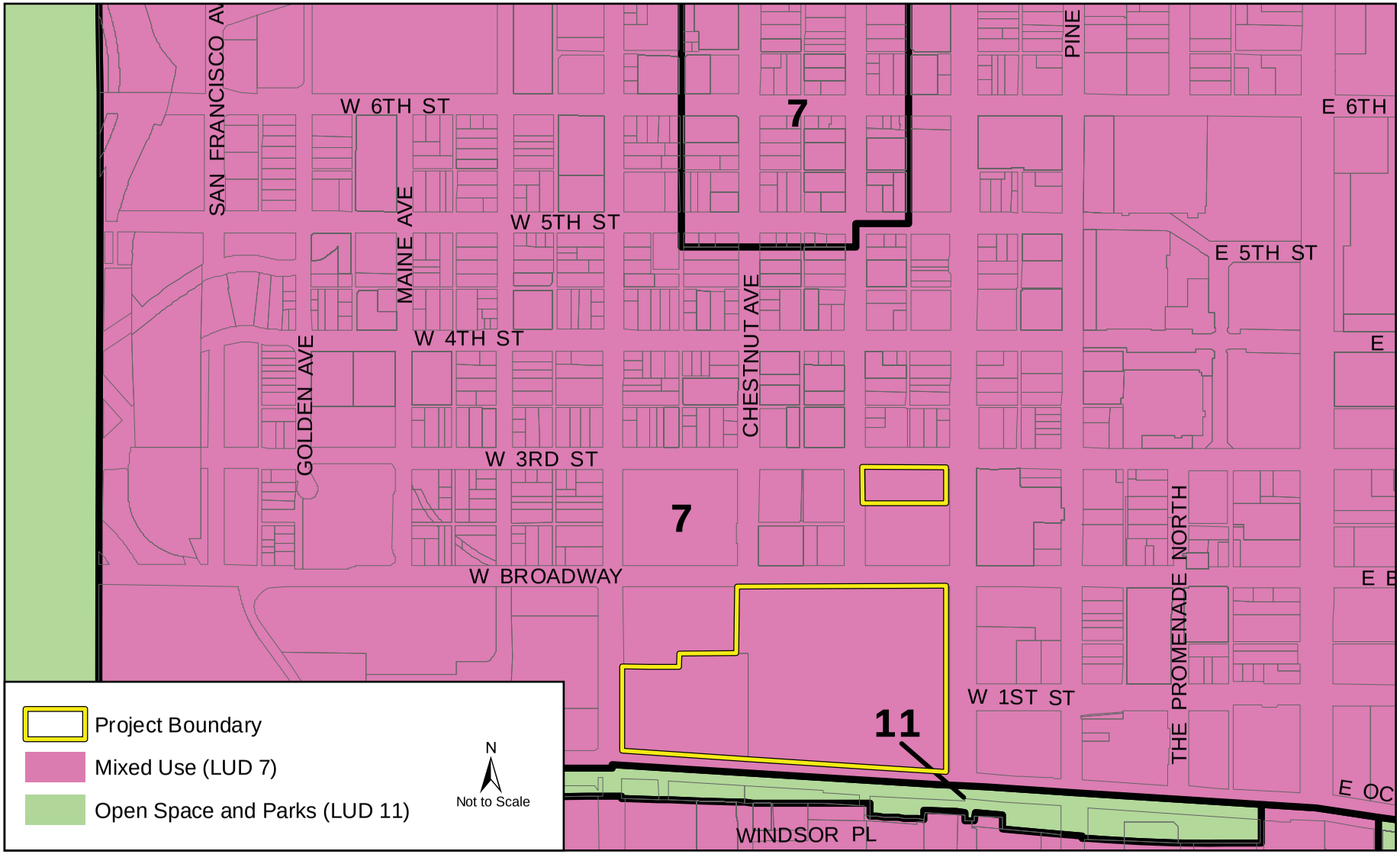
Figure 2-1



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Project Location

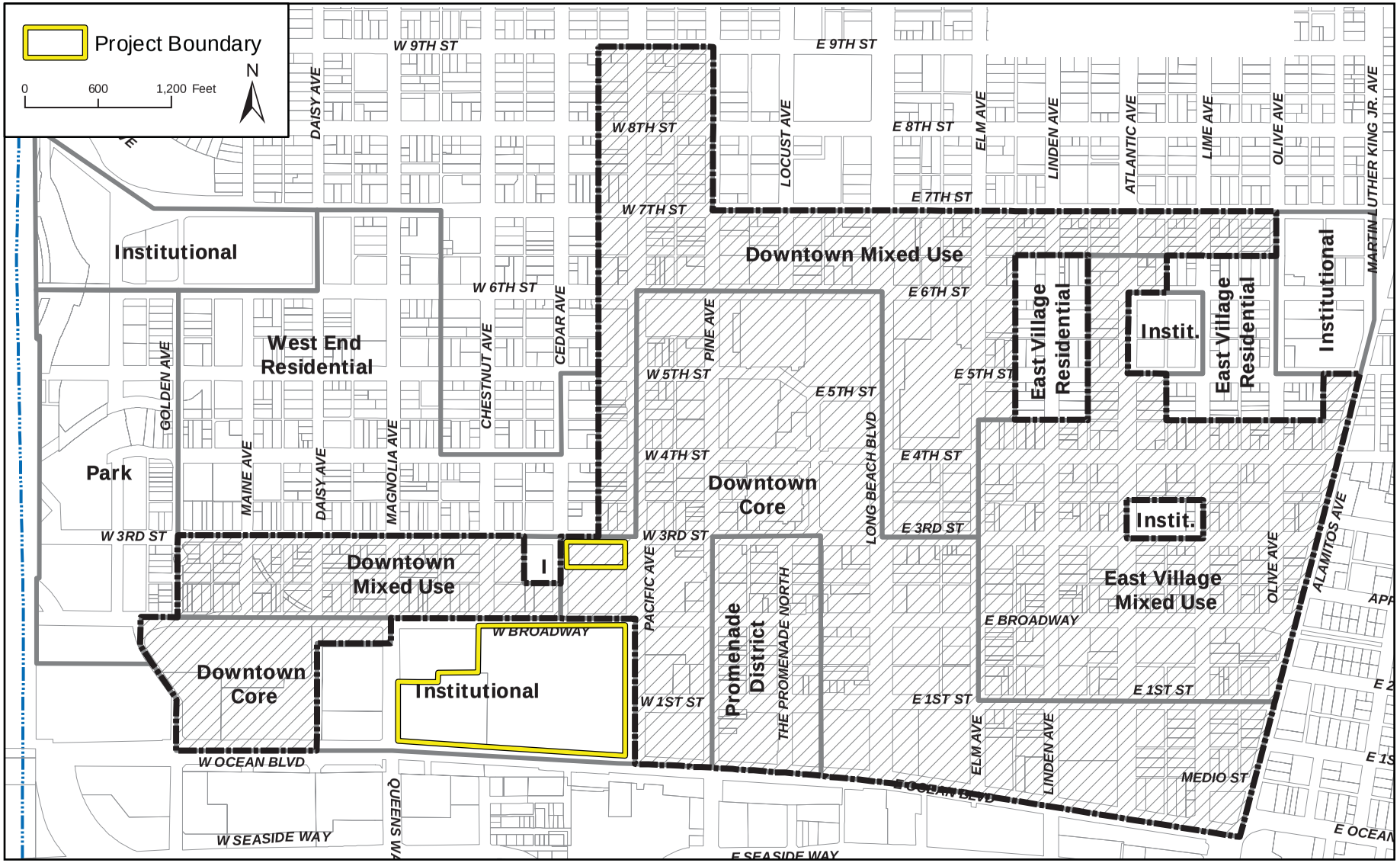
Figure 2-2



Source: Long Beach Development Services and Dept. of Technology Services, January 2012

General Plan Land Use Designations

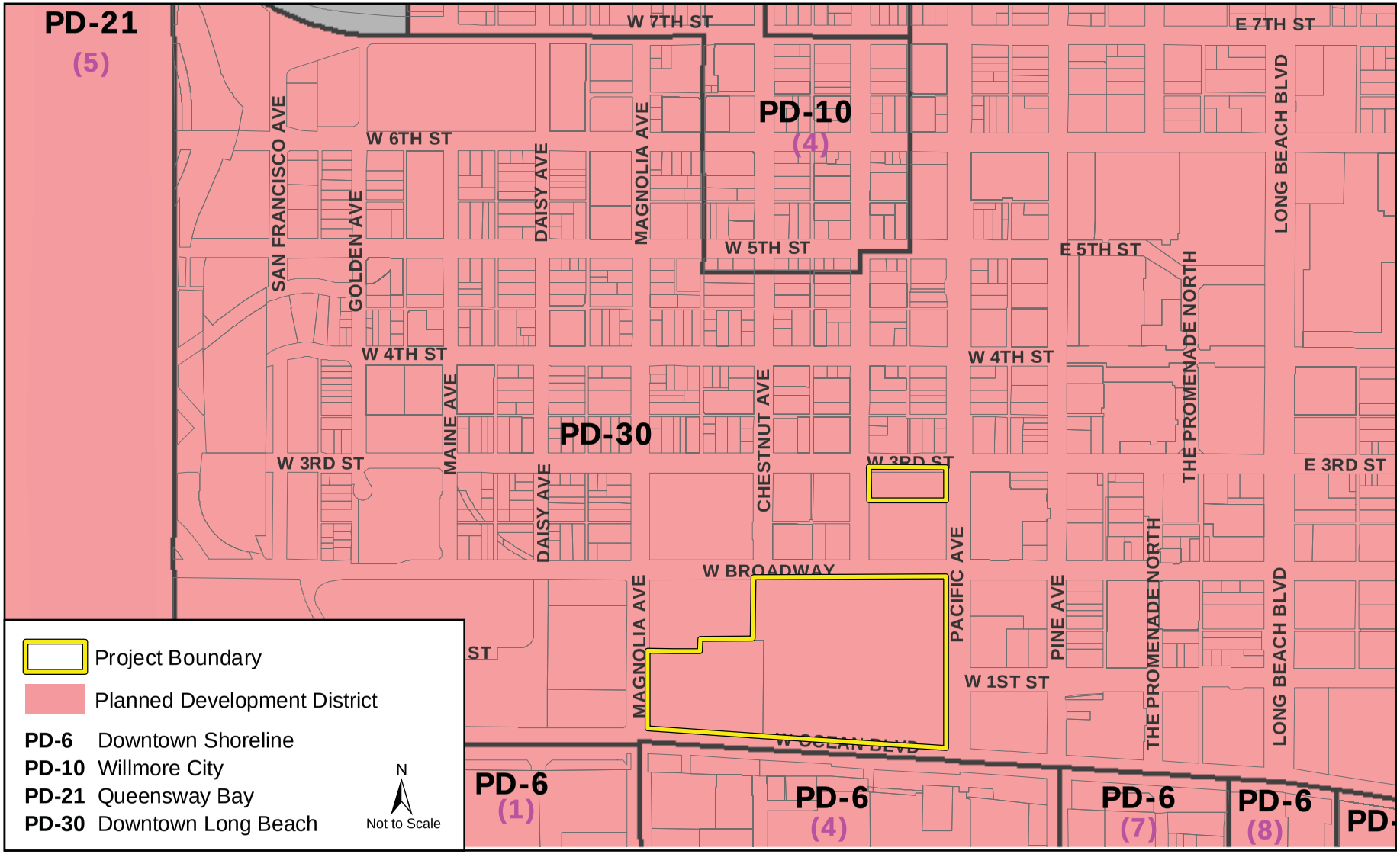
Figure 2-3



Source: Long Beach Downtown Plan PEIR, December 2010

Downtown PD-30 Land Use Districts

Figure 2-4



Source: Long Beach Development Services and Dept. of Technology Services, January 2012

Zoning Designations

Figure 2-5

Table 2-1
Existing Site Characteristics

Assessor's Parcel Number	7280-022-914; 7280-025-902; 7280-025-900
Site Size	15.87 acres
General Plan Land Use Designations (see Figure 2-3)	Mixed Use (LUD 7)
Downtown PD-30 Land Use Districts (see Figure 2-4)	Institutional and Downtown Core
Zoning Designations (see Figure 2-5)	Downtown Plan (PD-30)
Current Use and Development	Long Beach City Hall Long Beach Main Library Broadway Parking Structure Lincoln Park Former Long Beach Courthouse (No longer in use)
Surrounding Land Use Designations (see Figure 2-3)	North: Mixed Use (LUD 7) East: Mixed Use (LUD 7) South: Open Space and Parks (LUD 11) and Mixed Use (LUD 7) West: Mixed Use (LUD 7)
Surrounding Downtown PD-30 Land use Districts (see Figure 2-4)	North: West End Residential; Downtown Mixed Use; Downtown Core East: Downtown Core South: Downtown Shoreline (PD-6) (outside PD-30) West: Downtown Core; Institutional
Surrounding Zoning Designations (see Figure 2-5)	North: Downtown Plan (PD-30) East: Downtown Plan (PD-30) South: Downtown Shoreline (PD-6) West: Downtown Plan (PD-30)
Regional Access Local Access	Interstate 710 (Long Beach Freeway) Ocean Boulevard, Broadway and Third Street
Public Services	Water: Long Beach Water Department Sewer: Long Beach Water Department Fire: Long Beach Fire Department Police: City of Long Beach Police Department

2.3.1 Current Land Use

The proposed project is located in the Civic Center portion of the Downtown Plan area of Long Beach. The proposed project would include activities on four distinct blocks, which are fully developed under existing conditions (see Figures 2-2 for existing conditions): Civic Block, Lincoln Park and New Library Block, Third and Pacific Block, and Center Block (see Figure 2-6). The Center Block consists of City Hall (283,000 square feet [sf]) and Broadway Parking Structure. The Lincoln Park and New Library Block consists of the Main Library (138,000 sf), Lincoln Park and the Lincoln Parking Structure. The Civic Block consists of the former Long Beach Courthouse (approximately 277,000 sf) and a parking lot (approximately 82,000 sf). The Third and Pacific Block consists of a surface parking lot. All existing buildings and structures except for the former Courthouse are currently in use. As described in the Long Beach Courthouse Demolition Project Draft EIR, a statewide Task Force on Court Facilities was

established in 1997 to document the condition of California's existing court buildings and identify critical physical deficiencies in court buildings throughout the state. The Task Force's final report outlined a program to improve or replace courthouses to make them safe, secure, and accessible. The former Long Beach Courthouse, which is being proposed for demolition, was identified as one of the worst in the State.

In June 2001, the Administrative Office of the Courts began a capital planning process to develop a facility master plan for each of the 58 trial courts in California. The master plans confirmed the Task Force's findings related to physical and functional conditions, considered how best to provide court services to the public, developed judicial and staffing projections, and examined development options for how best to meet goals related to court service, operational efficiency, local public policy, and cost effectiveness. Specific functional and physical problems identified with the courthouse building include the following:

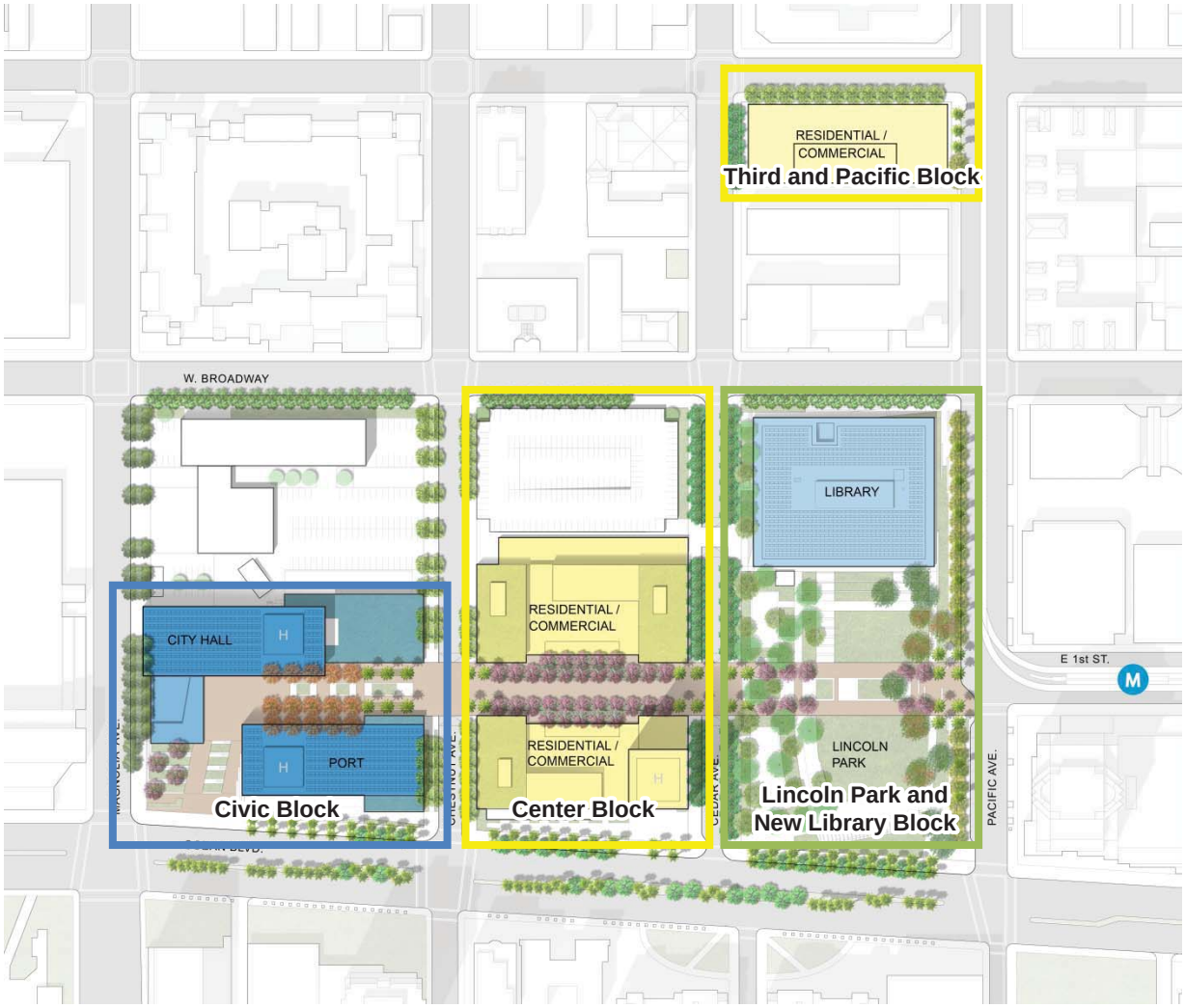
Americans with Disabilities Act (ADA)

- *The courthouse building does not have wheelchair accessible bathrooms on most floors.*
- *There is no public elevator access to the sixth floor.*
- *Access to and from the sixth floor for persons with disabilities is by security guard escort only, using the security elevator.*
- *Of the 27 courtrooms, none are ADA compliant.*

Seismic Deficiencies

- *Two independent surveys, one by the County of Los Angeles and one by the State of California, concluded that the courthouse building would collapse in the event of a medium-sized earthquake from a nearby fault.*
- *The last two area earthquakes caused a six-inch separation between the east wing and west wing of the courthouse building.*
- *Over time, rainstorms, coupled with high winds, caused further movement and damage in the east wing and new leaks have developed.*
- *The County of Los Angeles performed a limited retrofit at an estimated cost of $13.9 million. It is now estimated that the courthouse would remain standing long enough to evacuate but could not be capable of being re-occupied following a medium-sized earthquake.*

Due to its age, physical condition, and functional issues, renovating and expanding the courthouse was determined not to be a viable option to meet the growing demand for court services in the City of Long Beach. Therefore, a site for a new courthouse was identified on a six-acre property northwest of the existing Long Beach Courthouse at 275 Magnolia Avenue in Long Beach. The courthouse functions relocated to the new Governor George Deukmejian Courthouse and opened for business on September 9, 2013, and the former courthouse site is now owned by the City of Long Beach Successor Agency.



Source: PECP, 2015

Project Site Blocks

Figure 2-6

2.3.2 Surrounding Land Uses

Generally, the project site is located in the Civic Center portion of the Downtown Plan area of Long Beach surrounded by a mix of uses, including residential, retail, commercial space, and recreational areas (including parks). This area is also identified as the Institutional District of PD-30 in the Long Beach Downtown Plan EIR (the "Downtown Plan EIR") (see Figure 2-4). A portion of the project site (Third and Pacific Block) is identified as the Downtown Core District of PD-30 (see Figure 2-4). The Los Angeles River is less than one mile to the west of the Downtown area.

Land uses west of the project site, across Magnolia Avenue, include the Glenn M. Anderson Federal Building followed by the World Trade Center. North of Broadway Avenue are existing residential (apartment) development and mixed-use buildings. Immediately west of the Third and Pacific Block is the First Congregational Church, at the southwest corner of Third and Cedar. North of Third Street are residential and mixed use developments, while the block immediately east of Pacific Avenue contains residential, as well as high-rise commercial and mixed-use buildings. Uses south of the project site, across Ocean Boulevard, include high-rise residential buildings (up to 25 stories in height), a high-rise office building (approximately 15 stories in height), and a single-story strip retail building. The area south of Ocean Boulevard is located in the Downtown Shoreline Planned Development District (PD-6), outside of the Downtown Plan area. Figure 2-7 shows the location of surrounding land uses.

2.4 PROJECT CHARACTERISTICS

2.4.1 Proposed Land Uses and Development

The design of the proposed Civic Center project follows the guidance of the Downtown Plan, which was adopted in January 2012. The City of Long Beach prepared a Final Program Environmental Impact Report (EIR) for the Downtown Plan that was certified in January 2012. The guiding principles for downtown Long Beach from the Downtown Plan are as follows:

- *We promote the development of a distinctive downtown skyline, providing a vibrant, compact city core attracting cosmopolitan and creative people.*
- *Our lively Downtown acts as the heart of the city, connecting with the neighborhoods and coastline.*
- *We encourage an infrastructure to accommodate a future that is less dependent on fossil fuels and more focused on walking, bicycling, and public transportation.*
- *We invite and support new industries to invest in our future so that we can continue to diversify our economy and promote job growth while strengthening our existing backbone of convention, tourism, and port business.*
- *We endorse bold architecture, planning, and construction that utilize green building technology and incorporate sustainable energy.*
- *We demand quality in building practices in order to ultimately create historical masterpieces.*
- *We value our buildings of historic merit and seek to preserve or restore them through adaptive reuse.*

- *We include the best aspects of an innovative global city: dynamic architecture, light-filled public spaces, active recreation, celebration of our unique culture, and respect for the natural environment.*
- *We work together to ensure the success of this vision and it is our promise to the City and its residents to invest in the future.*

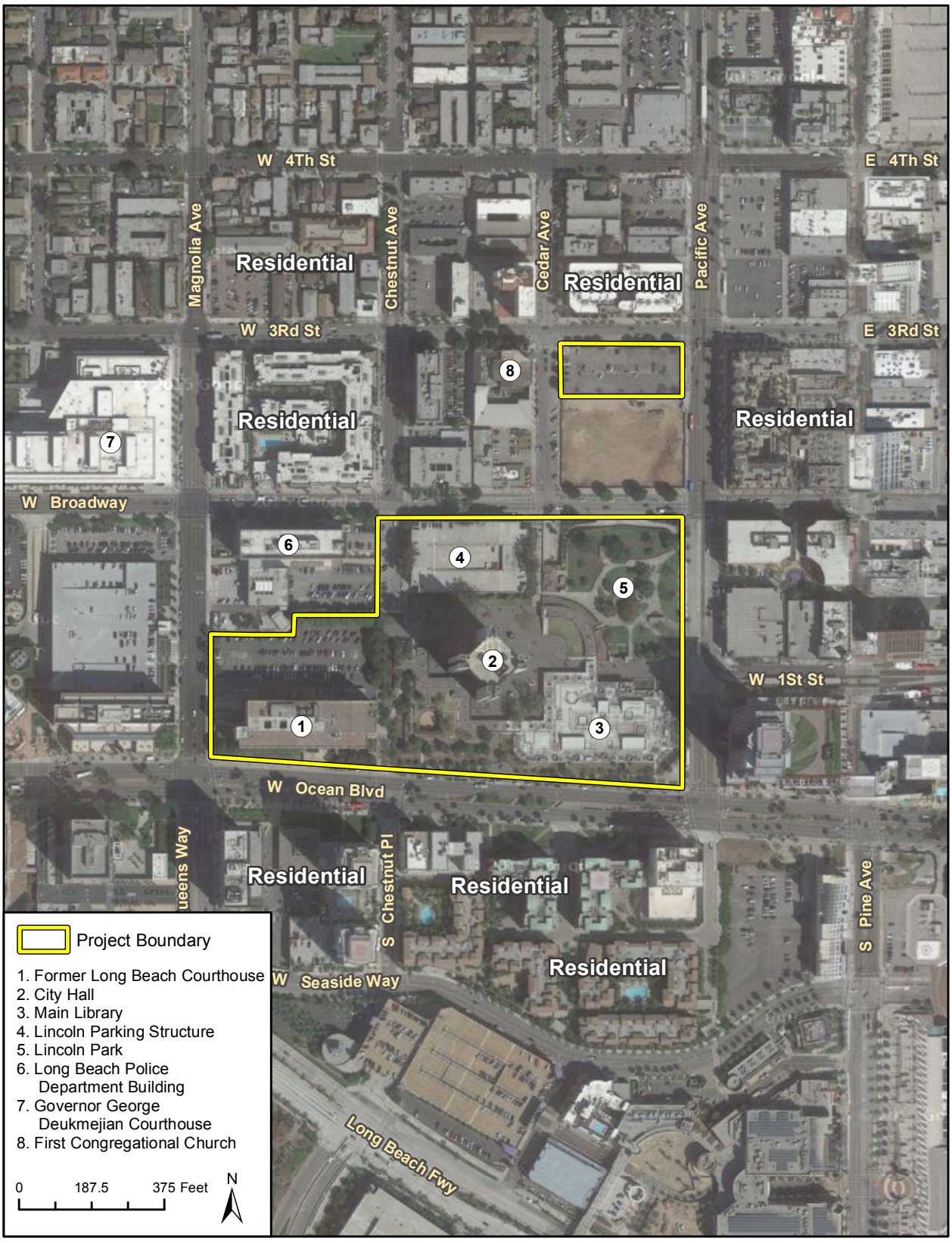
The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. The Lincoln Park garage and Broadway garage would be preserved and would continue to be used by City staff and public parking. Both the City Hall and Port buildings would be up to 11 stories in height. See Figures 2-8a and 2-8b for photosimulations of the project. Existing buildings that would be demolished include the former Long Beach Courthouse, Long Beach City Hall, and Long Beach Main Library.

The project includes the demolition of the former Long Beach Courthouse building. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014. The former courthouse would be demolished leaving the building foundation partially deconstructed with stem walls along the north and east property lines left in place. Prior to demolition, equipment and materials would be removed. Hazardous materials, if present, would be removed in accordance with federal and State abatement policies and procedures. Table 2-2 below describes the project components by block.

Table 2-2
Project Summary by Block

Block	Major Components	Uses	Height	Size
Civic Block	Port Building	Office	11 stories/164 ft	240,000 GSF
	City Hall Building	Office	11 stories/165 ft	270,000 GSF
	Underground Parking Structure	Parking	--	509 parking spaces
Lincoln Park and New Library Block	Total Lincoln Park Area	--	--	4.8 acres
	Main Library	Library	2 stories/42 ft	92,000 GSF; 1.63 acres
	Open Space	Recreation	--	3.17 acres
Third and Pacific Block	Residential Building	Residential	Up to 7 stories / approx. 70 ft	200 DU
	Underground Parking Structure	Parking	--	250 parking spaces
Center Block	Mixed-Use Development:	Residential Hotel Retail Restaurant	Two buildings: Up to 7 stories/85 ft Approx. 36 stories/432 ft	580 DU 32,000 GSF retail 8,000 GSF restaurant 200 room hotel
	Underground Parking Structure	Parking	--	725 parking spaces

GSF = gross square feet; DU = dwelling units; ft = feet



Imagery provided by Google and its licensors © 2015.

Surrounding Land Uses

Figure 2-7



Looking southwest through project area, Pacific Avenue shown in lower left.

Source: Skidmore, Owings & Merrill LLP, March 2015.

Aerial Photosimulations

Figure 2-8a



Looking east through project area, Ocean Boulevard shown on right.

Source: Skidmore, Owings & Merrill LLP, March 2015.

Aerial Photosimulations

Figure Figure 2-8b

Specific project components are described in more detail below.

a. Civic Block. The Civic Block consists of three major components (see Figure 2-9 for a site plan):

Port Building. The Port Building would be up to 11 stories in height (approximately 164 feet tall), utilizing a concrete frame structure of up to 240,000 gross square feet (gsf). It would be designed to house the administrative functions of the Harbor Department, which are currently housed near the Long Beach Airport (4801 Airport Plaza Drive). The space within this building would be primarily office space. Port Building elevations are shown in Figures 2-10a and 2-10b.

City Hall Building. The City Hall building would be an approximately 270,000 gsf, up to 11-story concrete frame structure (approximately 165 feet tall) that includes office space for City staff and elected officials. The structure would also include Council Chambers, meeting rooms, transaction counters and other public serving components. Located around and between the City Hall and Port Building would be a 73,000 square foot (sf) Civic Plaza, which would include hardscape and landscape elements appropriate for larger spontaneous gatherings as well as planned events. City Hall elevations are shown in Figures 2-11a and 2-11b.

Port and City Hall Foundations. The Port and City Hall buildings would share a common underground parking structure that includes shared infrastructure such as the combined central plant, common points of vehicular access and shared loading dock services. Approximately 509 new spaces of underground parking would be available to the Harbor Department and the City's priority parking users, including Americans with Disabilities Act (ADA) accessible parking spaces, in a 2 to 2.5 level below grade structure that includes a below grade loading dock.

Construction on the Civic Block would begin once the former Long Beach Courthouse building occupying the site is removed.

b. Lincoln Park and New Library Block. Improvements to the Lincoln Park and New Library Block consist of two primary components: a new Main Library and a new Lincoln Park. See Figure 2-12 for a site plan.

Main Library. A new two-story (approximately 42 feet tall) Main Library of up to 92,000 gsf would be constructed utilizing a wood frame structure built on top of the existing Lincoln Parking Garage roof deck. In addition to the aboveground component, service, support and archive functions would be constructed on the P1 level of the Lincoln Parking Garage. Lincoln Parking Garage renovations would include enhancements to the existing parking structure necessary to support the Library and would allow access to the garage using the existing Pacific and Cedar Street access ramps. These temporary ramps would be modified and replaced with a new ramp system as part of the Center Block work described below. Library elevations are shown in Figure 2-13.

Lincoln Park. Lincoln Park, as deeded, is a total 4.8 acres area that includes both Lincoln Park (approximately 2.6 acres of open space) and the existing Main Library. After occupation of the new Library, the existing Main Library would be demolished and the site would be redeveloped into a new Lincoln Park. The new Main Library would be located in the park. The open space area, not including the library footprint, would be approximately 3.17 acres.

Lincoln Park would include drought tolerant landscaping and hardscape treatment to support planned programs and events. Planned park amenities include a multi-purpose event lawn, a dog park, and a children's play area. A new public restroom would also be added. Cross sections of Lincoln Park are shown in Figure 2-14.

c. Third and Pacific Block. The parcel at Third Street and Pacific Avenue is currently an approximately 0.9-acre surface parking lot. The project would include construction of a seven-story, multi-family residential complex on this lot. The structure would have up to 200 residential units and be up to 235,000 gsf. The proposed building is a five to seven-story structure of a combination of concrete and wood frame. The complex would also include a parking structure with up to two levels below grade and up to three levels above ground partially wrapped by the residential units. Up to 250 parking stalls would be included in this structure and the building would be serviced by at grade loading facilities.

d. Center Block. After the New City Hall is operational, the existing City Hall structure would be demolished and a mixed use project would be developed in its place. The Center Block commercial development would include up to 580 residential units totaling up to 650,000 gsf and up to 32,000 gsf of retail and 8,000 gsf of restaurant space. A 200-room hotel may also be included as component of the project. An underground parking garage would service this parcel with up to 725 new parking spaces and the two buildings comprising the new development would be serviced by at-grade loading facilities. The building adjacent to Ocean Boulevard (the Ocean Lot) would be approximately 85 feet in height and up to seven stories tall. The building adjacent to Broadway Garage would be approximately 432 feet in height and approximately 36 stories tall. In the event of a hotel use within the Ocean Boulevard parcel, a port-cochere would be provided at the corner of Ocean Boulevard and Cedar Street. See Figure 2-15 for a site plan

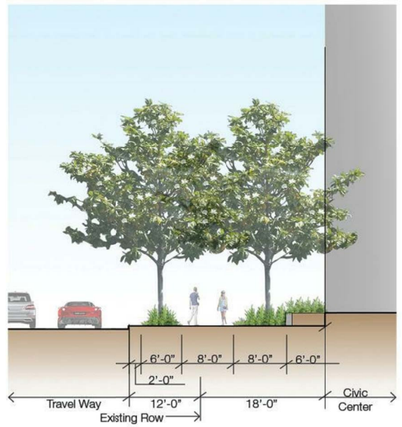
2.4.2 Site Infrastructure

The project would require site infrastructure improvements to service the buildings. The primary infrastructure components include:

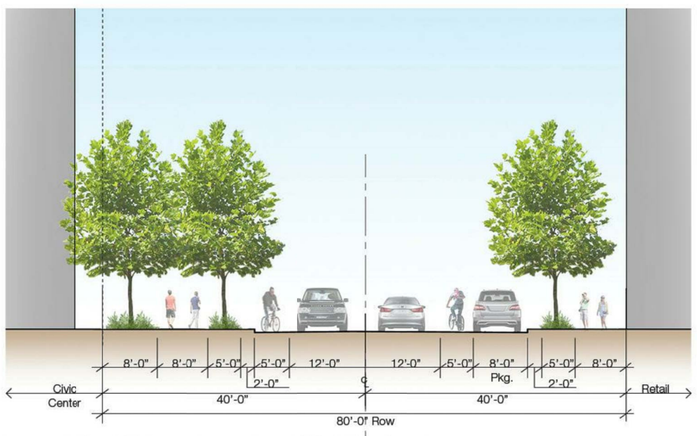
a. Street Extensions. Chestnut Street would be extended to connect Broadway to Ocean Boulevard as part of the Civic Block work discussed above. Cedar Street would be extended to connect Broadway to Ocean as part of the Center Block work discussed above. A section of First Street with non-traditional paving and a curbless design would be developed as a privately owned and operated street between Chestnut and Cedar Streets as part of the Center Block development. Street improvements would include new streetscape treatments and traffic signalization, cross walks, and on-street parking where feasible.

b. Utilities. Existing utilities that are not required to remain would be cut, capped and removed as necessary for each phase of construction. Utilities that need to remain in service, but that conflict with elements of the Downtown Plan would be re-located in coordination with appropriate utility provider.

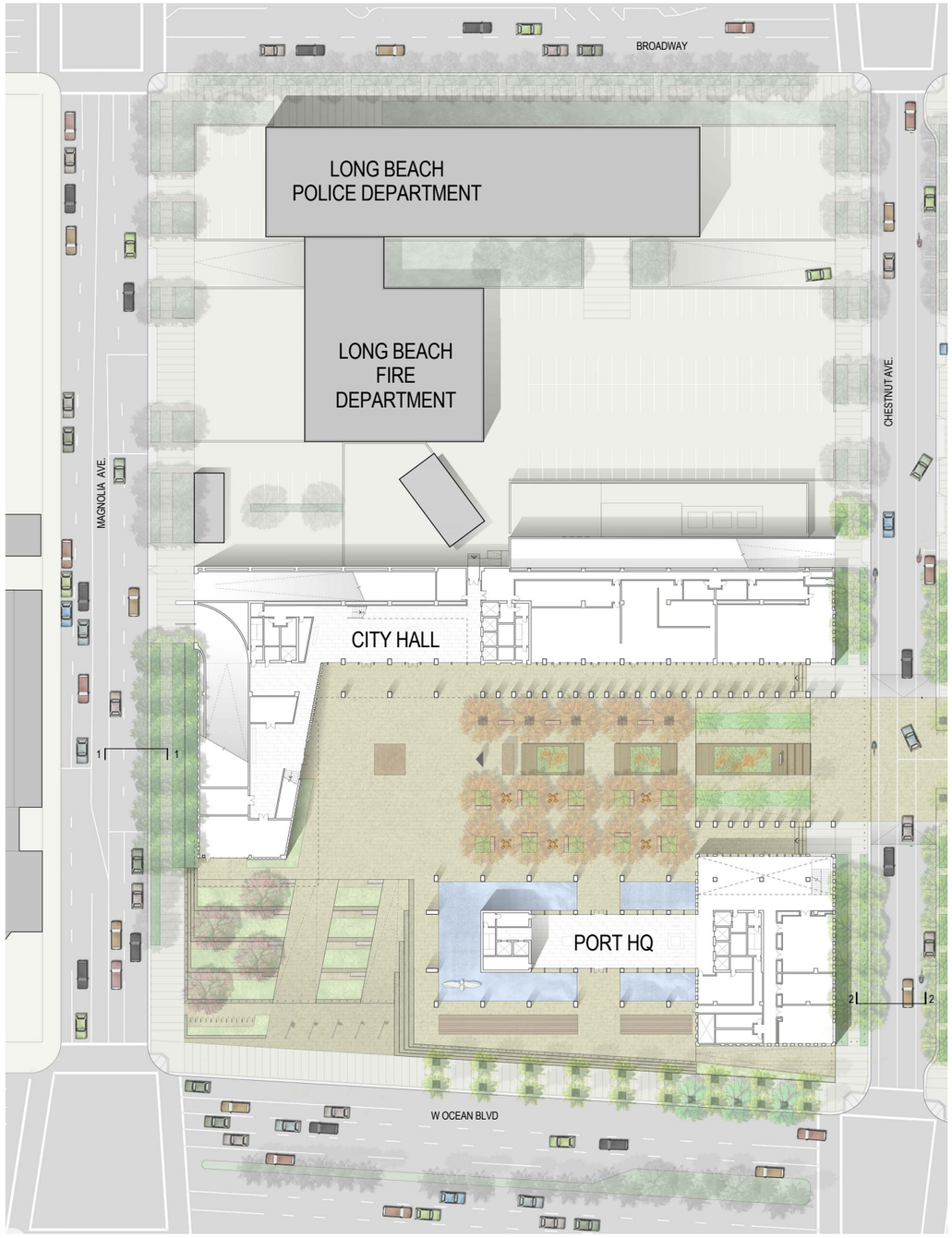
c. Landscaping. Landscaping for the site was designed at a Downtown Plan level to bring landscape consistency to the entire project and to ensure the project meets the City's requirements for streetscape improvements. Specific landscape and hardscape plans would be included with each of the major work components outlined above.

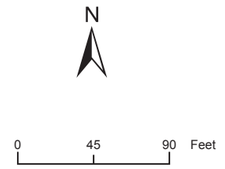


1 Magnolia Ave. East Side Typical (Proposed)



2 Chestnut Street Between Ocean Blvd & West Broadway (Proposed)

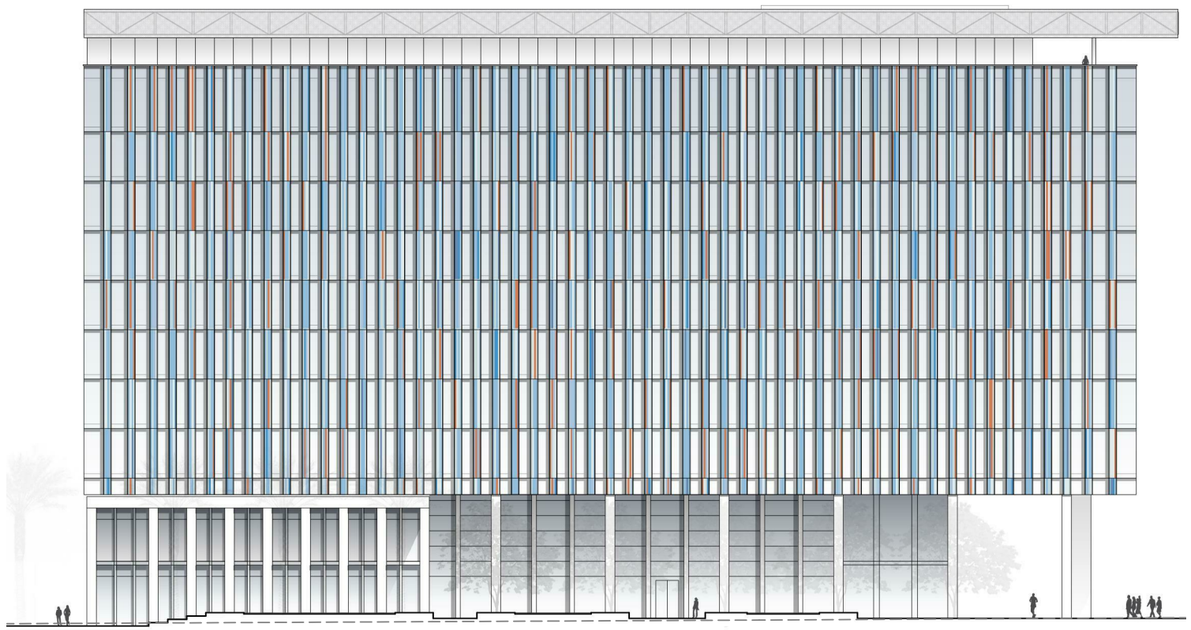




Site Plan: Civic Block

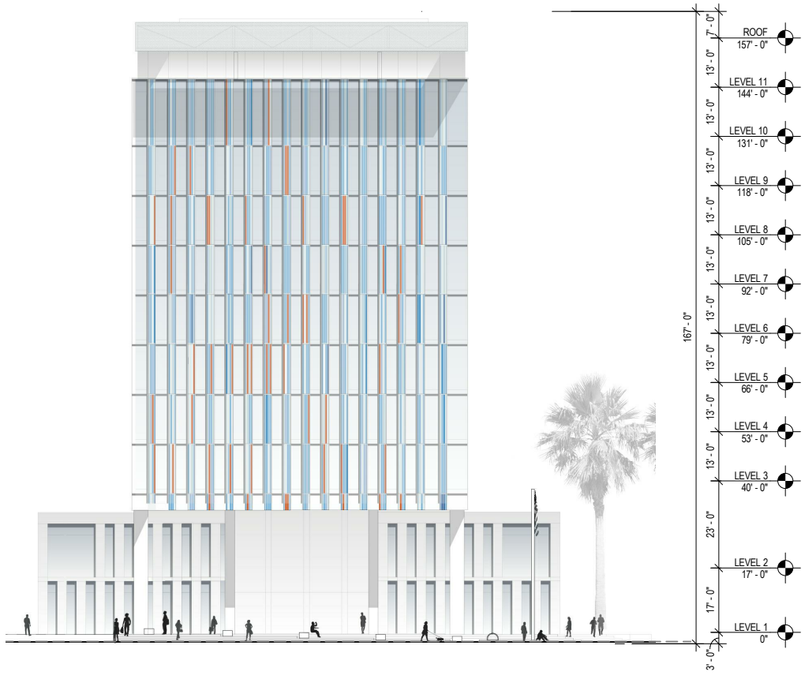
Source: PECP, April 2015

Figure 2-9



0 20 40 Feet

1 EXTERIOR ELEVATION NORTH

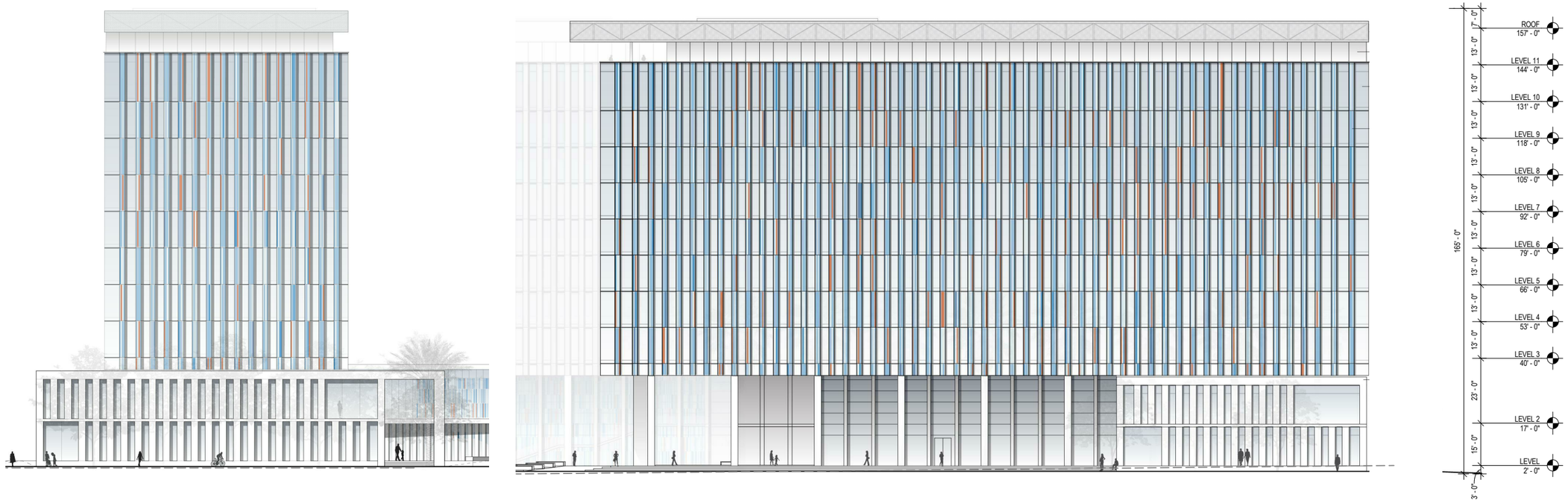


2 EXTERIOR ELEVATION WEST

Elevations: Port Building

Source: PECP, April 2015

Figure 2-10a



0 20 40 Feet

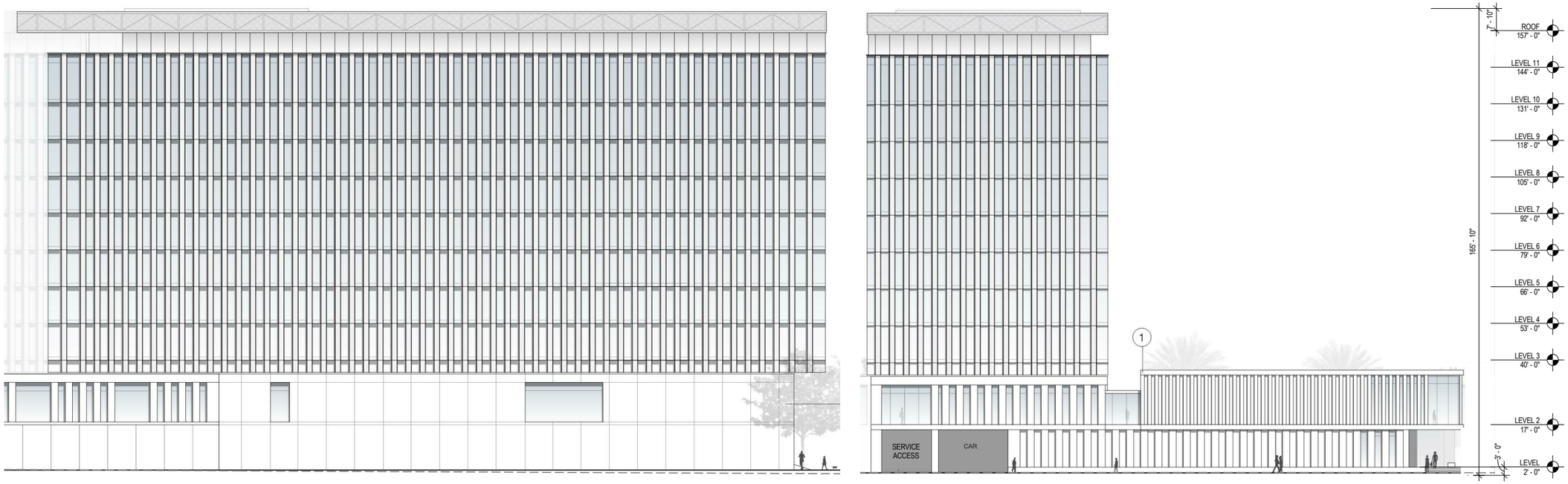
1 EXTERIOR ELEVATION EAST

2 EXTERIOR ELEVATION SOUTH

Elevations: Port Building

Source: PECP, April 2015

Figure 2-10b



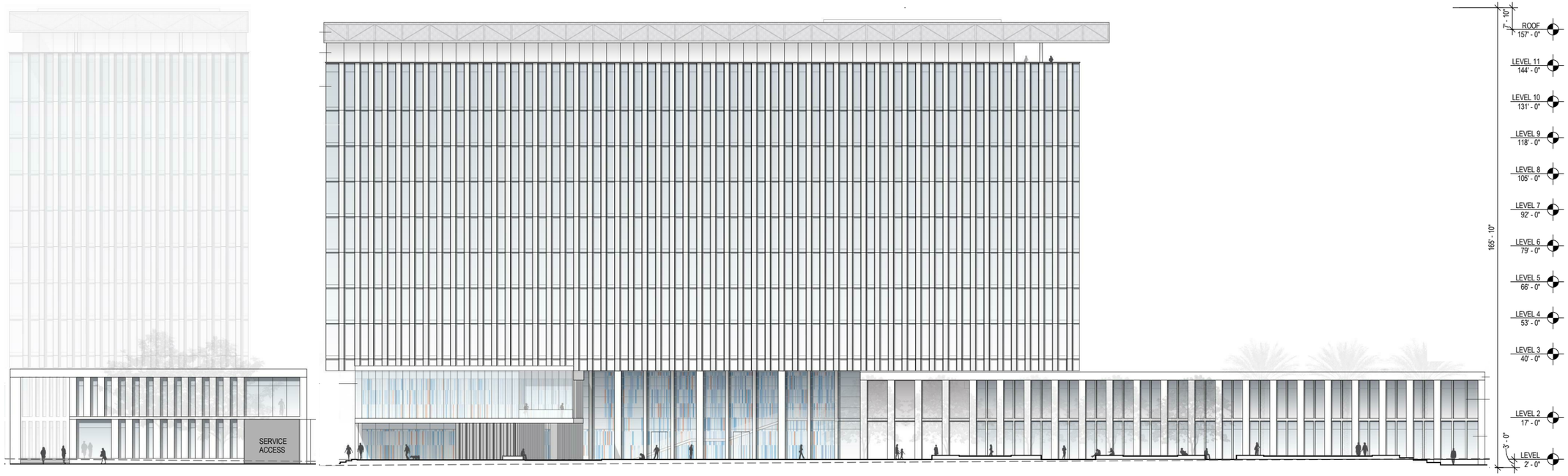
1 EXTERIOR ELEVATION NORTH

2 EXTERIOR ELEVATION WEST

Elevations: City Hall Building

Source: PECP, April 2015

Figure 2-11a



2 EXTERIOR ELEVATION EAST

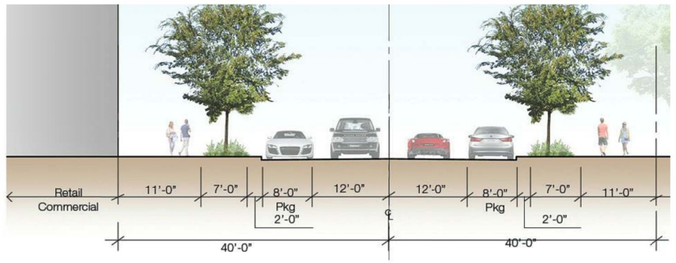
0 20 40 Feet

1 EXTERIOR ELEVATION SOUTH

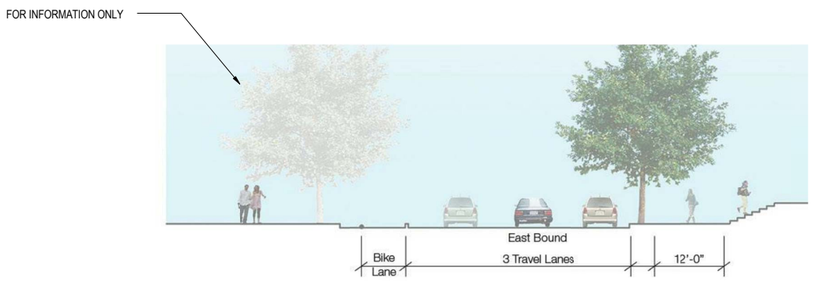
Elevations: City Hall Building

Source: PECP, April 2015

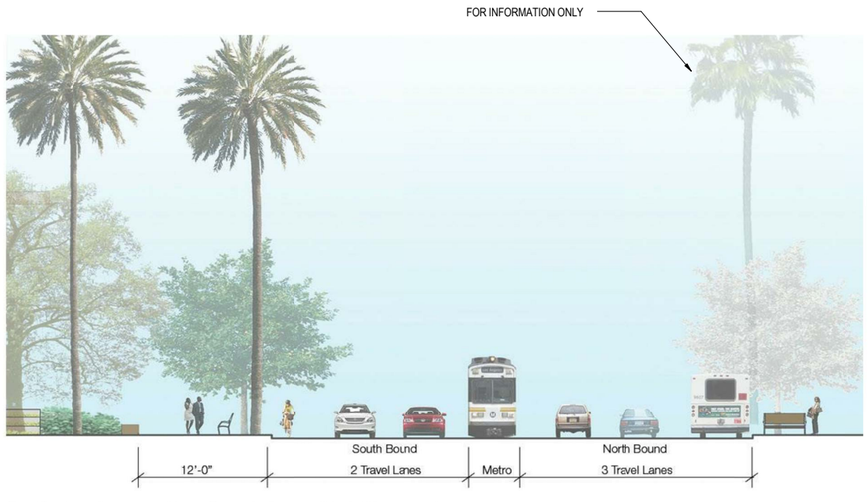
Figure 2-11b



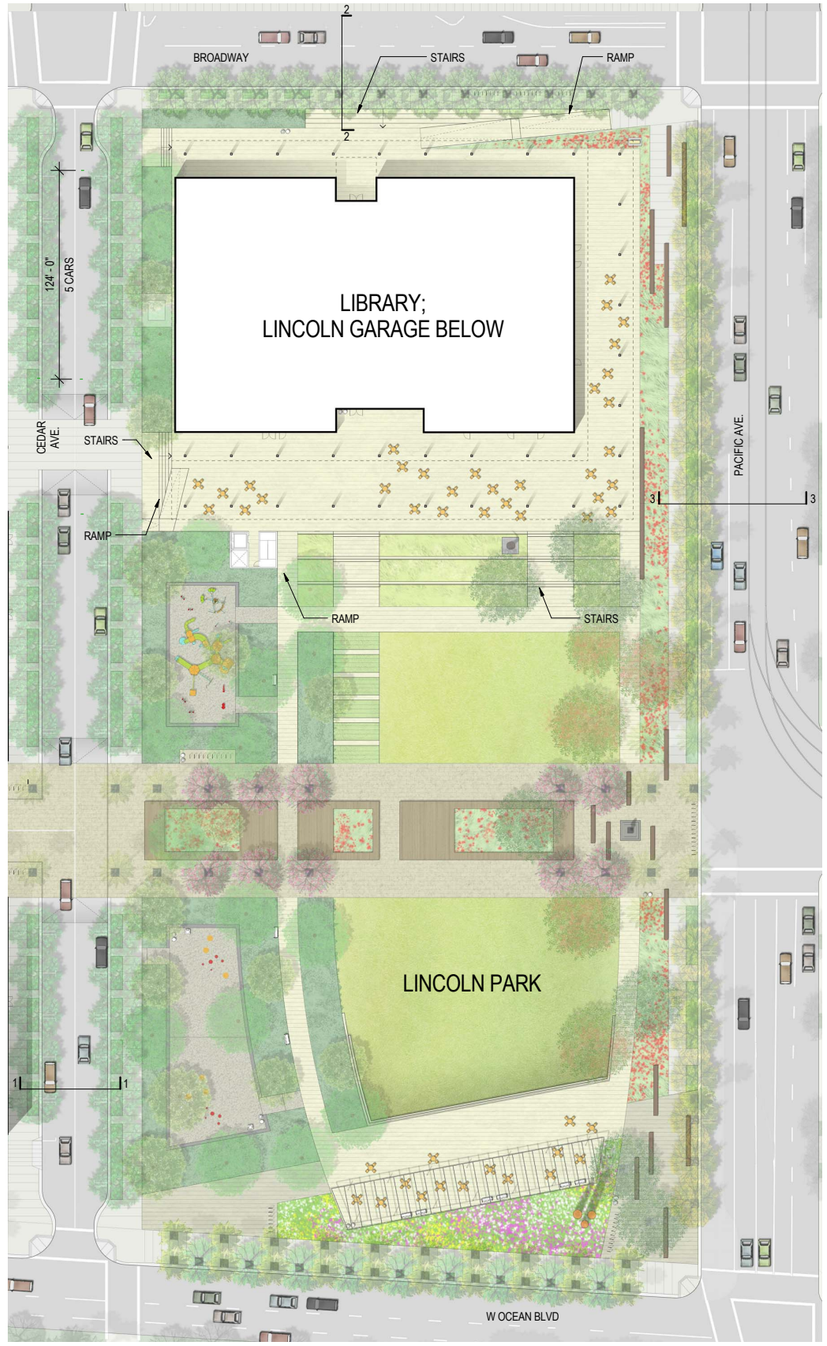
1 Cedar Ave. Between Ocean Blvd. & West Broadway (Prcposed)



2 Broadway Between cedar Ave. & Pacific Ave. (Proposed)



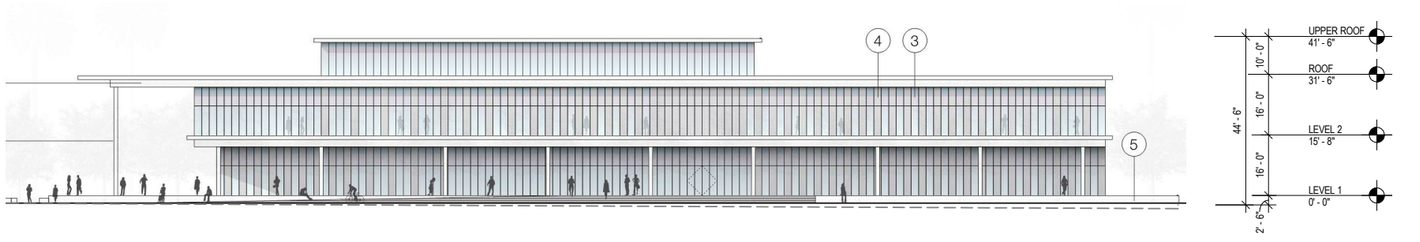
3 Pacific Ave. Between Broadway & Ocean Blvd. (Proposed)



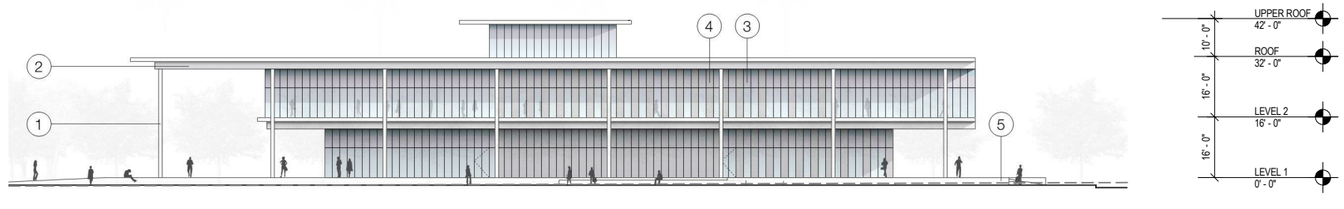
Site Plan: Lincoln Park and New Library Block

Source: PECP, April 2015

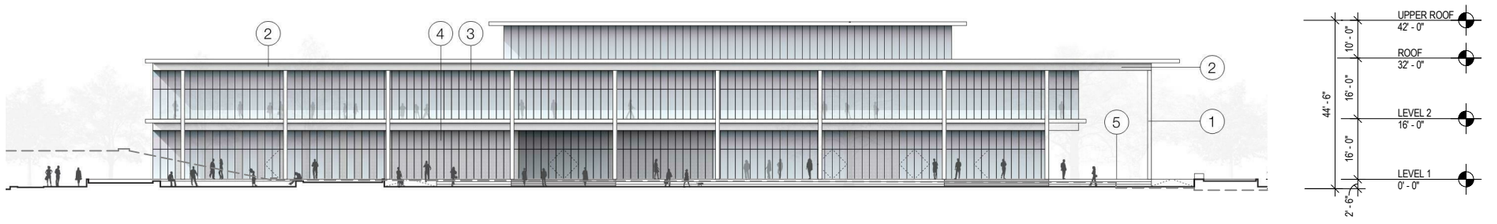
Figure 2-12



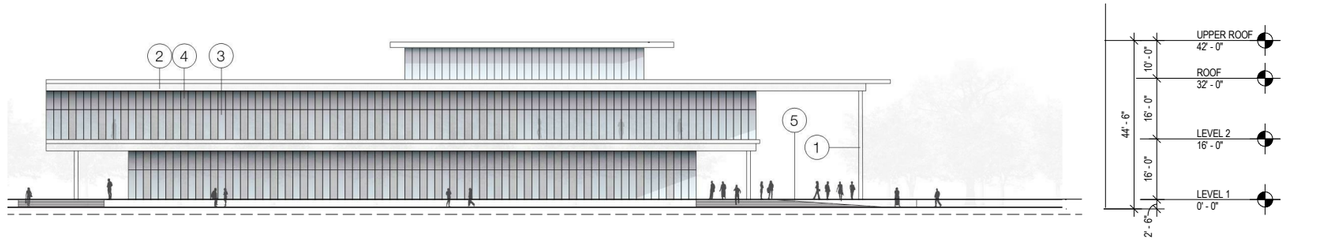
1 EXTERIOR ELEVATION NORTH



2 EXTERIOR ELEVATION EAST



3 EXTERIOR ELEVATION SOUTH



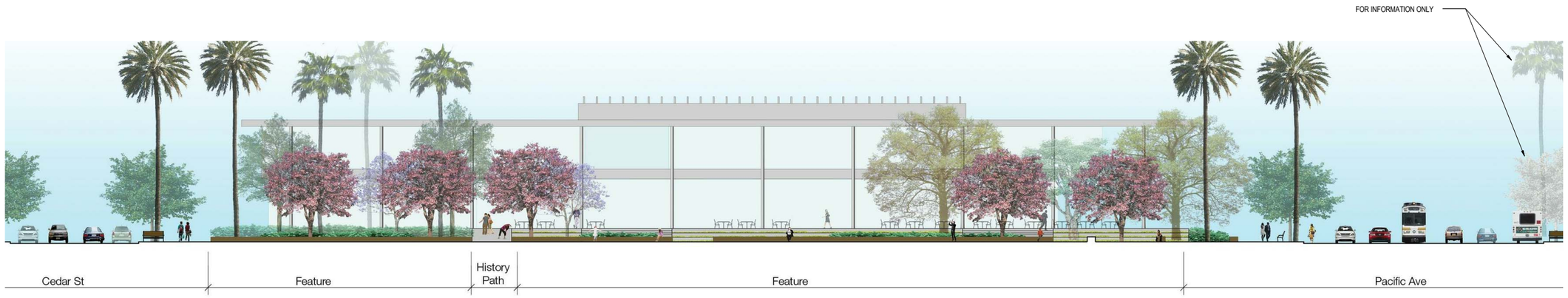
4 EXTERIOR ELEVATION WEST

0 20 40 Feet

Elevations: Library

Source: PECP, April 2015

Figure 2-13



Cross Section: Lincoln Park

Source: PECP, April 2015

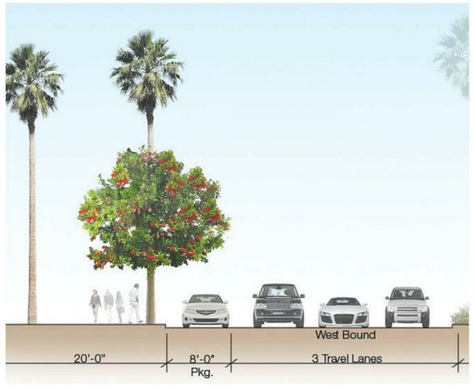
Figure 2-14

PROJECT INFORMATION
MIDDLE LOT:

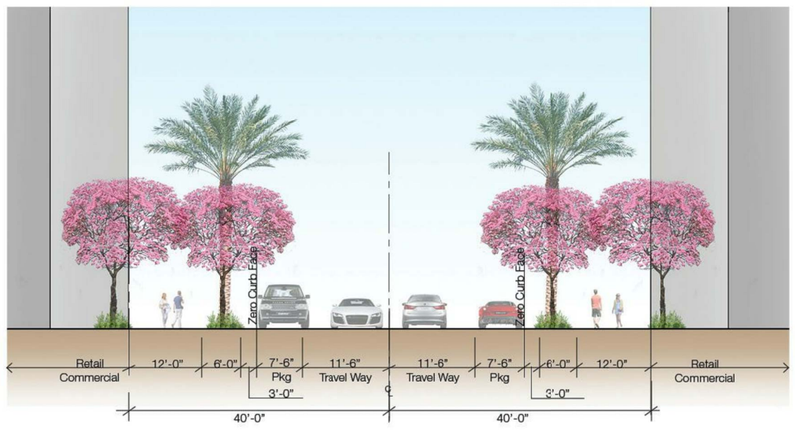
BUILDING USE:	RESIDENTIAL; RETAIL AND PARKING
TOTAL AREA	235,000 SF
BUILDING HEIGHTS:	85 FT
CONSTRUCTION TYPE:	TYPE IV RESIDENTIAL OVER TYPE IA PODUIM
NUMBER OF UNITS:	200 UNITS
PARKING COUNTS:	250 CARS

PROJECT INFORMATION
OCEAN LOT:

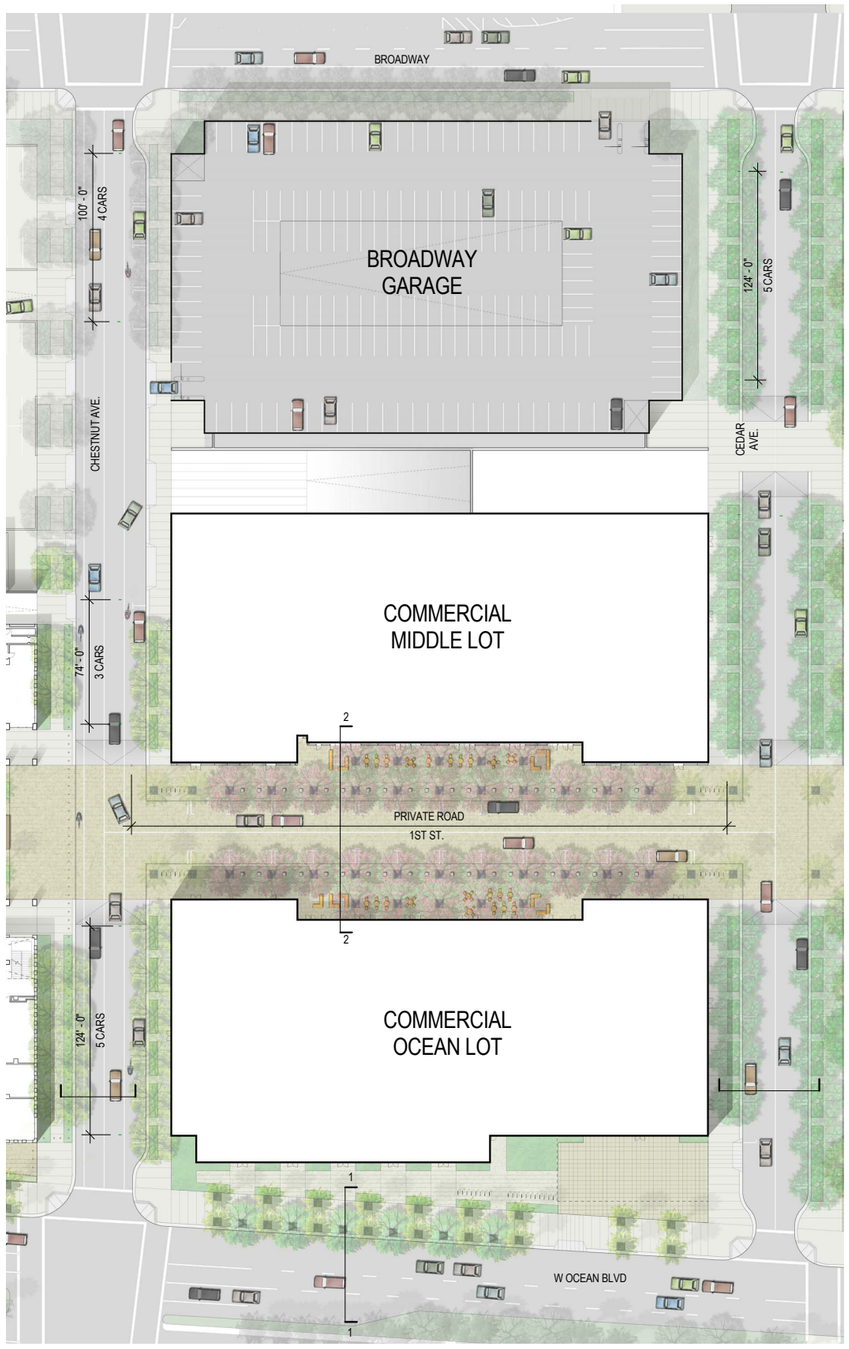
BUILDING USE:	HOTEL; RESIDENTIAL; RETAIL AND PARKING
TOTAL AREA	425,000 SF
BUILDING HEIGHTS:	432 FT
CONSTRUCTION TYPE:	TYPE IA HOTEL TOWER AND TYPE IV RESIDENTIAL OVER TYPE IA PODUIM
NUMBER OF UNITS:	380 UNITS
PARKING COUNTS:	475 CARS



1 Ocean Blvd. Between Magnolia Ave. & Pacifc Ave. (Proposed)



2 1St St. Between Cedar Ave. & Chestnut Ave. (Proposed)



Site Plan: Center Block

Source: PECP, April 2015

d. History and Cultural Loops. The project includes the development of History and Cultural Loops, a walking tour that would include historical, cultural, and educational points of interest throughout the project site. Points of interest would include contributing elements to the City Hall-Library Complex, such as the Carillon Clock Tower and 1915 Lincoln Park statue, as well as the Original Carnegie Library Cornerstone, Marlin Sculpture, time capsules (including the time capsule dedicated in 1976 at the Civic Center), and additional historical and cultural elements. Temporary art exhibits and historical timeline markers would also be present within the walking loops.

2.4.3 Site Preparation and Construction

Construction is anticipated to begin in June 2016 and last approximately seven years, ending by approximately July 2022. On the Civic Block, grading would require approximately 180,000 cubic yards (cy) of export if the Old Courthouse is completely removed down to the basement level. On the Center Block, grading would require approximately 250,000 cy of cut and 51,000 cy of fill with a net export of approximately 200,000 cy. On the Lincoln Park and New Library Block, grading would require approximately 57,000 cy of imported fill. Approximately 11,200 cy of fill is needed for improvements to Chestnut Street. Grading on the Third and Pacific Block would be balanced and no import or export would be necessary. The project would export a total of 380,000 cy and import a total of 68,200 cy. Soil import and export is summarized in Table 2-3.

Table 2-3
Soil Import and Export Summary

Project Component	Import (cy)	Export (cy)
Civic Block	0	180,000
Center Block	0	200,000
Lincoln Park and New Library Block	57,000	0
Chestnut Street Improvements	11,200	
Third and Pacific Block	0	0
Total	**68,200**	**380,000**

The Demolition Plan prepared for the Long Beach Courthouse Demolition Project Draft EIR states that demolition of the former courthouse building would take approximately nine months to complete. This schedule includes an allowance of three months for removal of hazardous building materials. The demolition phase can be handled two different ways. The first is conventional demolition, which would be expected to take five to seven months to complete. The other option is implosion, which would be expected to take four to six months. The final phase consists of grading/site preparation, which is expected to take between one and two months to complete. The existing surface parking lot adjacent to the former Courthouse would be utilized for demolition staging. The existing driveway off of Magnolia Avenue would be utilized for ingress and egress of demolition vehicles and equipment. One to two northbound lanes on Magnolia Avenue north of Ocean Boulevard may require closure during demolition operations, which would result in temporary modifications to the intersection of Magnolia Avenue and Ocean Boulevard. The temporary modifications on Magnolia Avenue at Ocean Boulevard, subject to approval of the City of Long Beach Traffic Engineer and preparation of a traffic control plan, may include the following:

- *Restriping of the southbound approach on Magnolia Avenue to provide a shared through/left-turn lane and an exclusive right-turn lane*
- *Restriping of the northbound approach on Magnolia Avenue to provide an exclusive left-turn lane and a shared through/right-turn lane*
- *Modification to traffic signal phasing from protected-permissive phasing in the southbound direction to permissive phasing on Magnolia Avenue*

2.5 PROJECT OBJECTIVES

The objectives of the proposed project are as follows:

- *Replace seismically deficient City Hall and Main Library in an expeditious manner.*
- *Reduce public safety hazards by eliminating the risk of fire, structural collapse, personal injury to trespassers, vandalism and crime, by demolishing the structurally unsound, abandoned, and deteriorated former Long Beach Courthouse building.*
- *Meet the long term goal of the Harbor Department to bring its headquarters downtown.*
- *Redevelop the Civic Center mega-block into a vibrant mix of public and private space, including a grand Civic Plaza, which asserts the value and importance of the public realm, and which functions as the City's center for governance, civic engagement and cultural and educational exchange.*
- *Consider opportunities to redevelop Old Courthouse site with public uses as part of the Civic Center mega-block redevelopment.*
- *Improve connections between the new Civic Center and greater Downtown through the reestablishment of the small block grid of the historic downtown street fabric and encouragement of a more pedestrian friendly environment.*
- *Redevelop the Main Library within Lincoln Park and ensure that future library space needs will be considered in the context of the changing role of the modern city library, and revolutionary change in media and technology that will influence the library of the future.*
- *Revitalize Lincoln Park into a destination park with amenities appropriate for visitors, residents and Downtown workers.*
- *Cap the City's ongoing maintenance costs, increase energy efficiency, and consolidate offsite City leases, when feasible.*
- *Consider private development elements and/or disposition of surplus property for private development, such as new housing, office, hotel and retail. If housing is proposed, 10 percent of all housing units must be affordable to moderate income persons.*
- *Design buildings to interface with the streets and draw pedestrians into the civic spaces. Proposed solutions must address the vision, guiding principles and design guidelines of the Downtown Plan 2012 (see Planned Development District Ordinance PD-30).*
- *Connect the Civic Center to surrounding business and residential uses. Be highly accessible to pedestrians and bicycles and include convenient automobile access. All private uses should complement the civic functions.*
- *Activate the perimeter streetscape, access points and all public components. Provide appropriate lighting and wayfinding signage for pedestrians, bicycles and automobiles.*

2.6 REQUIRED APPROVALS

The following City of Long Beach approvals will be required:

- *Long Beach Planning Bureau will review, comment and ultimately provide recommendations to the Planning Commission on the site plan, zoning and subdivision entitlement applications outlined above.*
- *Long Beach Planning Commission will review in a public hearing and consider approval recommendations for the entitlement applications and CEQA review documentation.*
- *Long Beach City Council will review in a public hearing and approve any Statutory Development Agreements related to private development site plans and other subdivision and zoning actions.*
- *Long Beach City Council will review in a public hearing (a portion of which may be in closed session) and approve project's transactional documents.*
- *Long Beach Parks and Recreation Commission will review and approve the Lincoln Park Design.*
- *Long Beach Gas and Oil will review and approve the gas service utility design.*
- *Long Beach Water Department will review and approve the water service utility design.*
- *Long Beach Traffic and Transportation Bureau, Traffic Engineering Division will review and approve the street and intersection improvement designs.*
- *Long Beach Department of Public Works will review and approve the utility excavation plans, management of traffic plans and work related to improvements within the Public Right of Way.*
- *Long Beach Building and Safety Bureau will review and approve the building plans and issue permits.*
- *Long Beach Fire Department will review and approve the building plans for fire and life safety issues.*

In addition to the above City approvals, the Board of Harbor Commissioners will review and approve their components of the project, including any direct contracts between Plenary-Edgemoor Civic Partners (PECP), the City's development partner, and the Harbor Department that are not a part of the City's agreements.

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3 ENVIRONMENTAL SETTING

3.1 REGIONAL SETTING

The project site is located in the City of Long Beach, in southern Los Angeles County, within the greater Los Angeles metropolitan area (refer to Figure 2-1, Regional Location, and Figure 2-2, Project Location, both of which can be found in Section 2, Project Description). Long Beach is approximately 20 miles south of downtown Los Angeles and is located adjacent to the Pacific Ocean. The total area of the City is approximately 33,908 acres (53 square miles). The Mediterranean climate of the region and coastal influence produce moderate temperatures year round, with rainfall concentrated in the winter months. The region is subject to various natural hazards, including earthquakes, tsunami and flooding.

3.2 PROJECT SITE SETTING

The project site includes several areas throughout downtown Long Beach: Civic Block, Lincoln Park Block, Third & Pacific Block, and Center Block. The larger portion of the project site is bounded by Magnolia Avenue and Chestnut Avenue to the west, Broadway to the north, Pacific Avenue to the east, and Ocean Boulevard to the south. A smaller part of the project site is bounded by Third Street, Cedar Avenue, and Pacific Avenue.

The project site is located within the Downtown Plan Area, which encompasses approximately 719 acres bounded by the Los Angeles River on the west and Ocean Boulevard on the south. The northern boundary of the Plan Area generally follows portions of 7th and 10th streets, and the eastern boundary includes land on both sides of Alamitos Avenue.

Downtown Long Beach is a modern, cosmopolitan area that adjoins a vibrant seaport and waterfront district that provides numerous venues for entertainment, shopping, and tourism. Both sides of Ocean Boulevard are lined with high-rise and mid-rise residential, hotel, commercial, and corporate office buildings, including the Civic Center complex. As described in the Downtown Plan, distinct neighborhood "character areas" within Downtown include the Business and Entertainment Area centered on Pine Avenue, which primarily functions as Downtown's entertainment corridor with many shops, restaurants, and theaters; the West End, containing low-rise single- and multi-family residences and neighborhood amenities of churches, schools, and Cesar Chavez Park; the Willmore City/Drake Park historic district to the northwest, which features residences of the early 1900s and tree-lined streets; the North Pine neighborhood, which has a variety of housing types, including modern high-rise and mid-rise residential and mixed-use buildings and neighborhood businesses; and East Village, which is the center of local arts and culture with small businesses, galleries, and shops that attract both tourists and local residents.

The Downtown Plan Area and surrounding areas are developed with a variety of commercial and residential uses in buildings generally ranging from one story to more than 20 stories in height. Uses include historic structures that reflect various eras of development extending back more than 100 years. Historic buildings are frequently intermixed with more contemporary structures. Densities range from open space and surface parking, to the most intensive development found in Long Beach, such as the World Trade Center and other skyscrapers and full-block developments.

Photos of the project site and surrounding uses are shown in Figure 4.1-2a through 4.1-5b in Section 4.1, *Aesthetics*. The project site setting is described in greater detail in the individual environmental issue analyses in Section 4.0, *Environmental Impact Analysis*.

3.3 CUMULATIVE PROJECTS SETTING

CEQA defines "cumulative impacts" as two or more individual events that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the SEIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Cumulative impacts are discussed within each of the specific impact analysis discussions in Section 4, *Environmental Impact Analysis*. Section 15130 of the *CEQA Guidelines* states that an adequate discussion of cumulative impacts should include either a list of past, present, and probable future projects producing related or cumulative impacts; or a summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

For cumulative impacts that are localized in nature, such as aesthetics, cultural resources, geology and soils, and noise, the cumulative analysis in this SEIR uses the list of planned and pending projects in the general area shown in Table 3-1. The projects in this list consist of planned or pending projects within a two-mile radius of the project site. Twelve planned or pending projects were identified within this area and are shown in Figure 3-1.

For certain cumulative impacts with a larger area of potential effect (impacts that may combine with the impacts of other projects on a city-wide, regional, state-wide, or even global level), the "summary of projections" method is used in this SEIR. For example, Section 4.2, *Air Quality*, of this SEIR uses land use projections from the Long Beach Downtown Plan EIR, summarized in Table 3-3. Full implementation of the Downtown Plan would increase the density and intensity of existing Downtown land uses by allowing up to: (1) approximately 5,000 new residential units; (2) 1.5 million square feet of new office, civic, cultural, and similar uses; (3) 384,000 square feet of new retail; (4) 96,000 square feet of restaurants; and (5) 800 new hotel rooms. The additional development projected in the Downtown Plan would occur over a 25-year time period. The Downtown Plan EIR assumed that buildout of the Civic Center area would include development of up to 800 residential units, 460,000 square feet of office/commercial floor area, 64,000 square feet of retail space and 16,000 square feet of restaurant uses within the Civic Center area (see Table 3-3).

Other impacts, such as greenhouse gas emissions that may contribute towards global warming, are cumulative by nature, with no localized impacts that could be attributed to any one project alone. The cumulative impacts analysis for such impacts therefore notes this fact and explains that the analysis contained throughout the impact analysis is cumulative in nature. The cumulative impacts analysis for Section 4.6, *Transportation and Traffic*, is conducted under year 2020 traffic conditions. The future year scenario is taken from the Traffic Impact Analysis (TIA) for the proposed project completed in June 2015 by Linscott, Law, and Greenspan, which assumed a 1 percent annual growth rate factor from Year 2015 for Year 2020 Conditions, in addition to the planned and pending projects shown in Table 3-1.

Table 3-1
Planned and Pending Projects in the Vicinity of the Project Site

No.	Project	Address	Description/Size
1	207 East Seaside Way Apartments	207 East Seaside Way, Long Beach	113 Apartments
2	Silversands	2010 East Ocean Boulevard, Long Beach	40 Hotel Rooms and 56 DU Condominiums
3	Mixed-Use Project	125 Linden Avenue, Long Beach	25 Apartments and 1,257 SF Retail
4	City Hall East	100 Long Beach Boulevard, Long Beach	156 Apartments and 3,621 SF Retail
5	Ocean Center Building Reuse	110 West Ocean Boulevard, Long Beach	81 Apartments, 5,000 SF Restaurant and 5,400 SF Retail
6	Oceanaire Residential Project	150 West Ocean Boulevard, Long Beach	216 Apartments
7	The Pike Outlet Conversion Project	Generally south of Seaside Way between Cedar Avenue and Pine Avenue, Long Beach	Conversion of Retail/Entertainment Center to Retail Outlet Center and the construction of 49,825 SF of new retail space
8	442 West Ocean Boulevard Apartments	442 West Ocean Boulevard, Long Beach	95 DU apartments
9	SRG 1st Alamitos Development	101 Alamitos Avenue, Long Beach	7-story mixed-use project with 141 DU condominiums, 2,700 SF of commercial, and 213 parking stalls
10	200 West Ocean Boulevard Apartments	200 West Ocean Boulevard, Long Beach	Conversion of an existing nine-story office building with three levels of subterranean parking into a 94 unit apartment building with ground level commercial spaces (4,597 sf), including the addition of two stories at 200 W. Ocean Blvd.
11	City Ventures Development	227 Elm Avenue, Long Beach	4-story, 40 DU residential townhome development
12	Shoreline Gateway (The Current)	777 E. Ocean Boulevard, north of Ocean Boulevard and east of Alamitos Boulevard, Long Beach	Buildout of the site: 445 residential condominium units and 15,549 SF retail

Source: Linscott, Law and Greenspan, Engineers, Traffic Impact Analysis, June 2015.
SF = Square-Feet; DU = Dwelling Unit

Table 3-2
Planned and Pending Projects Summary[1]

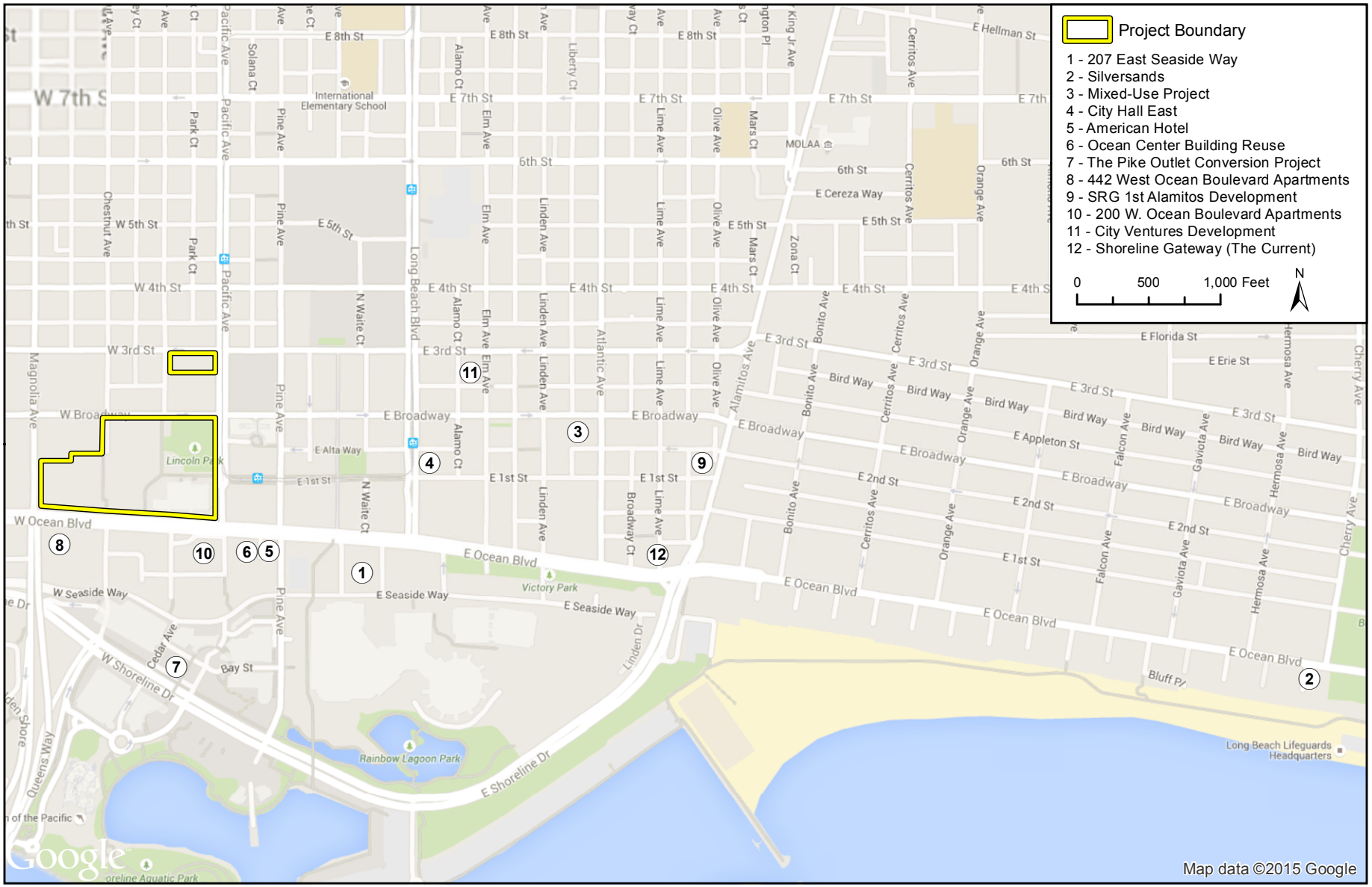
Land Use	Development Statistics
Residential	1,462 DU
Office/Commercial	7,297 SF
Retail	75,652 SF
Restaurant	5,000 SF
Hotel	40 Rooms

Source: Table 3-1
Notes: SF = Square-Feet; DU = Dwelling Unit
[1] Not all planned and pending projects are within the Downtown Plan Area

Table 3-3
Estimated Downtown Plan Buildout

Civic Center Area[1,2]	
Land Use	**Development Statistics**
Residential	800 DU
Office/Commercial	460,000 SF
Retail	64,000 SF
Restaurant	16,000 SF
Downtown Plan Area[2]	
Land Use	**Development Statistics**
Residential	5,000 DU
Office, Civic, and Cultural	1.5 million SF
Retail	384,000 SF
Restaurant	96,000 SF
Hotel	800 rooms

[1] Source: Iteris, Long Beach Downtown Community Plan EIR Traffic Impact Analysis, 2010
[2] Source: Long Beach Downtown Plan EIR, December 2010
SF = Square-Feet; DU = Dwelling Unit



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Location of Planned and Pending Projects

Figure 3-1

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4 ENVIRONMENTAL IMPACT ANALYSIS

This section discusses the possible environmental effects of the proposed project for the specific issue areas that were identified through the Notice of Preparation (NOP)/Scoping process as having the potential to experience significant impacts.

"Significant effect" is defined by the *CEQA Guidelines* §15382 as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. Within the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria adopted by the City, other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its significance following. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

> ***Class I.*** *Significant and Unavoidable: An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.*
>
> ***Class II.*** *Significant but Mitigable: An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the CEQA Guidelines.*
>
> ***Class III.*** *Not Significant: An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.*
>
> ***Class IV.*** *Beneficial: An effect that would reduce existing environmental problems or hazards.*

Following each environmental impact discussion is a listing of mitigation measures (if recommended or required) and the residual effects or level of significance remaining after the implementation of the measures. In those cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.

Please refer to the Executive Summary of this SEIR, which clearly summarizes all impacts and mitigation measures that apply to the proposed project.

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4.1 AESTHETICS

This section addresses potential impacts related to aesthetics, including changes in public views and visual character, and consistency with adopted urban design policies.

4.1.1 Setting

This section provides an overview of the existing visual character and quality of the project site and surrounding area, in order to evaluate potential aesthetic impacts that could occur as a result of the proposed project. The visual character and quality is based on the physical appearance and characteristics of the environment, such as the proximity and balance of man-made structures with open space or landscaping, and views of public open space or of more distant landscape features or built landmarks.

a. Visual Character of the Project Site Vicinity. The project site is located in the Civic Center portion of the Downtown Plan area of Long Beach, and is generally surrounded by a mix of uses and development, including residential, retail, commercial space, and recreational areas. The area is highly urbanized consisting of several high-rise office and multi-family residential buildings of varying architectural styles, a pedestrian plaza, and features a coordinated streetscape. An aerial photograph identifying the project site and surrounding land uses is provided in Figure 2-2 in Section 2, *Project Description*.

Major thoroughfares in the vicinity include Ocean Boulevard to the south, Magnolia Avenue to the west, and Pacific Avenue to the east. Ocean Boulevard has three travel lanes and one parking lane in each direction. The eastbound and westbound lanes of Ocean Boulevard are separated by a large landscaped median consisting of ground covering, public art, shrubs, and jacaranda trees. The sidewalk along the north side of Ocean Boulevard (adjacent to the project site) is lined with a variety of trees (including palms and magnolias), a grassy strip, and a sloping landscaped berm with shrubs and ground covering. The south side of Ocean Boulevard between Magnolia and Pacific is comprised of high-rise residential buildings (up to 25 stories in height), a high-rise office building (approximately 15 stories in height), and a single-story strip retail building (City of Long Beach, 2014). All of these buildings are set back approximately 30 feet from the street with landscaped buffers containing grass, shrubs, and palm trees within Victory Park.

To the west of the project site is the Glenn M. Anderson Federal Building, which sits directly west of the former courthouse building, at the northwest corner of Ocean Boulevard and Magnolia Avenue. Immediately west of the Federal Building is the World Trade Center building. North of Broadway are existing residential (apartment) development and mixed-use buildings. Immediately west of the Third and Pacific Block is the First Congregational Church, at the southwest corner of Third and Cedar. North of Third Street are residential and mixed use developments, while the block immediately east of Pacific Avenue contains residential, as well as high-rise commercial and mixed-use buildings.

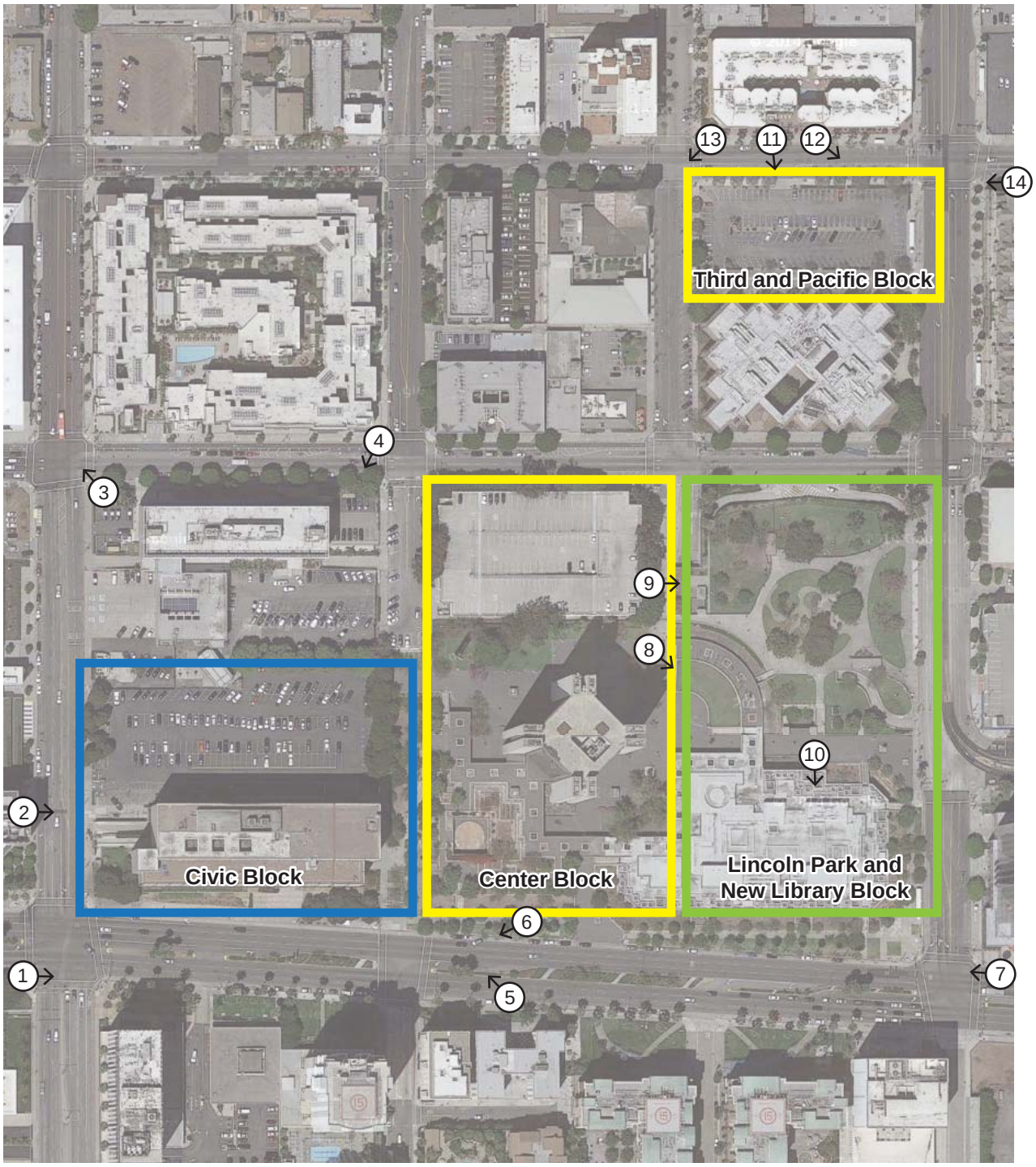
There are no State-designated scenic highways in the City of Long Beach, although a portion of the California Pacific Coast Highway (Highway 1) is identified by the California Department of Transportation (DOT) as an "Eligible State Scenic Highway – Not Officially Designated" (DOT, 2015). Ocean Boulevard is a locally-designated "scenic route," meaning that it is identified in the Scenic Routes Element (1997) of the Long Beach General Plan as a route that traverses areas of scenic beauty and interest.

b. Visual Character of the Project Site. Figures 4.1-1 through 4.1-5b illustrate the existing conditions and visual quality and character of the project site and surrounding area from various viewpoints. As mentioned, the project site is bordered by Ocean Boulevard to the south, Magnolia Avenue to the west, Broadway and Third Street to the north, and Pacific Avenue to the east. In addition, Chestnut Avenue and Cedar Avenue extend from Broadway through the proposed project site, toward Ocean Boulevard, connecting Broadway and Ocean Boulevard.

The proposed project would include activities on four distinct blocks, which are fully developed under existing conditions. A series of photos were taken in May 2015 of these block areas, in order to document existing visual conditions in the project area. Figure 4.1-1 (May 2015 Photo Locations) indicates the orientation of the views shown in these photos relative to existing and proposed site conditions. Figures 4.1-2a through 4.1-5b provide views within and surrounding the project site as Photos 1 through 14, described below.

- ***Civic Block (Figures 4.1-2a and 4.1-2b).*** *Consists of the former Long Beach Courthouse and parking area. Photo 1 is looking easterly down Ocean Boulevard, with the old Courthouse on the left and the existing City Hall building in the distance. Photo 2 provides a view of the existing parking lot behind the old Courthouse. Photos 3 and 4 show surrounding development north of the Civic Block (that would not be affected by the proposed project developments).*
- ***Center Block (Figures 4.1-3a and 4.1-3b).*** *Consists of the existing City Hall structure and Broadway parking structure. Photo 5 shows the existing City Hall building. Photo 6 shows existing development on the opposite side of Ocean Boulevard (that would not be affected by the project). Photo 7 is looking westerly down Ocean Boulevard, with the project site to the right and existing development to the left.*
- ***Lincoln Park and New Library Block (Figures 4.1-4a and 4.1-4b).*** *Consists of the City's Main Library, Lincoln Park, and Broadway Parking Structure. Photo 8 is a view of the existing Lincoln Park and Main Library, and Photo 9 is a view of the existing Lincoln Park. Photo 10 is a view of the existing Main Library and Centennial Plaza.*
- ***Third and Pacific Block (Figures 4.1-5a and 4.1-5b).*** *This parcel consists of a vacant surface parking lot. Photos 11 and 12 are views of the Third and Pacific Block and surrounding development from Third Street to the north. Photo 13 is a view of First Congregational Church to the west of the Third and Pacific Block. Photo 14 is looking to the west down Third Street from east of the Third and Pacific Block, with the proposed project site to the left and the First Congregational Church in the distance, beyond the future project site.*

These figures are utilized in the impact analysis provided in Section 4.1.3 to characterize how the proposed project could potentially result in changes in aesthetic conditions.



Existing Conditions
May 2015 Photo Locations

Figure 4.1-1



Photo 1: Looking East down Ocean Boulevard from the southwest corner of Ocean and Magnolia. The old Long Beach Courthouse is on the left, at the northeast corner of Ocean and Magnolia. City Hall is in the distance, between the palm trees.



Photo 2: Looking East across Magnolia Avenue at the parking lot behind the old Long Beach Courthouse on the project site. City Hall and the old Long Beach Courthouse are visible to the right. The Long Beach Police Department building is visible to the left.

Civic Block Photos

Figure 4.1-2a



Photo 3: Looking Northwest from Magnolia Avenue and Broadway towards the Governor George Deukmejian Courthouse.



Photo 4: Looking to the Southwest from Broadway and Chestnut Avenue at the Long Beach Police Department building.

Civic Block Photos

Figure 4.1-2b



Photo 5: Looking Northwest across Ocean Boulevard at City Hall. The old Long Beach Courthouse is visible to the left.



Photo 6: Looking West along Ocean Boulevard at surrounding residential and commercial buildings across from the project site.

Center Block Photos

Figure 4.1-3a



Photo 7: Looking West along Ocean Boulevard. The project site is to the right and existing residential and commercial buildings are to the left.

Center Block Photos

Figure 4.1-3b



Photo 8: Looking Southeast from Broadway Parking Garage through the project site at Lincoln Park to the left and the existing Long Beach Public Library to the right.



Photo 9: Looking East from the Broadway Parking Garage through the project site at the existing Lincoln Park.

Lincoln Park & New Library Block Photos Figure 4.1-4a



Photo 10: Looking South from Centennial Plaza at the existing Long Beach Public Library on the proposed project site.

Lincoln Park & New Library Block Photos Figure 4.1-4b



Photo 11: Looking South through the proposed project site from the north side of 3rd Street, between Cedar Avenue and Pacific Avenue. The existing City Hall is visible to the right.



Photo 12: Looking Southeast through the proposed project site from the north side of 3rd Street, towards residential and commercial buildings on the east side of Pacific Avenue.

3rd and Pacific Block Photos Figure 4.1-5a



Photo 13: Looking Southwest at First Congregational Church from the intersection of Cedar Avenue and 3rd Street. Parking lot visible to the left is the proposed project site. The existing City Hall building is visible in the distance.



Photo 14: Looking West down 3rd Street, from between Pacific Avenue and Pine Avenue. Residential (apartment) development at the intersection of 3rd Street and Pacific Avenue is visible on the left. First Congregational Church, located at 241 Chestnut Street, is visible in the distance on the left.

3rd and Pacific Block Photos Figure 4.1-5b

c. Regulatory Setting. There are no federal or state regulations related to visual character and quality applicable to the proposed project. Locally, the City of Long Beach has policies in place which focus on protecting views of the City's natural resources and views along significant streets and boulevards, as summarized below.

General Plan - Scenic Routes Element. The City of Long Beach General Plan, Scenic Routes Element (1997) proposed five scenic route systems within the City for potential adoption as official scenic routes within the City. Of these routes, only Ocean Boulevard was officially adopted by the City as a scenic route. Ocean Boulevard is adjacent to the project site on the south, and proposed changes situated along the southern portion of the project blocks would be visible from Ocean Boulevard; these include the City Hall and Port buildings on the Civic Center Block, the residential/commercial building on the Commercial/Center Block, and the proposed Lincoln Park on the Lincoln Park & New Library block.

General Plan - Land Use Element. The City of Long Beach General Plan, Land Use Element (1975) addresses issues related to urban design and the overall aesthetic quality of the City. The Urban Design Analysis contained within the Land Use Element outlines policies related to the visual character of the City and emphasizes visual compatibility along corridors as well as good design and landscaping.

Long Beach Downtown Plan (PD-30). Section 4 of the Downtown Plan provides design standards and guidelines that regulate and guide all development in Downtown Long Beach. The standards and guidelines emphasize design principles intended to produce good buildings, great streets, and memorable places as well as high-quality architecture and urban form.

Long Beach Municipal Code (LBMC). Title 21, Zoning, of the LBMC includes property development standards, as well as design guidelines for development projects within the City. Among the aspects of development regulated are types of allowable land uses, setback and height requirements, landscaping, walls, fencing, signage, access, parking requirements, storage areas, and trash enclosures. The zoning code also provides performance standards for various land use types to measure development projects' consistency with such regulations.

4.1.2 Previous Environmental Review

The Long Beach Downtown Plan EIR (the "Downtown Plan EIR") examined the aesthetic characteristics of the region and the potential impacts associated with development of the entire Downtown Plan area. The EIR determined that the visual character of the Downtown Plan area would be altered through the introduction of additional high-rise structures and full-block complexes at locations within the plan area. However, the EIR determined that due to the design framework provided by the Plan, the aesthetic change within Downtown would be beneficial and impacts to visual character would be less than significant. Implementation of the Downtown Plan would result in light and glare impacts that the Downtown Plan EIR determined would be significant but mitigable. The proposed project would be subject to Downtown Plan EIR Mitigation Measures AES-2(a) through AES-2(d), which include site plan and design review procedures. The Downtown Plan EIR determined that implementation of the Downtown Plan would result in significant and unavoidable shadow impacts. The proposed project would be subject to the mitigation measures identified in the EIR, specifically AES-3, *Shadow Impacts*, which requires a shading study for structures exceeding 75 feet in height or any structure that is adjacent to a light sensitive use and exceeds 45 feet in height.

The proposed project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not certified. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to aesthetics would be potentially significant but mitigatable to a less than significant level with the implementation of mitigation measures to provide temporary visual barriers to the active construction area.

4.1.3 Impact Analysis

a. Methodology and Significance Thresholds. The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. This evaluation measures the proposed project against existing visual conditions, analyzing the nature of the anticipated change. As described above, the project site was observed and photographically documented in May 2015. A series of 14 photos are provided on Figures 4.1-2a through 4.1-5b, with orientation of these photos provided on Figure 4.1-1 (May 2015 Photo Locations), which shows photo orientation in comparison to existing and proposed conditions. The figures and photos are utilized in this impact analysis to characterize how the visual environment and aesthetic conditions would change with implementation of the proposed project.

An environmental impact is considered significant if the proposed project would result in one or more of the following conditions, as described in Appendix G of the State *CEQA Guidelines*:

- *Have a substantial adverse effect on a scenic vista;*
- *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*
- *Substantially degrade the existing visual character or quality of the site and its surroundings; or*
- *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

The Initial Study that was prepared for the proposed project (see Appendix A) included an initial evaluation of aesthetic impacts, and determined that the project would not result in a significant impact associated with the introduction of a new source of substantial light or glare; therefore, this issue is not further addressed in the SEIR. The Initial Study determined that the proposed project could potentially result in significant impacts associated with adverse effects on scenic vistas, damage to scenic resources including historic buildings within a state scenic highway, and degradation of visual character or quality of the site and its surroundings; therefore, these issues are assessed in detail in the following impact analysis. In addition, the Long Beach Downtown Plan identifies that potential impacts of downtown development may include shadow and shading effects that would adversely affect sensitive receptors; therefore, the potential effects of shadow and shading associated with the proposed project are assessed in this section.

For potentially significant aesthetic impacts, mitigation measures are introduced where feasible to reduce or avoid potential impacts.

Evaluation of Shadow Effects. The City of Long Beach Downtown Plan EIR identifies potential aesthetic impacts of downtown development (such as would occur under the

proposed project) related to the introduction of shadows and shading effects from tall buildings, that could adversely affect existing and future visual receptors in the area. Therefore, this analysis of potential aesthetic impacts of the proposed project also addresses the potential for shadow and shading impacts to occur. In identifying and characterizing impacts of shadows and shading, the following factors are considered:

- *Affected land use (Is the affected [shadowed] land use light-sensitive such that sunlight is essential to its function?)*
- *Duration of shadow/shading (How many hours per day would an affected land use experience shadow/shading from the project?)*
- *Time of day (Is the affected land use affected by shadow/shade at a time of day when sunlight is most important?)*
- *Season (What time of year would affected land use[s] be in shadow/shade as a result of the project?)*
- *Extent of effect (What percentage of an affected land use would be affected by shadow/shade?);*
- *Nature of the shadows (Does the project's shadow have a more solid or dappled quality?)*
- *Pre-existing conditions (Are there other landforms or development that currently shadow/shading on the land uses affected by the project?)*

In order for a significant adverse impact to result from project-related shadows/shading, the following criterion is used:

- *The project increases shadows cast upon shadow-sensitive uses, and results in shading for more than three hours between late October and early April (including Winter Solstice), or for more than four hours between early April and late October (including Summer Solstice).*

Facilities and operations sensitive to the effects of shading include the following: routinely useable outdoor spaces (yards, playgrounds, etc.) associated with residential, recreational, or institutional land uses; solar collectors; nurseries; or primarily outdoor-oriented commercial uses (e.g., certain restaurants). These uses are considered sensitive because sunlight is important to their function, physical comfort, and/or commerce (City of Long Beach, 2010).

b. Project Impacts and Mitigation Measures.

Threshold:	*Have a substantial adverse effect on a scenic vista;*
Threshold:	*Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.*

Impact AES-1 The proposed project would alter site-specific visual features by replacing existing buildings and land uses, but would not substantially damage scenic resources, including those related to a scenic vista or state scenic highway, and potential impacts to scenic resources would be Class III, *less than significant*.

The proposed project is located in an urbanized area characterized by flat topography, where viewsheds are comprised of existing buildings, streets, and trees such as in Lincoln Park and the Ocean Boulevard median. Due to the flat topography and existing development, there are no

scenic vistas on the project site or in the immediate vicinity. The project would include the extension of Chestnut Street and Cedar Street, to connect Broadway to the north and Ocean Boulevard to the south. This would extend views to the south from Broadway and views to the north from Ocean Boulevard, but would not introduce a new scenic vista to the area.

As discussed above, the proposed project would alter the layout of the project site, and introduce structures of up to approximately 432 feet in height. Main roads that provide views of the project site include Ocean Boulevard, Broadway, and Third Street. Existing buildings along the south side of Ocean Boulevard currently block southward views of the Pacific Ocean from the project site and surrounding area. As shown on Figures 4.1-6a and 4.1-6b, the proposed mixed-use tower on the Center Block would be taller than other high-rise structures in the area. It is possible that views of the Pacific Ocean may be created on the upper (residential) levels of this mixed-use tower without obstructing other views of the ocean within the area. Southward ocean views from the residential developments on the south side of Ocean Boulevard (see Photos 6 and 7) would not be affected by the project.

Ocean Boulevard, which provides the southern boundary of the project area, is a locally-designated "scenic route," meaning that it is identified in the Scenic Routes Element (1997) of the Long Beach General Plan as a route that traverses areas of scenic beauty and interest. Ocean Boulevard is not a State-designated scenic highway, which would require the government with jurisdiction over abutting land to adopt a "Scenic Corridor Protection Program" limiting development, outdoor advertising, and earthmoving activities (DOT, 2015). Guidance regarding development along Ocean Boulevard is provided in the City of Long Beach Local Coastal Program (1980), *General Transportation and Access Policies* section (City of Long Beach, 1980), as well as in the City of Long Beach Zoning Ordinances. The proposed project would alter views of the project site from Ocean Boulevard, such as where the structures in Photo 1 would be replaced by taller structures under the proposed project, and where the existing library in Photo 10 would be replaced by the relocated Lincoln Park under the proposed project.

As described in the Cultural Resources Study provided as Appendix B, existing structures that would be replaced under the proposed project include the existing Long Beach Courthouse and City Hall-Library Complex, which have been found to be individually eligible for the California Register of Historical Resources (CRHR), although they have not been officially listed on the CRHR or the National Register of Historic Places (NRHP). Nevertheless, these structures are considered contributors to the Long Beach Civic Center Historic District, which is not a designated historic district, but is a distinct grouping of civic and governmental properties united historically by plan and physical development. They are also considered eligible for City of Long Beach Landmark Designation and are therefore considered historical resources for the purposes of CEQA. As described in the Cultural Resources Study, demolition of these structures constitutes a significant direct impact to cultural resources insofar as it entails a substantial adverse change in the significance of historical resources. As noted above, the project site is visible from main roads including Ocean Boulevard, Broadway, and Third Street. However, for the purposes of characterizing impacts to visual resources under the thresholds listed above, removal of these structures would not constitute a significant aesthetic impact because they are not located on a State-designated scenic highway or within a designated scenic vista. In addition, visual changes included under the proposed project may also introduce an improvement to aesthetics of the site, as the architecture of existing structures including the City Hall and Civic Center buildings is outdated and not visually consistent with current design

styles. Following implementation of the proposed project, new structures that would occupy the project site would be visually consistent with the surrounding area.

There is one designated historic building in the project area, the First Congregational Church, which is located at 241 Cedar Avenue, adjacent to the west of the Third and Pacific Block. As described in the Cultural Resources Study provided as Appendix B, this church is listed in the NRHP and CRHR as a historic resource. Photo 13 (Figure 4.1-5b) provides a view of the First Congregational Church from the northwest corner of the proposed Third and Pacific Block; this view would remain unobstructed with the proposed project. Photo 14 (Figure 4.1-5b) provides a west-looking view down Third Street from east of the proposed project site, with the First Congregational Church in the background on the left. With implementation of the proposed project, the northern portion of the Third and Pacific Block, currently occupied by a surface parking lot, would be replaced with a residential development, including surrounding landscaping consisting of shrubs and trees; this would obstruct the view of First Congregational Church currently available from east of the project site, as shown on Photo 14. However, Third Street is not a state scenic highway or a designated local view corridor; therefore, this view alteration would not be a significant impact.

The proposed project would not include any actions with potential to affect scenic resources, scenic views or viewsheds, or scenic route designations along Ocean Boulevard, including but not limited to scenic resources such as trees, rock outcroppings, and historic buildings located within a State-designated scenic highway.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be less than significant without mitigation.



Looking southwest through project area, Pacific Avenue shown in lower left.

Source: Skidmore, Owings & Merrill LLP, March 2015.

Aerial Photosimulations

Figure 4.1-6a



Looking east through project area, Ocean Boulevard shown on right.

Source: Skidmore, Owings & Merrill LLP, March 2015.

Aerial Photosimulations

Figure Figure 4.1-6b

Threshold:	*Substantially degrade the existing visual character or quality of the site and its surroundings.*

Impact AES-2 The project would alter existing visual characteristics of the project site and surroundings, but would be consistent with the Downtown Plan and would not degrade existing visual character or quality. The Downtown Plan EIR determined that buildout of the Downtown Plan would result in a Class III, less than significant impact. The project would result in temporary construction impacts to visual character and quality that would be Class II, *less than significant with mitigation*.

As described in Section 2, *Project Description*, the proposed project would occur on four distinct "blocks." Figures 4.1-2a through 4.1-5b provide photos of existing visual conditions in the project area, as described in Section 4.1.1(a); Figure 4.1-1 (May 2015 Photo Locations) identifies the perspective of these photos relevant to existing conditions and proposed site conditions. The following overview describes how these existing conditions/views would be affected by the proposed project.

- ***Civic Block**. Construction on the Civic Block would follow demolition of the former Long Beach Courthouse, which currently occupies the site. The old Courthouse building shown on Photo 1 and the parking area shown on Photo 2 would be replaced by the proposed City Hall and Port buildings, both of which would be almost twice as tall as the existing old Courthouse (additional discussion provided below, in the shadow effects analysis provided under Impact AES-3). Although the proposed project structures on this block would be taller than the existing old Courthouse building, they would be visually consistent with surrounding structures, including residential and mixed use developments to the south of Ocean Boulevard, the Glenn M. Anderson Federal Building to the northwest of the Civic Block, the existing Long Beach Police Department building on the north of the Civic Block, and proposed developments on the Center Block, as shown on the visual simulations provided as Figures 4.1-6a and 4.1-6b.*
- ***Center Block**. The existing City Hall structure would be demolished, and replaced with a mixed-use tower approximately 432 feet in height comprised of residential and retail uses, possibly also with a hotel. The views of the existing City Hall structure provided in Photos 2, 5, 11, and 13 would be altered in that the mixed-use tower would replace the existing City Hall structure. Figures 4.1-6a and 4.1-6b provide photo simulations of the proposed project development, including the new mixed-use tower that would replace the existing City Hall structure. Although these changes would alter views of the project site, the changes would be visually consistent with the surrounding area, including other mixed-use developments and high-rise structures in the project area.*
- ***Lincoln Park and New Library Block**. The existing Main Library, located in the southern portion of this block, would be demolished and rebuilt on top of the existing Lincoln Garage roof deck on the northern portion of this block. The roof of the new Main Library would be up to 42 feet in height. The existing location of the Main Library would be redeveloped into a new Lincoln Park. As a result, views of the existing library currently provided in Photos 8 and 10 would be replaced with views of the new Lincoln Park, and the view of the existing Lincoln Park currently provided in Photo 9 would be replaced with a view of the new Main Library. These changes would be visually consistent with current aesthetic conditions on the project site.*

- ***Third and Pacific Block***. *A seven-story residential structure (up to 70 feet tall) and parking structure with up to three above-ground levels would be constructed on what is currently a surface-level parking lot. This would alter the views provided in Photos 11 and 12, as the proposed structure would obstruct views from Third Street of existing structures to the south and east of the Third and Pacific Block. However, as shown on the visual simulations provided as Figures 4.1-6a and 4.1-6b, the new structures on the Third and Pacific Block would be visually consistent with the surrounding area, and with other residential and mixed use developments surrounding the project site.*

As discussed above, the proposed project would alter existing visual characteristics of the project site, but would be visually consistent with surrounding conditions and uses. Also as previously noted, existing structures on the project site that would be replaced with the proposed development, including the existing City Hall and Civic Center structures, are architecturally outdated and their replacement with new structures as proposed may represent an aesthetic improvement to existing conditions. The proposed project would be visually compatible with the existing high-density and mixed-use visual character of the project area, and would not permanently degrade the existing visual character or quality of the area.

Construction activities associated with the proposed project may cause a visual condition that is temporarily unappealing, both from within the project site and from views in the immediate vicinity. This could occur as a result of the use and presence of construction vehicles and equipment, the demolition of existing structures and removal of existing park areas, and the unfinished looks associated with constructing new infrastructure and facilities. Mitigation measures are recommended to minimize or avoid the temporary adverse visual impacts associated with the project's construction period, and to ensure that the project would not substantially degrade existing visual character or quality.

Mitigation Measures. Mitigation Measure AES-2 would minimize or avoid temporary impacts to visual character and quality by requiring visual screening where feasible, and ensuring that the area remain as clean and free of debris as possible.

AES-2 **Construction Screening.** Temporary fencing comprised of chain link or wood with screening material attached shall be used around the perimeter of the active construction site to buffer views of construction activities, as well as the staging of vehicles, equipment, and materials. In addition, the contractor shall affix or paint a plainly visible sign, on publically accessible portions of the temporary fencing, with the following language: "POST NO BILLS". Such language shall appear at intervals of no less than 25 feet along the length of the publically accessible portions of the barrier. The contractor shall ensure through daily visual inspections that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that such temporary barriers and walkways are maintained in a visually attractive manner, including the prompt removal of graffiti, throughout the construction period.

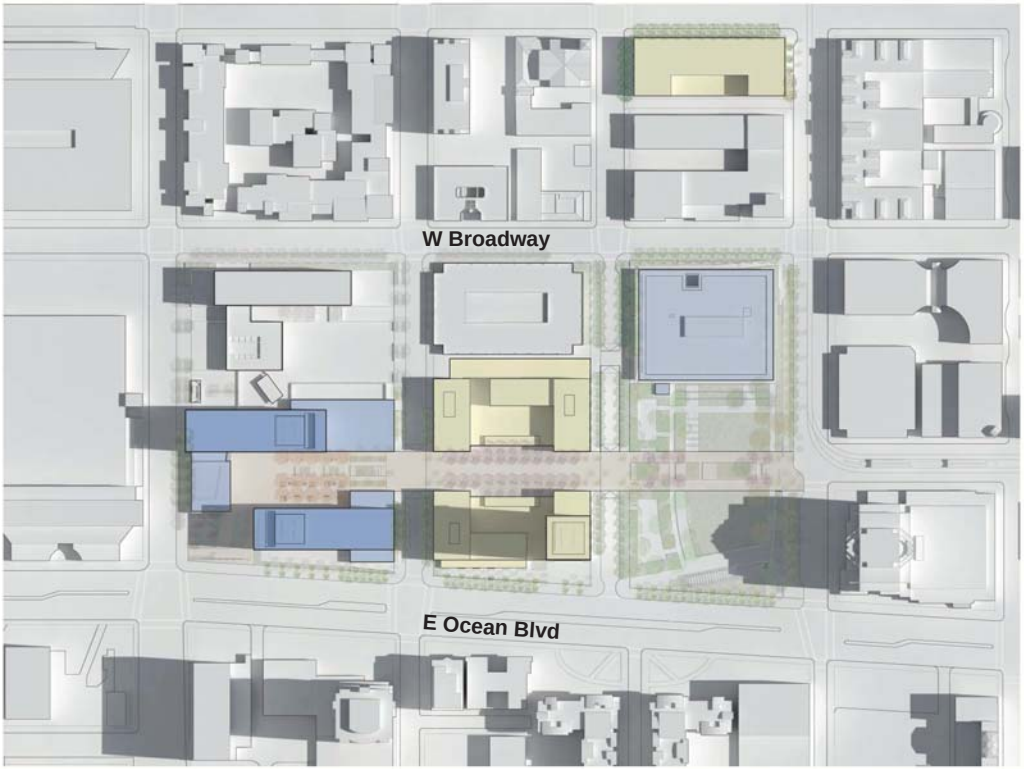
Significance After Mitigation. Impacts would be less than significant with mitigation.

Threshold:	*Increase shadows cast upon shadow-sensitive uses, and result in shading for more than three hours between late October and early April (including Winter Solstice), or for more than four hours between early April and late October (including Summer Solstice).*

Impact AES-3 The proposed project includes high-rise structures that would cast shadows onto adjacent properties. The Downtown Plan EIR determined that shadow impacts would be Class I, significant and unavoidable. However, shadows from project structures would not fall on sensitive residential, public gathering, and school uses for more than three hours during Winter months or for more than four hours during Summer months. The proposed project would not contribute to this Class I impact and would, therefore, have a Class III, *less than significant* impact.

As discussed in the Long Beach Downtown Plan EIR, adoption of the Downtown Plan was anticipated to introduce a variety of new development projects to the City, including high-rise structures such as would occur under the proposed project. Where new structures are substantially taller than the existing and/or surrounding buildings, substantially longer and broader shadows may occur, particularly at the street level. Shadows cast by buildings are typically longest at the Winter Solstice and shortest at the Summer Solstice, transitioning through the equinox seasons (where the "equinox" is the period when the sun crosses Earth's equator, so that the day and the night are of approximately the same duration).

The Long Beach Downtown Plan EIR includes Mitigation AES-3 (Shadow Impacts), which requires a shading study for projects that would introduce a structure(s) of 75 feet or more in height, or any structure that is adjacent to a light-sensitive use and exceeds 45 feet in height. Figures 4.1-7a through 4.1-7d provide sun-shadow diagrams for the Summer Solstice and Winter Solstice, at the following modeled times: 9:00 a.m., 11:00 a.m., 1:00 p.m., and 3:00 p.m. Table 4.1-1 provides an overview of the shadow effects shown on Figures 4.1-7a through 4.1-7d, with respect to how sensitive uses in the project area would be affected.



Summer Solstice - 9am

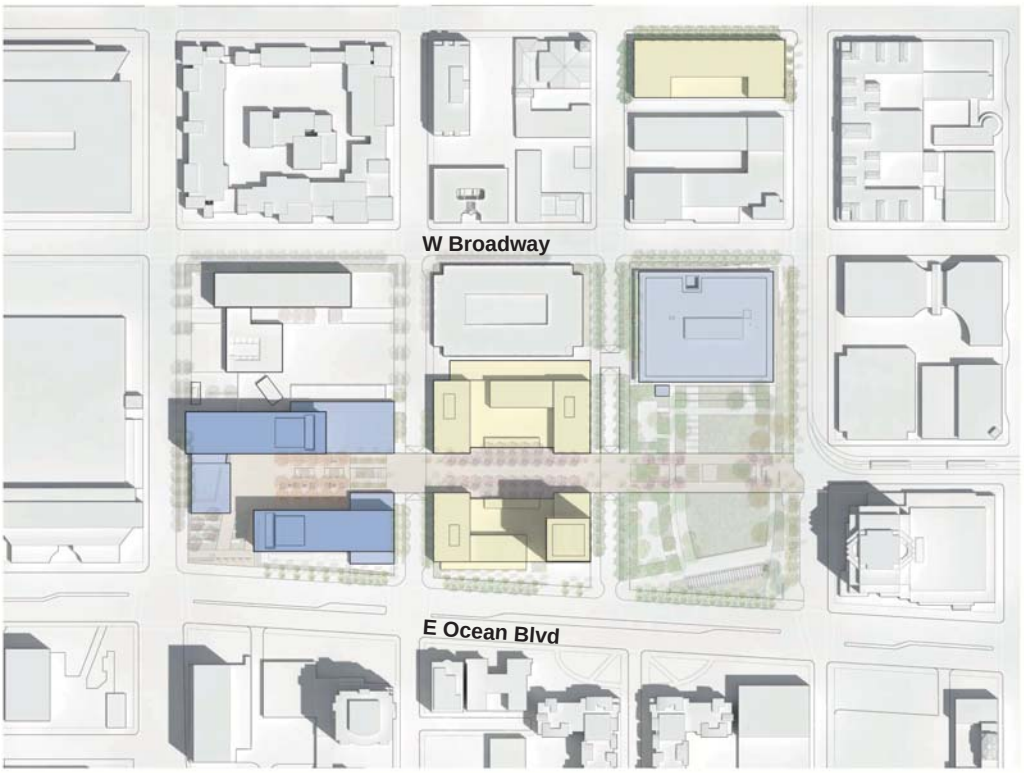


Winter Solstice - 9am

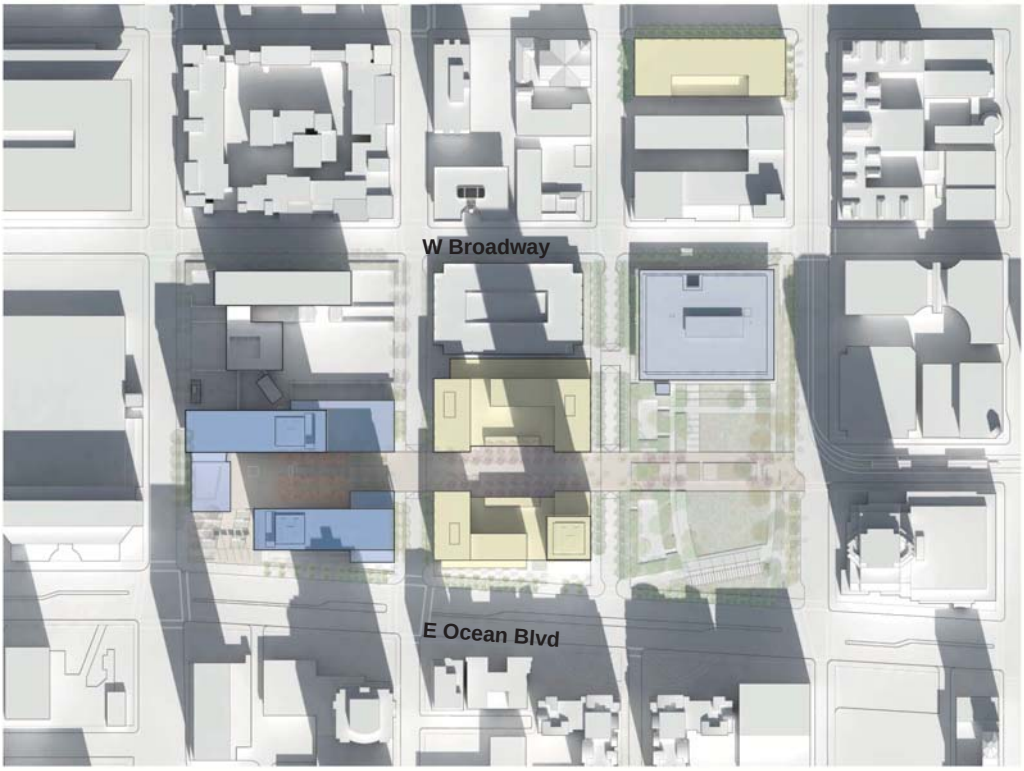
- Civic: City Hall and Port Headquarters
- Long Beach Main Library
- Private Development
- Lincoln Park

Sun Shadow Diagrams - 9:00 am

Figure 4.1-7a



Summer Solstice - 11am

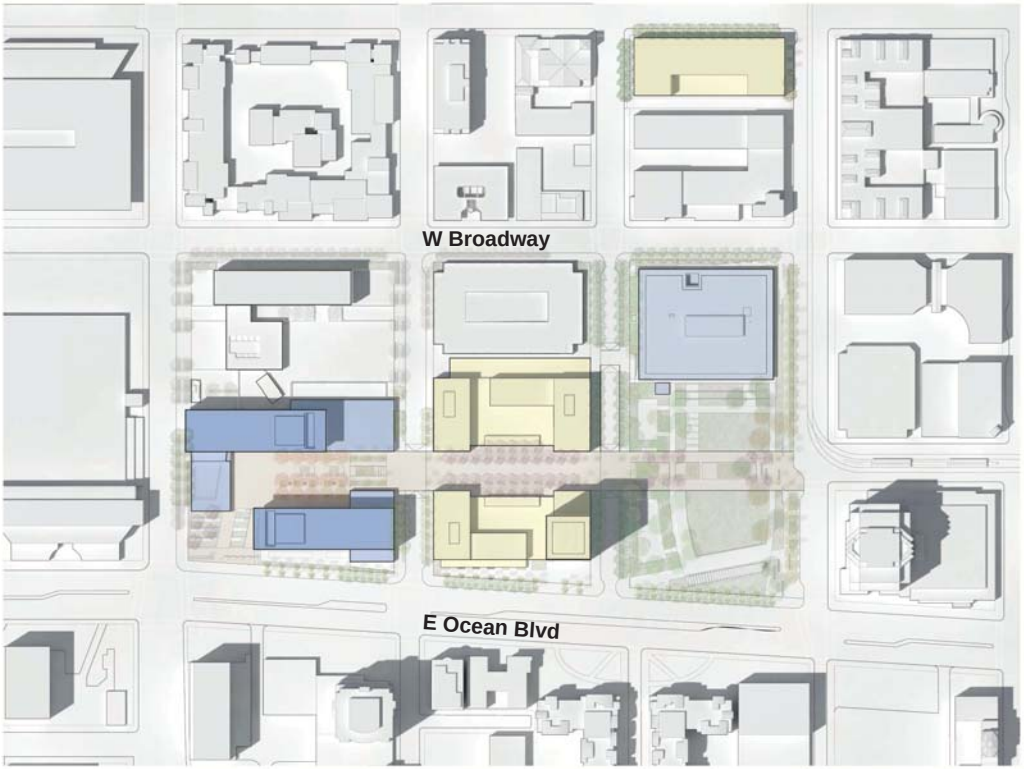


Winter Solstice - 11am

- Civic: City Hall and Port Headquarters
- Long Beach Main Library
- Private Development
- Lincoln Park

Sun Shadow Diagrams - 11:00 am

Figure 4.1-7b



Summer Solstice - 1pm



Winter Solstice - 1pm

- Civic: City Hall and Port Headquarters
- Long Beach Main Library
- Private Development
- Lincoln Park

Sun Shadow Diagrams - 1:00 pm

Figure 4.1-7c



Summer Solstice - 3pm



Winter Solstice - 3pm

- Civic: City Hall and Port Headquarters
- Long Beach Main Library
- Private Development
- Lincoln Park

Sun Shadow Diagrams - 3:00 pm

Figure 4.1-7d

Table 4.1-1
Shade and Shadow Effects

Time	Summer Solstice	Winter Solstice
9:00 a.m.	Shadows almost directly to the west. The new City Hall building would shade Magnolia Avenue. The new mixed use building would shade itself. The Center Block, in general, would shade the new Chestnut Street extension. The new Lincoln Park would be partly shaded by an existing structure to the east (Ocean Boulevard and Pacific Avenue). The new structure at Third and Pacific would shade a portion of Cedar Street, comparable to the adjacent existing structure on the same block.	Shadows cast to the northwest. Heavy shading throughout the project site from existing structures in the area. The Port building and City Hall would be almost completely shaded. The new City Hall would shade a portion of the existing Long Beach Fire Department building. The new mixed-use structure on the Center Block would partly shade the existing Long Beach Police Department building, and an apartment building north of Broadway (at Magnolia). Existing structures would shade the new Main Library. The new structure at Third and Pacific would shade portions of Third Street to the north and Cedar Street to the east.
11:00 a.m.	Shadows to the west-northwest. The new Port building and City Hall would cast minimal shadow towards the northwest, not affecting other structures. The new mixed-use tower would partially shade the new commercial development on the Center Block. The Lincoln Park and New Library Block would be virtually free of shade/shadow.	Shadows to the north-northwest. The new Port building would be partially shaded by existing development on the south side of Ocean Boulevard. The new City Hall building would shade the existing Long Beach Fire Department building. The new mixed-use tower would cast a shadow across the Center Block and West Broadway. The new structure at Third and Pacific would shade a portion of Third Street.
1:00 p.m.	Shadows to the northeast. The new Port building would shade a portion of the new Chestnut Street extension. The new mixed-use tower would shade a portion of the new Lincoln Park.	Shadows to the north-northeast. Existing structures on the south side of Ocean Boulevard would shade portions of the new Port building, City Hall, and commercial developments. The new City Hall building would shade the existing Long Beach Fire Department building. The new mixed-use tower would shade a portion of the new Main Library, Lincoln Park, and West Broadway. The new structure at Third and Pacific would shade a portion of Third Street.
3:00 p.m.	Shadows almost directly to the east. The new Port building and City Hall would shade portions of the new Chestnut Street extension. The new commercial buildings on the Center Block would shade portions of the new Cedar Street extension. The new mixed-use tower would cast a shadow across the new Lincoln Park. The new structure at Third and Pacific would shade a portion of Pacific Avenue, comparable to the adjacent existing structure on the same block.	Shadows to the northeast. Heavy shading throughout the project site from existing structures in the area. The Civic Block and Center Block would be almost entirely shaded by existing structures west of Magnolia and south of Ocean. The new City Hall building would partially shade the existing Long Beach Fire Department building. The new mixed-use tower would cast a shadow across the new Lincoln Park, the new Main Library, and structures to the north of Broadway and Pacific. The new structure at Third and Pacific would cast a shadow across both streets.

Comparison of Figures 4.1-7a through 4.1-7d and consideration of the summary descriptions provided above indicate that that the new buildings that would be constructed under the proposed project would not introduce new shadows or shading that would adversely affect shadow-sensitive land uses in the area. The most extended shadowing effects associated with the project would affect surrounding roadways, which are not considered sensitive uses.

The most substantial shadows associated with the proposed project would occur as a result of the new 432-foot-tall mixed-use tower on the Center Block. At 9:00 a.m. during the Winter Solstice, this tower would shade a portion of the existing apartment building located on the northeast corner of Broadway and Magnolia; however, by 11:00 a.m. this shadow would have moved to the east, partially shading a structure on the north side of Broadway. By 1:00 p.m., also during the Winter Solstice, this shadow would have stretched farther to the east, partially shading the new Main Library. This progression indicates that although some residential land uses in the project area would be partially shaded by project structures, such shading would last for less than two hours at a time. In addition, this shading would not affect "routinely useable outdoor spaces associated with" residential land uses and, therefore, would not significantly affect residential-related sensitive uses.

As described in Section 4.1.3(a), the threshold of significance for shadow and shading impacts is the creation of extended periods of shading on "shadow-sensitive" uses that result in shading for more than three hours over the Winter Solstice or four hours over the Summer Solstice. As shown on Figures 4.1-7a through 4.1-7d, during the Winter Solstice the existing Long Beach Fire Department building would be partially or fully shaded by the proposed new City Hall building throughout the day (partial shading at 9:00 a.m. and 3:00 p.m.; full shading at 11:00 a.m. and 1:00 p.m.). The Fire Department building, located in the northern portion of the Civic Block, is presently shaded by the Long Beach Courthouse. The existing Long Beach Courthouse is comprised of two sections, of which the southern (closer to Ocean Boulevard) is five stories tall and the northern (closer to Broadway) is six stories tall. Both sections would be demolished as part of the project and replaced by the City Hall building, which would be 11 stories tall, almost twice as tall as the tallest portion of the Courthouse; therefore, shadows cast by the City Hall building on the Fire Department building would be more substantial than those cast by the Courthouse. However, the Fire Department building is not a "shadow-sensitive" use, and doesn't include a "routinely useable outdoor space" which is a qualifier for being recognized as a "sensitive" use. In addition, as shown on Figures 4.1-7a through 4.1-7d, shadowing from the project would only occur during the Winter Solstice, with no shadowing effects during the Summer Solstice. Therefore, the seasonal shading of the existing Fire Department building that would occur as a result of the new City Hall building would not be a significant adverse effect.

The Long Beach Downtown Plan FEIR identifies that development which occurs under the Downtown Plan could result in significant and unavoidable shade/shadow impacts to Long Beach Unified School District (LBUSD) schools. The structures included under the proposed project are not located near an existing LBUSD school site, and would not result in shade/shadow effects on LBUSD schools. Potential shade/shadow effects of the proposed project, as characterized above and pictured on Figures 4.1-7a through 4.1-7d, would be less than significant.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

c. Cumulative Impacts. Planned and pending projects in the vicinity of the project site are identified in Table 3-1 in Section 3, *Environmental Setting*. These planned and pending projects, as well as other future projects in the vicinity of the proposed project, would be

expected to be consistent with the Long Beach Downtown Plan and design standards specified therein, including as related to aesthetics. The Downtown Plan EIR determined that given the City's current regulations and guidelines on the scale and design of new projects, Downtown development would generally further the City's goal of a more intensely developed and vibrant urban environment with a stronger pedestrian orientation for Downtown Long Beach, and the cumulative visual effect of development in the area would be less than significant.

In addition, as discussed in the Downtown Plan EIR, cumulative aesthetic impacts associated with shade and shadow from high-rise downtown developments would be significant and unavoidable, as assessed on the programmatic level. The impact analysis provided above for the proposed project determines that shade and shadow effects associated with the proposed project would be less than significant, because project structures would not cast shade or shadows on a shadow-sensitive use or on routinely useable outdoor space. Therefore, the proposed project would not contribute to cumulative shade- or shadow-related impacts.

As determined in the impact analysis provided above in Section 4.1.3(b), the proposed project would not result in significant adverse impacts to aesthetics. The proposed project would not create impacts to aesthetic resources that could combine with similar impacts of other projects in the cumulative environment to result in a significant adverse impact. Although cumulative development may, over time, alter the visual character of this part of Long Beach, such development would be subject to the same policies and regulations as the proposed project and would be expected to generally enhance aesthetic conditions in the Downtown area. Cumulative impacts related to aesthetics would be less than significant.

4.2 AIR QUALITY

This section analyzes the proposed project's temporary and long-term impacts to local and regional air quality. Greenhouse gas emissions are discussed in Section 4.4, *Greenhouse Gas Emissions*. This section uses data generated using the California Air Emissions Estimator Model (CalEEMod), which can be found in Appendix C.

4.2.1 Setting

The project site is located in the City of Long Beach, which is part of the South Coast Air Basin (Basin) and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

a. Climate and Meteorology. Air quality in the Basin is affected by various emission sources (mobile and industry, etc.) as well as atmospheric conditions such as wind speed, wind direction, temperature, and rainfall, etc. The combination of topography, low mixing height, abundant sunshine, and emissions from the second largest urban area in the United States give the Basin the worst air pollution problem in the nation.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thunder showers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. The Long Beach WSCMO Station climatological station monitored precipitation from April 1958 to March 2013. Average monthly rainfall measured in Long Beach during that period varied from 2.90 inches in February to 0.42 inch or less between May and October, with an annual total of 12.01 inches.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid to late afternoons on hot summer days. Winter inversions frequently break by midmorning.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problem is the accumulation of carbon monoxide (CO) and nitrogen oxides (NO_X) due to low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog.

b. Sensitive Receptors. Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public

most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore, schools and hospitals. Sensitive receptors likely to be affected by air quality impacts associated with project construction include residential areas near the project site. The nearest existing residential sensitive receptors are located 100 feet north of the Third and Pacific Block proposed development, across Third Street. In addition, the proposed project's residential uses and library would be considered sensitive receptors. The First Congregational Church of Long Beach, located at 241 Cedar Avenue, is also a sensitive receptor and is located 85 feet west of the proposed construction area.

c. Air Pollution Regulation.

Federal Regulations/Standards. Pursuant to the federal Clean Air Act (CAA) of 1970, the U.S. Environmental Protection Agency (U.S. EPA) established national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants termed "criteria" pollutants, which are those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations in order to protect public health. The current AAQS plus the California standards (which are generally more stringent than federal standards) are shown in Table 4.2-1.

Table 4.2-1
Current Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.075 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.07 ppm (8-hr avg)
Carbon Monoxide	9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)	9.0 ppm (8-hr avg) 20.0 ppm (1-hr avg)
Nitrogen Dioxide	0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)
Sulfur Dioxide	0.14 ppm (24-hr avg) 0.075 ppm (1-hr avg)	0.04 ppm (24-hr avg) 0.25 ppm (1-hr avg)
Lead	1.5 $\mu g/m^3$ (3-month avg)	1.5 $\mu g/m^3$ (30-day avg)
Particulate Matter (PM_{10})	150 $\mu g/m^3$ (24-hr avg)	20 $\mu g/m^3$ (annual avg) 50 $\mu g/m^3$ (24-hr avg)
Particulate Matter ($PM_{2.5}$)	15 $\mu g/m^3$ (annual avg) 35 $\mu g/m^3$ (24-hr avg)	12 $\mu g/m^3$ (annual avg)

ppm= parts per million
$\mu g/m^3$ = micrograms per cubic meter
Source: California Air Resources Board, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, 2014.

The U.S. EPA uses data collected at permanent monitoring stations to classify regions as "attainment" or "nonattainment," depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the U.S. EPA.

The U.S. EPA established new national air quality standards for ground-level ozone and fine particulate matter in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health

standards for ozone and particulate matter, was unconstitutional and an improper delegation of legislative authority to the U.S. EPA. On February 27, 2001, the U.S. Supreme Court upheld the way the government sets air quality standards under the CAA. The Court unanimously rejected industry arguments that the U.S. EPA must consider financial costs as well as health benefits in writing standards. The justices also rejected arguments that the U.S. EPA took too much lawmaking power from Congress when it set tougher standards for ozone and soot in 1997. Nevertheless, the court dismissed the U.S. EPA's policy for implementing new ozone rules, saying that the agency ignored a section of the law that restricts its authority to enforce such rules.

In April 2003, the White House Office of Management and Budget (OMB) cleared the U.S. EPA to implement the 8-hour ground-level ozone standard. The U.S. EPA issued the proposed rule implementing the 8-hour ozone standard in April 2003. The U.S. EPA completed final 8-hour nonattainment status on April 15, 2004. The U.S. EPA revoked the 1-hour ozone standard on June 15, 2005, and lowered the 8-hour O_3 standard from 0.08 parts per million (ppm) to 0.075 ppm on April 1, 2008. The U.S. EPA issued the final $PM_{2.5}$ implementation rule in fall 2004. The U.S. EPA lowered the 24-hour $PM_{2.5}$ standard from 65 to 35 micrograms per cubic meter ($\mu g/m_3$) and revoked the annual PM_{10} standard on December 17, 2006. The U.S. EPA issued final designations for the 2006 24-hour $PM_{2.5}$ standard on December 12, 2008.

Descriptions of the criteria pollutants follow.

Ozone. O_3 (smog) is formed by photochemical reactions between oxides of nitrogen and reactive organic gases rather than being directly emitted. Ozone is a pungent, colorless gas typical of Southern California smog. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. Ozone levels peak during summer and early fall. The entire Basin is designated as a nonattainment area for the State 1-hour and 8-hour ozone standards. The U.S. EPA has officially designated the status for the Basin regarding the 8-hour ozone standard as "Extreme." The Basin has until 2024 to attain the federal 8-hour O_3 standard.

Carbon Monoxide. CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless odorless gas that can cause dizziness, fatigue, and impairment to central nervous system functions. The entire Basin is in attainment for the State standards for CO. The Basin is designated as an "Attainment/Maintenance" area under the federal CO standards.

Nitrogen Oxides. Nitrogen dioxide (NO_2), a reddish-brown gas, and nitric oxide (NO), a colorless odorless gas, is formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_X. NO_X is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition (i.e., acid rain). NO_2 decreases lung function and may reduce resistance to infection. The entire Basin is designated as nonattainment for the State NO_2 standard and as an "Attainment/Maintenance" area under the federal NO_2 standard.

Sulfur Dioxide. Sulfur dioxide (SO_2) is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire Basin is in attainment for both federal and State SO_2 standards.

Lead. Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The Los Angeles County portion of the Basin was re-designated as nonattainment for the State and federal standards for lead in 2010.

Particulate Matter. Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (particulate matter less than 10 microns in diameter [PM_{10}]), derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particle ($PM_{2.5}$) levels. Fine particles can also be formed in the atmosphere through chemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. The U.S. EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death; increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. The Basin is a nonattainment area for the State PM_{10} and $PM_{2.5}$ standards and a nonattainment area for the federal $PM_{2.5}$ standards. The Basin was redesignated as attainment/maintenance for the federal PM_{10} standard in 2013.

Reactive Organic Compounds. Reactive organic compounds (ROCs; also known as ROGs and volatile organic compounds [VOCs]) are formed from combustion of fuels and evaporation of organic solvents. ROCs are not defined criteria pollutants but are a prime component of the photochemical smog reaction. Consequently, ROCs accumulate in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower.

Sulfates. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The entire Basin is in attainment for the State standard for sulfates.

Hydrogen Sulfide. Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal

energy exploitation. In 1984, a California Air Resources Board (CARB) committee concluded that the ambient standard for H_2S is adequate to protect public health and to significantly reduce odor annoyance. The state standard for outdoor levels of hydrogen sulfide is 30 parts per billion averaged over one hour (SCAQMD, 2015).The entire Basin is unclassified for the State standard for H_2S.

Visibility-Reducing Particles. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. The statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. The entire Basin is unclassified for the State standard for visibility-reducing particles.

State Regulations/Standards. In 1967, the California Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish the California Air Resources Board (CARB). The CARB coordinates and oversees both State and federal air pollution control programs in California. It also oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the U.S. EPA and local air districts. The CARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution.

The CARB identified particulate emissions from diesel-fueled engines (diesel particulate matter [DPM]) as toxic air contaminants (TACs) in August 1998. Following the identification process, CARB was required by law to determine whether there is a need for further control. In September 2000, the CARB adopted the Diesel Risk Reduction Plan (Diesel RRP), which recommends many control measures to reduce the risks associated with DPM and to achieve the goal of 85 percent DPM reduction by 2020.

California Green Building Code. California Green Buildings Standards Code (Cal Green Code) (California Code of Regulations [CCR], Title 24, Part 11) was adopted by the California Building Standards Commission in 2010 and became effective in January 2011. The Code applies to all new constructed residential, nonresidential, commercial, mixed-use, and State-owned facilities, as well as schools and hospitals. Cal Green Code is comprised of Mandatory Residential and Nonresidential Measures and more stringent Voluntary Measures (TIERs I and II).

Mandatory Measures are required to be implemented on all new construction projects and consist of a wide array of green measures concerning project site design, water use reduction, improvement of indoor air quality, and conservation of materials and resources. The Cal Green Building Code refers to Title 24, Part 6 compliance with respect to energy efficiency; however, it encourages 15 percent energy use reduction over that required in Part 6. Voluntary Measures are optional, more stringent measures may be used by jurisdictions to enhance their commitment towards green and sustainable design and achievement of Assembly Bill (AB) 32 goals. Under TIERs I and II, all new construction projects are required to reduce energy consumption by 15 percent and 30 percent, respectively, below the baseline required under the

California Energy Commission (CEC), as well as implement more stringent green measures than those required by mandatory code.

Local Regulations and Policies. Local regulations and policies related to air quality are described below.

Regional Air Quality Planning Framework. The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state. The CARB is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for U.S. EPA approval. Significant authority for air quality control within the local air basins has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan. The SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. Every 3 years, the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. The SCAQMD adopted the Final 2012 AQMP on December 7, 2012 and forwarded it to the CARB for review in February 2013. The 2012 AQMP includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches.

Currently, the SCAQMD is initiating an early development process for the 2016 AQMP, which will be a comprehensive and integrated Plan primarily focused on addressing the ozone standards. The Plan will be a regional and multi-agency effort (SCAQMD, CARB, SCAG, and U.S. EPA). State and federal planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans. The 2016 AQMP will incorporate the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories.

SCAQMD Rules and Regulations. All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated under the Plan may include the following:

Rule 401 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

Rule 403 – Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.

Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule.

City of Long Beach General Plan. The Air Quality Element (1996) of the Long Beach General Plan includes goals and polices related to air quality. The following goals and policies are applicable to the proposed project:

- ***Goal 6:*** *Minimize particulate emissions from the construction and operation of roads and buildings, from mobile sources, and from the transportation, handling and storage of materials.*
- ***Policy 6.1:*** *Control Dust. Further reduce particulate emissions from roads, parking lots, construction sites, unpaved alleys, and port operations and related uses.*
- ***Goal 7:*** *Reduce emissions through reduced energy consumption.*
- ***Policy 7.1:*** *Energy Conservation. Reduce energy consumption through conservation improvements and requirements.*

d. Current Air Quality. The SCAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring station closest to the site is the South Long Beach station (located at 1305 East Pacific Coast Highway), and its air quality trends are representative of the ambient air quality in the project area. The pollutants monitored at this station are PM_{10} and $PM_{2.5}$. Data for CO, O_3, NO_2, and SO_2 is from the second nearest station (North Long Beach, located at 3648 North Long Beach Boulevard) to the project site. Table 4.2-2 summarizes the ambient air quality levels measured at these stations between 2012-2014.

The pollutants that exceeded thresholds during the monitoring period were O_3, PM_{10} and $PM_{2.5}$. TheO_3 standard was exceeded one time in 2013; the PM_{10} standard was exceeded 1 time in 2012 and 2013 and twice in 2014; the PM2.5 standard was exceeded four times in 2012, one time in 2013, and two times in 2014

Table 4.2-2
Ambient Air Quality Data

Pollutant	2012	2013	2014
Ozone, ppm - Worst Hour	0.084	0.092	*
Number of days of State exceedances – 8 hour average (>0.07 ppm)	0	1	*
Carbon Monoxide, ppm - Worst 8 Hours	2.17	*	*
Number of days of State/Federal exceedances (>9.0 ppm)	0	0	0
Nitrogen Dioxide, ppm - Worst Hour	77.2	66.9	*
Number of days of State exceedances (>0.18 ppm)	0	0	0
Sulfur Dioxide, ppm – Worst Hour	0.003	0.001	*
Number of days of State exceedances (>0.04 ppm)	*	*	*
Particulate Matter <10 microns, $\mu g/m^3$ Worst 24 Hours	54	54	59
Number of samples of State exceedances (>50 $\mu g/m^3$)	1	1	2
Number of samples of Federal exceedances (>150 $\mu g/m^3$)	0	0	0
Particulate Matter <2.5 microns, $\mu g/m^3$ Worst 24 Hours	59.1	42.9	61.9
Number of samples of Federal exceedances (>35 $\mu g/m^3$)	4	1	2

Source: CARB, Annual Air Quality Data Summaries available at http://www.arb.ca.gov

- *Particulate Matter (<10 and <2.5) data from South Long Beach station.*
- *Ozone, Carbon Monoxide, Nitrogen Dioxide, and Sulfur Dioxide data taken from North Long Beach station.*

** Insufficient data available to determine the value*

4.2.2 Previous Environmental Review

The Long Beach Downtown Plan EIR (the "Downtown Plan EIR") examined the air quality setting of the project region and the potential impacts resulting from development under the Downtown Plan. The Downtown Plan EIR concluded that the Downtown Plan would not increase the allowable density in the Downtown area; therefore, operational emissions associated with land use development on the site, including vehicle trip generation, was accounted for in the AQMP. However, it was also determined that construction and operational area- and mobile-source emissions from implementation of the Downtown Plan would result in or substantially contribute to emissions concentrations that exceed the national or California standards causing significant and unavoidable impacts.

The proposed project is within the parameters and growth forecasts of the Downtown Plan and would generate short-term air pollutant emissions associated with construction, as well as long-term operations, which would contribute to the significant and unavoidable impacts determined in the Downtown Plan EIR. Emissions have the potential to contribute to an existing project air quality violation or result in a cumulatively considerable net increase of criteria pollutants for which the region is in non-attainment.

Construction of the proposed project would be subject to Downtown Plan EIR Mitigation Measure AQ-1(a), which requires all heavy-duty (50 horsepower [hp] or more) offroad vehicles to be used during construction must implement Enhanced Exhaust Control Practices. Mitigation Measure AQ-1(b) requires individual projects within 1,500 feet of existing and proposed sensitive receptors to undergo project-specific construction-related air quality analysis. The project would also be subject to Mitigation Measure AQ-1(c), which requires individual projects to include specific provisions, such as temporary traffic controls as well as the use of 2010 or newer diesel trucks to reduce construction-related air quality impacts.

The project would also be subject to Downtown Plan EIR Mitigation Measure AQ-2 to reduce operational emissions. Mitigation Measure AQ-2 requires implementation of ride-share programs, development of secure bicycle parking areas, exceedance of Title 24 energy efficiency standards by 20 percent, inclusion of such measures as solar panels to achieve an additional 25 percent reduction in electricity use, and restrictions on diesel truck idling.

The Downtown Plan EIR determined that impacts from local mobile-source CO emissions associated with implementation of the proposed Downtown Plan would be less than significant. In addition, the Downtown Plan EIR determined that implementation of the Downtown Plan could result in the exposure of receptors to short- and long-term emissions of Toxic Air Contaminants (TACs) from onsite and offsite stationary and mobile sources. Impacts associated with the Port of Long Beach and offsite stationary sources were determined to be significant and unavoidable, while impacts related to short-term construction, long-term onsite stationary sources, and offsite mobile-sources were determined to be less than significant. The proposed project would be subject to the same general mitigation measures identified in the Downtown Plan EIR, specifically AQ-4(a) and AQ-4(b), which require location of TAC emitters away from existing and proposed onsite, sensitive receptors; implementation of idle-reduction strategies for diesel trucks; posting of signs; installation of high efficiency filter systems and mechanical ventilation systems in all proposed residences; and other measures specific to both TAC generators and TAC receptors to reduce risks to sensitive receptors. Development of the proposed project would potentially be subject to a component of Mitigation Measure AQ-4(a) that requires a project-level health risk assessment (HRA) for commercial land uses generating more than 100 trucks per day, or 40 trucks equipped with transportation refrigeration units (TRUs), within 1,000 feet of sensitive receptors.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not certified. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to construction emissions exceeding SCAQMD's daily regional and localized construction thresholds would be less than significant with implementation of mitigation involving the development and implementation of an Air Quality Safety Plan, if the demolition occurs by implosion. The Long Beach Courthouse Demolition Project Draft EIR also determined that impacts related to TAC emissions would be less than significant with implementation of mitigation involving the development and implementation of an Air Quality Safety Plan, if the demolition occurs by implosion.

As stated in the Downtown Plan EIR, project construction activities associated with the development of onsite land uses could result in odorous emissions from diesel exhaust

generated by construction equipment. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction and the impact related to the Downtown Plan was determined to be less than significant. Downtown Plan EIR Mitigation Measure AQ-6 includes measures to control exposure of sensitive receptors to operational odorous emissions. Mitigation Measure AQ-6 requires the City to consider the odor-producing potential of land uses when reviewing development proposals; implementation of odor-control devices to mitigate the exposure of receptors to objectionable odors, where necessary; siting of loading docks and delivery areas away from sensitive receptors; and posting of signage in loading docks stating that diesel-powered delivery trucks must be shut off when not in in use for longer than five minutes. The proposed project would occur within the 25-year buildout assessed in the Downtown Plan EIR and would not include any uses expected to generate odors outside of what was considered in the Downtown Plan EIR.

4.2.3 Impact Analysis

a. Methodology and Significance Thresholds.

Methodology. The air quality analysis conforms to the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook* (1993). The handbook includes thresholds for emissions associated with both construction and operation of proposed projects.

The SCAQMD's current guidelines, included in its *CEQA Air Quality Handbook*, were adhered to in the assessment of potential short- and long-term air quality impacts of the proposed project. However, the air quality models identified in the *CEQA Air Quality Handbook* are outdated; therefore, CalEEMod Version 2013.2.2 was used to estimate regional air pollutant emissions associated with project construction and operation. Modeling assumed demolition would occur by traditional methods, as it is not possible to model demolition by implosion in CalEEMod.

Construction is expected to occur in phases over approximately seven years beginning in 2016. The project includes demolition of the former Long Beach Courthouse, City Hall, and the Main Library. A total disturbance area of 15.87 acres split between the project components based on the project site plans was assumed in the model to calculate construction emissions. Grading operations would disturb an area of approximately nine acres and result in approximately 380,000 cubic yards (cy) of export and 68,200 cy of import. Due to construction phasing, the project cannot use 68,200 cy of export as fill. Construction is expected to occur over four phases based on the applicant-provided construction schedule. Phase 1 would span January 2016 to November 2019 and includes demolition of the former Courthouse, grading, construction of City Hall, the Port Building, the new Library, Civic Block parking garage and associated architectural coating and paving. Phase 1 also includes the grading and construction of the residential building and parking garage within the Third and Pacific Block. Phase 2 would span April 2017 to December 2017 and includes architectural coating and paving for the residential building within the Third and Pacific Block. Phase 3 would span July 2019 to March 2020 and includes demolition of the existing Main Library, and grading and construction of Lincoln Park. Phase 4 would span January 2020 to July 2022 and includes demolition of the existing City Hall and grading and construction of the Center Block components, including associated architectural coating and paving.

Modeling assumed compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measures AQ-1(a), AQ-1(b), AQ-1(c), AQ-2, GHG-1(b), and GHG-2(b) discussed in "Previous Environmental Review" and Section 4.4, *Greenhouse Gas Emissions and Climate Change*. Complete results from CalEEMod and assumptions can be viewed in Appendix B. All other values utilized in the modeling were based on applicable SCAQMD defaults for the Basin.

Both temporary construction emissions and long-term operation emissions were calculated using CalEEMod. The estimate of total daily trips associated with the proposed project and existing uses was based on the Traffic Impact Analysis prepared by Linscott, Law, and Greenspan, Engineers (LLG) in June 2015 and was calculated and extrapolated to derive total annual mileage in CalEEMod. Both construction and long-term emissions were analyzed based on the regional thresholds established by the SCAQMD and published in the *CEQA Air Quality Handbook*.

Thresholds. Pursuant to the *State CEQA Guidelines*, air quality impacts related to the proposed project would be significant if the project would:

a) *Conflict with or obstruct implementation of the applicable air quality plan;*
b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);*
d) *Expose sensitive receptors to substantial pollutant concentrations; or*
e) *Create objectionable odors affecting a substantial number of people.*

As discussed in the Initial Study prepared for the project (Appendix A), onsite development would not generate objectionable odors that would affect a substantial number of people. No heavy industrial, agricultural or other uses typically associated with objectionable odors are proposed. Therefore, it is unlikely that the proposed project would generate objectionable odors affecting a substantial number of people. Consequently, threshold (e) related to objectionable odors is not discussed below.

Air Quality Management Plan Consistency. Criteria for determining consistency with the SCAQMD's AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's *CEQA Air Quality Handbook*, and include the following:

- *The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.*
- *The proposed project will not exceed the assumptions in the AQMP based on the year of project buildout.*

Construction Emission Thresholds. The SCAQMD has developed specific numeric thresholds that apply to projects within the Basin. The SCAQMD currently recommends that impacts associated with projects with construction-related mass daily emissions that exceed any of the following emissions thresholds should be considered significant:

- *75 pounds per day of ROG*
- *100 pounds per day of NO_x*
- *550 pounds per day of CO*
- *150 pounds per day of SO_x*
- *150 pounds per day of PM_{10}*
- *55 pounds per day of $PM_{2.5}$*

Operational Emission Thresholds. The SCAQMD has also established the following significance thresholds for project operations within the Basin:

- *55 pounds per day of ROG*
- *55 pounds per day of NO_X*
- *550 pounds per day of CO*
- *150 pounds per day of SO_X*
- *150 pounds per day of PM_{10}*
- *55 pounds per day of $PM_{2.5}$*

Localized Significance Thresholds. In addition to the above thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook*. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, distance to the sensitive receptor and other factors. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NO_X, CO, PM_{10} and $PM_{2.5}$. LSTs do not apply to mobile sources such as cars on a roadway (SCAQMD, 2003). As such, LSTs for operational emissions do not apply to onsite operational emissions as the majority of emissions would be generated by cars on the roadways.

LSTs have been developed for emissions within areas up to five acres in size, with air pollutant modeling recommended for activity within larger areas. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. The project area measures approximately 16 acres and is located in Source Receptor Area 4 (SRA-4) (SCAQMD, 2003). Based on the estimated construction schedule, it is assumed that construction activity at the project site would generally occur within a five-acre area at any one time. The applicable LSTs for construction on a five acre site in SRA-4 are shown in Table 4.2-3. According to the SCAQMD's publication, *Final Localized Significant (LST) Thresholds Methodology*, the use of LSTs is voluntary, to be implemented at the discretion of local agencies.

LSTs are provided for receptors at a distance of 25 to 500 meters from the project site boundary. As described above, the nearest existing sensitive receptor is approximately 100 feet, or 30 meters, from the project site boundary; however, the project's proposed library would be located adjacent to on-going construction. The residential components of the project are concentrated on the Third and Pacific Block, which is located approximately 300 feet north of where construction on the remainder of the project site would occur, and on Center Block,

operation of which would occur after all other components are constructed. Therefore, the proposed library would be the only sensitive receptor that would be located adjacent to project construction. According to the SCAQMD's LST methodology, projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.

Table 4.2-3
SCAQMD LSTs for Emissions in SRA-4

Pollutant	Allowable emissions as a function of receptor distance in meters from a five-acre site (lbs/day)				
	25	**50**	**100**	**200**	**500**
Gradual conversion of NO_x to NO_2	123	118	126	141	179
CO	1,530	1,982	2,613	4,184	10,198
PM_{10}	14	42	58	92	191
$PM_{2.5}$	8	10	18	39	120

Source: SCAQMD, website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2. Accessed: June 2015.

b. Project Impacts and Mitigation Measures.

Threshold	*Conflict with or obstruct implementation of the applicable air quality plan.*

Impact AQ-1 The proposed project would not directly or indirectly generate population growth beyond that anticipated in the Downtown Plan EIR and AQMP forecasts. Impacts relating to AQMP consistency are, therefore, Class III, *less than significant*.

A project may be inconsistent with the AQMP if it would generate population, housing or employment growth exceeding the forecasts used in the development of the AQMP. The 2012 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local city general plans and the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) socioeconomic forecast projections of regional population, housing and employment growth. The growth assumptions used in the AQMP are based on SCAG growth forecasts. Therefore, if the proposed project would not facilitate growth exceeding SCAG forecasts, then the project would be consistent with the assumptions in the AQMP (SCAG, 2012a).

As shown in Table 4.2-1, the RTP/SCS population growth forecast for Long Beach is 491,000 in 2020 and 534,100 in 2035 (SCAG, 2012b). SCAG's forecasts that Long Beach will have 175,600 housing units in 2020 and 188,900 housing units in 2035. SCAG estimates citywide employment for Long Beach at 176,000 jobs in 2020 and 184,800 jobs in 2035 (SCAG, 2012b).

Table 4.2-4
SCAG Population, Housing, Employment Forecasts for Long Beach

Year	Population	Housing	Employment
2020	491,000	175,600	176,000
2035	534,100	188,900	184,800

Source: SCAG, 2012b Adopted Growth Forecast

Long Beach currently has an estimated population of 470,292 (California Department of Finance, 2014). The proposed project would accommodate up to 780 new residential units within Long Beach. The City has approximately 2.82 persons per household (California Department of Finance, 2014). Development of the proposed project would therefore accommodate an estimated 2,200 residents (780 dwelling units x 2.82 people/dwelling unit). Based on this average, the project would add an estimated 2,200 residents, for a total City population of 472,492 residents (California Department of Finance, 2014). The 2,200 new residents would increase the City's population by 0.5%. The increase is well within the 63,808 residents forecast by SCAG to be added to the City between 2014 and 2035 (see Table 4.2-4). Direct population growth associated with the proposed project is therefore within SCAG's growth forecasts.

The City currently exceeds the 2020 SCAG forecast for housing with approximately 176,417 housing units (California Department of Finance, 2014). SCAG's housing forecast for Long Beach is 188,900 in 2035 (SCAG, 2012b). Housing units are expected to increase in the City by approximately 12,483 between 2014 and 2035. The project's proposed 780 units would account for approximately 6.2 percent of housing growth between 2014 and 2035 and would not exceed SCAG housing forecasts for 2035.

The project's commercial components would generate jobs onsite. As shown in Table 4.2-5, the proposed hotel, retail, and restaurant uses would accommodate an estimated 365 jobs. The Port Building, City Hall, and library would accommodate existing jobs that would simply be relocated to the new facilities.

Table 4.2-5
New Employees Accommodated by Proposed Project

Land Use	Area (sf)	Area (acres)	Employees per Acre	Total Employees
Retail	32,000	0.73	18.86	14
Restaurant[1]	8,000	0.18	25.76	5
Hotel	290,400	6.67	51.91	346
			Total[2]	**365**

Source: Table C-1, Range of Employment Densities (Employees Per Acre) by County (Southern California Association of Governments (SCAG), Employment Density Study Summary Report, October 31, 2001).
[1] Employee rate for "Other Retail/Services" in SCAG Table C-1 was used, as "Restaurant" is not listed.

SCAG estimated employment (jobs) in the City to be 168,100 in 2008. SCAG's employment growth forecast for Long Beach is 184,800 in 2035 (SCAG, 2012b). Therefore, jobs are expected to increase in the City by approximately 16,700 between 2008 and 2035. Consequently, the employment increase generated by the proposed project would account for approximately 2.2 percent of job growth between 2008 and 2035 and would not exceed SCAG employment forecasts.

The Downtown Plan EIR concluded that the Downtown Plan would not increase the allowable density in the Downtown area and therefore operational emissions associated with land use development on the site, including vehicle trip generation, were accounted for in the AQMP. As shown in Table 3-3 in Section 3, *Environmental Setting*, buildout of the Downtown Plan is expected to generate approximately 5,000 housing units. Implementation of the Downtown Plan is expected to generate 14,500 residents and approximately 5,200 jobs. The proposed project would account for approximately 15.6 percent of the housing units, 15.2 percent of the population increase, and 7 percent of the jobs anticipated in the Downtown Plan EIR. As such, the assumptions in the RTP/SCS about growth in the Downtown Plan Area and the City accommodates housing and population growth on the project site. Therefore, the project does would not conflict with the growth assumptions in the AQMP.

Mitigation Measures. Impacts would be less than significant and no mitigation measures would be required.

Level of Significance After Mitigation. Impacts related to AQMP consistency would be less than significant without mitigation.

Threshold	*Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
Threshold	*Expose sensitive receptors to substantial pollutant concentrations.*

Impact AQ-2 **Onsite construction activity would generate temporary emissions. The Downtown Plan EIR determined that construction emissions associated with buildout of the Downtown Plan would result in Class I, significant and unavoidable impacts. The proposed project would contribute to this impact; however, project emissions would not exceed SCAQMD regional thresholds or LSTs. However, if demolition occurs by implosion, the project would result in significant impacts related to localized PM_{10} emissions and asbestos exposure without additional mitigation. Impacts would, therefore, be Class II, *less than significant with mitigation.***

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles, in addition to ROG that would be released during the drying phase upon application of architectural coatings. Construction would generally consist of grading, construction of the proposed buildings, paving, and architectural coating.

The grading phase would involve the greatest concentration of heavy equipment use and the highest potential for fugitive dust emissions. This analysis assumes that 380,000 cubic yards of soil would be exported off-site and 68,200 cubic yards would be imported and both would be phased throughout the seven year construction schedule.

The project would be required to comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the South Coast Air Basin. Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for ~~the site preparation and grading~~ all phases of construction.

1. ***Minimization of Disturbance.*** *Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.*
2. ***Soil Treatment.*** *Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least two times daily, preferably in the late morning and after work is done for the day.*
3. ***Soil Stabilization.*** *Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.*
4. ***Grading During High Winds.*** *Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).*
5. ***Street Sweeping.*** *Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.*

Construction emissions modeling for grading, building construction, paving, and application of architectural coatings is based on the overall scope of the proposed development and construction phasing, which is expected to begin in 2016 and extend through 2022. In addition to SCAQMD Rule 403 requirements, emissions modeling also accounts for the use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Table 4.2-6 shows estimated maximum daily emissions for each year of construction. The highest daily emissions would be in 2016 and 2017, during which demolition, grading, building, and architectural coating are expected to occur for the Civic Block, Third and Pacific Block and for the new library. With compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measure AQ-1(a), AQ-1(b), AQ-1(c), and GHG-1(b), construction emissions would not exceed SCAQMD regional thresholds for any criteria pollutant during any of the seven years of construction.

Table 4.2-6
Estimated Construction Maximum
Daily Air Pollutant Emissions (lbs/day)

Year	Emissions (lbs/day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2016	10.7	66.0	181.8	0.4	20.6	6.9
2017	33.3	60.7	172.1	0.4	23.8	7.6
2018	42.9	36.2	142.5	0.4	18.3	5.3
2019	42.3	63.8	168.2	0.4	21.3	7.2
2020	9.6	63.8	170.0	0.4	22.0	7.4
2021	64.2	25.3	108.2	0.3	18.0	5.1
2022	63.9	23.4	104.2	0.3	18.0	5.1
Maximum lbs/day[1]	**64.2**	**66.0**	**181.8**	**0.4**	**23.8**	**7.6**
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD LST Spreadsheet for a 5-acre site and CalEEMod; see Appendix B for calculations and assumptions. Assumed compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measure AQ-1(a), AQ-1(b), AQ-1(c), and GHG-1(b).
1. Maximum daily emissions include onsite and offsite emissions.

LSTs only apply to those emissions generated by onsite construction activities, such as emissions from onsite grading, and do not apply to offsite mobile emissions. The LST for sensitive receptors 25 meters from the project site were used to illustrate the closest receptor, which is the project's proposed library that would be located adjacent to ongoing construction. As indicated in Table 4.2-7, with compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measure AQ-1(a), AQ-1(b), AQ-1(c), and GHG-1(b), emissions generated by temporary construction activities would be below LSTs for NOx, CO, PM_{10} and $PM_{2.5}$.

Table 4.2-7
Estimated Construction Maximum Onsite
Daily Air Pollutant Emissions (lbs/day)

Year	Onsite Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2016	0.8	3.3	34.8	0.1	2.8	1.5
2017	24.5	3.3	34.8	0.1	2.8	1.5
2018	34.7	2.2	17.4	<0.1	<0.1	<0.1
2019	34.7	3.3	34.8	0.1	2.8	1.5
2020	0.8	3.3	34.8	0.1	2.8	1.5
2021	57.6	2.2	17.4	<0.1	<0.1	<0.1
2022	57.6	2.2	17.4	<0.1	<0.1	<0.1
Maximum Onsite lbs/day[1]	**234.7**	**3.3**	**34.8**	**0.1**	**2.8**	**1.5**
Local Significance Thresholds[2] (LSTs)	*n/a*	*123*	*1,530*	*n/a*	*14*	*8*
Threshold Exceeded?	**n/a**	**No**	**No**	**n/a**	**No**	**No**

Source: SCAQMD LST Spreadsheet for a 5-acre site and CalEEMod; see Appendix B for calculations and assumptions. Assumed compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measure AQ-1(a), AQ-1(b), AQ-1(c, and GHG-1(b)).
1. Maximum daily onsite emissions from construction phases.
2. LSTs are for a five-acre project in SRA-4 within a distance of 25 meters from the site boundary

As indicated in Table 4.2-6 and Table 4.2-7, demolition during any phase of the project would not result in emissions that exceed SCAQMD regional or localized thresholds. However, the Long Beach Courthouse Demolition Project Draft EIR determined that because emissions during demolition by implosion could vary substantially depending on wind conditions, building materials, and the amount of explosive material involved, demolition of the former Courthouse, if done by implosion, could substantially increase downwind concentrations of PM_{10}, potentially exceeding SCAQMD's LSTs. In addition, considering the age of the former Courthouse, potentially hazardous materials such as asbestos-containing materials and surfaces painted with lead-based paint may be present. Because any exposure to asbestos is considered hazardous, the Long Beach Courthouse Demolition Project Draft EIR determined that demolition by implosion could result in a significant impact related to asbestos exposure.

The proposed project would include demolition of the former Courthouse, City Hall, and the Main Library. Due to the age of City Hall and the Main Library, all of which could potentially contain asbestos-containing materials and surfaces painted with lead-based paint. Because demolition could occur by implosion, impacts related to asbestos exposure and PM_{10} would be potentially significant.

Mitigation Measures. The following mitigation measure is required to reduce localized exposure to emissions of particulate matter and asbestos, if existing buildings are demolished by implosion.

AQ-2 **Air Quality Safety Plan.** If demolition occurs by implosion, the City shall approve an Air Quality Safety Plan that protects public health. The Plan shall be prepared with and approved by the South Coast Air Quality Management District. Public safety measures include:

- *A radius around the project site in which the public is prevented from being outdoors;*
- *Advanced notification of potential particulate matter and asbestos exposure to all land uses within 1,000 feet of the project site;*
- *Notice that windows should be closed at all buildings within the safety radius during the implosion until the City has provided notice that particulate matter and asbestos concentrations have reached background concentrations;*
- *Air quality monitoring during the day of the implosion to confirm when particulate matter and asbestos concentrations have reached background concentrations.*

Significance After Mitigation. Mitigation Measure AQ-2 would ensure that the public would not be exposed to significant particulate matter and asbestos concentrations. A safety radius preventing outside activity would be kept in place until air monitoring demonstrates that concentrations do not exceed pre-implosion background concentrations. Therefore, the proposed project would result in a less than significant impact related to particulate matter and asbestos exposure.

Threshold	*Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).*

Impact AQ-3 **Operation of the proposed project would generate air pollutant emissions in the long-term. Emissions would not exceed SCAQMD operational significance thresholds for any criteria pollutants, except ROG. The Downtown Plan EIR determined that operational emissions associated with buildout of the Downtown Plan would result in a Class I, significant and unavoidable impact. The proposed project would contribute to this impact and would be a Class I, *significant and unavoidable* impact.**

Long-term air pollutant emissions are those associated with stationary sources and mobile sources involving any project-related changes. The proposed project would result in an increase in both stationary and mobile source emissions. Stationary source emissions would come from additional natural gas consumption for onsite buildings and electrical demand. Mobile source emissions would come from project-related vehicle trips. Project-related vehicle trips are largely

dependent on the number of residences. The net increase in long-term operational emissions associated with the proposed project, calculated using CalEEMod, is shown in Table 4.2-8. The net increase of NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ would be less than the corresponding SCAQMD daily emission thresholds. However, the net increase of ROG emissions would exceed the SCAQMD daily emissions threshold. Therefore, project-related long-term impacts to regional air quality would be significant.

Table 4.2-8
Long-Term Operational Emissions (lbs/day)

Emission Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Project Emissions						
Area	61.4	0.7	64.8	<0.1	0.4	0.4
Energy	0.7	6.3	5.1	<0.1	0.6	0.6
Mobile	53.1	99.4	589.9	2.0	133.7	37.4
Total Project Emissions	**115.2**	**106.3**	**521.1**	**1.3**	**89.4**	**25.6**
Existing Emissions						
Area	18.2	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	0.2	1.5	1.3	<0.1	0.1	0.1
Mobile	35.0	78.5	323.7	0.6	55.3	15.7
Total Existing Emissions	**53.4**	**80.1**	**325.1**	**0.6**	**55.4**	**15.8**
Net Emissions (Project – Existing)	***61.8***	***26.2***	***196***	***0.7***	***34***	***9.8***
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	*Yes*	*No*	*No*	*No*	*No*	*No*

Source: See Appendix B for CalEEMod calculations. Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 and Architectural Coating Rule 1113,and Downtown Plan EIR Mitigation Measure AQ-2 and GHG-2(b).
Note: Totals may not add up due to rounding.

Mitigation Measures. The following mitigation measures are required to reduce emissions of ROG during operation of the proposed project to the maximum extent feasible.

AQ-3(a) **Low-VOC Paint.** The project applicant shall require all development operator(s) to use low-VOC paint on all interior and exterior surfaces. Paint should not exceed 50 g/L for all interior surfaces and exterior surfaces.

AQ-3(b) **Barbecue Outlets.** Provide electric and propane barbecue outlets in all residential outdoor areas.

Significance After Mitigation. As shown in Table 4.2-9, implementation of Mitigation Measure AQ-3(a) would reduce ROG emissions to the maximum extent feasible. Mitigation Measure AQ-3(b) would further reduce ROG emissions, however, it is not possible to quantify reductions with CalEEMod. ~~However, p~~Project-related long-term impacts to regional air quality would remain significant and unavoidable.

Table 4.2-9
Long-Term Operational Emissions (lbs/day) with Mitigation Measure AQ-3

Emission Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Project Emissions						
Area	**56.9**	0.7	64.8	<0.1	0.4	0.4
Energy	**0.7**	6.3	5.1	<0.1	0.6	0.6
Mobile	**53.1**	99.4	589.9	2.0	133.7	37.4
Total Project Emissions	**110.7**	**106.3**	**521.1**	**1.3**	**89.4**	**25.6**
Existing Emissions						
Area	18.2	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	0.2	1.5	1.3	<0.1	0.1	0.1
Mobile	35.0	78.5	323.7	0.6	55.3	15.7
Total Existing Emissions	**53.4**	**80.1**	**325.1**	**0.6**	**55.4**	**15.8**
Net Emissions (Project – Existing)	***57.3***	***26.2***	***196***	***0.7***	***34***	***9.8***
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	*Yes*	*No*	*No*	*No*	*No*	*No*

Source: See Appendix B for CalEEMod calculations. Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 and Architectural Coating Rule 1113,and Downtown Plan EIR Mitigation Measure AQ-2 and GHG-2(b).
Note: Totals may not add up due to rounding.

Threshold	*Expose sensitive receptors to substantial pollutant concentrations.*

Impact AQ-4 **Project traffic would generate CO emissions that have the potential to create high concentrations of CO, or CO hotspots. However, project traffic would not cause the level of service (LOS) of an intersection to change to E or F, nor would it increase the volume to capacity ratio (V/C) by two percent or more for intersections rated D or worse. Therefore, localized air quality impacts related to CO hotspots would be Class III, *less than significant*.**

Areas with high vehicle density, such as congested intersections, have the potential to create high concentrations of CO, known as CO hotspots. A project's localized air quality impact is considered significant if CO emissions create a hotspot where either the California one-hour standard of 20 ppm or the federal and state eight-hour standard of 9.0 ppm is exceeded. This typically occurs at severely congested intersections (level of service [LOS] E or worse). Pursuant to SCAQMD guidance, a CO hotspot analysis should be conducted for intersections where the proposed project would have a significant impact at a signalized intersection, causing the LOS to change to E or F, or when the volume to capacity ratio (V/C) increases by two percent or more as a result of a proposed project for intersections rated D or worse (SCAQMD, 2003). As discussed in Section 4.6, *Transportation and Traffic*, local intersections currently operate at LOS C or better during peak hours (Shane Green, LLG, personal communication, June 2015). Under cumulative conditions in 2020, when portions of the project would be operational, one intersection (Magnolia Avenue at Ocean Boulevard) would operate at LOS D. The proposed project is forecast to result in a net increase of 671 vehicle trips during the a.m. peak hour and a net increase of 552 vehicles trips during the p.m. peak hour (Shane Green, LLG, personal communication, June 2015). Under cumulative conditions in year 2020, the addition of project traffic would not cause the LOS of any intersections to change to E or F, nor would it increase the V/C by two percent or more at an intersection rated as LOS D under existing conditions. In addition, as shown in Table 4.2-8, project operational CO emissions are well below SCAQMD regional thresholds. Therefore, the proposed project would not result in a CO hotspot and impacts would be less than significant.

Mitigation Measures. Mitigation would not be required since impacts would be less than significant.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Threshold	*Expose sensitive receptors to substantial pollutant concentrations.*

Impact AQ-5 **The Downtown Plan EIR determined that implementation of the Downtown Plan could result in exposure of receptors to short- and long-term emissions of toxic air contaminants (TACs) from onsite and offsite stationary and mobile sources. Impacts from Port of Long Beach and offsite stationary sources, and onsite mobile sources were determined by the Downtown Plan EIR to be Class I, significant and unavoidable. Operation of the proposed project would increase mobile source emissions of TACs in the Downtown Plan Area, however, fewer than 100 trucks and 40 trucks equipped with transportation refrigeration units (TRUs) per day would be accommodated by the proposed project. Therefore, impacts from mobile source emissions of TACs would be Class III, *less than significant*; however, because the project would place residential uses within the Downtown Plan Area, impacts from Port of Long Beach and offsite stationary sources would remain Class I, *significant and unavoidable*.**

Within the Downtown Plan Area, mobile sources of TAC emissions would be associated with the operation of diesel-powered delivery trucks at loading docks and delivery areas of commercial land uses. Some sensitive land uses within the project area could be located within 100 feet of commercial uses. Operational activities that require the use of diesel-fueled vehicles, such as delivery areas or loading docks, could expose nearby sensitive receptors to diesel PM emissions. The diesel PM emissions generated by these uses would be produced primarily at discrete locations on a regular basis. Idling trucks at these locations, including Transportation Refrigeration Units (TRUs), could result in the exposure of nearby residents to increased diesel PM levels on a recurring basis.

The California Air Resources Board's (CARB's) *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) recommends avoiding the siting of new commercial trucking facilities that accommodate more than 100 trucks per day, or 40 trucks equipped with TRUs, within 1,000 feet of sensitive receptors. The types of tenants that would occupy commercial spaces and the number of trucks that would visit these facilities on any given day was not known at the time the Downtown Plan was analyzed in the Downtown Plan EIR. However, it was anticipated that the types of commercial uses proposed for the Downtown Plan Area would not involve large-scale trucking operations. For the purposes of the Downtown Plan, it was not anticipated that the combination of commercial land uses proposed in the Downtown Plan Area would exceed these screening limits.

Nonetheless, Downtown Plan EIR Mitigation Measure AQ-4(a) requires a project-level health risk assessment (HRA) for commercial land uses that accommodate more than 100 trucks per day, or 40 trucks equipped with TRUs, within 1,000 feet of sensitive receptors. The project site is within 1,000 feet of sensitive receptors and includes proposed sensitive receptors. In addition, the proposed project includes commercial components, such as proposed hotel, retail, and restaurant uses, as well as residential, library, and government office land uses.

Linscott, Law, and Greenspan, Engineers estimates that approximately 0.5 percent of residential vehicle trips would be truck trips and one percent of the remaining project vehicle trips would be truck trips (Shane Green, LLG, personal communication, June 2015). Based on these estimates, the project would accommodate approximately 84 trucks per day (see Table 4.2-10). Assuming that all truck trips to the restaurant are by trucks equipped with TRUs, the project would accommodate approximately 5 trucks with TRUs per day. Based on these conservative estimates, the proposed project would accommodate fewer than 100 trucks per day and fewer than 40 trucks with TRUs per day; therefore, the project's impact on mobile source TAC emissions would be less than significant and a project-level HRA is not warranted.

Table 4.2-10
Estimated Project Truck Trips

Land Use	Daily Trips	Truck Trip Percentage	Total Truck Trips (Inbound/Outbound)	Total Trucks[1]
Third and Pacific Block				
Residential	1,176	0.5%	6	3
Civic Block				
City Hall	2,793	1%	28	14
Port Building	2,554	1%	26	13
Lincoln Park and New Library Block				
Main Library	3,533	1%	35	18
Lincoln Park	111	1%	1	1
Center Block				
Residential	2,821	0.5%	14	7
Hotel	1,552	1%	16	8
Retail	3,076	1%	31	15
Restaurant	966	1%	10	5
			Total Truck Trips	84

Source: LLG, Traffic Impact Analysis, June 2015 (see Appendix E)
1. Total trucks include one inbound and one outbound trip. Therefore, total trucks equal total truck trips divided by two.

The Downtown Plan EIR determined that the cumulative carcinogenic risk in the Downtown Plan Area, including risk from emissions sources at the Port of Long Beach and other TAC sources in the surrounding area, would exceed SCAQMD's recommended threshold for sensitive receptors (maximum incremental risk of ten per one million population or a 0.00001 probability). To provide a perspective on risk, the American Cancer Society (2007) reports that in the U.S., men have a one in two chance (0.5 probability) and women about one in three chance (0.3) probability of developing cancer during a lifetime, with one in four deaths (0.23) in the U.S. attributed to cancer. Given this background carcinogenic risk level in the general population, application of a ten per one million excess risk limit means that the contribution from a toxic hazard should not cause the resultant cancer risk for the exposed population to exceed 0.50001 for men and 0.33334 for women. The cumulative carcinogenic risk in the Downtown Plan Area ranges from 1,201 to 2,904 potential cases per one million population (0.01201 to 0.02904 probability).

Although TAC emissions from the Port of Long Beach would be reduced over time with implementation of the San Pedro Bay Ports Clean Air Action Plan, the Downtown Plan EIR determined that the siting of residential uses within the Downtown Plan Area would result in a significant and unavoidable impact with regard to exposure of sensitive receptors to TAC emission sources.

In order to reduce exposure of sensitive receptors to operational emissions of TACs, the proposed project would be subject to Downtown Plan EIR Mitigation Measure AQ-4(a), which requires loading docks to be located away from existing and proposed onsite sensitive receptors; the use of idle-reduction strategies, such as electrification of truck parking, for proposed commercial uses that may host diesel trucks; and signage in all loading dock areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than five minutes on the premises. The proposed project would also be required to implement Downtown Plan EIR Mitigation Measure AQ-4(b), which includes installation of mechanical ventilation systems and filter systems with high Minimum Efficiency Reporting Value (MERV) ratings for removal of small particles (such as 0.3 micron) at all air intake points in proposed residential units to reduce exposure to TACs. Filters with a MERV rating of 16 are capable of removing parcels 0.3 micron in size and have efficiency rates exceeding 95 percent. In addition, Downtown Plan EIR Mitigation Measure AQ-4(b) requires installation of heating, ventilation, and air conditioning (HVAC) systems to maintain all residential units under positive pressure at all times, as well as the development of on-going education and maintenance plans for the HVAC filtration systems. Downtown Plan EIR Mitigation Measure AQ-4(b) also requires, to the extent feasible, sensitive receptors to be located as far from the Port of Long Beach as possible.

The cumulative carcinogenic risk calculated in the Downtown Plan EIR for the Downtown Plan Area (1,201 to 2,904 potential cases per one million population) is based on exposure to outdoor air 24 hours per day, but the U.S. EPA Exposure Factors Handbook indicates that the recommended daily activity pattern includes 16.4 hours per day (approximately 68 percent) spent inside and 2 hours per day (approximately 8 percent) spent outside (Volume III, Table 15-176 Summary of Recommended Values for Activity Factors). The remaining daily time is spent offsite (approximately 23 percent). Assuming that 32 percent of time not spent indoors is spent in the Downtown Plan Area, implementation of Downtown Plan EIR Mitigation Measure AQ-4(b)'s high efficiency air filter systems would reduce cumulative carcinogenic risk by nearly 68 percent; that is cumulative carcinogenic risk would be approximately 817 to 1,975 potential cases per one million population (68 percent of 1,201 to 2,904 potential cases per one million population). Nonetheless, this rate would exceed SCAQMD's recommended threshold for sensitive receptors (maximum incremental risk of ten per one million population or a 0.00001 probability).

Mitigation Measures. Downtown Plan EIR Mitigation Measures AQ-4(a) and AQ-4(b) would reduce project impacts related to exposing sensitive receptors to TAC emissions from the Port of Long Beach and other sources to the maximum extent feasible.

Significance After Mitigation. Implementation of Downtown Plan EIR Mitigation Measures AQ-4(a) and AQ-4(b) would reduce concentrations of TACs that proposed sensitive receptors would be exposed to for time spent indoors. Implementation of the above mitigation measures would also disclose to those considering residing on the project site the potential risks involved with residing in the Downtown Plan Area. The mitigation would not reduce exposure of sensitive receptors to substantial pollutant concentrations for time spent outdoors. Mitigation measures would reduce impacts to the maximum extent feasible; however, the project would expose sensitive receptors to TAC emissions from the Port of Long Beach and other TAC sources and would remain significant and unavoidable.

c. Cumulative Impacts. The South Coast Air Basin is a non-attainment area for the federal standards for ozone, $PM_{2.5}$ and lead and the state standards for ozone, PM_{10}, $PM_{2.5}$, NO_2 and lead. Any growth within the Los Angeles metropolitan area would contribute to existing exceedances of ambient air quality standards when taken as a whole with existing development. The Downtown Plan EIR determined that implementation of the Downtown Plan would result in direct significant and unavoidable cumulative air quality impacts. As development of the project site was anticipated in the Downtown Plan EIR, the proposed project would contribute to the Downtown Plan's cumulative air quality impacts and would be significant and unavoidable.

4.3 CULTURAL RESOURCES

The information and analysis presented in this section is based on a Cultural Resources Study prepared for the proposed project by Rincon Consultants, Inc. in June 2015, included as Appendix C of this EIR.

4.3.1 Setting

a. Historical Background.

Prehistory. The project site is located in the southern coastal region of California (Jones and Klar 2007). Wallace (1955, 1978) devised a prehistoric chronology for the southern California coastal region which has been modified and improved by researchers over recent decades (Byrd and Raab 2007; Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The chronological sequence is generally divided into four periods: Early Man, Milling Stone, Intermediate, and Late Prehistoric. The Early Man Horizon (ca. 10,000-6,000 B.C.) is represented by numerous sites identified along the mainland coast and Channel Islands (c.f., Erlandson 1991; Johnson et al. 2002; Jones and Klar 2007; Moratto 1984; Rick et al. 2001). Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons, though recent data indicates that the economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources (Jones and Klar 2007). The Millingstone Period, (6000-3000 B.C.), is characterized by an ecological adaptation to collecting suggested by the appearance and abundance of well-made milling implements (Wallace 1955; Jones and Klar 2007). A broad spectrum of food resources were consumed, including small and large terrestrial mammals, sea mammals, birds, shellfish, fishes, and other littoral and estuarine species, yucca, agave, seeds, and other plant products (Reinman 1964; Kowta 1969). The Intermediate Horizon (3000 B.C. – A.D. 500) is characterized by a shift toward a hunting and maritime subsistence strategy. A noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish, land mammal, and sea mammal along the coast. Tool kits for hunting, fishing, and processing food and other resources reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured. An increase in mortars and pestles became more common, indicating an increasing reliance on acorn (Glassow et al. 1988; True 1993). The Late Prehistoric Horizon (A.D. 500 - Historic Contact) saw further increase in the diversity of food resources (Wallace 1955, 1978). More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small, finely worked projectile points associated with the bow and arrow (Wallace 1955).

Ethnography. The project site lies within an area traditionally occupied by the Native American group known as the Gabrielino. The name Gabrielino was applied by the Spanish to those natives that were attached to Mission San Gabriel (Bean and Smith 1978). Today, most contemporary Gabrielino prefer to identify themselves as Tongva (King 1994). Tongva territory included the Los Angeles basin and southern Channel Islands as well as the coast from Aliso Creek in the south to Topanga Creek in the north (Bean and Smith 1978). The Tongva language belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin region (Mithun 2004).

The Tongva established large permanent villages and smaller satellite camps throughout their territory. Society was organized along patrilineal non-localized clans, a common Takic pattern O'Neil 2002). Tongva subsistence was oriented around acorns supplemented by roots, leaves, seeds, and fruits of a wide variety of plants. Meat sources included large and small mammals, freshwater and saltwater fish, shellfish, birds, reptiles, and insects (Bean and Smith 1978; Langenwalter et al. 2001; Kroeber 1925; McCawley 1996). Tongva employed a wide variety of tools and implements to gather and hunt food. The digging stick, the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks were common tools. Like the Chumash, the Tongva made oceangoing plank canoes (known as ti'at) capable of holding 6 to 14 people and used for fishing, travel, and trade between the mainland and the Channel Islands (Blackburn 1963; McCawley 1996).

History. Spanish exploration of California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968, Rolle 2003). In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in what was then known as Alta (upper) California at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. It was during this time that initial Spanish settlement of the project vicinity began.

On September 8, 1771, Fathers Pedro Cambón and Angel Somera established the Mission San Gabriel de Arcángel near the present-day city of Montebello (Johnson et al. 1972). In 1775, the mission was moved to its current location in the City of San Gabriel due to better agricultural lands. The establishment of Mission San Gabriel marked the first sustained European occupation of the Los Angeles Basin. The mission, despite a slow start partially due to misconduct by Spanish soldiers, eventually became so prosperous it was known as "The Queen of the Missions" (Johnson et al. 1972).

In addition to Mission San Gabriel, the Spanish also established a pueblo (town) in the Los Angeles Basin known as El Pueblo de la Reina de los Angeles de la Porciúncula in 1781. This pueblo was one of only three pueblos established in Alta California and eventually became the City of Los Angeles (Robinson 1979). It was also during this period that the Spanish crown began to deed ranchos to prominent citizens and soldiers. To manage and expand their herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population (Engelhardt 1927a). Native populations were also affected by the missions who were responsible for their administration as well as converting the population to Christianity (Engelhardt 1927b). The increased European presence during this period led to the spread of disease which devastated the native populations (McCawley 1996). In 1784, the Spanish King Carlos III granted Manuel Nieto the Rancho Los Nietos land grant. This grant was one of the first and largest of the land grants and encompassed much of present day Los Angeles and Orange counties (Shumway 2007).

The Mexican Period commenced when news of the success of the Mexican War of Independence (1810-1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. This Act federalized mission lands and enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. Successive Mexican

governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). In 1834, Governor Jose Figueroa declared the Rancho Los Nietos grant to be partitioned into six smaller ranchos. The Long Beach area was divided into two land grants, Rancho Los Cerritos and Rancho Los Alamitos, the boundary for these two grants was Signal Hill (Stewart 2013). The Rancho Los Cerritos grant was located on the western side of the boundary and included the current project site. Later in 1834, Jonathon Temple purchased the Los Cerritos land grant. During this time, the population of the pueblo of Los Angeles nearly doubled, rising from 650 to 1,250 between 1822 and 1845 (Weber 1982). In 1842, gold was discovered by Francisco Lopez in Placerita Canyon on a rancho associated with Mission San Fernando (Guinn 1977, Workman 1935).

The Mexican Period for the Los Angeles region ended in early January 1847. Mexican forces fought and lost to combined U.S. Army and Navy forces in the Battle of the San Gabriel River on January 8 and in the Battle of La Mesa on January 9 (Nevin 1978). On January 10, leaders of the pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander of California Andrés Pico surrendered all of Alta California to U.S. Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga (Nevin 1978).

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for conquered territory including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of the Los Angeles region increased dramatically in the early American Period. Los Angeles County was established on February 18, 1850, one of 27 counties established in the months prior to California becoming the 31st state.

The discovery of gold in northern California in 1848 led to the California Gold Rush, despite the aforementioned 1842 discovery in Placerita Canyon (Guinn 1977, Workman 1935). By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to immigrate to the state, particularly after the completion of the First Transcontinental Railroad in 1869. The U.S. Congress in 1854 agreed to let San Pedro become an official port of entry. By the 1880s, the railroads had established networks from the port and throughout the county, resulting in fast and affordable shipment of goods, as well as a means to transport new residents to the booming region (Dumke 1944). New residents included many health-seekers drawn to the area by the fabled climate in the 1870s–1880s.

Many ranchos in Los Angeles County were sold or otherwise acquired by Americans in the mid-1800s, and most were subdivided into agricultural parcels or towns. Nonetheless, ranching retained its importance and, by the late 1860s, Los Angeles was one of the top dairy production centers in the West (Rolle 2003). By 1876, the county had a population of 30,000 (Dumke 1944). Ranching was supplanted by farming and urban professions during the late nineteenth century due to droughts and increased population growth.

European settlement of what was later to become the City of Long Beach began as early as 1784 as part of a land grant given to Manuel Nieto that became Rancho Los Nietos (Shumway 2007). After Nieto's death in 1804 much of the land grant remained intact and was managed by his heirs. In 1834, however the Governor declared Rancho Los Nietos should be divided into six smaller ranchos. Two of these ranchos form the majority of what is now the City of Long Beach.

The current project site is within former Rancho Los Cerritos lands, which was inherited by Nieto's daughter Manuela Cota. Following Manuela's death, Rancho Los Cerritos was sold to Jonathan Temple, a Los Angeles entrepreneur (City of Long Beach 2010).

During the 1860s, a massive drought decimated much of the cattle ranching in the Long Beach area causing several ranches to fall into debt (Stewart 2013). In 1866, Temple sold Rancho Los Cerritos to Thomas and Benjamin Flint and Lewellyn Bixby. The Bixby family bought Rancho Los Alamitos, combining the two and forming the Bixby Ranch. Beginning in the 1870s, Flint, Bixby, and Co., began selling the land. By 1884, Long Beach, then known as both the American Colony and Wilmore City, covered the southwestern portion of Rancho Los Cerritos. The failed Wilmore City development was purchased in 1884 by Pomeroy and Mills, a San Francisco real-estate company, and the community began to grow under its new name of Long Beach. Expansion of transportation networks sparked further growth and in 1888 Long Beach was incorporated as a city with a population of 800. Long Beach became a major producer of oil beginning in the 1920s with the drilling of the Signal Hill Oil Field. By 1950 the field produced more than 750 million barrels of crude, averaging more than 500,000 barrels of oil per acre, making it one of the richest oil fields in terms of production per acre in the world (Franks and Lambert 1985). Long Beach also became a tourist destination, transportation center, and shipping industry hub with the construction of the wharf and multiple piers. Today, Long Beach has the busiest port on the West Coast, just east of the former port of San Pedro (now the Port of Los Angeles) and is one of the most populous cities in California (City of Long Beach, 2010).

b. Regulatory Setting.

State.

California Register of Historical Resources. The California Register of Historical Resources (California Register, or CRHR) is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The California Register helps government agencies identify, evaluate, and protect California's historical resources, and indicates which properties are to be protected from substantial adverse change (Pub. Resources Code, Section 5024.1(a)). The California Register is administered through the State Office of Historic Preservation (SHPO), which is part of the California State Parks system.

A cultural resource is evaluated under four California Register criteria to determine its historical significance. A resource must be significant at the local, state, or national level in accordance with one or more of the following criteria set forth in the *CEQA Guidelines* at Section 15064.5(a)(3):

1. *It is associated with events that have made a significant contribution to the broad pattern of California's history and cultural heritage;*
2. *It is associated with the lives of persons important in our past;*
3. *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
4. *It has yielded, or may be likely to yield, information important in prehistory or history.*

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time must have passed to allow a "scholarly perspective on the events or individuals associated with the resource." Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource according to SHPO publications. The California Register also requires a resource to possess integrity, which is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association." Archaeological resources can sometimes qualify as "historical resources" [*CEQA Guidelines*, Section 15064.5(c)(1)]. In addition, Public Resources Code Section 5024 requires consultation with SHPO when a project may impact historical resources located on State-owned land.

Two other programs are administered by the state: California Historical Landmarks and California "Points of Historical Interest." California Historical Landmarks are buildings, sites, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value. California Points of Historical Interest are buildings, sites, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value.

Native American Consultation. Prior to the adoption or amendment of a general plan proposed on or after March 1, 2005, Government Code Sections 65352.3 and 65352.4 require a city or county to consult with local Native American tribes that are on the contact list maintained by the Native American Heritage Commission. The purpose is to preserve or mitigate impacts to places, features, and objects described in Public Resources Code Sections 5097.9 and 5097.993 (Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property) that are located within a city or county's jurisdiction. The proposed project does not require a general plan amendment.

Human Remains. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. *CEQA Guidelines* Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Public Resources Code Section 5097.5. California Public Resources Code Section 5097.5 prohibits excavation or removal of any "vertebrate paleontological site…or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are

defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of archaeological, historical, or paleontological materials or sites located on public lands is a misdemeanor.

CEQA. CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA review process (Public Resources Code, Section 21083.2). If feasible, adverse effects to the significance of historical resources must be avoided, or significant effects mitigated [CEQA Guidelines Section 15064.5(b)(4)].

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A *historical resource* is a resource listed, or determined to be eligible for listing, in the CRHR; a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

According to CEQA, all buildings constructed over 50 years ago and that possess architectural or historical significance may be considered potential historic resources. Most resources must meet the 50-year threshold for historic significance; however, resources less than 50 years in age may be eligible for listing on the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance.

Local.

City of Long Beach General Plan. The Historic Preservation Element of the Long Beach 2030 General Plan includes goals and policies to protect archaeological and historical resources. The goals and policies applicable to the proposed project are presented below.

Goal 1 *Maintain and support a comprehensive, citywide historic preservation program to identify and protect Long Beach's historic, cultural, and archaeological resources.*

Policy 1.1 *The City shall comply with City, State, and Federal historic preservation regulations to ensure adequate protection of the City's cultural, historic, and archaeological resources.*

Policy 1.2	*The City shall maintain its status as a Certified Local Government (CLG) and ensure that CLG requirements are implemented as the key components of the City's historic preservation program.*
Policy 1.4	*The City shall use public input to help shape the historic preservation program.*
Goal 2	*Protect historic resources from demolition and inappropriate alterations through the use of the City's regulatory framework, technical assistance, and incentives.*
Policy 2.5	*The City shall enforce historic preservation codes and regulations.*
Policy 2.6	*The City shall implement and promote incentives for historic preservation.*
Policy 2.7	*The City shall encourage and support public, quasi-public, and private entities in local preservation efforts, including the designation of historic resources and the preservation of designated resources.*
Goal 5	*Integrate historic preservation policies into City's community development, economic development, and sustainable-city strategies.*
Policy 5.2	*The City shall consider historic preservation as a basis for neighborhood improvement and community development.*
Policy 5.3	*The City shall consider historic preservation goals and policies when making community and economic development decisions and determining sustainable-city strategies.*
Policy 5.7	*The City shall promote historic preservation as a sustainable land use practice.*

c. Existing Conditions.

Cultural. A records search was conducted for the project site at the California Historical Resources Information System (CHRIS), South Central Coastal Information Center at California State University, Fullerton. Seven cultural resources have been previously recorded and mapped within 0.25 mile of the project site. One resource is an historic archaeological site and six are historic built environment resources; none of these are located within the project site. As indicated by CHRIS, an additional 48 unmapped properties are located within 0.25 mile of the project site, and consist of historic-era buildings, structures, and objects. Of the 56 total previously recorded cultural resources, three are listed in the NRHP, four have been determined eligible for listing in the NRHP and are listed in CRHR, seven appear eligible for listing in the NRHP, one is recommended eligible for the CRHR, and 25 are recognized as historically significant by the City.

Eleven cultural resources studies have been previously conducted within 0.25 mile of the project site. Of these, two were conducted within at least a portion of the project site (LA-02399 and LA-10527); however, neither identified cultural resources within the project site. An additional 14 unmapped studies were also conducted within the Long Beach quadrangle. Most of these studies are overview reports encompassing very large areas and all appear to be located outside of the project site.

Although not identified in the records search, one previously recorded historic resource was identified within the project site: the Old Long Beach Courthouse building constructed in 1960 by architects Francis J. Heusel and Kenneth S. Wing. The Old Courthouse was previously evaluated and found individually eligible for historic significance on two occasions: in 2006, it was found eligible for local listing as a City of Long Beach Historic Landmark and in 2008 the property was found eligible for listing in the California Register of Historical Resources (CRHR). The Old Long Beach Courthouse also appears eligible for listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Competed in 1960 the Old Courthouse was one of the first projects of the long-awaited Civic Center Master Plan. The Old Long Beach Courthouse also appears eligible for listing in the CRHR as an individual resource under Criterion 3 within the context of the architectural evolution of Long Beach, as one of a limited number of ~~fine~~ examples of the Corporate International Style of architecture remaining in the City. The building embodies the distinctive characteristics of the Corporate International Style, and is a representative example of the style designed by local architects, Francis Heusel and Kenneth S. Wing. Despite having undergone a 60,000 square foot alteration in 1971, the building's exterior appearance still reflects its period of construction and retains a high degree of integrity of location, feeling, association, setting, design, materials and workmanship. The building has retained most of its character-defining features: curtain wall construction and glass windows inset in recliner grids, recessed first floor and use of squared columns, terrazzo floors, and windows and vertical surfaces on the same plane. ~~Completed in 1960 the Old Long Beach Courthouse was one of the first projects of the Civic Center Master Plan.~~ In addition, according to CEQA, all buildings constructed over 50 years ago and that possess architectural or historical significance may be considered potential historic resources. The Old Courthouse is now approximately 55 years in age and therefore would be considered a historical resource for the purposes of CEQA.

A Sacred Lands File search by the Native American Heritage Commission did not identify any sacred lands within the project site.

A cultural resources survey was conducted for the proposed project. The survey did not identify any surficial archaeological resources within the project site. Three additional built environment resources requiring survey and historic evaluation were identified within the project site: the City Hall-Library Complex, Lincoln Park, and the Broadway Parking Garage. Although not within the project site, the Public Safety Building located to the northwest of the project site within the Civic Center was also surveyed and evaluated due to its proximity to the project site and association with the remaining Civic Center buildings and structures on the property.

Completed in 1977 by Allied Architects, the Long Beach City Hall-Library Complex is an intact example of Late Modern architecture that retains integrity of design, materials, feeling, workmanship, association and location. The City Hall-Library Complex appears individually eligible for listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project. The complex also appears eligible for individual listing ~~as an individual resource~~ under Criterion 3 as a representative example of the Late Modern-style with unique landscape design elements and as the work of a group of local master architects. The complex is one of a limited number of ~~fine~~ examples of the Late Modern Style of architecture remaining in the city.

Designed by a consortium of local architects that consisted of Hugh and Donald Gibbs, Frank Homolka, Ed Killingsworth, Brady and Associates, and Kenneth S. Wing Jr. and Sr., each considered local masters in their own right, the complex is unique for its collaborative design amongst local architects and represents the collective work of a group of masters. The Library rooftop design contributions of master landscape architect Peter Walker also contribute to the significance and eligibility of the complex. ~~Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project.~~ For the same reasons, the City Hall-Library Complex is also eligible for City of Long Beach Landmark Designation. As noted under section 4.3.1 (b) "Regulatory Setting," most resources must meet the 50-year threshold for historic significance; however, resources less than 50 years in age may be eligible for listing on the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance. Although the City Hall-Library Complex is less than 50 years in age (constructed in 1977) it is a representative example of the Late Modern-style with unique landscape design elements and as the work of a group of local master architects is eligible for listing in the CRHR and for City of Long Beach Landmark Designation. Therefore, the City Hall-Library Complex is considered a historical resource for the purposes of CEQA.

The Public Safety Building and Lincoln Park have undergone continuous alterations since their construction, significantly reducing their historic integrity. The Broadway Parking Garage is a simple structure, lacking in design and character, constructed outside of the historic district period of significance. The Public Safety Building, Lincoln Park and the Broadway Parking Garage were found to be ineligible for listing in the CRHR as individual resources.

The project site and the adjacent Public Safety Building were also assessed to determine if the buildings and structures were eligible for listing in the CRHR or at the local level as a potential historic district. While the buildings and structures within the Civic Center are all functionally related and were each designed for municipal purposes, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district.

Paleontological. The project site is located in the southwest portion of the Los Angeles Basin in the Peninsular Ranges geomorphic province. The Los Angeles Basin is subdivided into the following four structural blocks: the southwestern block, the northwestern block, the central block and the northeastern block. The project site is generally located within the boundary area of the southwestern and central blocks. This boundary area is referred to as the Newport-Inglewood Structural Zone, which can be traced from Beverly Hills to Newport Bay where it trends offshore (Norris and Webb, 1990; Jennings, 1962).

A single sedimentary geologic unit has been mapped underlying the project area (Bedrossian et al. 2012): late to middle Pleistocene aged lacustrine, playa, and estuarine (paralic) sediments (Qol).

Quaternary Geologic Units. The Quaternary units mapped within the project site include only Pleistocene aged lacustrine, playa, and estuarine (paralic) sediments. These sediments are known to have produced significant paleontological resources (McLeod 2014). A single vertebrate fossil locality is known from within the project boundaries and three more are

known from similar deposits in the immediate vicinity (McLeod 2014). Together, these three localities produced specimens of sea lion (Zalophus), camel (Camelops), whale, bison (Bison), ground sloth (Nothrotheriops), and mammoth (Mammuthus columbi). Based on these occurrences and their individual find contexts, surface grading or deeper excavations have the potential to uncover significant vertebrate fossils of middle to late Pleistocene age.

Paleontological Sensitivity. Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits (formations) within which fossils are buried and physically destroy the fossils. Since fossils are the remains of prehistoric animal and plant life, they are considered to be nonrenewable. Such impacts have the potential to be significant. Sensitivity is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey.

Currently, two generally accepted paleontological sensitivity classifications are used: the Society of Vertebrate Paleontology (SVP) system outlined in the SVP Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP, 2010) and the Bureau of Land Management (BLM) Potential Fossil Yield Classification (PFYC) system outlined in the BLM Instruction Memorandum (IM) No. 2008-009 (BLM, 2009). The BLM system allows for a finer level of classification than the more general SVP system. The City of Long Beach General Plan does not provide any specific guidance on paleontological sensitivity; however, based on the geologic units present within the project site, the SVP classification system provides a sufficient level of detail for assessing paleontological sensitivity within the project site. Affected geologic formations are classified based on the relative abundance of vertebrate fossils and significant non-vertebrate fossils using a scale of high, undetermined, low and no paleontological sensitivity, depending upon the resource sensitivity of the impacted geologic formations. The specific criteria applied for each sensitivity category are presented below and extracted directly from the SVP Guidelines (SVP, 2010):

- ***High Potential****: Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcaniclastic formations (e. g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.). Paleontological potential consists of both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, plant, or trace fossils and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data. Rock units which contain potentially datable organic remains older than late Holocene, including deposits associated with animal nests or middens, and rock units which may contain new vertebrate deposits, traces, or trackways are also classified as having high potential.*

- ***Undetermined Potential****: Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.*
- ***Low Potential****: Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e.g. basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.*
- ***No Potential****: Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection or impact mitigation measures relative to paleontological resources.*

In general terms, for geologic units with high sensitivity, full-time monitoring typically is recommended during any project-related ground disturbance. For geologic units with low sensitivity, protection or salvage efforts typically are not required. For geologic units with undetermined sensitivity, field surveys by a qualified paleontologist are usually recommended to specifically determine the paleontological potential of the rock units present within the study area. For geologic units with no sensitivity, a paleontological monitor is not required. Table 4.3-1 shows the mapped geologic units within the project site, their age and paleontological sensitivity.

Table 4.3-1
Geologic Units within the Project Site

Geologic Unit	Age	Notes	Paleontological Sensitivity (SVP)
Quaternary older lacustrine, playa, and estuarine (paralic) deposits (Qol)	Quaternary	Known to produce significant fossils in southern California	High

Sources: Jennings (1962); Bedrossian et al. (2012); McDougall et al. (2012)

4.3.2 Previous Environmental Review

The Long Beach Downtown Plan EIR (the "Downtown Plan EIR") examined the potentially historic resources in the Downtown Plan area. The Downtown Plan EIR determined that the Downtown Plan would have a significant but mitigable impact on archaeological resources. This determination was due to the fact that no surveys could be conducted prior to onset of demolition or other ground-disturbing activities. The project would be subject to the same general mitigation measures identified and analyzed in the Downtown Plan EIR, specifically CR-2(a) through CR-2(c), which require a qualified project archaeologist or archaeological monitor approved by the City to be present during excavation into native sediments; that the monitor shall also prepare a final report of any cultural resource finds; and that if human

remains are encountered during excavation and grading activities, proper handling procedures shall be implemented, as regulated by the State Health and Safety Code.

The Downtown Plan EIR determined that the Downtown Plan would have a significant and unavoidable impact resulting from the potential redevelopment of properties that are eligible for listing on the National Register of Historic Places or the California Register of Historic Places, or that are determined eligible for listing as a City Landmark or Landmark District. The project would be subject to the same general mitigation measures identified in the Downtown Plan EIR, specifically CR-1(b), which outlines procedures to be followed prior to issuance of a demolition permit or building permit for alteration of any property listed in the Historic Survey Report, designated as a Historic Landmark, listed in the Downtown Plan EIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for listing as a historic resource.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not certified. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to the significance of a historical resource would be significant and unavoidable despite implementation of required mitigation involving documentation of the courthouse in accordance with the general guidelines of Historic American Building Survey documentation.

4.3.3 Impact Analysis

a. Methodology and Significance Thresholds. According to Appendix G of the *State CEQA Guidelines*, impacts related to cultural resources from the proposed project would be significant if the project would:

- *Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;*
- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;*
- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature of paleontological or cultural value;*
- *Disturb any human remains, including those interred outside of formal cemeteries*

The following topics were determined to have less than significant impacts in the Initial Study prepared for the proposed project (Appendix A) and are not discussed further in this section:

- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;*
- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature of paleontological or cultural value;*
- *Disturb any human remains, including those interred outside of formal cemeteries*

Historical resources are "significantly" affected if there is demolition, destruction, relocation, or alteration of the resource or its surroundings. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior's *Guidelines for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and*

Reconstructing Historic Buildings or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* [13 PRC 15064.5 (b)(3)]. In some circumstances, documentation of an historical resource by way of historic narrative photographs or architectural drawings will not mitigate the impact of demolition below the level of significance [13 PRC 15126.4 (b)(3)].

b. Project Impacts and Mitigation Measures.

Threshold	*Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5.*

Impact CR-1 **Construction of the proposed project would involve the demolition of the Old Courthouse and the Long Beach City Hall-Library Complex, which have been identified as historical resources for the purposes of CEQA. The Downtown Plan EIR determined that buildout of the Downtown Plan would result in Class I, significant and unavoidable impacts. Demolition of the Old Courthouse and the Long Beach City Hall-Library Complex would contribute to this Class I impact and would be a Class I, *significant and unavoidable* impact.**

According to the Cultural Resources Study prepared for the proposed project (see Appendix C), the project site contains two historical resources: the Long Beach Courthouse and the City Hall-Library Complex, as representative examples of the Corporate and Late Modern styles and their associations with the institutional development of the City. Both resources were found individually eligible for the CRHR and are also eligible for City of Long Beach Landmark Designation. Therefore, the former Long Beach Courthouse and the City Hall-Library Complex are considered historical resources for the purposes of CEQA. The project would result in the demolition of these buildings and would therefore have a significant direct impact to cultural resources insofar as it entails a substantial adverse change in the significance of historical resources. Impacts to the Old Courthouse and the Long Beach City Hall-Library Complex would be significant.

As discussed in Section 2, *Project Description*, the project includes the development of History and Cultural Loops, a walking tour that would include historical, cultural, and educational points of interest throughout the project site. Points of interest would include the Carillon Clock Tower and 1915 Lincoln Park statue, as well as the Original Carnegie Library Cornerstone, Marlin Sculpture, time capsules (including the time capsule dedicated in 1976 at the Civic Center), and additional historical and cultural elements. Temporary art exhibits and historical timeline markers would also be present within the walking loops.

The project would be subject to Downtown Plan EIR Mitigation Measure CR-1(b), which outlines procedures to be followed prior to issuance of a demolition permit or building permit for alteration of any property listed in the Historic Survey Report, designated as a Historic Landmark, listed in the Downtown Plan EIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for listing as a historic resource. Nonetheless, implementation of Downtown Plan EIR Mitigation Measure CR-1(b) would not reduce impacts to a less than significant level.

Mitigation Measures. The following mitigation measures, which would comply with Measure CR-1(b) of the Downtown Plan EIR, would reduce project impacts on historical resources to the degree feasible.

CR-1(a) **Historic Artifact Collection Program**. Impacts resulting from the demolition of the City Hall-Library Complex and Courthouse shall be minimized through development of an archival identification and collections program. The purpose of this program will be to identify the existing historic artifacts, documents and other objects that are currently stored at the Main Library, City Hall and Port of Long Beach facilities, as well as key components of the Old Courthouse and City Hall-Library Complex to be demolished, so that these important relics can be utilized in the future by researchers and the public for educational purposes. As part of the program, the City will itemize, catalogue and rehouse the items, and establish appropriate conservation and storage measures for long-term preservation. One possible location for rehousing items would be as a museum in the proposed project's new Library. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Development Services Department.

CR-1(b) **Building Documentation.** Impacts resulting from the demolition of the City Hall-Library Complex and Old Courthouse shall be minimized through archival documentation of as-built and as-found condition. Prior to issuance of the first occupancy permit for the project, the lead agency shall ensure that documentation of the building is completed in accordance with the general guidelines of Historic American Building Survey (HABS) documentation. The documentation shall include large-format photographic recordation, a historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to repositories that will make it available for current and future generations. Archival copies of the documentation also would be submitted to the City of Long Beach Development Services Department, the downtown branch of the Long Beach Public Library, and the Historical Society of Long Beach where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Development Services Department.

In its response to the Notice of Preparation (NOP) the SHPO suggests the following as mitigation: 1) additional historic surveys in parts of the City that have not been surveyed; (2) development of design guidelines for future re-use of public buildings; and (3) creation of a Historic Preservation Mitigation Fund. However, although these ideas may mitigate the impacts of potential future projects, they would not mitigate the impact of the currently

proposed project. Consequently, there is no nexus between these suggested measures and the impact associated with the proposed project and these suggestions would not constitute "mitigation" under CEQA. City decisionmakers may, nevertheless, consider including one or more of these suggestions as conditions of project approval.

Significance After Mitigation. Implementation of Mitigation Measures CR-1(a) and CR-1(b), compliance with Downtown Plan EIR Mitigation Measure CR-1(b), and the project's Cultural and Historic Loops would reduce significant direct and cumulative impacts to the historical resource scheduled for demolition to the degree feasible, but not to below a level of significance.

Additional mitigation is infeasible due to the physical condition and limitations of the Old Courthouse and City Hall-Library complex and the physical limitations of the project site. As discussed in Section 2.0, *Project Description*, there are critical functional and physical deficiencies identified for the former Courthouse by the statewide Task Force on Court Facilities in 1997 and the Administrative Office of the Courts in 2001 that would make additional mitigation, such as rehabilitation of the former Courthouse, infeasible. These deficiencies are described in detail in Section 2.0, *Project Description*, but include Americans with Disabilities Act (ADA) accessibility issues and seismic deficiencies. Despite a limited retrofit at an estimated cost of $13.9 million by the County of Los Angeles, the Courthouse is expected to remain standing long enough to evacuate, but would not be capable of being re-occupied following a medium-sized earthquake. RRM Design Group prepared an Adaptive Reuse Study for the former Long Beach Courthouse in September 2014 (Appendix H of the Long Beach Courthouse Demolition Project Draft EIR). The study determined that adaptive reuse of the former Courthouse would require substantial upgrades to the building's structural, mechanical, plumbing, fire protection, lighting and electrical systems. All levels of the building's interior would require substantial modernization to comply with the California's building codes, energy efficiency regulations and disabled access for a government office use. The Study estimated that costs for rehabilitation of the former Courthouse and conversion to municipal office use would range from $124,650,000 to $138,500,000. City Hall has seismic deficiencies that would also require rehabilitation costs. Moreover, the project site is largely built out; retaining the former Courthouse and the City Hall-Library Complex would restrict space available to achieve project objectives, such as redeveloping the Civic Center mega-block into a vibrant mix of public and private space with a grand Civic Plaza; improving connections between the new Civic Center and greater Downtown through the reestablishment of the small block grid of the historic downtown street fabric; and private development of housing, office, hotel, and retail, with ten percent of all housing units being affordable to moderate income persons. As additional mitigation is infeasible, demolition of the Old Courthouse and the City Hall-Library Complex would have significant and unavoidable impacts.

c. Cumulative Impacts.

In terms of historical resources, the analysis of cumulative impacts relates to whether impacts of the proposed project and future related projects, considered together, might substantially impact and/or diminish the number of similar historic resources, in terms of context or property type. While the proposed project would result in significant impacts to historic resources, the proposed project would not be expected to result in cumulative adverse impacts to historic resources as it is the only proposed project in the vicinity that involves the demolition

of a historic building. The Cultural Resources Study also assessed the project site and the adjacent Public Safety Building to determine if the buildings and structures were eligible for listing in the CRHR or at the local level as a potential historic district (see Appendix C). The Cultural Resources Study found that while the buildings and structures within the Civic Center are all functionally related and were each designed for municipal purposes, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district; therefore, although the project would result in significant impacts to historic resources (the former Long Beach Courthouse and City Hall-Library Complex), impacts to these historic resources would not result in any cumulative impacts because the Civic Center is ineligible for consideration as a CRHR or locally eligible historic district. Any future projects would need to be analyzed on a case-by-case basis pursuant to CEQA, with a determination made for each project on the significance of indirect impacts to historic resources, as well as any future historic resources that are identified in the vicinity. Therefore, impacts related to historical resources would not be cumulatively considerable.

4.4 GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE

This section addresses the proposed project's contribution to cumulative impacts to global climate change.

4.4.1 Environmental Setting

a. Climate Change and Greenhouse Gases. Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC, 2013), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-20th century (IPCC, 2013).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Observations of CO_2 concentrations, globally-averaged temperature, and sea level rise are generally well within the range of the extent of the earlier IPCC projections. The recently observed increases in CH_4 and N_2O concentrations are smaller than those assumed in the scenarios in the previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced.

Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and sulfur hexafluoride (SF_6) (California Environmental Protection Agency [CalEPA], 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a

common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane (CH_4) has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis (IPCC, 2007).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (CalEPA, 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The following discusses the primary GHGs of concern.

Carbon Dioxide. The global carbon cycle is made up of large carbon flows and reservoirs. Billions of tons of carbon in the form of CO_2 are absorbed by oceans and living biomass (i.e., sinks) and are emitted to the atmosphere annually through natural processes (i.e., sources). When in equilibrium, carbon fluxes among these various reservoirs are roughly balanced (United States Environmental Protection Agency [U.S. EPA], April 2014). CO_2 was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the second half of the 20th century. Concentrations of CO_2 in the atmosphere have risen approximately 40 percent since the industrial revolution. The global atmospheric concentration of CO_2 has increased from a pre-industrial value of about 280 parts per million (ppm) to 391 ppm in 2011 (IPCC, 2007; Oceanic and Atmospheric Administration [NOAA], 2010). The average annual CO_2 concentration growth rate was larger between 1995 and 2005 (average: 1.9 ppm per year) than it has been since the beginning of continuous direct atmospheric measurements (1960–2005 average: 1.4 ppm per year), although there is year-to-year variability in growth rates (NOAA, 2014). Currently, CO_2 represents an estimated 74 percent of total GHG emissions (IPCC, 2007). The largest source of CO_2 emissions, and of overall GHG emissions, is fossil fuel combustion.

Methane. Methane (CH_4) is an effective absorber of radiation, though its atmospheric concentration is less than that of CO_2 and its lifetime in the atmosphere is limited to 10 to 12 years. It has a GWP approximately 25 times that of CO_2. Over the last 250 years, the concentration of CH_4 in the atmosphere has increased by 148 percent (IPCC, 2007), although emissions have declined from 1990 levels. Anthropogenic sources of CH_4 include enteric fermentation associated with domestic livestock, landfills, natural gas and petroleum systems, agricultural activities, coal mining, wastewater treatment, stationary and mobile combustion, and certain industrial processes (U.S. EPA, 2014).

Nitrous Oxide. Concentrations of nitrous oxide (N_2O) began to rise at the beginning of the industrial revolution and continue to increase at a relatively uniform growth rate (NOAA, 2014). N2O is produced by microbial processes in soil and water, including those reactions that occur in fertilizers that contain nitrogen, fossil fuel combustion, and other chemical processes. Use of these fertilizers has increased over the last century. Agricultural soil management and mobile source fossil fuel combustion are the major sources of N_2O emissions. The GWP of nitrous oxide is approximately 298 times that of CO2 (IPCC, 2007).

Fluorinated Gases (HFCS, PFCS and SF_6). Fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfurhexafluoride (SF_6), are powerful GHGs that are emitted from a variety of industrial processes. Fluorinated gases are used as substitutes for ozone-depleting substances such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons, which have been regulated since the mid-1980s because of their ozone-destroying potential and are phased out under the Montreal Protocol (1987) and Clean Air Act Amendments of 1990. Electrical transmission and distribution systems account for most SF_6 emissions, while PFC emissions result from semiconductor manufacturing and as a by-product of primary aluminum production. Fluorinated gases are typically emitted in smaller quantities than CO_2, CH_4, and N_2O, but these compounds have much higher GWPs. SF_6 is the most potent GHG the IPCC has evaluated.

Greenhouse Gas Emissions Inventory. Worldwide anthropogenic emissions of GHGs were approximately 46,000 million metric tons (MMT, or gigatonne) CO_2e in 2010 (IPCC, 2014). CO_2 emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, CO_2 was the most abundant, accounting for 76 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while nitrous oxide and fluorinated gases account for 6 and 2 percent respectively (IPCC, 2014).

Total U.S. GHG emissions were 6,525.6 MMT CO_2e in 2012 (U.S. EPA, 2014). Total U.S. emissions have increased by 4.7 percent since 1990; emissions decreased by 3.4 percent from 2011 to 2012 (U.S. EPA, 2014). The decrease from 2011 to 2012 was due to a reduction in the carbon intensity of fuels consumed to generate electricity due to a decrease in coal consumption, with increased natural gas consumption. Additionally, relatively mild winter conditions, especially in regions of the United States where electricity is important for heating, resulted in an overall decrease in electricity demand in most sectors. Since 1990, U.S. emissions have increased at an average annual rate of 0.2 percent. In 2012, the transportation and industrial end-use sectors accounted for 28.2 percent and 27.9 percent of CO_2 emissions (with electricity-related emissions distributed), respectively. Meanwhile, the residential and commercial end-use sectors accounted for 16.3 percent and 16.4 percent of CO_2 emissions, respectively (U.S. EPA, 2014).

Based upon the California Air Resources Board (CARB) California Greenhouse Gas Inventory for 2000-2012 (CARB, 2014), California produced 459 MMT CO_2e in 2012. The major source of GHG in California is transportation, contributing 36 percent of the state's total GHG emissions. Electric power is the second largest source, contributing 21 percent of the state's GHG emissions (CARB, 2014). The industrial sector accounted for approximately 19 percent of the total emissions. California emissions are due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. CARB has projected statewide unregulated GHG emissions for the year 2020 will be 507 MMT CO_2e (CARB, August 2013). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

Potential Effects of Climate Change. Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or

above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The global combined land and ocean temperature data show an increase of about 0.89°C (0.69°C–1.08°C) over the period 1901–2012 and about 0.72°C (0.49°C–0.89°C) over the period 1951–2012 when described by a linear trend. Several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations are in agreement that LSAT as well as sea surface temperatures have increased. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC, 2013).

According to the CalEPA's *2010 Climate Action Team Biennial Report*, potential impacts of climate change in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CalEPA, 2010). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Sea Level Rise. According to The Impacts of Sea-Level Rise on the California Coast, prepared by the California Climate Change Center (CCCC, 2009), climate change has the potential to induce substantial sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. Sea levels are rising faster now than in the previous two millennia, and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report (2013) predicts a mean sea–level rise of 11-38 inches by 2100. This prediction is more than 50 percent higher than earlier projections of 7-23 inches, when comparing the same emissions scenarios and time periods. The previous IPCC report (2007) identified a sea level rise on the California coast over the past century of approximately eight inches. Based on the results of various climate change models, sea level rise is expected to continue. The California Climate Adaptation Strategy (2009) estimates a sea level rise of up to 55 inches by the end of this century.

Air Quality. Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Energy Commission [CEC], 2009).

Water Supply. Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California. However, the average early spring snowpack in the Sierra Nevada decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of

snowpack storage. During the same period, sea level rose eight inches along California's coast. California's temperature has risen 1°F, mostly at night and during the winter, with higher elevations experiencing the highest increase. Many Southern California cities have experienced their lowest recorded annual precipitation twice within the past decade. In a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR], 2008; CCCC, 2009).

This uncertainty complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The Sierra snowpack provides the majority of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers. Based upon historical data and modeling DWR projects that the Sierra snowpack will experience a 25 to 40 percent reduction from its historic average by 2050. Climate change is also anticipated to bring warmer storms that result in less snowfall at lower elevations, reducing the total snowpack (DWR, 2008).

Hydrology. As discussed above, climate change could potentially affect: the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 mm per year, which is double the observed 20th century trend of 1.6 mm per year (World Meteorological Organization [WMO], 2013). As a result, sea levels averaged over the last decade were about 8 inches higher than those of 1880 (WMO, 2013). Sea level rise may be a product of climate change through two main processes: expansion of sea water as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply due to salt water intrusion. Increased CO_2 emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture. California has a $30 billion annual agricultural industry that produces half of the country's fruits and vegetables. Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater air pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (CCCC, 2006).

Ecosystems and Wildlife. Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the average global surface temperature could rise by 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) in the next century, with substantial regional variation. Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan, 2004).

According to the Center for Ocean Solutions, potential impacts from sea level rise on coastal communities, such as those in Long Beach, include: coastal erosion, coastal inundation, the intrusion of salt water into fresh water, and increased frequency and intensity of storms and waves. Unlike flooding events that can be short lived, erosion can cause greater and potentially permanent damage. Coastal erosion will increase as global sea levels continue to rise. Higher sea levels will allow waves and tides to travel farther inland, exposing beaches, cliffs and coastal dunes to more persistent erosion forces. Erosion is not a new issue in California but rising sea levels threaten to increase the severity and frequency of erosion damage to coastal infrastructure and property.

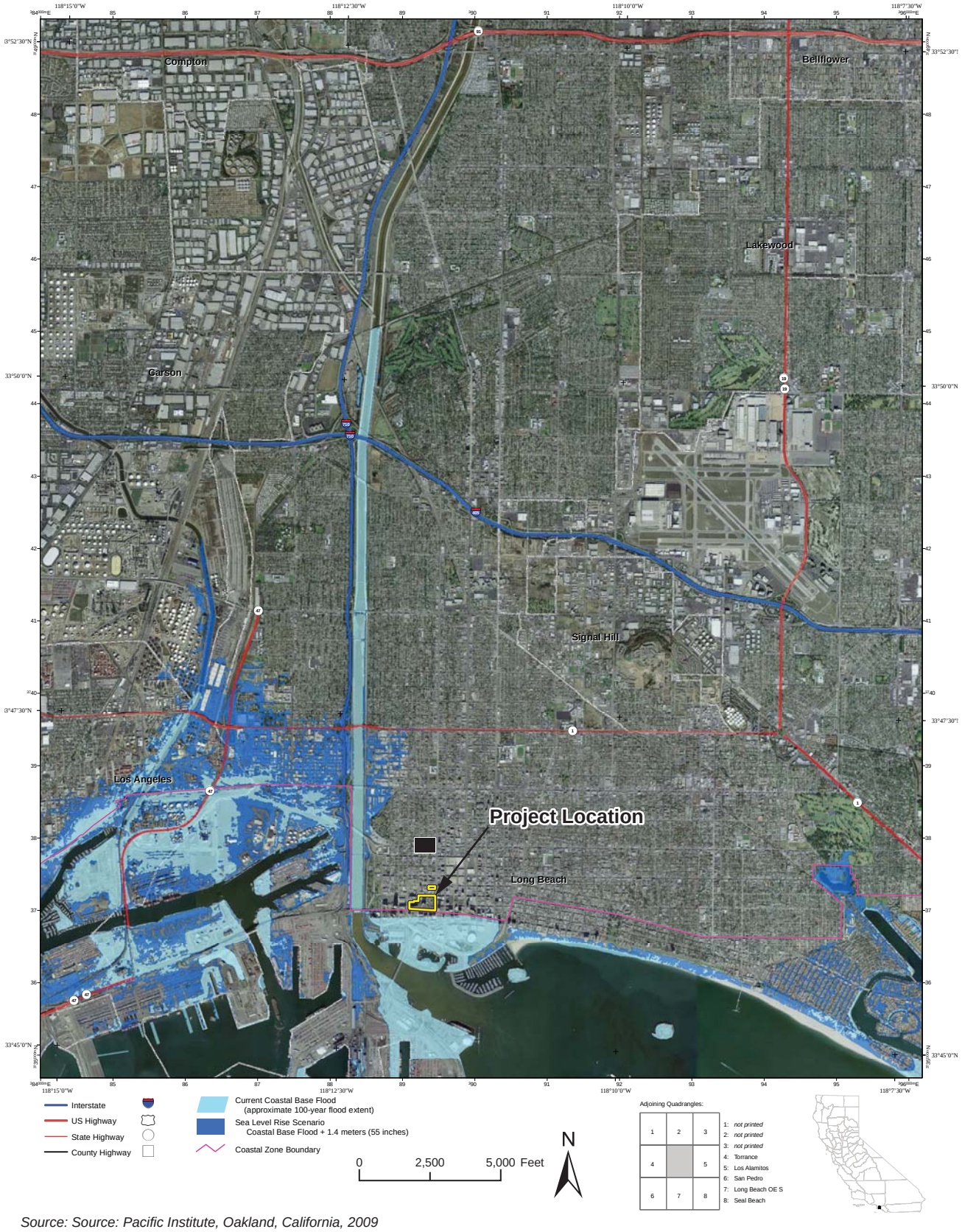
Projected sea level rise in Long Beach is depicted in Figure 4.4-1. This figures show an approximate 4.6-foot (1.4-meter) sea level rise combined with a 100-year flood in 2100.

b. Regulatory Setting. The following regulations address both climate change and GHG emissions.

International Regulations. The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC) since it was produced in 1992. The UNFCCC is an international environmental treaty with the objective of, "stabilization of GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." This is generally understood to be achieved by stabilizing global GHG concentrations between 350 and 400 ppm, in order to limit the global average temperature increases between 2 and 2.4°C above pre-industrial levels (IPCC, 2007). The UNFCCC itself does not set limits on GHG emissions for individual countries or enforcement mechanisms. Instead, the treaty provides for updates, called "protocols," that would identify mandatory emissions limits.

Five years later, the UNFCCC brought nations together again to draft the *Kyoto Protocol* (1997). The Kyoto Protocol established commitments for industrialized nations to reduce their collective emissions of six GHGs (CO_2, CH_4, N_2O, SF_6, HFCs, and PFCs) to 5.2 percent below 1990 levels by 2012. The United States is a signatory of the Kyoto Protocol, but Congress has not ratified it and the United States has not bound itself to the Protocol's commitments (UNFCCC, 2007). The first commitment period of the Kyoto Protocol ended in 2012. Governments, including 38 industrialized countries, agreed to a second commitment period of the Kyoto Protocol beginning January 1, 2013 and ending either on December 31, 2017 or December 31, 2020, to be decided by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its seventeenth session (UNFCCC, 2011).

In Durban (17th session of the Conference of the Parties in Durban, South Africa, December 2011), governments decided to adopt a universal legal agreement on climate change as soon as possible, but not later than 2015. Work will begin on this immediately under a new group called the Ad Hoc Working Group on the Durban Platform for Enhanced Action. Progress was also made regarding the creation of a Green Climate Fund (GCF) for which a management framework was adopted (UNFCCC, 2011).



Source: Source: Pacific Institute, Oakland, California, 2009

California Flood Risk:
Sea Level Rise - Long Beach

Figure 4.4-1

Federal Regulations. The United States Supreme Court in Massachusetts et al. v. Environmental Protection Agency et al. ([2007] 549 U.S. 05-1120) held that the U.S. EPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act.

The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines, and requires annual reporting of emissions. The first annual reports for these sources were due in March 2011.

On May 13, 2010, the U.S. EPA issued a Final Rule that took effect on January 2, 2011, setting a threshold of 75,000 tons CO_2e per year for GHG emissions. New and existing industrial facilities that meet or exceed that threshold will require a permit after that date. On November 10, 2010, the U.S. EPA published the "PSD and Title V Permitting Guidance for Greenhouse Gases." The U.S. EPA's guidance document is directed at state agencies responsible for air pollution permits under the Federal Clean Air Act to help them understand how to implement GHG reduction requirements while mitigating costs for industry. It is expected that most states will use the U.S. EPA's new guidelines when processing new air pollution permits for power plants, oil refineries, cement manufacturing, and other large point sources of pollution.

On January 2, 2011, the U.S. EPA implemented the first phase of the Tailoring Rule for GHG emissions Title V Permitting. Under the first phase of the Tailoring Rule, all new sources of emissions are subject to GHG Title V permitting if they are otherwise subject to Title V for another air pollutant and they emit at least 75,000 tons CO_2e per year. Under Phase 1, no sources were required to obtain a Title V permit solely due to GHG emissions. Phase 2 of the Tailoring Rule went into effect July 1, 2011. At that time new sources were subject to GHG Title V permitting if the source emits 100,000 tons CO_2e per year, or they are otherwise subject to Title V permitting for another pollutant and emit at least 75,000 tons CO_2e per year.

On July 3, 2012 the U.S. EPA issued the final rule that retains the GHG permitting thresholds that were established in Phases 1 and 2 of the GHG Tailoring Rule. These emission thresholds determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

California Regulations. CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has a numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, U.S. EPA granted the waiver of Clean Air Act preemption to California for its greenhouse gas emission standards for motor vehicles beginning with the 2009 model year. Pavley I took effect for model years starting in 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" will cover 2017 to 2025. Fleet average emission standards would reach 22 percent reduction from 2009 levels by 2012 and 30 percent by 2016. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions

Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB, 2011).

In 2005, Executive Order (EO) S-3-05 established statewide GHG emissions reduction targets. EO S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent below 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture. In April 2015 Governor Brown issued EO B-30-15, calling for a new target of 40 percent below 1990 levels by 2030.

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels; the same requirement as under S-3-05), and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions.

After completing a comprehensive review and update process, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2e. The Scoping Plan was approved by CARB on December 11, 2008, and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted over the last five years. Implementation activities are ongoing and CARB is currently the process of updating the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defines CARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in EO S-3-05. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use (CARB, 2014).

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions.

The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

CARB Resolution 07-54 establishes 25,000 metric tons (MT) of GHG emissions as the threshold for identifying the largest stationary emission sources in California for purposes of requiring the annual reporting of emissions. This threshold is just over 0.005 percent of California's total inventory of GHG emissions for 2004.

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, CARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 13 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

In April 2011, Governor Brown signed SB 2X requiring California to generate 33 percent of its electricity from renewable energy by 2020.

For more information on the Senate and Assembly Bills, Executive Orders, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

California Environmental Quality Act. Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, the South Coast Air Quality Management District (SCAQMD), the Bay Area Air Quality Management District (BAAQMD), the San Luis Obispo Air Pollution Control District (SLOAPCD), and the San Joaquin Air Pollution Control District (SJVAPCD) have adopted quantitative significance thresholds for GHGs.

Local Regulations. In February 2010, the Long Beach City Council adopted the Long Beach Sustainable City Action Plan, which includes initiatives, goals, and actions to reduce the City's GHG emissions. In October 2011, the Port of Long Beach developed the Greenhouse Gas Emissions Reduction Mitigation Grant Program (GHG Grant Program) to provide grant funds for projects that will reduce, avoid or capture GHG emissions. Projects eligible for funding from the program include energy efficiency, transportation, renewable energy and landscaping projects. The City of Long Beach has successfully registered its GHG emissions inventory with the California Climate Action Registry, earning the distinction of Climate Action Leader. The

City is now publicly and voluntarily reporting its 2007 GHG emissions under the California Registry's program.

4.4.2 Previous Environmental Review

The Long Beach Downtown Plan EIR (the "Downtown Plan EIR") determined that construction activities associated with full buildout of the Downtown Plan would result in the generation of GHG emissions that would cause a significant and unavoidable impact. The project would contribute to this impact, as it would generate GHG emissions through the burning of fossil fuels or other GHG emissions during construction, creating temporary emissions, including on-site stationary emissions and off-site mobile emissions. The Downtown Plan EIR estimated GHG emissions using URBEMIS 2007 Version 9.2.4. Construction and operational emissions were modeled based on default SCAQMD-recommended settings and parameters attributable to the proposed land use types and site location. The project would be subject to the mitigation measures identified and analyzed in the Downtown Plan EIR, specifically GHG-1(b), which requires that project applicant(s) obtain the most current list of construction-related GHG-reduction measures recommended by the City and/or SCAQMD and stipulate that these measures be implemented. Implementation of Downtown Plan EIR Mitigation Measure GHG-1(a), which calls for implementation of Mitigation Measure AQ-1, would require the application of Enhanced Exhaust Control Programs during construction that would reduce construction emissions of criteria air pollutants and precursors that would also reduce GHG emissions.

The Downtown Plan EIR determined that operation of uses facilitated by the Downtown Plan would also result in generation of GHG emissions that would cause a significant and unavoidable impact. Mitigation Measure GHG-2(a), which implements Mitigation Measure AQ-2, would be applicable to the project and requires implementation of ride-share programs, development of secure bicycle parking areas, exceedance of Title 24 energy efficiency standards by 20 percent, and inclusion of such measures as solar panels to achieve an additional 25 percent reduction in electricity use. Mitigation Measure GHG-2(b) requires project applicants within the Downtown Plan to implement energy efficiency, water efficiency, solid waste reduction, mobile strategies, and other measures detailed in the Downtown Plan EIR to reduce GHG emissions associated with the operation of future project development phases and supporting roadway and infrastructure improvements by an amount sufficient to achieve the goal of 6.6 MT CO_2e per service population per year. Mitigation Measure GHG-2(b) would require the project to reduce operational impacts to the extent feasible. Emissions estimates from operation may also be lower than predicted due to increased efficiency in technology since the EIR was adopted.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not adopted. The Long Beach Courthouse Demolition Project Draft EIR determined that the demolition would not generate significant GHG emissions, and would not interfere with State, regional, or climate change plans, policies, or regulations. Impacts of the demolition project were determined to be less than significant. Nevertheless, demolition of the former Courthouse is included in this analysis of the project's GHG emissions.

4.4.3 Impact Analysis

a. Methodology and Significance Thresholds. Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project.

According to the adopted CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or*
- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

The majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines*, Section 15355).

The SCAQMD threshold, which was adopted in December 2008, considers emissions of over 10,000 MT CO_2e/year to be significant. However, the SCAQMD's threshold applies only to stationary sources and is intended to apply only when the SCAQMD is the CEQA lead agency.

In the latest guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD has considered a tiered approach to determine the significance of residential and commercial projects. The draft-tiered approach is outlined in the meeting minutes, dated September 29, 2010.

> ***Tier 1*** *- If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.*
>
> ***Tier 2*** *- Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.*
>
> ***Tier 3*** *- Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 tons of CO_2e per year for commercial projects.*

Downtown Plan EIR Mitigation Measure GHG-2(b) outlines a GHG reduction plan for projects within the Plan Area and requires that projects reduce GHG emissions associated with the operation of future project development phases and supporting roadway and infrastructure improvements by an amount sufficient to achieve the goal of 6.6 MT CO_2e per service population per year. As the Downtown Plan is an adopted plan, SCAQMD's Tier 3 approach, although not formally adopted, is the appropriate threshold. Therefore, 6.6 MT CO_2e per service population per year is used to gauge the significance of the project's impact to climate change.

Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches (as discussed below in GHG Cumulative Significance) adequately address impacts from temporary construction activity. As stated in the CEQA and Climate Change white paper, "more study is needed to make this assessment or to develop separate thresholds for construction activity" (CAPCOA, 2008). Nevertheless, air districts such as the SCAQMD (2015) have recommended amortizing construction-related emissions over a 30-year period in conjunction with the proposed project's operational emissions. Therefore, although Mitigation Measure GHG-2(b) stipulates that the goal should be applied to GHG emissions associated with operational emissions and emissions from roadway and infrastructure improvements, this threshold has been applied to the project's combined operational and amortized construction emissions, per SCAQMD's recommendation (2015).

Study Methodology. Calculations of CO_2, CH_4, and N_2O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO_2, CH_4, and N_2O because these make up 98.9 percent of all GHG emissions by volume (IPCC, 2007) and are the GHG emissions that the project would emit in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF_6, were also considered for the analysis. However, the potential for future occupants of the proposed industrial structures is unknown at this time and to forecast emissions of fluorinated gases would be necessarily speculative. Emissions of all GHGs are converted into their CO_2e. Minimal amounts of other main GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the calculated CO_2e amounts. Calculations are based on the methodologies discussed in the CAPCOA CEQA and Climate Change white paper (2008) and included the use of the California Climate Action Registry (CCAR) General Reporting Protocol (2009).

On-Site Operational Emissions. Operational emissions associated with existing land uses (including City Hall, the Main Library, Lincoln Park, Lincoln Parking Structure, and existing parking lots) and proposed on-site development were calculated using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 software program (see Appendix B for calculations). The former Courthouse was not included in existing uses because it is not currently in operation. Operational emissions from energy use (electricity and natural gas use) for the project were estimated using CalEEMod. The default values on which CalEEMod are based include the CEC-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO_2, N_2O and CH_4. This methodology is considered reasonable and reliable for use, as it has been subjected to peer review by numerous public and private stakeholders, and in particular by the CEC. It is also recommended by CAPCOA (2008).

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating, were calculated in CalEEMod and utilize standard emission rates from CARB, U.S. EPA, and district supplied emission factor values (CalEEMod User Guide, 2013).

Emissions from waste generation were also calculated using CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide, 2013). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California.

Modeling assumed compliance with Downtown Plan EIR Mitigation Measures AQ-2 and GHG-2(b) discussed in "Previous Environmental Review." Complete results from CalEEMod and assumptions can be viewed in Appendix B.

Direct Emissions from Mobile Combustion. Emissions of CO_2 and CH_4 from transportation sources for the proposed project were quantified using CalEEMod. Because CalEEMod does not calculate N_2O emissions from mobile sources, N_2O emissions were quantified using the California Climate Action Registry General Reporting Protocol (2009) direct emissions factors for mobile combustion (see Appendix C for calculations). The estimate of total daily trips associated with the proposed project was based on the Traffic Study prepared by Linscott, Law, and Greenspan, Engineers (LLG) in June 2015 and was calculated and extrapolated to derive total annual mileage in CalEEMod. Emission rates for N_2O emissions were based on the vehicle mix output generated by CalEEMod and the emission factors found in the California Climate Action Registry General Reporting Protocol.

A limitation of the quantitative analysis of emissions from mobile combustion is that emission models, such as CalEEMod, evaluate aggregate emissions, meaning that all vehicle trips and related emissions assigned to a project are assumed to be new trips and emissions generated by the project itself. Such models do not demonstrate, with respect to a regional air quality impact, what proportion of these emissions are actually "new" emissions, specifically attributable to the project in question. For most projects, the main contributor to regional air quality emissions is from motor vehicles; however, the quantity of vehicle trips appropriately characterized as "new" is usually uncertain as traffic associated with a project may be relocated trips from other locales. In other words, vehicle trips associated with the project may include trips relocated from other existing locations. Therefore, because the proportion of "new" versus relocated trips is unknown, the VMT estimate generated by CalEEMod is used as a conservative, "worst-case" estimate.

Construction Emissions. Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. CalEEMod was used to estimate emissions associated with the construction period, based on parameters such as the duration of construction activity, area of disturbance, and anticipated equipment use during construction. Modeling assumed

compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measure AQ-1(c), discussed in "Previous Environmental Review" (SCAQMD rules are described in more detail in Section 4.2, *Air Quality*). Complete results from CalEEMod and assumptions can be viewed in Appendix B.

Service Population. According to the Downtown Plan EIR, the project's service population is the number of residents accommodated by the project plus the number of jobs supported by the project. The proposed project would accommodate up to 780 new residential units within Long Beach. The City has approximately 2.82 persons per household (California Department of Finance, 2014). Development of the proposed project would therefore accommodate an estimated 2,200 residents (780 dwelling units x 2.82 people/dwelling unit). In addition, the project's commercial and institutional components would support jobs. As shown in Table 4.4-1, the project would support approximately 1,787 employees. Therefore, the total service population for the proposed project would be 3,987 persons.

Table 4.4-1
Employees Supported by Proposed Project

Land Use	Area (sf)	Area (acres)	Employees per Acre	Total Employees
Hotel	290,400	6.67	51.91	346
Port Building[1]	240,000	--	--	432
City Hall[1]	270,000	--	--	899
Library[2]	92,000	--	--	91
Restaurant[3]	8,000	0.18	25.76	5
Retail	32,000	0.73	18.86	14
			Total[4]	1,787

Source: Table C-1, Range of Employment Densities (Employees Per Acre) by County (Southern California Association of Governments (SCAG), Employment Density Study Summary Report, October 31, 2001). .
1. Anticipated employee count for City Hall and Port Building; Source: Amy Bodek, City of Long Beach, personal communication, July 2015.
2. Employee count from existing Main Library; Source: Stephanie Kemp, City of Long Beach, personal communication, July 2015.
3. Employee rate for "Other Retail/Services" in SCAG Table C-1 was used, as "Restaurant" is not listed.
4. Total employees rounded up, as partial employees are not possible.

Project Impacts and Mitigation Measures.

Threshold	*Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Impact GHG-1 **Development associated with the proposed project would generate additional GHG emissions beyond existing conditions from construction and operational activities. The Downtown Plan EIR determined that both construction and operational GHG emissions associated with buildout of the Downtown Plan would result in significant and unavoidable impacts. The proposed project would contribute to this impact; however, GHG emissions would not exceed the 6.6 MT CO_2e per service population per year significance threshold as required by Downtown Plan EIR Mitigation Measure AQ-2 and no additional mitigation measures would be required. Impacts would therefore be Class III, *less than significant.***

Operational emissions associated with existing land uses (including City Hall, the Main Library, Lincoln Park, Lincoln Parking Structure, and existing parking lots), as well as construction and operational emissions associated with proposed on-site development were calculated using CalEEMod. The former Courthouse was not included in existing uses because it is currently not in operation. The following summarizes the project's overall GHG emissions (see Appendix B for full CalEEMod worksheets).

Construction Emissions. The project construction schedule indicates that construction would occur in phases over approximately seven years beginning in 2016. Based on the CalEEMod results, construction activity facilitated by the proposed project would generate an estimated 16,583.8 metric tons of CO_2e (as shown in Table 4.4-2). Amortized over a 30-year period (the assumed life of the project), construction facilitated by the project would generate an estimated 552.8 metric tons of CO_2e per year.

Table 4.4-2
Estimated Construction Emissions of Greenhouse Gases

Construction Year	CO_2e (MT)
2016	2,400.0
2017	3,424.0
2018	2,819.0
2019	2,251.4
2020	2,518.6
2021	2,535.6
2022	635.1
Total	**16,583.8**
Amortized over 30 years	**552.8 MT per year**

See Appendix B for calculations and for GHG emission factor assumptions. Assumed compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measure AQ-1(c).
Note: Total may not add up due to rounding.

Long-Term Stationary and Mobile Source Emissions. Operational emissions associated with existing uses (City Hall, Main Library, Lincoln Park, Lincoln Parking Structure, and parking lots) and proposed on-site development were estimated using CalEEMod. The former Courthouse was not included in existing uses because it is not currently in operation. Because the proposed project would in part replace existing facilities (Civic Center, Library), Table 4.4-3 summarizes the net increase in emissions associated with operation of the proposed project (emissions from proposed on-site development minus emissions from existing development to be removed or replaced as part of the project). Net operational emissions are estimated at 10,723.5 metric tons of CO_2e per year.

Table 4.4-3
Long-Term Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions MT CO_2e
Project Emissions	
Operational	
Area	11.4
Energy	4,338.2
Solid Waste	1,803.3
Water	1,046.5
Mobile	
CH_4 and CO_2	13,178.9
N_2O	720.9
Total Operational Emissions	*21,099.2*
Existing Emissions	
Operational	
Area	<0.1
Energy	2,267.6
Solid Waste	791.7
Water	442.9
Mobile	
CH_4 and CO_2	6,562.1
N_2O	311.4
Total Existing Emissions	*10,375.7*
Net Increase in Long-Term GHG Emissions [Project – Existing]	**10,723.5**

Sources: See Appendix B for calculations and for GHG emission factor assumptions. Assumed compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measures AQ-1(c), AQ-2, and GHG-2(b).
Note: Total may not add up due to rounding.

Combined Construction, Stationary and Mobile Source Emissions. Table 4.4-4 summarizes the combined emissions associated with construction and operation of the proposed project and illustrates the overall emissions per service population. Construction emissions associated with construction activity (approximately 16,583.8 metric tons of CO_2e) are amortized over 30 years (the anticipated life of the project). For the proposed project, net combined annual emissions would total 11,276.3 MT CO_2e per year. With a service population of 3,987 persons, the project's net combined annual emissions would total 2.8 MT CO_2e per service population per year, which is less than the significance threshold of 6.6 CO_2e per service population per year required by Downtown Plan EIR Mitigation Measure GHG-2(b). Therefore, impacts from GHG emissions would be less than significant.

Table 4.4-4
Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions MT CO_2e
Project Emissions	
Construction	552.8
Operation	7,199.4
Mobile	13,899.8
Total Project Emissions	*21,652.0*
Total Existing Emissions	***10,375.7***
Net Increase in GHG Emissions [Project – Existing]	**11,276.3**
GHG Emissions/SP/year	**2.8 MT CO_2e/SP/year**
Exceed Threshold (6.6 MT CO_2e/SP/year)?	**No**

Sources: See Appendix B for calculations and for GHG emission factor assumptions. Assumed compliance with SCAQMD Fugitive Dust Rule 403, SCAQMD Architectural Coating Rule 1113, and Downtown Plan EIR Mitigation Measures AQ-1(c), AQ-2, and GHG-2(b).
Note: Total may not add up due to rounding.
SP = service population (3,987 persons)

Mitigation Measures. Because impacts would be less than significant with mitigation from the Downtown Plan EIR, no mitigation beyond that required in the Downtown Plan EIR is required.

Significance after Mitigation. The Downtown Plan EIR determined that both construction and operational GHG emissions associated with buildout of the Downtown Plan would result in significant and unavoidable impacts. The proposed project would contribute to this impact; however, the project's emissions would be less than the significance threshold and no additional mitigation beyond that required by the Downtown Plan EIR would be necessary. Impacts would be less than significant (Class III) without additional mitigation.

Threshold	*Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Impact GHG-2 The proposed project would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals. Impacts related to consistency with GHG plans and policies would therefore be Class III, *less than significant.*

The proposed project would be generally consistent with applicable regulations or plans addressing GHG reductions. As indicated above, the CAT published the Climate Action Team Report (the "2006 CAT Report") in March 2006. The CAT Report identifies a recommended list of strategies that the State could pursue to reduce climate change greenhouse gas emissions.

The CAT strategies are recommended to reduce GHG emissions at a statewide level to meet the goals of the Executive Order S-3-05. These are strategies that could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with existing authority of the State agencies.

The SCAG SCS contains a number of strategies that relate to the operations of SCAG and regional land use planning. Since such strategies lie beyond the scope of individual development projects, only those strategies applicable to the proposed project are addressed.

The City of Long Beach adopted a Sustainable City Action Plan in 2010. This plan contains goals intended to support sustainable development within the City. Implementation of this plan would contribute to a reduction in the City's overall GHG emissions.

Table 4.4-5 through Table 4.4-7 illustrate that the proposed project would be consistent with the GHG reduction strategies set forth by the 2006 CAT Report, the SCAG SCS, and the Sustainable City Action Plan. Therefore, additional mitigation measures would not be required.

Table 4.4-5
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
California Air Resources Board	
Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by CARB in September 2004.	**Consistent** Vehicles that travel to and from the project site on public roadways would be in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Diesel Anti-Idling The CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling in July 2004.	**Consistent** Current State law restricts diesel truck idling to five minutes or less. Diesel trucks operating from and making deliveries to the project site are subject to this state-wide law. Construction vehicles are also subject to this regulation. The project would be required to comply with Downtown Plan EIR Mitigation Measure AQ-2, which states that all truck loading and unloading docks must be equipped with one 110/208-volt power outlet for every two-dock door. Diesel trucks are prohibited from idling more than 5 minutes and must be required to connect to the 110/208-volt power to run any auxiliary equipment. Signs outlining the idling restrictions area also required.
Hydrofluorocarbon Reduction 1) Ban retail sale of HFC in small cans. 2) Require that only low GWP refrigerants be used in new vehicular systems. 3) Adopt specifications for new commercial refrigeration. 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs. 5) Enforce federal ban on releasing HFCs.	**Consistent** This strategy applies to consumer products. All applicable products would be required to comply with the regulations that are in effect at the time of manufacture.

Table 4.4-5
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
Alternative Fuels: Biodiesel Blends CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	**Consistent** Diesel vehicles such as construction vehicles that travel to and from the project site on public roadways could utilize this fuel once it is commercially available. Downtown Plan EIR Mitigation Measure GHG-1(b) would require the project to use a CARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment.
Alternative Fuels: Ethanol Increased use of E-85 fuel.	**Consistent** Residents living at the project site could choose to purchase flex-fuel vehicles and utilize this fuel, which is currently available at locations in Wilmington, approximately six miles northwest of the project site. Downtown Plan EIR Mitigation Measure GHG-1(b) would require the project to use a CARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment.
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy duty vehicles and an education program for the heavy duty vehicle sector.	**Consistent** Heavy-duty vehicles for construction activities that travel to and from the project site on public roadways would be subject to all applicable CARB efficiency standards that are in effect at the time of vehicle manufacture. In addition, the project would be subject to Mitigation Measure AQ-1(a), which requires the use of 2010 and newer diesel haul trick and that all heavy-duty (50 horsepower [hp] or more) offroad vehicles to be used during construction must implement Enhanced Exhaust Control Practices. These practices include meeting Tier 4 emission standards and being outfitted with emissions control devices that reduce emissions by no less than what could be achieved by a Level 3 diesel emissions control strategy for a similar sized engine as defined by CARB regulations.
Achieve 50 Percent Statewide Recycling Goal Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48 percent has been achieved on a statewide basis. Therefore, a 2 percent additional reduction is needed.	**Consistent** According to data provided by CalRecycle, the City of Long Beach met its target disposal rates for both per resident and per employee metrics. Based on data for 2013 (the most recent year for which approved data is available), the City's per resident disposal rate was 3.9 pounds per day (ppd), half of the City's 7.6 ppd target. The City has implemented more than 40 programs designed to sustain these disposal rates.
Zero Waste – High Recycling Efforts to exceed the 50 percent goal would allow for additional reductions in climate change emissions.	**Consistent** As described above it is anticipated that the proposed project would participate in waste diversion programs. The project would also be subject to all applicable State and City requirements for solid waste reduction as they change in the future.

Table 4.4-5
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
Department of Forestry	
Urban Forestry A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	**Consistent** Landscaping for new structures would result in additional planted trees throughout the project site.
Department of Water Resources	
Water Use Efficiency Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	**Consistent** The new proposed structures would be required to be consistent with CalGreen standards. As such, the proposed project would be equipped with low-flow plumbing fixtures, reducing water use.
Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	**Consistent** The proposed project would be required to exceed Title 24 standards that are in effect at the time of development by 20 percent (Downtown Area Plan EIR Mitigation Measure AQ-2). The project would be equipped with equipment (e.g., HVAC systems), lighting fixtures, and lighting that exceed Title 24 requirements.
Appliance Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	**Consistent** Under State law, appliances that are purchased for the project - both pre- and post-development – would be consistent with energy efficiency standards that are in effect at the time of manufacture.
Fuel-Efficient Replacement Tires & Inflation Programs State legislation established a statewide program to encourage the production and use of more efficient tires.	**Consistent** Residents living at the project site could purchase tires for their vehicles that comply with state programs for increased fuel efficiency.
Municipal Utility Energy Efficiency Programs/Demand Response Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	*Not applicable*, but project development would not preclude the implementation of this strategy by municipal utility providers.
Municipal Utility Renewable Portfolio Standard California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 20 percent of retail electricity sales from renewable energy sources by 2017, within certain cost constraints.	*Not applicable*, but the project would not preclude implementation of this strategy by Southern California Edison.

Table 4.4-5
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
Municipal Utility Combined Heat and Power Cost effective reduction from fossil fuel consumption in the commercial and industrial sector through the application of on-site power production to meet both heat and electricity loads.	*Not applicable* since this strategy addresses incentives that could be provided by utility providers such as Southern California Edison and The Gas Company.
Alternative Fuels: Non-Petroleum Fuels Increasing the use of non-petroleum fuels in California's transportation sector, as recommended as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	**Consistent** Residents living at the project site could choose to purchase flex-fuel vehicles and utilize this fuel, which is currently available at locations in Wilmington approximately six miles northwest of the project site.
Green Buildings Initiative Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels. The Executive Order and related action plan spell out specific actions state agencies are to take with state-owned and -leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.	**Consistent** The proposed project would be required to exceed Title 24 standards that are in effect at the time of development by 20 percent (Downtown Area Plan EIR Mitigation Measure AQ-2). The 2013 Title 24 standards, which took effect on July 1, 2014, improve nonresidential energy efficiency by 30 percent compared to the current 2008 standards. The project would be required to exceed the 2016 Title 24 standards by 20 percent, which will take effect on January 1, 2017, if construction occurs any time after that date.

Table 4.4-5
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
Business, Transportation and Housing	
Smart Land Use and Intelligent Transportation Systems (ITS) Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. The Governor is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity and a quality environment. Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	**Consistent** The project site is accessible via existing bus transit facilities. Long Beach Transit has more than ten bus stops within 0.1 miles of the project site.
Public Utilities Commission (PUC)	
Accelerated Renewable Portfolio Standard The Governor has set a goal of achieving 33 percent renewable in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	*Not applicable*, but project development would not preclude the implementation of this strategy by energy providers.
California Solar Initiative The solar initiative includes installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses, increased use of solar thermal systems to offset the increasing demand for natural gas, use of advanced metering in solar applications, and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	**Consistent** The project would be required to comply with Downtown Plan Mitigation Measure AQ-2, which requires the project to include such measures as photovoltaic cells on the rooftops to achieve a 25 percent reduction in electricity use on an average sunny day, in addition to exceeding Title 24 standards by 20 percent.

Table 4.4-6
Project Consistency with Applicable SCAG SCS Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
Land Use Actions and Strategies	
Encourage the use of range-limited battery electric and other alternative fueled vehicles through policies and programs, such as, but not limited to, neighborhood oriented development, complete streets, and Electric (and other alternative fuel) Vehicle Supply Equipment in public parking lots.	**Consistent** Residents living at the project site could choose to purchase flex-fuel vehicles and utilize this fuel, which is currently available at locations in Wilmington, approximately six miles northwest of the project site.
Support projects, programs, policies and regulations that encourage the development of complete communities, which includes a diversity of housing choices and educational opportunities, jobs for a variety of skills and education, recreation and culture, and a full-range of shopping, entertainment and services all within a relatively short distance.	**Consistent** The proposed project includes mixed-use buildings with residential, retail, and other commercial uses. The project also includes development of a new and relocated library and park. These uses would also be located in an urbanized area and in proximity to existing residential and commercial development. Existing public transit facilities are located within 0.1 miles of the project site. The proposed project would be consistent with efforts to provide diverse housing choices with commercial and recreational opportunities. It is assumed residents and employees would use other modes of transportation including non-auto (e.g., walking, bicycles) and public transportation.
Transportation Network Actions and Strategies	
Prioritize transportation investments to support compact infill development that includes a mix of land uses, housing options, and open/park space, where appropriate, to maximize the benefits for existing communities, especially vulnerable populations, and to minimize any negative impacts.	**Consistent** The proposed project is located in an area surrounded by existing development, and would add residential, commercial, institutional, and recreational uses. As such, the project would be infill development.
Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes, including walking, bicycling, and neighborhood electric vehicles (NEVs) or other alternative fueled vehicles.	**Consistent** The proposed project is located in an urbanized area and in proximity to existing residential and commercial development. Existing public transit facilities are located within 0.1 miles of the project site. The project site would be walkable and pedestrian access to the existing transit would be available.
Collaborate with local jurisdictions to plan and develop residential and employment development around current and planned transit stations and neighborhood commercial centers.	**Consistent** The proposed project is located in an urbanized area and in proximity to existing public transit facilities. The proposed project would be consistent with efforts to support the use of public transportation.
Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or neighborhood electric vehicle or other ZEV options.	**Consistent** The proposed project is located in an urbanized area and in proximity to existing residential and commercial development. Existing public transit facilities are located near the project site. The proposed project would include pedestrian connections to the existing developed areas surrounding the site as well as access to transit.

Table 4.4-6
Project Consistency with Applicable SCAG SCS Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
Transportation Demand Management Actions and Strategies	
Support work-based programs that encourage emission reduction strategies and incentivize active transportation commuting or ride-share modes.	**Consistent** Downtown Plan EIR Mitigation Measure AQ-2 would require commercial development operator(s) to operate, maintain, and promote a ride-share program for employees of the various businesses. In addition, this mitigation requires the development of secure bicycle parking areas within the project site for employees and customers.
Encourage the development of telecommuting programs by employers through review and revision of policies that may discourage alternative work options.	*Not applicable*; however, occupants of the project site could telecommute as appropriate.
Clean Vehicle Technology Actions and Strategies	
Develop a Regional PEV Readiness Plan with a focus on charge port infrastructure plans to support and promote the introduction of electric and other alternative fuel vehicles in Southern California.	*Not applicable*, but project development would not preclude implementation of this strategy.

Table 4.4-7
Project Consistency with Applicable Long Beach Sustainable City Action Plan Goals

Goal	Project Consistency
Buildings and Neighborhoods	
At least 5 million square feet of privately developed LEED certified (or equivalent) green buildings by 2020	**Consistent** The proposed project is not currently designed to qualify for LEED certification. However, the project includes sustainability features that would be compatible with the general LEED certification principles such as being infill development and being located in proximity to transit stops. In addition, the proposed project would be required to exceed Title 24 standards that are in effect at the time of development by 20 percent (Downtown Area Plan EIR Mitigation Measure AQ-2). The project would be equipped with equipment (e.g. HVAC systems), lighting fixtures, and lighting that exceed Title 24 requirements. The proposed project would not conflict with the implementation of this goal.
Plant at least 10,000 trees in Long Beach by 2020	**Consistent** Landscaping for new structures and Lincoln Park would result in additional planted trees throughout the project site, thus moving the City toward this target.

Table 4.4-7
Project Consistency with Applicable
Long Beach Sustainable City Action Plan Goals

Goal	Project Consistency
50 percent of Long Beach residents work in Long Beach by 2020	**Consistent** The proposed project would provide up to 780 residential units for Long Beach residents in the Downtown Area. This would enhance local housing opportunities for Long Beach workers.
Energy	
Reduce community electricity use by 15 percent by 2020 Reduce community natural gas use by 10 percent by 2020	**Consistent** The proposed project would exceed the most recent Title 24 energy efficiency requirements by 20 percent, which would increase energy efficiency. The 2014 Title 24 standards improve nonresidential energy efficiency by 30 percent.
Facilitate the development of at least 8 Megawatts of solar energy within the community (private rooftops) by 2020.	**Consistent** The project would be required to comply with Downtown Plan Mitigation Measure AQ-2, which requires the project to include such measures as photovoltaic cells on the rooftops to achieve a 25 percent reduction in electricity use on an average sunny day, in addition to exceeding Title 24 standards by 20 percent.
Transportation	
Increase public transit ridership by 25 percent by 2016 Increase bike ridership from 1 percent to 10 percent by 2016	**Consistent** The proposed project is infill development in an area served by existing public transit lines and within 0.1 miles of multiple existing transit stops.
Annual reduction in average pounds of solid waste generated per person per day	**Consistent** According to data provided by CalRecycle, the City of Long Beach met its target disposal rates for both per resident and per employee metrics. Based on data for 2013 (the most recent year for which approved data is available), the City's per resident disposal rate was 3.9 pounds per day (ppd), half of the City's 7.6 ppd target and the City's per employee disposal rate was 11.8 ppd, less than half of the 25.1 ppd target. The City has implemented more than 40 programs designed to sustain these disposal rates. The proposed project would participate in City programs intended to continue solid waste diversion.

As indicated in Table 4.4-5 through Table 4.4-7, the proposed project would not conflict with applicable CAT strategies, SCAG'S SCS GHG emission reduction strategies, and the Long Beach Sustainable City Action Plan Goals.

Mitigation Measures. Mitigation is not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

b. Cumulative Impacts. As discussed in Section 3.0, *Environmental Setting*, cumulative development in Long Beach, including development facilitated by the proposed project, would add dwelling units and non-residential development that would generate GHGs from vehicle trips and other sources. Analyses of GHGs are cumulative in nature, as they affect the accumulation of greenhouse gases in the atmosphere. Projects falling below the impact thresholds discussed above would have a less than significant impact, both individually and cumulatively. As indicated in Impact GHG-1, GHG emissions associated with the proposed project would be less than significant and the project's contribution to cumulative impacts are therefore also cumulatively less than significant.

4.5 NOISE AND VIBRATION

This section addresses the impact of the noise and vibration that would be generated by the proposed project on nearby noise-sensitive land uses, as well as the effect of current and future noise and vibration levels on the proposed project.

4.5.1 Setting

a. Overview of Sound Measurement. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dBA to actual nighttime (10 p.m. to 7 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5 dBA penalty for noise occurring during the evening (7 PM to 10 p.m.).

b. Vibration. Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the United States. Policies and standards related to ground-borne vibration are provided in Section 8.80.200 of the Long Beach Municipal Code (LBMC), where operating or permitting the operation of any device that creates vibration above the vibration perception threshold of an individual at or beyond the property boundary of the source, if on private property, or at 150 feet from the source if on a public space or public right-of-way, is a code violation. Section 8.80.200(g) is described in more detail below under *Regulatory Setting*.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (Federal Transit Administration, 2006). A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Consequently, the FTA recommends an 80 VdB threshold for infrequent events at residences and buildings where people normally sleep (e.g., the future on-site residences and the residences and hotels in the vicinity). In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings.

c. Sensitive Receptors. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, and libraries are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to effects such as sleep disturbance. Noise sensitive land uses near the project area include residences, a library, and a school. The nearest existing residential receptors are located 100 feet north of the project site boundary on Third Street. The First Congregational Church of Long Beach, located at 241 Cedar Avenue, is also a sensitive receptor and is located 85 feet west of the proposed construction area near the 3rd and Pacific Block.

d. Regulatory Setting. Chapter 8.80 of the LBMC provides regulations regarding noise levels in the City. Section 8.80.160 sets exterior noise level limits for districts identified in the municipal code. The project site is located in District 2. The following exterior noise level standards would therefore apply to the project site:

- *Daytime (7:00 a.m. – 10:00 p.m.): 60 dBA*
- *Nighttime (10:00 p.m. – 7:00 a.m.) 55 dBA*

Receptors to the northwest of the project site, west of Queens Way, are located in District 1 and the following exterior noise level standards are applicable to those receptors:

- *Daytime (7:00 a.m. – 10:00 p.m.): 50 dBA*
- *Nighttime (10:00p.m. – 7:00 a.m.) 45 dBA*

Section 8.80.150 states that the noise standards provided in Section 8.80.160 shall be applied as follows:

> *No person shall operate or cause to be operated any source of sound at any location within the incorporated limits of the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured from any other property, either incorporated or unincorporated, to exceed:*
>
> *1) The noise standard for that land use district as specified in Table A in Section 8.80.160 for a cumulative period of more than thirty (30) minutes in any hour; or*
>
> *2) The noise standard plus five (5) decibels for a cumulative period of more than fifteen (15) minutes in any hour; or*
>
> *3) The noise standard plus ten (10) decibels for a cumulative period of more than five (5) minutes in any hour; or*
>
> *4) The noise standard plus fifteen (15) decibels for a cumulative period of more than one (1) minute in any hour; or*
>
> *5) The noise standard plus twenty (20) decibels or the maximum measured ambient, for any period of time.*

Section 8.80.170 of the LBMC sets interior noise levels for specific types of development, as shown in Table 4.5-1.

Table 4.5-1
City of Long Beach Interior Noise Level Standards

Land Use	Time Interval	Allowable Noise Level (dBA)
Residential	10:00 p.m. – 7:00 a.m.	35
	7:00 a.m. – 10:00 p.m.	45
School	7:00 a.m. – 10:00 p.m. (While school is in session)	45
Hospital, designated quiet zones, and noise sensitive zones	Anytime	40

Source: Long Beach Municipal Code Sec. 8.80.170

Section 8.80.202 of the Long Beach Municipal Code sets restrictions on construction activities as follows:

- *No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity*

between the hours of 7:00 p.m. and 7:00 a.m. the following day on weekdays or federal holidays, except for emergency work authorized by the Building Official.

- *No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of 7:00 p.m. on Friday and 9:00 a.m. on Saturday and after 6:00 p.m. on Saturday, except for emergency work authorized by the Building Official.*
- *No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity at any time on Sunday, except for emergency work authorized by the Building Official or except for work authorized by permit issued by the Noise Control Officer.*

The Long Beach Municipal Code 8.80.200(n) requires that air conditioning equipment generate noise levels of no more than 55 dBA at any point on a neighboring property line. This standard would apply to all air conditioning and refrigerating equipment.

The Long Beach General Plan Noise Element provides outdoor and indoor noise standards for different types of land uses, as summarized in Table 4.5-2.

Table 4.5-2
City of Long Beach General Plan Noise Level Standards

Land Use	Outdoor			Indoor (Ldn)
	Peak	L10	L50	
Residential (7:00 a.m.–10:00 p.m.)	70	55	45	45
Residential (10:00 p.m.–7:00 a.m.)	60	45	35	35
Commercial (any time)	75	65	55	-
Industrial (any time)	85	70	60	-

Source: Long Beach General Plan Noise Element.

The Long Beach General Plan Noise Element also contains the following goal related to transportation noise.

Goal 2: Discouraging within transportation noise zones the development of noise sensitive uses that cannot be sufficiently insulated against externally generated noise at a reasonable cost.

The Long Beach General Plan Noise Element contains the following goals related to population and housing.

Goal 3 To reduce the level of noise generated by the population into the environment of the City.

Goal 6 To require better sound deadening design on new housing units where acoustical problems could develop.

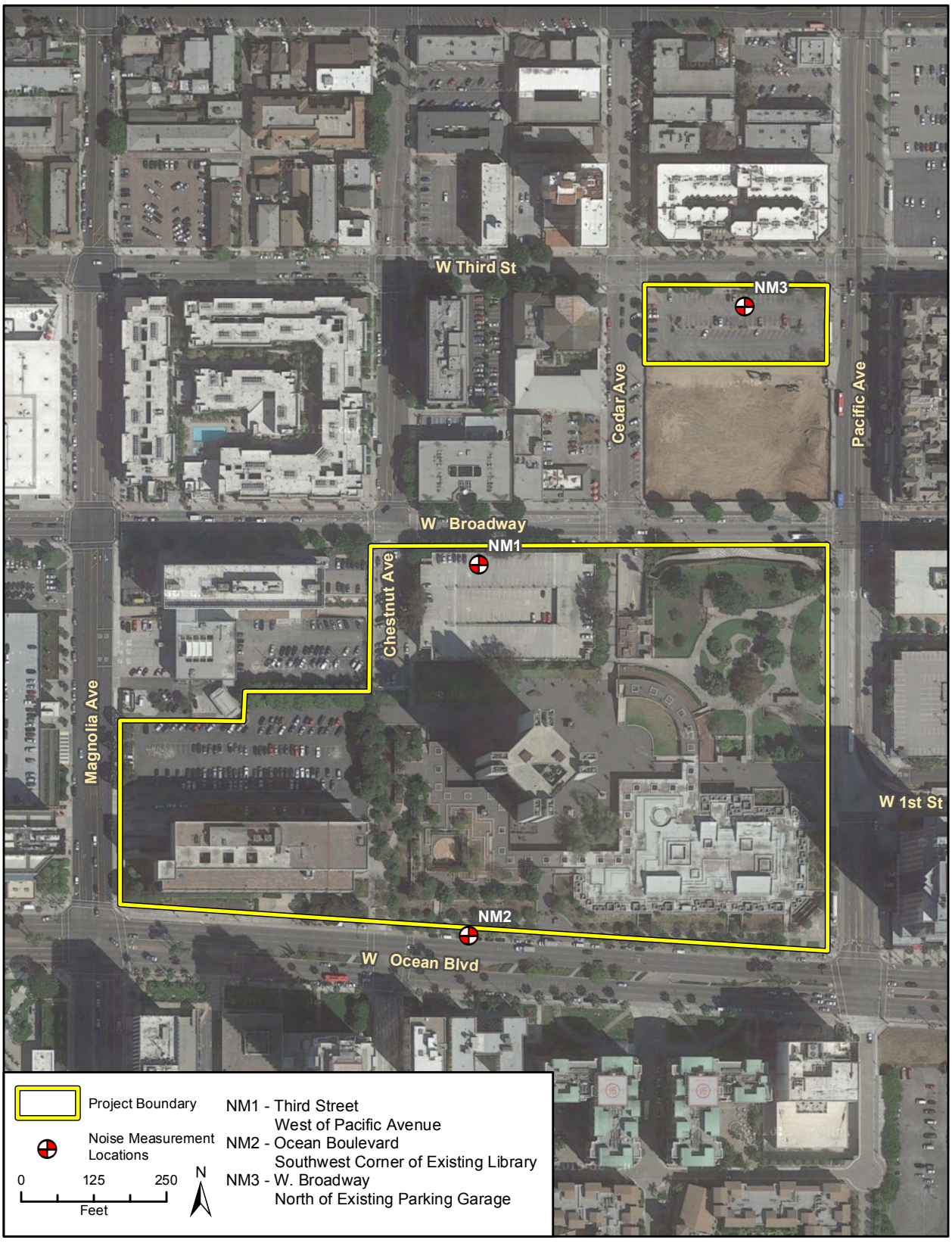
Goal 7 To reduce the level of incoming and outgoing noise into and from residential dwellings within the City.

The California Department of Health Services establishes noise criteria for various land uses. Noise exposure for a residential land use is "normally acceptable" when the CNEL at exterior residential locations is equal or below 60 dBA, "conditionally acceptable" when the CNEL is between 60 and 70 dBA, "normally unacceptable" when the CNEL is between 70 and 75 dBA, and "clearly unacceptable" when the CNEL is greater than 75 dBA.

Section 8.80.200(g) of the Long Beach Municipal Code regulates vibration as follows:

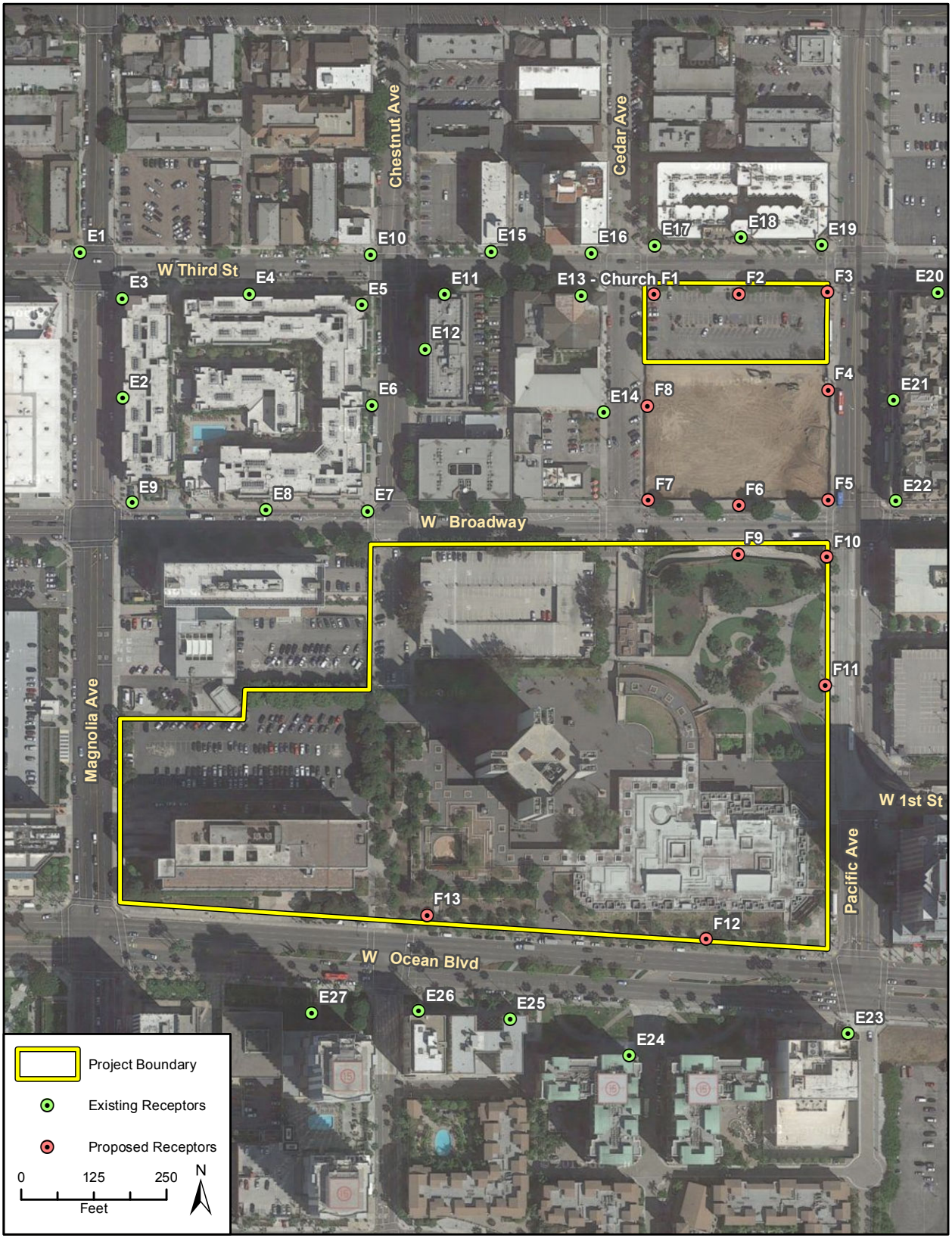
Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at one hundred fifty feet (150') (forty-six (46) meters) from the source if on a public space or public right-of-way. For the purposes of this subsection, "vibration perception threshold" means the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such directed means as, but not limited to, sensation by touch or visual observation of moving objects. The perception threshold shall be presumed to be .001 g's in the frequency range 0—30 hertz and .003 g's in the frequency range between thirty and one hundred hertz.

e. Existing Noise Sources. The most common source of noise in the project site vicinity is traffic on surrounding roads. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create sustained noise levels. Ambient noise levels would be expected to be highest during the daytime and rush hour unless congestion slows speeds substantially. Existing noise sources within the project site consist of commercial and government buildings, as well as the existing library and park. To determine ambient noise levels at nearby sensitive receptors, three 15-minute noise measurements were taken between 7:00 a.m. and 9:00 a.m. (peak hour) on May 20, 2015 using an ANSI Type II integrating sound level meter (refer to Appendix D for noise measurement data). Table 4.5-3 lists the ambient noise levels measured at these locations. See Figure 4.5-1 for the locations of noise measurements and Figure 4.5-2 for the locations of existing and proposed sensitive receptors within the project area.



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Noise Measurement Locations Figure 4.5-1



Imagery provided by Google and its licensors © 2015.

Modeled Existing and Future Receptor Locations Figure 4.5-2

Table 4.5-3
Noise Measurements

Measurement Number	Measurement Location	Distance to Nearest Sensitive Receptor	Distance from Centerline of Roadway	Sample Time	Leq (dBA)
1	Third Street west of Pacific Avenue	80 ft (to apartments on Third St.)	40 ft	7:25 a.m.– 7:40 a.m.	64.9
2	Ocean Boulevard on the southwest corner of the existing library	100 ft (to existing library)	50 ft	8:00 a.m. – 8:15 a.m.	70.8
3	W. Broadway, north of the existing parking garage	230 ft (to apartments on W. Broadway)	35 ft	8:30 a.m. – 8:45 a.m.	68.5

All measurements were taken using ANSI Type II Integrating sound level meter.
Refer to Figure 4.5-1 for noise measurement locations.
Refer to the Appendix D for noise monitoring data sheets

Long Beach Municipal Airport is located approximately four miles northeast of the project site, and the project site is outside its Airport Influence Area (Los Angeles County Airport Land Use Commission, 2003).

LLG prepared the *Transportation Impact Analysis* for the project and analyzed local roadway segments and intersections in the surrounding roadway network and provided average daily trip (ADT) rates and peak hour trips (see Appendix E). Using the trip data, existing traffic-generated noise levels along these segments were estimated using the U.S. Department of Transportation, Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5 (FHWA, 2004). Table 4.5-4 shows the estimated noise levels at existing sensitive receptors near the project site. Each of the sensitive receptor locations listed is the edge or corner of an existing residential building, with the exception of "Cedar – Church btwn Third and Broadway," which is the First Congregational Church of Broadway.

Table 4.5-4
Existing Traffic-Generated Noise

Receptor Location	Modeled Noise Level Leq (dBA)
Broadway btwn Chestnut and Magnolia	69.3
Broadway NE Corner of Broadway and Magnolia	71.9
Broadway NW Corner of Chestnut and Broadway	69.2
Cedar - Church btwn Third and Broadway	65.8
Chestnut btwn Third and Broadway	65.3
Chestnut E of Chestnut btwn Third and Broadway	64.1
Magnolia btwn Third and Broadway	70.0
Ocean btwn Cedar and Chestnut	71.8
Ocean btwn Chestnut and Magnolia	70.3
Ocean NE Corner of Ocean and Chestnut	71.9
Ocean NW Corner of Ocean and Cedar	69.2
Ocean NW Corner of Ocean and Pacific	71.8
Pacific E of Pacific btwn Third and Broadway	68.4
Pacific NE Corner of Pacific and Broadway	71.1
Third btwn Cedar and Chestnut	69.3
Third btwn Magnolia and Chestnut	67.5
Third E of Pacific	68.0
Third NE Corner of Pacific and Cedar	67.9
Third NE Corner of Third and Magnolia	69.1
Third North of Third West of Pacific	69.5
Third NW Corner of Third and Cedar	70.2
Third NW Corner of Third and Chestnut	70.5
Third NW Corner of Third and Magnolia	70.9
Third NW Corner of Third and Pacific	70.9
Third SE of Chestnut and Pacific Intersection	67.4
Third SW Corner of Third and Cedar	69.4
Third SW Corner of Third and Chestnut	68.3

Refer to Appendix D for these estimates. Calculated using the FHWA Traffic Noise Model.

Modeled noise levels range from 64.1 dBA to 71.9 dBA for existing sensitive receptors. The highest modeled noise level was identified at Ocean on the northeast corner of Ocean and Chestnut and at Broadway on the northeast corner of Broadway and Magnolia. Modeled noise



exceeds the measured noise levels at the same locations because the model includes the greatest amount of traffic observed during PM peak hours, whereas the measurements were taken during AM peak hour and traffic was slightly lower. Nonetheless, the noise levels at the measurement locations indicate that the model is an appropriate tool for determining existing and future noise levels for this area.

4.5.2 Previous Environmental Review

The Long Beach Downtown Plan EIR examined the noise setting of the region and the potential impacts associated with development of the entire Downtown Plan area. The EIR determined that construction noise impacts associated with the Downtown Plan would be significant but mitigable because Downtown Plan implementation would expose businesses and residences throughout the Downtown Plan Area to temporary elevated levels of noise throughout years of construction. The project would be subject to the mitigation measures identified in the EIR, specifically Noise-1(a), which required noise reduction techniques such as equipment mufflers, "quiet" construction equipment models, prohibition of idling, and routing of construction-related traffic, as well as Noise-1(b), which requires the construction of temporary noise barriers and a project-specific noise analysis to determine further necessary noise reduction techniques.

The Downtown Plan EIR determined that noise associated with traffic generated by the Downtown Plan would be less than significant as it affects existing sensitive receptors, but that traffic noise and land use compatibility impacts would be significant but mitigable for proposed receptors. Operation of the proposed project would generate traffic and would locate sensitive receptors, including residences and a library, in areas that could be exposed to levels of noise that exceed applicable standards. The project would be subject to the mitigation measures identified in the EIR, specifically Noise-5, which requires a site-specific noise study for projects in areas where new residential development would be exposed to noise levels exceeding 65 dBA.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not adopted. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to noise and vibration would be significant and unavoidable despite implementation of mitigation involving the erection of temporary sound barriers, installation of mufflers, use of electric equipment, and the establishment of a noise disturbance coordinator. If demolition occurs by implosion, the Downtown Plan EIR recommended mitigation requiring the development and approval of a Noise Control Plan and a Vibration Control Plan to protect human health and adjacent buildings.

The Downtown Plan EIR determined that construction of the Downtown Plan would include vibration sources, including pile driving that would result in a significant and unavoidable impact. The project would be subject to EIR Measure Noise-2(a), which requires a site-specific vibration study for all construction projects in order to determine the area of impact and identify appropriate mitigation measures.

4.5.3 Impact Analysis

a. Methodology and Thresholds of Significance.

Methodology. The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with operation of the proposed project. Construction noise estimates are based upon noise levels reported by the Federal Transit Administration (FTA), Office of Planning and Environment (FTA, May 2006), and the distance to nearby sensitive receptors. Reference noise levels from that document were then used to estimate noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dBA per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Construction noise level estimates do not account for the presence of intervening structures or topography, which could reduce noise levels at receptor locations. Therefore, the noise levels presented herein represent a conservative, reasonable worst-case estimate of actual construction noise.

To determine ambient noise levels at nearby sensitive receptors, Rincon Consultants, Inc. took three 15-minute noise measurements between 7:00 a.m. and 9:00 a.m. (peak hour) on May 20, 2015, using an ANSI Type II integrating sound level meter (see Figure 4.5-1 above for noise measurement locations relative to the project site; see Appendix D for noise measurement data). These locations were selected to represent ambient noise levels experienced by sensitive receptors near the project site, as well as noise levels generated by land uses similar to the project. At each location, consideration was given to site-specific characteristics, and the sound level meter was placed away from walls and topographic features which might skew noise measurements. The noise measurements recorded the equivalent noise level (Leq) at each location.

Rincon calculated noise levels associated with existing and future traffic along local roadways using the U.S. Department of Transportation, Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5 (FHWA, 2004) (noise modeling data sheets can be viewed in Appendix D) and the *Transportation Impact Analysis* (see Appendix E and Section 4.6, *Transportation and Traffic*). Roadway noise level estimates do not account for all intervening barriers, such as trees or walls, which may shield individual receptors from the noise source. Therefore, the levels presented represent a conservative estimate of the noise levels that would be experienced at individual receptor locations.

The future exterior noise levels associated with traffic for the proposed residences and library were also calculated using the FHWA Traffic Noise Model Version 2.5 (FHWA, 2004). The interior noise level is the difference between the projected exterior noise level at the structure's façade and the noise reduction provided by the structure itself. Typical residential construction in California provides approximately 15 dBA of noise reduction from exterior noise sources with windows partially open, and approximately 20 to 25 dBA of noise reduction with windows kept closed (DOT, 2009). For this analysis, interior noise level was determined by subtracting the estimated noise reduction achieved by the building shell from the estimated exterior noise level of the project site.

Significance Thresholds. Pursuant to Appendix G of the *State CEQA Guidelines*, potentially significant impacts would occur if the project would result in any of the following conditions:

- *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
- *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;*
- *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels; and/or*
- *For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.*

As discussed in the Initial Study (Appendix A), the project site is not located in the vicinity of a private airstrip nor is it located within two miles of an airport or within an airport land use plan. Impacts related to airport noise would therefore be less than significant and are not discussed further in this section. The SEIR analyzes potential temporary and permanent impacts from construction and operation of the proposed project, including potential vibration impacts.

Existing off-site development would primarily be affected by potential increased noise associated with increased traffic volumes attributable to the project at various roadway segments. Impacts to existing development are considered significant if project-generated traffic results in exposure of sensitive receptors to an unacceptable increase in noise levels. The level of significance changes with increasing noise exposure, such that smaller changes in ambient noise levels result in significant impacts at higher existing noise levels. Table 4.5-5 shows the relevant significance thresholds for increases in traffic related noise levels caused either by the project alone or by cumulative development.

Impacts related to operational on-site activities and traffic noise would also be significant if project-related activities cause occupied sensitive receptors to experience noise levels exceeding the standards shown in Table 4.5-5.

Table 4.5-5
Significant Change in Ambient Noise Levels

Existing Ambient Noise Level, CNEL/Ldn	Significant Increase
< 60 dBA	+ 5 dBA or greater
> 60 dBA	+ 3 dBA or greater

Source: Long Beach Downtown Community Plan – Noise Impact Analysis (Appendix F of the Long Beach Downtown Plan EIR)

Impacts related to construction would be significant if project-related activities cause occupied sensitive receptors to experience noise levels exceeding the following federal noise standards shown in Table 4.5-6 or if it would occur during hours when construction activity is prohibited under the Long Beach Municipal Code (see *Regulatory Setting*).

Table 4.5-6
Construction Noise Level Limits

Land Use	8-hour Noise Limit (dBA Leq)
Residential	80
Commercial	85
Industrial	90

Source: Federal Transit Administration (FTA). Transit Noise and Vibration Impact Assessment. May 2006.

b. Project Impacts and Mitigation Measures.

CEQA Checklist Threshold	*Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*
CEQA Checklist Threshold	*A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*
Quantitative Threshold	*See Table 4.5-6*

Impact N-1 **Construction-related activities associated with the proposed project would generate noise that could exceed City of Long Beach standards at existing receptors. Residential uses proposed by the project may also be exposed to noise levels that exceed City standards. The Downtown Plan EIR determined that construction associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would not be feasible to reduce the impact to a less than significant level. This is a Class I, *significant and unavoidable* impact.**

Construction would not cause permanent impacts since it would be temporary and daily construction activities would be limited by the City's Noise Ordinance (Section 8.80.202) to less noise sensitive daytime hours. Construction noise impacts primarily result when construction activities occur during times of day when people are most sensitive to noise (early morning,

evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time.

As discussed in the Downtown Plan EIR, adoption of the Downtown Plan could subject nearby residents to excessive noise levels. The Downtown Plan EIR includes Mitigation Measure Noise-1(a), which requires that: construction equipment be equipped with mufflers; "quiet" models of stationary equipment be used; stationary noise-generating equipment be located as far as possible from receptors; engines do not idle for longer than five minutes; as well as other requirements to reduce noise impacts from construction. The Downtown Plan EIR also includes Mitigation Measure Noise-1(b), which requires construction of temporary noise barriers around construction sites within 300 feet of operational businesses, residences, and other-noise sensitive land uses. Noise-1(b) also requires that if a project-specific noise analysis determines that the barriers described above would not be sufficient to avoid a significant construction noise impact, a temporary sound control blanket must be erected along building façades facing construction sites.

Temporary noise impacts associated with construction of the proposed project may adversely affect adjacent sensitive receptors. The grading/excavation phase of project construction tends to create the highest construction noise levels because of the operation of heavy equipment. As shown in Table 4.5-7, the maximum noise level associated with heavy equipment at construction sites can range from about 74 to 88 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and phase of construction (FTA, 2006). During grading operations, equipment is dispersed in various portions of the site in both time and space. Due to site and equipment limitations, only a limited amount of equipment can operate near a given location at a particular time.

Construction noise levels would diminish at approximately 6 dBA per doubling of distance. Table 4.5-7 shows typical maximum construction noise levels at various distances from construction activity. The nearest existing sensitive receptor is the First Congregational Church of Long Beach, which is approximately 85 feet from the nearest proposed construction areas; however, construction would not occur on Sunday mornings when the church would be in use and, therefore, would not impact this receptor. The nearest sensitive receptor that would be in use during construction activities is a residential building located 100 feet from the project site. The maximum noise level at that location would be about 82 dBA. The residential component of the project is concentrated on the 3rd and Pacific Block, which is located approximately 300 feet north of the where construction on the remainder of the project site would occur, and on Center Block, operation of which would occur after all other components are constructed. Therefore, the proposed library would be the only onsite sensitive receptor that would be located adjacent to project construction. The library could be approximately 50 feet from construction activity and could experience a maximum noise level of approximately 88 dBA during construction of both the Center Block and the Lincoln Park and New Library Block.

Table 4.5-7
Typical Construction Equipment Noise Levels

Equipment	Noise Level at 50 feet from Source	Noise Level at 100 feet from Source	Noise Level at 300 feet from Source
Augur Drill Rig	84	78	69
Backhoe	78	72	63
Compactor (ground)	83	77	68
Dozer	82	76	67
Dump Truck	76	70	61
Excavator	81	75	66
Flat Bed Truck	74	68	59
Front End Loader	79	72	63
Generator	81	75	66
Grader	83	77	68
Jackhammer	88	82	73
Pickup Truck	75	69	60
Pneumatic Tools	85	79	70
Roller	80	74	65
Scraper	84	78	69
Warning Horn	83	77	68
Welder/Torch	74	68	59

Source: FTA, 2006.

A temporary noise barrier, as required by Mitigation Measure Noise-1(b) would attenuate construction noise at locations for which the barrier breaks the line of sight between the source and the receptor by up to 10 dBA (FHWA, 2001). However, given the height of the surrounding buildings, which includes residential buildings of over ten stories, a temporary noise barrier would not break the line-of-sight between the construction activities and upper-floor receptors. In order for a barrier to successfully reduce noise at a receptor, it must disrupt the line-of-sight and directly shield the receptor. It would not be feasible to construct a noise barrier tall enough to shield high-rise buildings. Therefore, while Mitigation Measure Noise-1(b) would reduce noise levels to a less than significant level for receptors located on the first floor and would be implemented as a requirement of the Downtown Plan EIR, it would not be sufficient to reduce noise levels to less than 80 dBA Leq for eight hours for noise-sensitive uses located on higher floors. Therefore, impacts would significant and unavoidable at existing and proposed residential units.

Temporary noise from construction would exceed the ambient noise levels near the project site, which are between 65 and 71 dBA. Therefore, City noise standards would be exceeded, despite

implementation of mitigation measures Noise-1(a) and Noise-1(b). This would be a significant and unavoidable impact.

Furthermore, as described in the Long Beach Courthouse Demolition Project Draft EIR, demolition of the former Long Beach Courthouse would result in impacts related to noise that would be significant and unavoidable despite implementation of mitigation involving the erection of temporary sound barriers, installation of mufflers, use of electric equipment, and the establishment of a noise disturbance coordinator. If demolition occurs by implosion, the Downtown Plan EIR recommended mitigation requiring the development and approval of a Noise Control Plan to protect human health and adjacent buildings. Nonetheless, mitigation required by the Downtown Plan EIR and Long Beach Courthouse Demolition Project Draft EIR would not reduce impacts related to construction to a less than significant level. Due to the height of the surrounding residential and commercial buildings, and the potential for demolition to occur by implosion, mitigation would not be feasible for all receptors. Impacts would be significant and unavoidable.

Mitigation Measures. Along with the mitigation required by the Downtown Plan EIR, the following mitigation would be required to reduce impacts from the demolition of the former Courthouse to the extent feasible.

Noise-1 **Noise Control Plan.** If demolition occurs by implosion, the City shall approve a Noise Control Plan that protects public health and includes:

- A site-specific map that delineates the hearing damage radius;
- Safety measures to ensure that community members would not be within this radius during the implosion;
- Control measures designed by an implosion expert to reduce noise at the source of the implosion; and
- A statement that all demolition-related damage shall be repaired.

Significance After Mitigation. The Downtown Plan EIR determined that construction associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would not be feasible to reduce impacts to a less than significant level. The Long Beach Courthouse Demolition Project Draft EIR determined that construction associated with the demolition of the Courthouse would result in a significant and unavoidable noise impact; the proposed project would contribute to that impact. Therefore, impacts associated with construction noise would be significant and unavoidable.

CEQA Checklist Threshold	*Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*
CEQA Checklist Threshold	*A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*
CEQA Checklist Threshold	*A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*
Quantitative Threshold	*See Table 4.5-1 and Table 4.5-2*

Impact N-2 Operational activities associated with the proposed project would generate noise that could exceed City of Long Beach standards at existing receptors. Residential uses proposed by the project may also be exposed to noise levels that exceed City standards. The Downtown Plan EIR determined that operation associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would be required. This is a Class II, *significant but mitigable* impact.

As discussed in the Downtown Plan EIR, point source noise levels associated with commercial uses have the potential to expose nearby existing and future noise sensitive receptors to excessive noise levels that violate the City Noise Ordinance and that would permanently or temporarily exceed existing ambient noise levels. Downtown Plan EIR Mitigation Measure Noise-6 requires a site-specific noise study prior to issuance of building permits in areas where new residential development would be located adjacent to commercial uses to determine the area of impact and to present appropriate mitigation measures. The mitigation measures required as a result of the noise study may include:

- *Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses.*
- *Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible.*
- *Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.*

The buildings proposed on the 3rd and Pacific Block, as well as the Center Block, would locate residential uses adjacent to commercial uses. Noise sources associated with commercial land uses include mechanical equipment operation, public address systems, parking lot noise (e.g., opening and closing of vehicle doors, people talking, car alarms), delivery activities (e.g., use of

forklifts, hydraulic lifts), trash compactors, and air compressors. Noise from such equipment can reach intermittent levels of approximately 90 dBA, 50 feet from the source (City of Long Beach, 2011). These elevated noise levels, which have the potential to be generated by commercial uses within mixed use land use designations, would expose nearby noise sensitive land uses (e.g., residential units both existing and proposed) to excessive noise levels that violate the City Noise Ordinance and permanently increase noise levels above ambient levels.

The Third and Pacific Block includes commercial uses on the first floor of the proposed buildings. The nearest sensitive receptor to the Block is the First Congregational Church of Long Beach, which is located 85 feet west. However, the church would be occupied on Sunday mornings, at which time the commercial uses would not generate high levels of noise. The residential building located 100 feet north across Third Street is the nearest sensitive receptor that would be occupied. While the proposed commercial uses are not expected to generate high levels of noise, the highest noise generator would be the loading and unloading areas for trucks. Loading/unloading areas could be located 100 feet from the nearest residences. Thus, point source noise levels associated with commercial land uses could potentially expose nearby existing noise sensitive receptors to excessive noise levels that violate the City Noise Ordinance and mitigation would be required to reduce these impacts.

The Third and Pacific Block would include residential uses above the commercial uses described above. The proposed residential uses could also be exposed to intermittent levels of up to 90 dBA, 50 feet from the source as a result of the commercial activities; therefore, mitigation would be required to reduce these impacts for proposed receptors as well.

Relocation of the park would place it in closer proximity to the residential uses that are south of Ocean Boulevard (approximately 150 feet away). While there may be periodic events in the park that generate noise, the park would not generally generate noise that would impact sensitive users. This impact would be less than significant.

Mitigation Measures. The following mitigation measures would be required to reduce operational noise impacts to existing and proposed receptors to a less than significant level.

Noise-2(a) **Loading Areas.** The applicant shall submit site plans to the Department of Development Services showing that all loading and unloading areas would be oriented away from existing sensitive receptors and/or shielded by the proposed buildings such that the line-of-sight would be broken.

Noise-2(b) **Sound-Rated Windows and Glass Doors Near Commercial Uses.** The applicant shall install sound-rated windows and sliding glass doors on all residential units that are within 50 feet of commercial uses. Windows shall be at least STC 35 to ensure that commercial activities do not result in interior noise levels exceeding 35 dBA when the windows are closed.

Significance After Mitigation. The Downtown Plan EIR determined that operation associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would be required to reduce impacts to a less than significant level.

CEQA Checklist Threshold	*Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.*
Quantitative Threshold	*80 VdB for residences and buildings where people normally sleep. 100 VdB for damage to fragile buildings (LBMC 8.80.200(g); Federal Transit Administration, May 2006).*

Impact N-3 Construction-activities associated with the proposed project could generate ground-borne vibration. The Downtown Plan EIR and Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to construction-generated vibration would be significant and unavoidable. The proposed project would contribute to this impact and construction-related vibration would therefore be a Class I, *significant and unavoidable* impact.

As discussed in the Downtown Plan EIR, adoption of the Downtown Plan could subject nearby residents to excessive levels of vibration. The Downtown Plan EIR includes Mitigation Measure Noise-2(a), which requires that the City review all construction projects for potential vibration-generating activities from demolition, excavation, pile–driving, and construction within 100 feet of existing structures and require site-specific vibration studies to be conducted by a qualified structure engineer in order to determine the area of impact and identify appropriate mitigation measures. Mitigation Measure Noise-2(b) requires that construction near schools that generates vibration exceeding the "vibration perception threshold" be scheduled at a time when school is not in session. Because the nearest school, Edison Elementary School is 2,250 feet northwest of the project site, Noise-2(b) would not be required for the proposed project.

The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to vibration would be significant and unavoidable despite implementation of mitigation measures if demolition occurs by implosion. The Downtown Plan EIR recommended mitigation requiring the development and approval of a Vibration Control Plan to protect human health and adjacent buildings if demolition occurs by implosion.

Project construction activities would result in vibration that may be felt on properties in the immediate vicinity of the project site, as commonly occurs with construction projects. Table 4.5-8 identifies various vibration velocity levels for different types of construction equipment. Pile-driving would not be required for the proposed project. Project construction would likely involve the use of bulldozers and jackhammers on the project site for all building elements. Additionally, loaded trucks carrying construction materials would operate on the project site and some surrounding streets during construction.

Table 4.5-8
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB					
	10 Feet	40 Feet	75 Feet	100 Feet	200 Feet	300 Feet
Large Bulldozer	97	79	73	69	60	55
Loaded Trucks	93	77	71	68	59	54
Jackhammer	87	71	65	61	52	47
Small Bulldozer	66	49	43	40	31	26

Source: FTA, 2006.

None of the proposed project components would require use of a large bulldozer within 40 feet of an existing or proposed structure that would include residential uses. Therefore, vibration levels would not exceed the vibration threshold established by the FTA of 80 VdB for residences and buildings where people normally sleep. No new impact would occur and impacts would be less than significant.

As described above, impacts related to vibration would be significant and unavoidable despite implementation of mitigation measures if demolition of the former Courthouse occurs by implosion. Implosion is not included in the vibration estimates shown in Table 4.5-8 above. The proposed project includes the demolition of the former Courthouse, as well as other existing structures. Therefore, impacts would be significant and unavoidable.

Mitigation Measures. Along with the mitigation required by the Downtown Plan EIR, the following mitigation would be required to reduce impacts from the demolition of the former Courthouse to the extent feasible.

Noise-3 **Vibration Control Plan.** If demolition occurs by implosion, the City shall approve a Vibration Control Plan that protects public health and adjacent buildings, and includes:

- A site-specific estimate of the potential zones of vibration perceptibility and building damage;
- A pre-construction survey to assess the foundations and facades of buildings within the damage zone;
- A post-construction survey to assess damage, if any, caused by implosion; and
- A statement that all demolition-related damage shall be repaired.

Significance After Mitigation. The proposed project would contribute to the significant and unavoidable impact as described in the Long Beach Courthouse Demolition Project Draft EIR. Therefore, project impacts would be significant and unavoidable.

CEQA Checklist Threshold	*Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.*
Quantitative Threshold	*80 VdB for residences and buildings where people normally sleep. 100 VdB for damage to fragile buildings (LBMC 8.80.200(g); Federal Transit Administration, May 2006).*

Impact N-4 Operational activities associated with the proposed project could generate ground-borne vibration. The Downtown Plan EIR determined that impacts related to operational vibration would be less than significant. The proposed project would not result in additional impacts beyond those determined in the Downtown Plan EIR and operational vibration would therefore be a Class III, *less than significant* impact.

The Downtown Plan EIR determined that heavy trucks used for delivery and distribution of materials to and from commercial sites generally operate at low speeds while on the commercial site; and the operational characteristics of mechanical equipment and distribution methods used for general commercial land uses would not result in excessive ground-borne vibration levels.

The types of tenants that would occupy commercial spaces and the number of trucks that would visit these facilities on any given day were not known at the time the Downtown Plan was analyzed in the Downtown Plan EIR. However, it was anticipated that the types of commercial uses proposed for the Downtown Plan Area would not involve large-scale trucking operations. Linscott, Law, and Greenspan, Engineers estimates that the project would accommodate approximately 83 trucks per day. These truck trips would be distributed throughout the project area to the multiple proposed commercial uses. Therefore, operational noise associated with heavy trucks would not generate a substantial level of ground-borne vibration at any sensitive receptors and no new impacts would result from the proposed project.

Mitigation Measures. No mitigation would be required.

Significance After Mitigation. Impacts would be less than significant without mitigation. The Downtown Plan EIR determined that operational vibration impacts would be less than significant. Impacts would be less than significant (Class III).

CEQA Checklist Threshold	*A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*
Quantitative threshold	*See Table 4.5-5 above.*

Impact N-5 **Traffic generated by the proposed project is not anticipated to result in noise level increases along roadways in the project vicinity. Traffic-related increases in noise would not exceed the City's threshold at sensitive receptors along roadway segments. The Downtown Plan EIR also determined that traffic-generated noise increases resulting from the Downtown Plan would be less than significant. This is a Class III, *less than significant* impact.**

The Downtown Plan EIR determined that traffic-generated noise increases resulting from the Downtown Plan would be less than significant. The traffic noise level increases directly attributable to the project were estimated to be no greater than 1 dBA, which would not be perceptible and would be less than the 3-dBA significance criterion.

Development of the proposed project would increase the number of vehicle trips to and from the site, which would increase traffic noise on surrounding roadways within the vicinity of the project site. The *Transportation Impact Analysis* prepared for the proposed project (Shane Green, personal communication, June 2015; see Appendix E) determined the existing and future traffic levels on Third Street, Broadway, Ocean Boulevard, Magnolia Avenue, Chestnut Avenue, Cedar Avenue, Pacific Avenue, and First Street, as well as the traffic levels expected as a result of the proposed project. These traffic levels were used to determine existing and potential future sound levels at existing sensitive receptors along these roadways, including residences and the First Congregational Church of Long Beach, located at 241 Cedar Avenue.

These estimates are based on noise modeling using the FHWA Traffic Noise Model. The fleet mix for vehicle trips along the roadways was estimated at between 86 to 95% passenger vehicles, 2.5% light- and medium-duty trucks, 2.5% heavy-duty trucks, and between 0 to 9% buses. This estimate is considered reasonable for these roadways based on the urban/ downtown nature of the area, as well as the actual bus schedule. The sensitive receptors closest to the roadways were selected to determine the highest noise levels that would occur at receptors located along these roadways. Receptors that were not modeled would experience the similar or lower increases in noise than those receptors that were modeled based on their proximity to the roadways. Table 4.5-9 shows estimates of exterior noise level increases that would result from project-related traffic increases on local roadways within the immediate vicinity of the project site and Figure 4.5-2 shows the locations of the modeled receptors.

Table 4.5-9
Pre-Project and Post-Project Traffic Noise

Receptor Location	Projected Noise Level (dBA CNEL)		Change In Noise Level (dBA CNEL)	Significance Threshold (dBA)[4]	Significant Impact?
	Existing[1]	Existing Plus Project[3]			
Broadway btwn Chestnut and Magnolia	69.3	69.9	0.6	3	No
Broadway NE Corner of Broadway and Magnolia	71.9	72.4	0.5	3	No
Broadway NW Corner of Chestnut and Broadway	69.2	70.4	1.2	3	No
Cedar - Church btwn Third and Broadway	65.8	70.1	4.3	3	No[5]
Chestnut btwn Third and Broadway	65.3	67.2	1.9	3	No
Chestnut E of Chestnut btwn Third and Broadway	64.1	66.6	2.5	3	No
Magnolia btwn Third and Broadway	70	70.7	0.1	3	No
Ocean btwn Cedar and Chestnut	71.8	71.9	0.1	3	No
Ocean btwn Chestnut and Magnolia	70.3	70.3	0	3	No
Ocean NE Corner of Ocean and Chestnut	71.9	72	0.1	3	No
Ocean NW Corner of Ocean and Cedar	69.2	69.3	0.1	3	No
Ocean NW Corner of Ocean and Pacific	71.8	71.8	0	3	No
Pacific E of Pacific btwn Third and Broadway	68.4	69.0	0.6	3	No
Pacific NE Corner of Pacific and Broadway	71.1	71.5	0.4	3	No
Third btwn Cedar and Chestnut	69.3	70.1	0.8	3	No
Third btwn Magnolia and Chestnut	67.5	68.3	0.8	3	No
Third E of Pacific	68	68.5	0.5	3	No
Third NE Corner of Pacific and Cedar	67.9	69.4	1.5	3	No
Third NE Corner of Third and Magnolia	69.1	69.8	0.7	3	No
Third North of Third West of Pacific	69.5	70.4	0.9	3	No
Third NW Corner of Third and Cedar	70.2	71.2	1	3	No

Table 4.5-9
Pre-Project and Post-Project Traffic Noise

Receptor Location	Projected Noise Level (dBA CNEL)		Change In Noise Level (dBA CNEL)	Significance Threshold (dBA)[4]	Significant Impact?
	Existing[1]	Existing Plus Project[3]			
Third NW Corner of Third and Chestnut	70.5	71.5	1	3	No
Third NW Corner of Third and Magnolia	70.9	71.6	0.7	3	No
Third NW Corner of Third and Pacific	70.9	71.6	0.7	3	No
Third SE of Chestnut and Pacific Intersection	67.4	68.3	0.9	3	No
Third SW Corner of Third and Cedar	69.4	70.4	1	3	No
Third SW Corner of Third and Chestnut	68.3	69.4	1.1	3	No

1. Existing noise is based on measured noise, except where measurements were not taken, in which case noise estimates based on U.S. Department of Transportation, Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5 were used.

2. Existing noise reflects modeled estimates based on traffic from roadways as determined in the Traffic Impact Analysis. Refer to Appendix E for the traffic analysis and Appendix D for the estimates from the FHWA Traffic Noise Model Version 2.5.

3. Existing Plus Project noise reflects estimates generated using FHWA Traffic Noise Model Version 2.5.

4. As shown in Table 4.5-5, an increase of 5 dBA would be considered significant when existing ambient noise is less than 60 dBA and an increase of 3 dBA would be considered significant when existing ambient noise is greater than 60 dBA.

5. The noise level at the First Congregational Church of Long Beach could increase by as much as 4.3 dBA during peak-hour traffic. However, the church would not be occupied during peak-hour traffic on weekday mornings or evenings.

Existing plus project traffic volumes would increase exterior noise levels by less than 3 dBA for all existing residences, which are represented by the locations listed in Table 4.5-9. Additional receptors are located along the roadways included in Table 4.5-9 and throughout the buildings, which extend further back from the roadways, and would also not experience exterior noise level increases greater than 3 dBA. Therefore, impacts from project-related traffic noise increases would be less than significant.

Future noise levels were also calculated using the FHWA Traffic Noise Model. In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed project, the status of other known development projects (cumulative projects) in the area was researched, as described in Section 4.6, *Transportation and Traffic*. Eleven cumulative projects within a two-mile radius of the project site are located in the City of Long Beach. These cumulative projects have either been built, but are not yet fully occupied, or are being processed for approval and have been included as part of the cumulative background setting. Noise levels were estimated for a scenario including only these cumulative projects and a scenario including the cumulative projects and the proposed Civic Center Project. The change in noise level that would occur as a result of the proposed project is again compared to the 3 dBA threshold described in Table 4.5-5. Exterior noise levels are shown in Table 4.5-10.

Table 4.5-10
Cumulative Traffic Noise Impacts

Roadway	Projected Noise Level (dBA CNEL)			Change In Noise Level (Future Plus Project - Existing) (dBA CNEL)	Project Contribution to Change in Noise Level (Future Plus Project - Future) (dBA CNEL)	Significance Threshold (dBA)[4]	Significant?
	Existing[1]	Future	Future Plus Project[3]				
Broadway btwn Chestnut and Magnolia	69.3	69.9	71	1.7	1.1	3	No
Broadway NE Corner of Broadway and Magnolia	71.9	72.4	73.4	1.5	1	3	No
Broadway NW Corner of Chestnut and Broadway	69.2	69.5	70.8	1.6	1.3	3	No
Cedar - Church btwn Third and Broadway	65.8	66.1	70.1	4.3	4	3	No[5]
Chestnut btwn Third and Broadway	65.3	65.5	66.7	1.4	1.2	3	No
Chestnut E of Chestnut btwn Third and Broadway	64.1	64.3	65.9	1.8	1.6	3	No
Magnolia btwn Third and Broadway	70	70.4	70.9	0.9	0.5	3	No
Ocean btwn Cedar and Chestnut	71.8	72.2	72.2	0.4	0	3	No
Ocean btwn Chestnut and Magnolia	70.3	70.9	70.8	0.5	-0.1	3	No
Ocean NE Corner of Ocean and Chestnut	71.9	72.3	72.3	0.4	0	3	No

Table 4.5-10
Cumulative Traffic Noise Impacts

Roadway	Projected Noise Level (dBA CNEL)			Change In Noise Level (Future	Project Contribution to	Significance Threshold	Significant?
Ocean NW Corner of Ocean and Cedar	69.2	69.6	69.6	0.4	0	3	No
Ocean NW Corner of Ocean and Pacific	71.8	71.6	72.5	0.7	0.9	3	No
Pacific E of Pacific btwn Third and Broadway	68.4	69.0	69.3	0.9	0.3	3	No
Pacific NE Corner of Pacific and Broadway	71.1	71.6	71.9	0.8	0.3	3	No
Third btwn Cedar and Chestnut	69.3	69.6	70.5	1.2	0.9	3	No
Third btwn Magnolia and Chestnut	67.5	67.7	68.6	1.1	0.9	3	No
Third E of Pacific	68.0	68.3	68.8	0.8	0.5	3	No
Third NE Corner of Pacific and Cedar	67.9	68.3	69.7	1.8	1.4	3	No
Third NE Corner of Third and Magnolia	69.1	69.5	70.1	1	0.6	3	No
Third North of Third West of Pacific	69.5	70.0	70.8	1.3	0.8	3	No
Third NW Corner of Third and Cedar	70.2	70.5	71.6	1.4	1.1	3	No
Third NW Corner of Third and Chestnut	70.5	70.8	71.7	1.2	0.9	3	No

Table 4.5-10
Cumulative Traffic Noise Impacts

Roadway	Projected Noise Level (dBA CNEL)			Change In Noise Level (Future	Project Contribution to	Significance Threshold	Significant?
Third NW Corner of Third and Magnolia	70.9	71.2	71.9	1	0.7	3	No
Third NW Corner of Third and Pacific	70.9	71.4	72.0	1.1	0.6	3	No
Third SE of Chestnut and Pacific Intersection	67.4	67.6	68.5	1.1	0.9	3	No
Third SW Corner of Third and Cedar	69.4	69.7	70.7	1.3	1.0	3	No
Third SW Corner of Third and Chestnut	68.3	68.5	69.4	1.1	0.9	3	No

1. Existing noise is based on noise estimates from Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5.

2. Existing noise reflects modeled estimates based on traffic from roadways as determined in the Traffic Impact Analysis. Refer to Appendix E for the traffic analysis and Appendix D for the estimates from the FHWA Traffic Noise Model Version 2.5.

3. Existing Plus Project noise reflects estimates generated using FHWA Traffic Noise Model Version 2.5.

4. As shown in Table 4.5-5, an increase of 5 dBA would be considered significant when existing ambient noise is less than 60 dBA and an increase of 3 dBA would be considered significant when existing ambient noise is greater than 60 dBA.

5. The noise level at the First Congregational Church of Long Beach could increase by as much as 4.3 dBA during peak-hour traffic. However, the church would not be occupied during peak-hour traffic on weekday mornings or evenings.

Similar to the existing and existing plus project conditions, the project's contribution to the future plus project change in noise levels would only exceed the 3 dBA increase at the First Congregational Church of Long Beach. However, as described above, this increase in noise was determined based on peak hour traffic, which occurs on weekday mornings and evenings. Services are held at the First Congregational Church of Long Beach on weekends; therefore the church would not be occupied during peak-hour traffic. Impacts from project-related traffic noise increases under future conditions would be less than significant.

Mitigation Measures. Because impacts would be less than significant, no mitigation is required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

CEQA Checklist Threshold	*Exposure of persons to or generation of noise levels in exceed of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*
Quantitative threshold	*See Table 4.5-5 above.*

Impact N-6 **Noise levels at proposed sensitive receptors may exceed City thresholds for interior and exterior noise. The Downtown Plan EIR determined that the Downtown Plan would result in a Class II impact, potentially significant unless mitigation is incorporated, as it would allow sensitive receptors to be located in areas exceeding the City's noise standards. The Downtown Plan required site-specific noise analysis and mitigation for individual projects. The proposed project would contribute to this impact and such mitigation would be required. This is a Class II, *significant but mitigable* impact.**

The Downtown Plan EIR determined that because the Downtown Plan would allow the location of sensitive receptors in areas that would exceed the standards identified for the applicable land use by the Noise Element of the Long Beach General Plan, impacts would be significant but mitigable. The project would be subject to the mitigation measure identified in the EIR, specifically Mitigation Measure Noise-5, which requires a site-specific noise study and mitigation in areas where new residential development would be exposed to noise levels exceeding 65 dBA. This noise study requirement has been met in this EIR and is described below.

The *Transportation Impact Analysis* prepared for the proposed project (Shane Green, personal communication, June 2015; see Appendix E) determined the traffic levels expected as a result of the proposed project. Traffic is the largest source of noise in the project area; therefore, these traffic levels were used to determine potential sound levels at proposed receptors, including proposed residences and the proposed library location (Figure 4.5-2 shows the locations of the modeled receptors). The sensitive receptors that would be closest to the roadways were selected to determine the highest noise levels that would occur at receptors located along these roadways. Receptors that were not modeled would experience similar or lower increases in noise level than those receptors that were modeled based on their proximity to the roadways.

Table 4.5-11 shows exterior and interior noise levels that would be experienced at the proposed residences and library. As shown, exterior noise levels would exceed 65 dBA at all proposed receptors adjacent to roadways. As described in Section 4.5.3(a), typical residential construction in California provides approximately 15 dBA of noise reduction from exterior noise sources with windows partially open, and approximately 20 to 25 dBA of noise reduction with windows kept closed (DOT, 2009).

Table 4.5-11
Projected Noise Levels
for Proposed Receptors

Roadway	Projected Noise Level
Future Library NW corner Broadway and Pacific	71.6
Future Library on Broadway btwn Pacific and Cedar	72.4
Future Library on Pacific btwn Broadway and First	68.6
NE corner Broadway and Chestnut	69.4
E of Cedar btwn Broadway and Third	69.9
NE corner Broadway and Cedar	70.5
North of Broadway btwn Pacific and Cedar	68.3
NW corner Pacific and Broadway	72.0
SE Corner Third and Cedar	70.1
SW Corner Third and Pacific	70.4
W of Pacific btwn Third and Broadway	68.7

Where exterior noise levels are below 70 dBA Ldn, interior noise can be mitigated with standard wall and window construction, and the inclusion of mechanical forced-air ventilation to allow occupants the option of maintaining windows closed to control noise, as required by Mitigation Measure Noise-6(a). Where exterior noise levels exceed 70 dBA Ldn, noise-sensitive uses would not normally be able to meet the 45-dBA Ldn interior standard simply through typical construction methods. Thus, noise-sensitive uses, including the proposed library and the residences located adjacent to Broadway, Pacific Avenue, Third Street, and Cedar Avenue, would require additional noise reduction measures described in Mitigation Measure Noise-6(b).

Mitigation Measures. The following mitigation measures would be required to reduce impacts to future receptors to a less than significant level. These mitigation measures include features that were recommended in Mitigation Measure Noise-5 of the Downtown Plan EIR.

Noise-6(a) **Mechanical Ventilation.** The applicant shall provide mechanical ventilation in all residential units proposed along Broadway, Pacific Avenue, Third Street, Cedar Avenue, Chestnut Avenue, and First Street, so that windows can remain closed at the choice

of the occupants to maintain interior noise levels below ~~45~~ 35 dBA Ldn.

Noise-6(b) **Sound-Rated Windows and Sliding Glass Doors.** The applicant shall install sound-rated windows and sliding glass doors on the residential units that face Broadway, Pacific Avenue, Third Street, and Cedar Avenue, as well as the proposed library, such that interior noise levels would not exceed ~~45~~ 35 dBA Ldn when the windows are closed.

Significance After Mitigation. With implementation of mitigation measures Noise-6(a) and Noise-6(b), impacts to interior noise levels for proposed residences and the proposed library would be reduced to less than significant levels.

c. Cumulative Impacts. The Downtown Plan Area, which surrounds the project site, is the geographic extent for cumulative impacts associated with noise. Cumulative development in the City of Long Beach would result in the development of eleven projects also served by the larger roadway network surrounding the project site, as described in Section 4.6, *Traffic and Transportation*. As shown in Table 4.5-10, cumulative impacts along the analyzed surrounding roadway network would contribute to further exceedance of the exterior noise standard over time. Cumulative traffic noise increases from project-generated traffic along the analyzed road segments would range from 0.0 to 4.2 dBA and in some cases the project would result in a decrease in traffic noise compared to future without project traffic, due to the extension of existing roadways.

The operational noise generation of cumulative projects is not known, but because future uses would be similar to the existing uses in the area, cumulative projects would not create cumulative operational noise impacts in combination with the proposed project. All future development would be required to comply with the City's noise and vibration standards, which restrict the level of noise and vibration that can be generated near a property according to its designated use. Cumulative impacts would be less than significant.

4.6 TRANSPORTATION AND TRAFFIC

This section analyzes the potential for the proposed project to cause significant impacts to the existing traffic and transportation facilities in the City of Long Beach. The analysis in this section is based on a Traffic Impact Analysis (TIA) prepared for the project by Linscott, Law & Greenspan, Engineers (LLG), in July 2015. The full TIA is provided in Appendix E.

4.6.1 Setting

a. Existing Street System. The principal local network of streets serving the project site includes Third Street, Broadway, Ocean Boulevard, First Street, Magnolia Avenue, Chestnut Avenue, Cedar Avenue, and Pacific Avenue. The following discussion provides a brief synopsis of these streets. The descriptions are based on an inventory of existing roadway conditions.

Third Street. Third Street is a two-lane, one-way roadway (westbound travel only) oriented in the east-west direction. Parking is generally permitted on both sides of the roadway, except for a segment between Chestnut Avenue and Cedar Avenue. A separated/protected bike lane is also present on Third Street and limits parking on the street. The posted speed limit is 25 miles per hour (mph). A bike The intersection of Third Street and Pacific Avenue is controlled by a traffic signal.

Broadway. Broadway is a two-lane, one-way divided roadway (eastbound travel only) oriented in the east-west direction. West of Magnolia Avenue, parking is restricted on both the north and south side of the roadway. West of Pine Avenue, parking is generally permitted on the north side of the roadway and restricted on the south side. East of Pine Avenue, parking is permitted on both sides of the roadway. A separated/protected bike lane is also present on Broadway and limits parking on the street. The posted speed limit on Broadway is 30 mph. The intersections of Broadway at Magnolia Avenue, Chestnut Avenue, Cedar Avenue, and Pacific Avenue are controlled by traffic signals.

Ocean Boulevard. Ocean Boulevard is primarily a six-lane, divided roadway oriented in the east-west direction. West of Magnolia Avenue, Ocean Boulevard is a seven-lane, divided roadway, with three travel lanes in the eastbound direction and four travel lanes in the westbound direction. Parking is permitted on both sides of the roadway. The posted speed limit on Ocean Boulevard is 30 mph. The intersections of Ocean Boulevard at Magnolia Avenue, Chestnut Avenue, and Pacific Avenue are controlled by traffic signals. The intersection of Ocean Boulevard at Cedar Avenue is controlled by a one-way stop.

First Street. First Street is primarily a two-lane, divided roadway oriented in the east-west direction. Parking is not permitted on both sides of the roadway. The posted speed limit on First Street is 25 mph. The intersection of Pacific Avenue at First Street is controlled by a traffic signal.

Magnolia Avenue. Magnolia Avenue is primarily a four-lane, divided roadway oriented in the north-south direction. South of Ocean Boulevard, Magnolia Avenue is a six-lane, divided roadway. North of Third Street, Magnolia Avenue is a two-lane, divided roadway. Parking is permitted on both sides of the roadway north of Broadway. South of Broadway, parking is

generally not permitted on both sides of the roadway, except for a segment between Broadway and Ocean Avenue where parking is permitted on the west side of the roadway. North of Ocean Boulevard, the posted speed limit is 25 mph; south of Ocean Boulevard, the posted speed limit is 45 mph. The intersections of Magnolia Avenue at Broadway and Ocean Boulevard are controlled by traffic signals.

Chestnut Avenue. Chestnut Avenue is primarily a two-lane, undivided roadway oriented in the north-south direction. Between Third Street and Broadway, Chestnut is a two-lane, divided roadway. Between Broadway and Ocean Boulevard, Chestnut is a three-lane, undivided roadway. Parking is permitted on both sides of the roadway, north of Ocean Boulevard. Parking is not permitted on both sides of the roadway south of Ocean Boulevard. The posted speed limit on Chestnut Avenue is 25 mph. The intersections of Chestnut Avenue at Broadway and Ocean Boulevard are controlled by traffic signals.

Cedar Avenue. Cedar Avenue is a primarily two-lane, undivided roadway oriented in the north-south direction. South of Broadway and north of Ocean Boulevard, Cedar Avenue is a two-lane, divided roadway. Parking is permitted on both sides of the roadway, north of Broadway. Parking is not permitted on both sides of the roadway, south of Broadway. The posted speed limit on Cedar Avenue is 25 mph. The intersection of Cedar Avenue at Broadway is controlled by a traffic signal. The intersection of Cedar Avenue at Ocean Boulevard is controlled by a one-way stop.

Pacific Avenue. Pacific Avenue is primarily a four-lane, divided roadway oriented in the north-south direction. South of Ocean Boulevard, Pacific Avenue is a two-lane, undivided roadway. Parking is not permitted on either side of the roadway within the vicinity of the project site. The posted speed limit on Pacific Avenue is 25 mph. The intersections of Pacific Avenue at Third Street, Broadway, First Street and Ocean Boulevard are controlled by traffic signals.

b. Existing Public Transit. The Los Angeles County Metropolitan Transportation Authority and Long Beach Transit (LBT) provide public transit services in the vicinity of the proposed project. In the vicinity of the project, the Metro Blue Line currently serves Pacific Avenue. The Los Angeles Department of Transportation (LADOT) Commuter Express 142 currently serves Ocean Boulevard. In addition to the Metro routes, LBT Route 151 serves Broadway, Third Street, and Pacific Avenue; Route 121 serves Ocean Boulevard and Pacific Avenue; LBT Route 181, 191 and 192 serve Broadway, Third Street, and Magnolia Avenue; LBT Route 21, 22, 61, and Passport serve Pacific Avenue. LBT bus stops are located throughout Downtown and include the downtown Long Beach Transit Mall on First Street between Pacific Avenue and Long Beach Boulevard, in proximity to the project site. From the westerly edge of the project site, the Long Beach Transit Mall is located directly east of the civic center block across Pacific Avenue. The TIA in Appendix E contains figures that illustrate Long Beach Transit routes and bus stops within the vicinity of the project site.

c. Existing Bicycle Master Plan and Bicycle Facilities. The City of Long Beach promotes bicycling as a means of mobility and a way in which to improve the quality of life within its community. The Bicycle Master Plan recognizes the needs of bicycle users and aims to create a complete and safe bicycle network throughout the City. Existing and proposed City of Long Beach Bicycle Facilities in the vicinity of the project site are shown in the TIA in Appendix E.

d. Existing Intersection Conditions. Existing a.m. and p.m. peak hour operating conditions for the key signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology for signalized intersections.

Intersection Capacity Utilization (ICU) Method of Analysis. In conformance with City of Long Beach and Los Angeles County Congestion Management Program (CMP) requirements, existing weekday peak hour operating conditions for the key signalized study intersections were evaluated using the ICU method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. The ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

Per Los Angeles County CMP requirements, the ICU calculations use a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and dual left turn capacity of 2,880 vph. A clearance interval is also added to each Level of Service (LOS) calculation. Per City of Long Beach requirements, clearance intervals are based on the number of phases in the intersection and whether the left turning movements are all fully protected or whether some of them are permitted with other left-turn movements being protected. Table 4.6-1 shows the clearance intervals used in the analysis of the key study intersections within the City of Long Beach.

Table 4.6-1
City of Long Beach Clearance Intervals

Number of Signal Phases	Left-turn Phasing Type	Clearance Interval (Percent)
2	Permitted	10%
3	Protected and Permitted	12%
3	Fully Protected	15%
4	Protected and Permitted	14%
4	Fully Protected	18%

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.

The ICU value translates to a LOS estimate, which is a relative measure of the intersection performance. The six qualitative categories of LOS have been defined along with the corresponding ICU value range and are shown in Table 4.6-2. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements.

Table 4.6-2
Level of Service Criteria for Signalized Intersections

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	LOS Description
A	<0.600	**Excellent**. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601–0.700	**Very Good**. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701–0.800	**Good**. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801–0.900	**Fair**. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901–1.000	**Poor**. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	**Failure**. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.

Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections). The 2000 HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the key unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay is measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a LOS estimate, which is a relative measure of the intersection performance. The six qualitative categories of LOS have been defined along with the corresponding HCM control delay value range, as shown in Table 4.6-3.

Table 4.6-3
Level of Service Criteria for Unsignalized Intersections

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.

Level of Service Criteria. According to the City of Long Beach, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours, or the current LOS if the existing LOS is worse than LOS D (i.e. LOS E or F).

Existing Traffic Volumes. The ten key study intersections selected for evaluation in the TIA provide local access to the project study area. They include the following:

1. *Magnolia Avenue at Broadway*
2. *Chestnut Avenue at Broadway*
3. *Cedar Avenue at Broadway*
4. *Pacific Avenue at Broadway*
5. *Magnolia Avenue at Ocean Boulevard*
6. *Chestnut Avenue at Ocean Boulevard*
7. *Cedar Avenue at Ocean Boulevard*
8. *Pacific Avenue at Ocean Boulevard*
9. *Pacific Avenue at Third Street*
10. *Pacific Avenue at First Street*

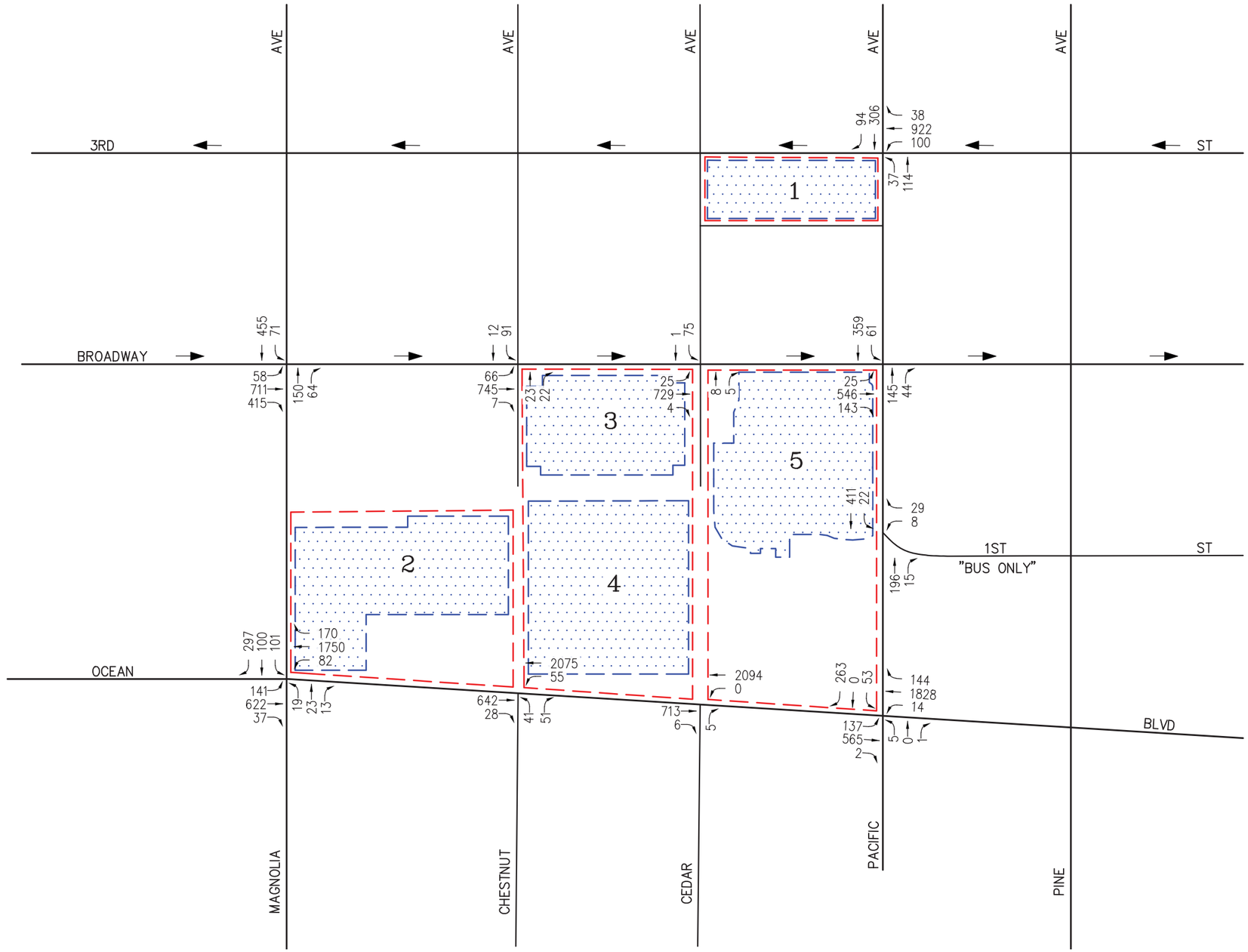
These ten key study intersections have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of potential project-related traffic will pass through each of these intersections, and their analysis will reveal the expected impact associated with the proposed project.

Existing weekday peak hour traffic volumes for the ten key study intersections evaluated in the TIA were obtained from manual turning movement counts conducted by National Data and Surveying Services (NDS) in March 2015.

Figures 4.6-1a and 4.6-1b illustrate the existing weekday a.m. and p.m. peak hour traffic volumes at the ten key study intersections evaluated in the TIA, respectively. Figures 4.6-2a and 4.6-2b show a.m. and p.m. peak hour traffic volumes associated with the current Civic Center land uses.

Existing Level of Service Results. Table 4.6-4 summarizes the existing peak hour service level calculations for the ten (10) key study intersections based on existing traffic volumes and current street geometrics. Review of Table 4.6-4 indicates that all ten (10) key study intersections currently operate at LOS C or better during the weekday a.m. and p.m. peak hours.

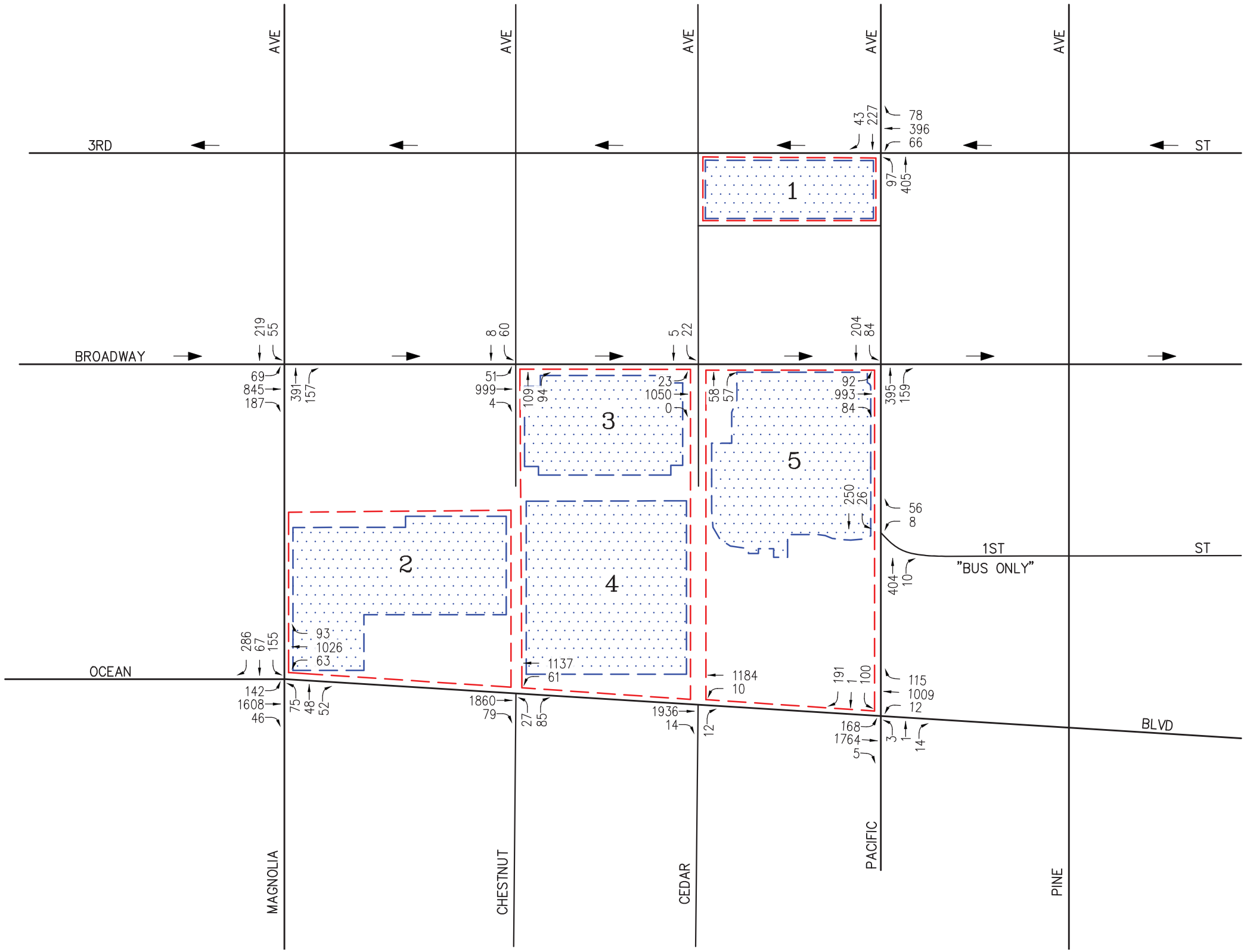
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Existing A.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-1a



KEY

= PROJECT AREA
= PARKING LOCATIONS

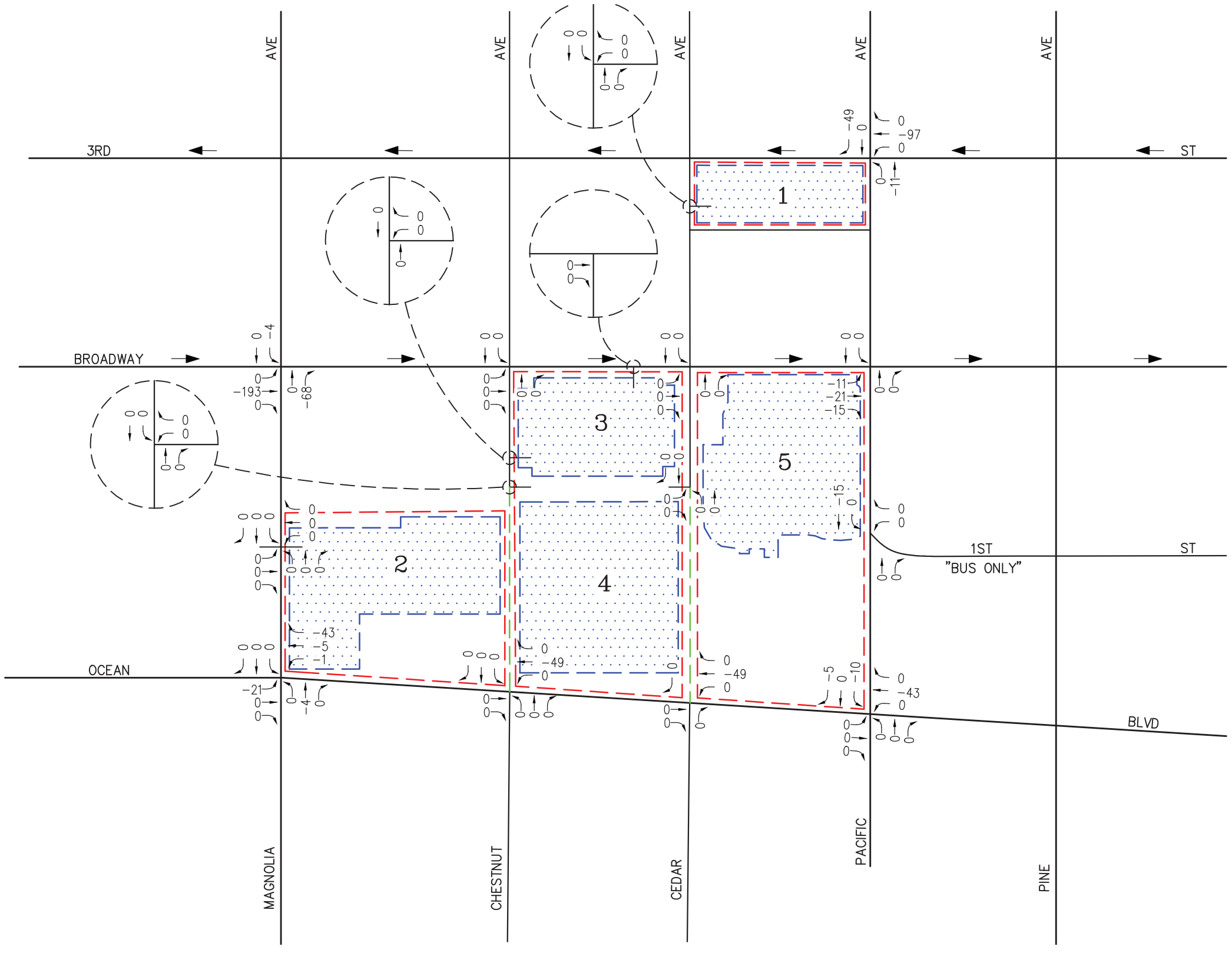
1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

N

Existing P.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

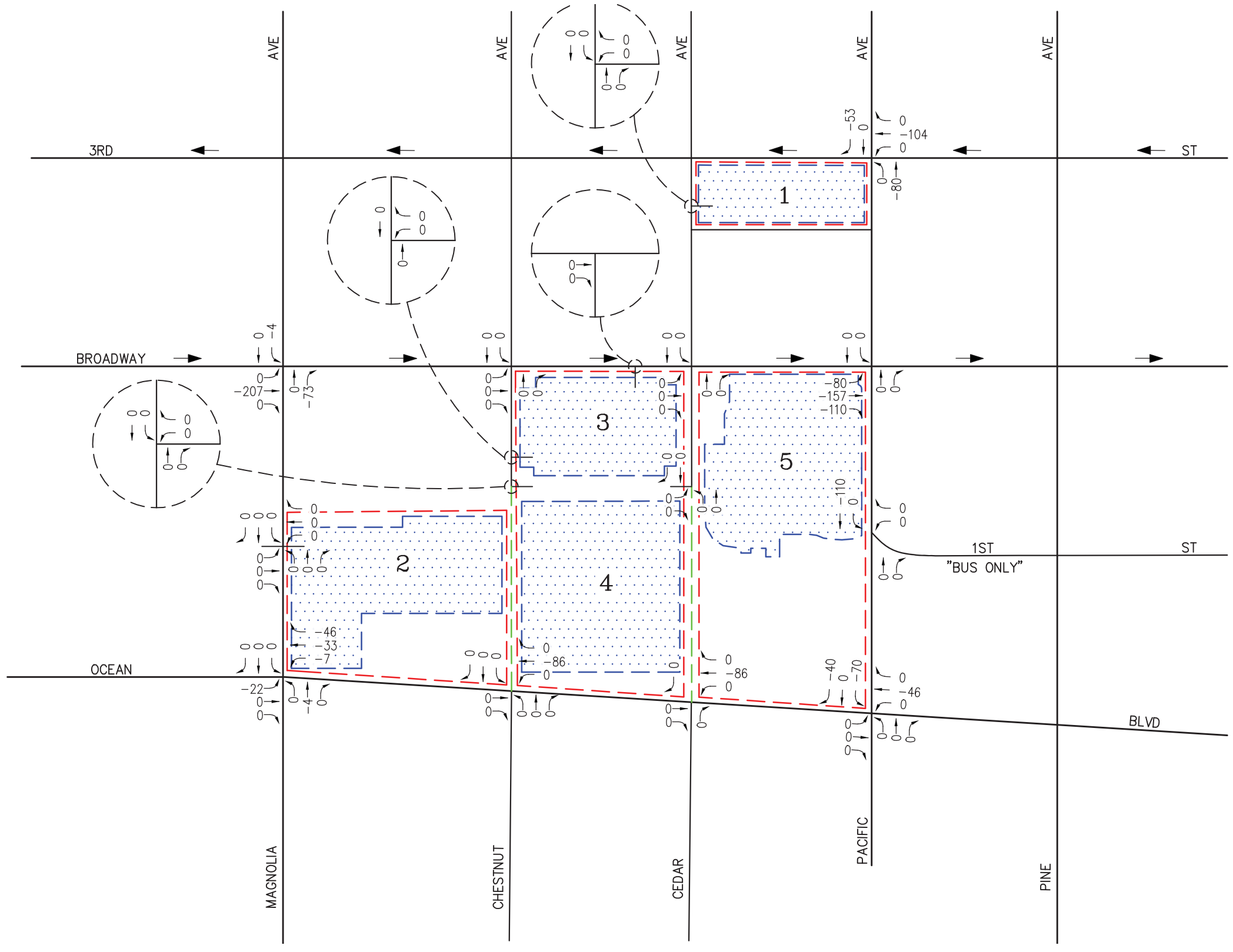
Figure 4.6-1b



A.M. Peak Hour Existing
Civic Center Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-2a



P.M. Peak Hour Existing
Civic Center Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-2b

Table 4.6-4
Existing Peak Hour Levels of Service

Key Intersection	Control Type	Time Period	ICU/HCM	LOS
1. Magnolia Avenue at Broadway	2-Phase Traffic Signal	a.m. p.m.	0.502 0.570	A A
2. Chestnut Avenue at Broadway	3-Phase Traffic Signal	a.m. p.m.	0.432 0.553	A A
3. Cedar Avenue at Broadway	3-Phase Traffic Signal	a.m. p.m.	0.432 0.531	A A
4. Pacific Avenue at Broadway	3-Phase Traffic Signal	a.m. p.m.	0.478 0.663	A B
5. Magnolia Avenue at Ocean Boulevard	3-Phase Traffic Signal	a.m. p.m.	0.770 0.730	C C
6. Chestnut Avenue at Ocean Boulevard	2-Phase Traffic Signal	a.m. p.m.	0.564 0.595	A A
7. Cedar Avenue at Ocean Boulevard	One-Way Stop	a.m. p.m.	9.7 s/v 17.2 s/v	A C
8. Pacific Avenue at Ocean Boulevard	6-Phase Traffic Signal	a.m. p.m.	0.689 0.559	B A
9. Pacific Avenue at Third Street	3-Phase Traffic Signal	a.m. p.m.	0.569 0.430	A A
10. Pacific Avenue at First Street	3-Phase Traffic Signal	a.m. p.m.	0.302 0.336	A A

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.
Notes:
ICU = Intersection Capacity Utilization
s/v = seconds per vehicle (delay)
LOS = Level of Service, please refer to Table 4.6-2 and Table 4.6-3 for the LOS definitions

e. Regulatory Setting.

Congestion Management Program (CMP). In Los Angeles County, the CMP uses ICU intersection analysis methodology to analyze its operations. In June 1990, the passage of the Proposition 111 gas tax increase required urbanized areas in the State with a population of 50,000 or more to adopt a CMP. Metro is the Congestion Management Agency (CMA) for the County. Metro has been charged with the development, monitoring, and biennial updating of Los Angeles County's CMP. The Los Angeles County CMP is intended to address the impact of local growth on the regional transportation system. The CMP Highway System includes specific roadways, including State highways, and CMP arterial monitoring locations/intersections. The CMP is also the vehicle for proposing transportation projects that are eligible to compete for the State gas tax funds.

City of Long Beach General Plan. It is the stated goal of the City to maintain or improve the current ability to move people and goods to and from activity centers while reinforcing the quality of life in their neighborhoods. This goal is supported by the objectives to: (1) maintain traffic and transportation LOS at LOS D, (2) accommodate reasonable, balanced growth, and (3) maintain or enhance our quality of life. The following specific Mobility of People (MOP) policies are included in the Mobility Element of the General Plan.

MOP Policy 1-1	*To improve the performance and visual appearance of Long Beach's streets, design streets holistically using the "complete streets approach" which considers walking, those with mobility constraints, bicyclists, public transit users, and various other modes of mobility in parallel.*
MOP Policy 1-9	*Increase mode shift of transit, pedestrians, and bicycles.*
MOP Policy 1-18	*Focus development densities for residential and nonresidential uses around the eight Metro Blue Line stations within City boundaries.*
MOP Policy 4-1	*Consider effects on overall mobility and various travel modes when evaluating transportation impacts of new developments or infrastructure projects.*
MOP Policy 15-3	*Consider pickup and delivery activities associated with various land uses when approving new development, implementing projects, and improving highways, streets, and bridges.*

Long Beach Municipal Code. Chapter 21.41, Off-Street Parking and Loading requirements of the Long Beach Municipal Code (LBMC) provides parking requirements for development projects within the City. Since the proposed project involves development of new residential uses within the City, which will require adequate parking, the proposed project is subject to the requirements of Chapter 21.41 of the LBMC.

4.6.2 Previous Environmental Review

The Long Beach Downtown Plan EIR (the "Downtown Plan EIR") examined traffic impacts associated with buildout of the Downtown Plan. The Downtown Plan EIR determined that the Downtown Plan would result in significant impacts at 16 intersections and would result in a significant and unavoidable impact. The Downtown Plan EIR determined that the Downtown Plan would not result in any significant impacts related to design hazards or emergency access. For comparison purposes, the project's trip generation potential was compared to the traffic forecast associated with the development potential of the Civic Center area as evaluated in the Downtown Plan EIR Traffic Impact Analysis, dated February 4, 2010. Up to 800 residential units, 460,000 square feet (sf) of office/commercial floor area, 64,000 sf of retail space and 16,000 sf of restaurant uses were assumed and assessed for the Civic Center area in the Downtown Plan EIR traffic analysis.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not certified. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to conflicts with applicable plans would be less than significant with implementation of mitigation involving the development of a Construction Management Plan.

4.6.3 Impact Analysis

a. Methodology and Significance Thresholds.

Traffic Forecasting Methodology. In order to estimate the traffic impact characteristics of the proposed project, a multi-step process has been utilized. The first step is estimating traffic generation, which includes the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing or expected future travel patterns in the study area. The analysis assumes the future year scenario does not include roadway changes or improvements beyond those proposed by the project.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

Project Traffic Generation. Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the Ninth Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE).

Trip generation rates/equations for ITE Land Use 230: Residential Condominium/Townhouse, ITE Land Use 310: Hotel, ITE Land Use 411: City Park, ITE Land Use 590: Library, ITE Land Use 710: General Office Building, ITE Land Use 820: Shopping Center and ITE Land Use 932: High-Turnover (Sit Down) Restaurant have been applied appropriately to the existing development and proposed project uses.

As shown in Table 4.6-5, the proposed project is forecast to generate 18,582 daily trips, including 1,185 trips (795 inbound, 390 outbound) produced in the a.m. peak hour and 1,668 trips (693 inbound, 975 outbound) produced in the p.m. peak hour on a typical weekday.

For the existing land use, Table 4.6-5 shows that the existing trip generation potential of the current civic center (i.e., City Hall office tower, Main Library and Lincoln Park) totals 7,659 daily trips, with 514 trips (418 inbound, 96 outbound) produced in the a.m. peak hour and 1,116 trips (446 inbound, 670 outbound) produced in the p.m. peak hour.

Comparison of the trips generated by the proposed project to the trip generation potential of existing land uses shows that the implementation of the proposed project would result in an additional 10,923 daily trips, including 671 net a.m. peak hour trips and 552 net p.m. peak hour trips.

Table 4.6-5
Project Trip Generation Forecast

Land Use	Daily	A.M. Peak Hour			P.M. Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
Proposed Project Trip Generation							
Third and Pacific Block							
Residential	1,176	11	56	67	53	25	78
Civic Block							
City Hall and Port Building	5,347	527	72	599	92	447	539
Lincoln Park and New Library Block							
Main Library and Lincoln Park	3,644	90	40	130	277	298	575
Center Block							
Residential	2,821	25	123	148	119	59	178
Hotel	1,552	60	41	101	58	56	114
Retail	3,076	46	28	74	63	69	132
Restaurant	966	36	30	66	31	21	52
Total Proposed Project Trips	**18,582**	**795**	**390**	**1,185**	**693**	**975**	**1,668**
Total Existing Land Use Trips	**7,659**	**418**	**96**	**514**	**446**	**670**	**1,116**
Net Project Trips (Project – Existing)	**10,923**	**377**	**294**	**671**	**247**	**305**	**552**

Source: Linscott, Law and Greenspan July 2015; see Appendix E for full TIA report. Trip calculations include reductions for transit, internal capture, mixed-use, and pass by trips, where applicable.

Project Traffic Distribution and Assignment. Figures 4.6-3a illustrates the general, directional traffic distribution pattern for the existing civic center uses, whereas Figures 4.6-3b through 4.6-3f present the trip distribution patterns for various components of the proposed project. Project traffic volumes both entering and exiting the project site have been distributed and assigned to the adjacent street system based on the following considerations:

- *Location of site access points in relation to the surrounding street system*
- *The site's proximity to major traffic carriers and regional access routes*
- *Physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns*

- *Presence of traffic congestion in the surrounding vicinity*
- *Ingress/egress availability at the project's parking structures, including turn restrictions to and from Ocean Boulevard*

The a.m. and p.m. peak hour traffic volumes associated with the current civic center uses are presented in Figures 4.6-2a and 4.6-2b, respectively. The anticipated a.m. and p.m. peak hour project traffic volumes associated with the proposed project are presented in Figures 4.6-4a and 4.6-4b, respectively. The traffic volume assignments presented in Figures 4.6-2a and 4.6-2b above reflect the traffic distribution characteristics for the existing development and the traffic generation potential presented in Table 4.6-5.

The project's traffic volume forecasts illustrated in Figures 4.6-4a and 4.6-4b reflect the traffic distribution characteristics of the proposed project as shown in Figures 4.6-3b through 4.6-3f below and the project traffic generation potential presented in Table 4.6-5.

Figures 4.6-5a and 4.6-5b present projected a.m. and p.m. peak hour traffic volumes at the ten key study intersections with the addition of the trips generated by the proposed project to existing traffic volumes, respectively.

Future Traffic Conditions.

Ambient Traffic Growth. Cumulative traffic growth estimates were calculated using an ambient growth factor. The ambient traffic growth factor is intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent per year. Applying this factor to existing Year 2015 traffic volumes results in a five percent increase of growth in existing volumes in horizon year 2020.

The ambient growth factor is generally consistent with the background traffic growth estimates contained in the most current Congestion Management Program for Los Angeles County. In addition, the one percent per year ambient growth factor was approved by City of Long Beach staff.

Cumulative Projects Traffic Characteristics. In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed project, the status of other known development projects (cumulative projects) in the area has been researched. With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impact of all ongoing development. There are twelve cumulative projects within a two-mile radius of the project site that are located in the City of Long Beach. These cumulative projects have either been built, but not yet fully occupied, or are being processed for approval and have been included as part of the cumulative background setting. These cumulative projects are described in Section 3, *Environmental Setting*.

Table 4.6-6 presents the development totals and resultant trip generation for the twelve cumulative projects. As shown in Table 4.6-6, the twelve cumulative projects are expected to generate a combined total of 13,513 daily trips, including 891 a.m. peak hour trips (251 inbound and 640 outbound) and 1,306 p.m. peak hour trips (761 inbound and 545 outbound) on a typical weekday.

Table 4.6-6
Cumulative Projects Traffic Generation Forecast[1]

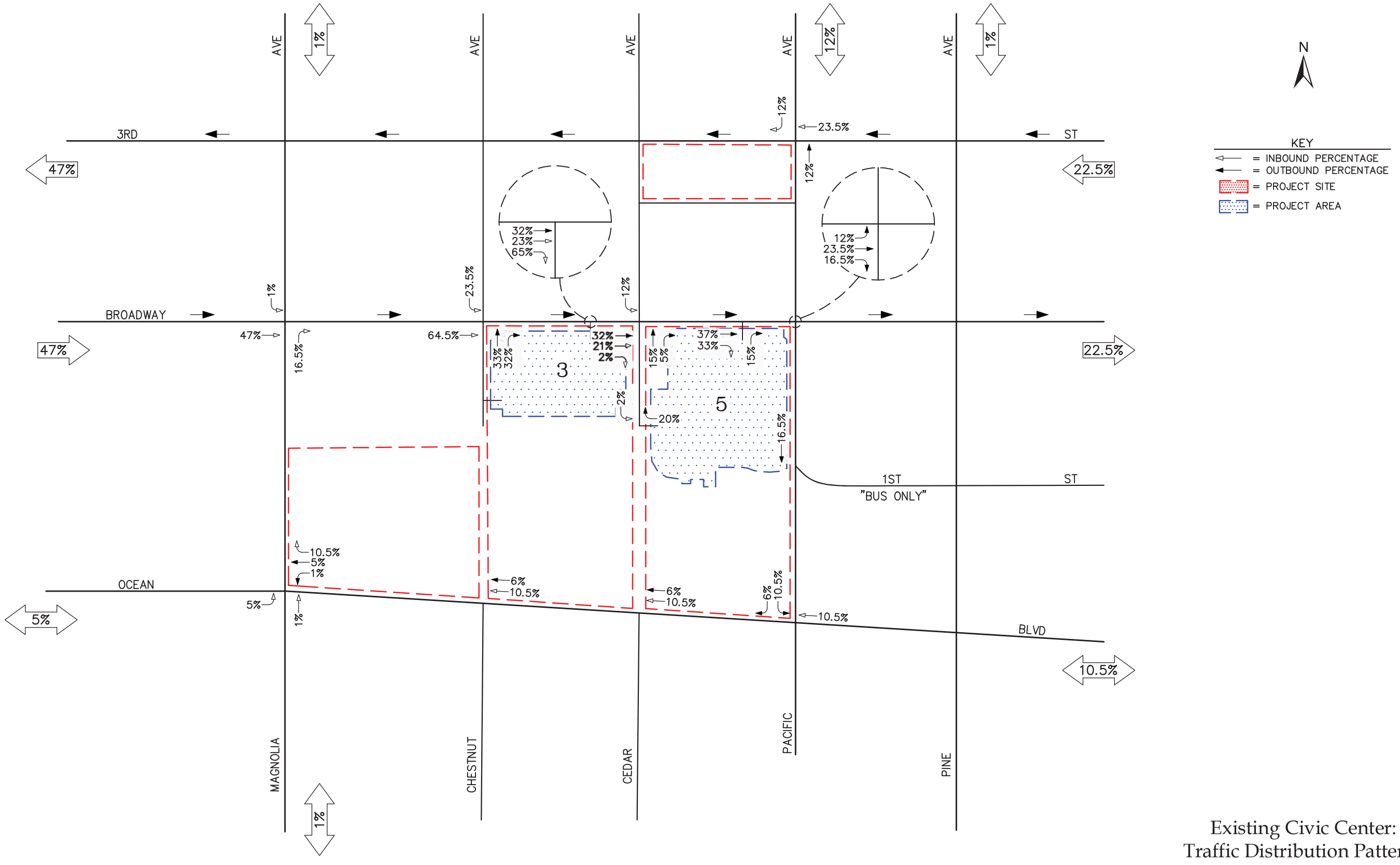
#	Cumulative Project Description	Daily 2-way	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
1	207 East Seaside Way Apartments[2]	751	11	47	58	45	25	70
2	Silversands	652	16	30	46	31	22	53
3	Mixed-Use Project	220	4	10	14	12	9	21
4	City Hall East	1,192	18	65	83	69	41	110
5	Ocean Center Building Reuse	1,247	41	59	100	60	38	98
6	Oceanaire Residential Project[3]	1,436	22	89	111	86	48	134
7	The Pike Outlet Conversion Project	2,266	41	22	63	85	124	209
8	442 West Ocean Boulevard Apratments[4]	632	10	38	48	38	21	59
9	SRG 1st Alamitos Development	922	13	52	65	52	28	80
10	200 W. Ocean Boulevard	801	12	40	52	43	26	69
11	City Ventures Development	232	3	15	18	14	7	21
12	Shoreline Gateway[5]	4,381	60	173	233	226	156	382
Total Cumulative Projects Trip Generation Potential		**14,732**	**251**	**640**	**891**	**761**	**545**	**1,306**

Source: LLG, TIA, July 2015.
[1]Source: Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE).
[2]Source: 207 East Seaside Way Apartments Project Traffic Impact Analysis, prepared by LLG Irvine.
[3]Source: Oceanaire Apartments Traffic Impact Analysis, prepared by Michael Baker International.
[4]Source: 442 West Ocean Boulevard Apartments Project Traffic Impact Analysis, prepared by LLG Irvine.
[5]Trip Generation forecast based on the approach published in the City of Long Beach Shoreline Gateway EIR Traffic Impact Study, June 2006, prepared by MMA. Project Development Totals based on information provided by the City of Long Beach.

The a.m. and p.m. peak hour traffic volumes associated with the twelve cumulative projects are presented in Figures 4.6-6a and 4.6-6b above, respectively.

Year 2020 Traffic Volumes. Figures 4.6-7a and 4.6-7b present future a.m. and p.m. peak hour cumulative traffic volumes at the ten (10) key study intersections for the Year 2020, respectively. The cumulative traffic volumes represent the accumulation of existing traffic, ambient growth traffic and cumulative projects traffic.

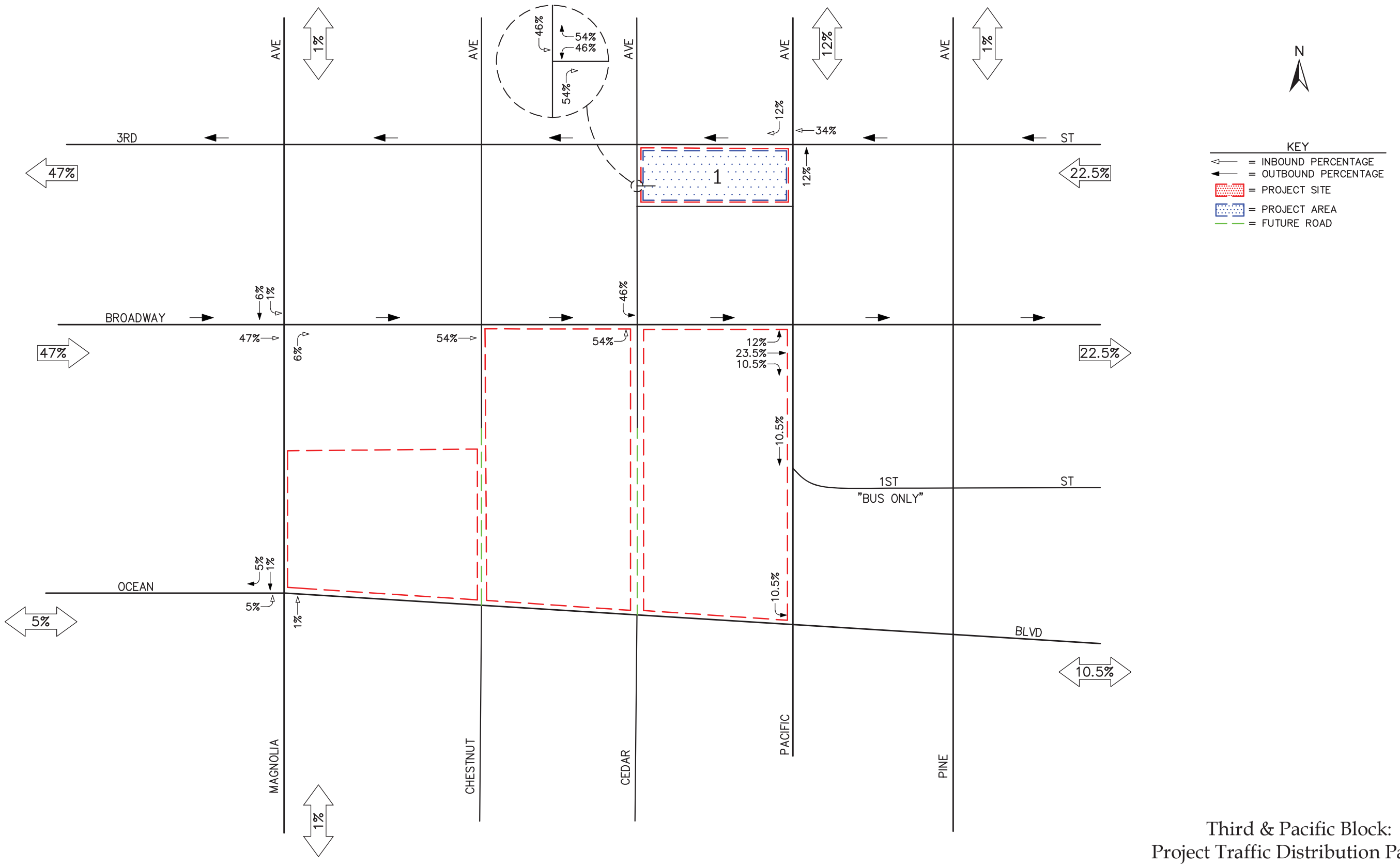
Figures 4.6-8a and 4.6-8b illustrate Year 2020 forecast a.m. and p.m. peak hour traffic volumes with the inclusion of the trips generated by the proposed project.



Existing Civic Center:
Traffic Distribution Patterns

Source: Linscott, Law & Greenspan, 2015

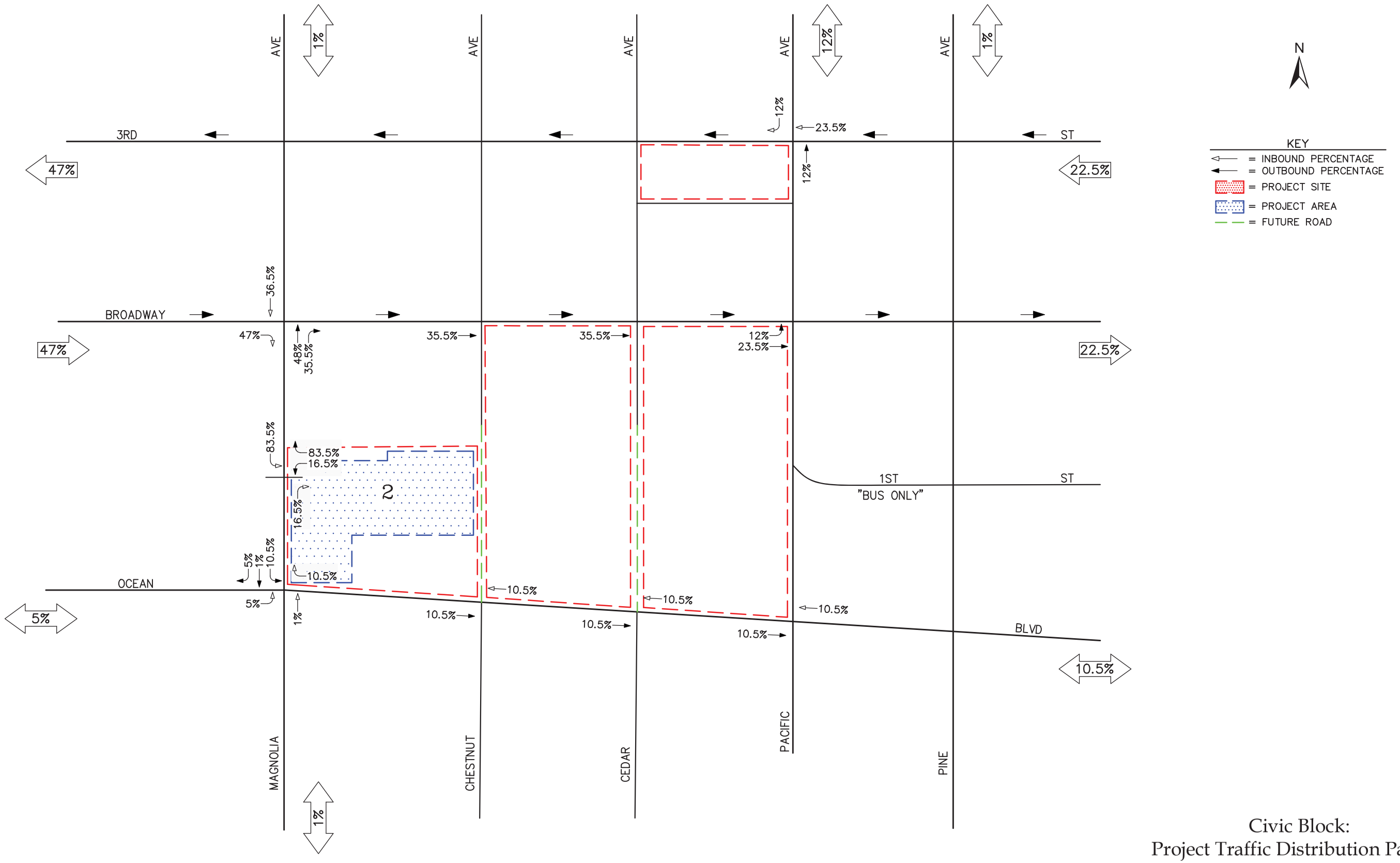
Figure 4.6-3a



Third & Pacific Block:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

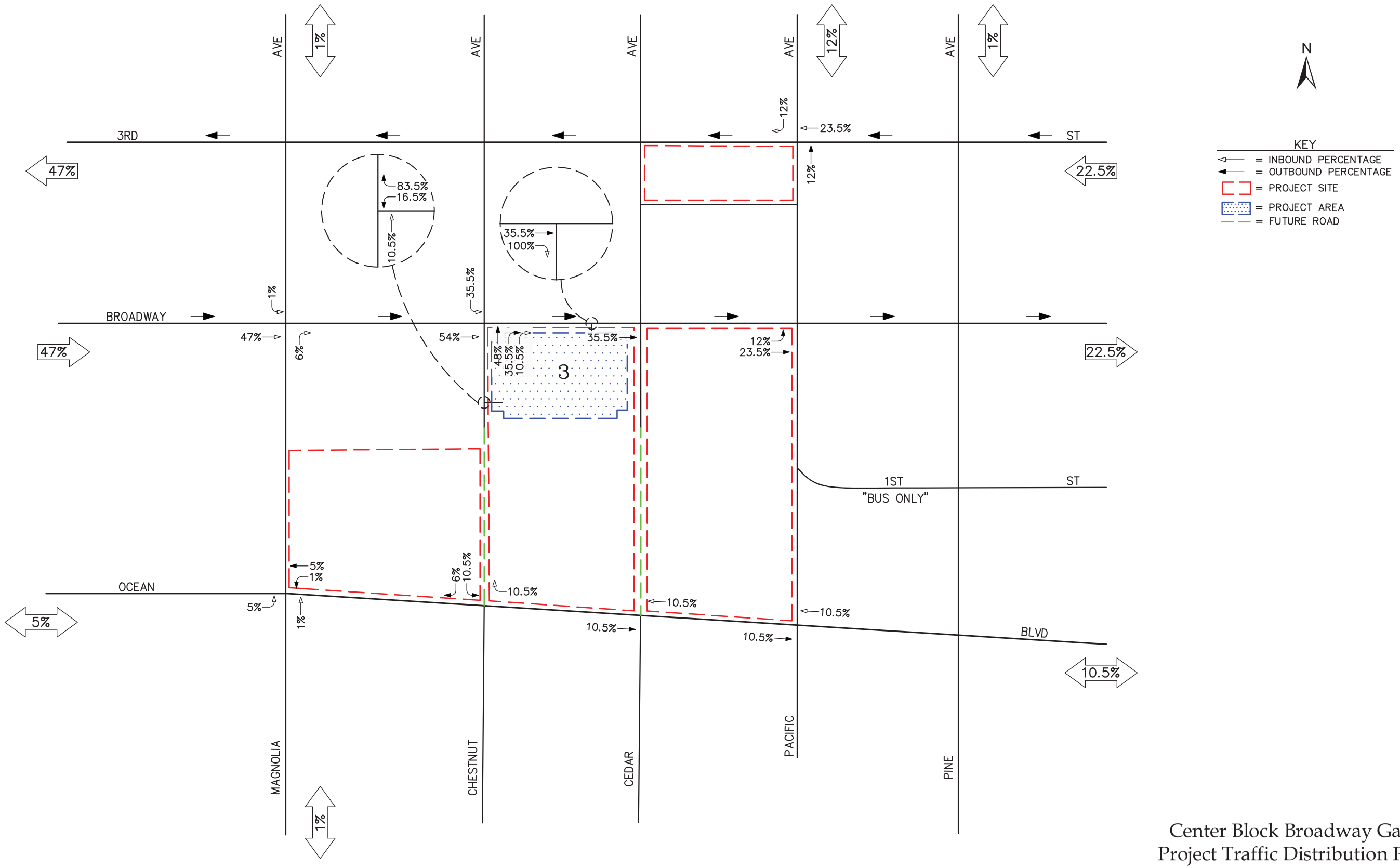
Figure 4.6-3b



Civic Block:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

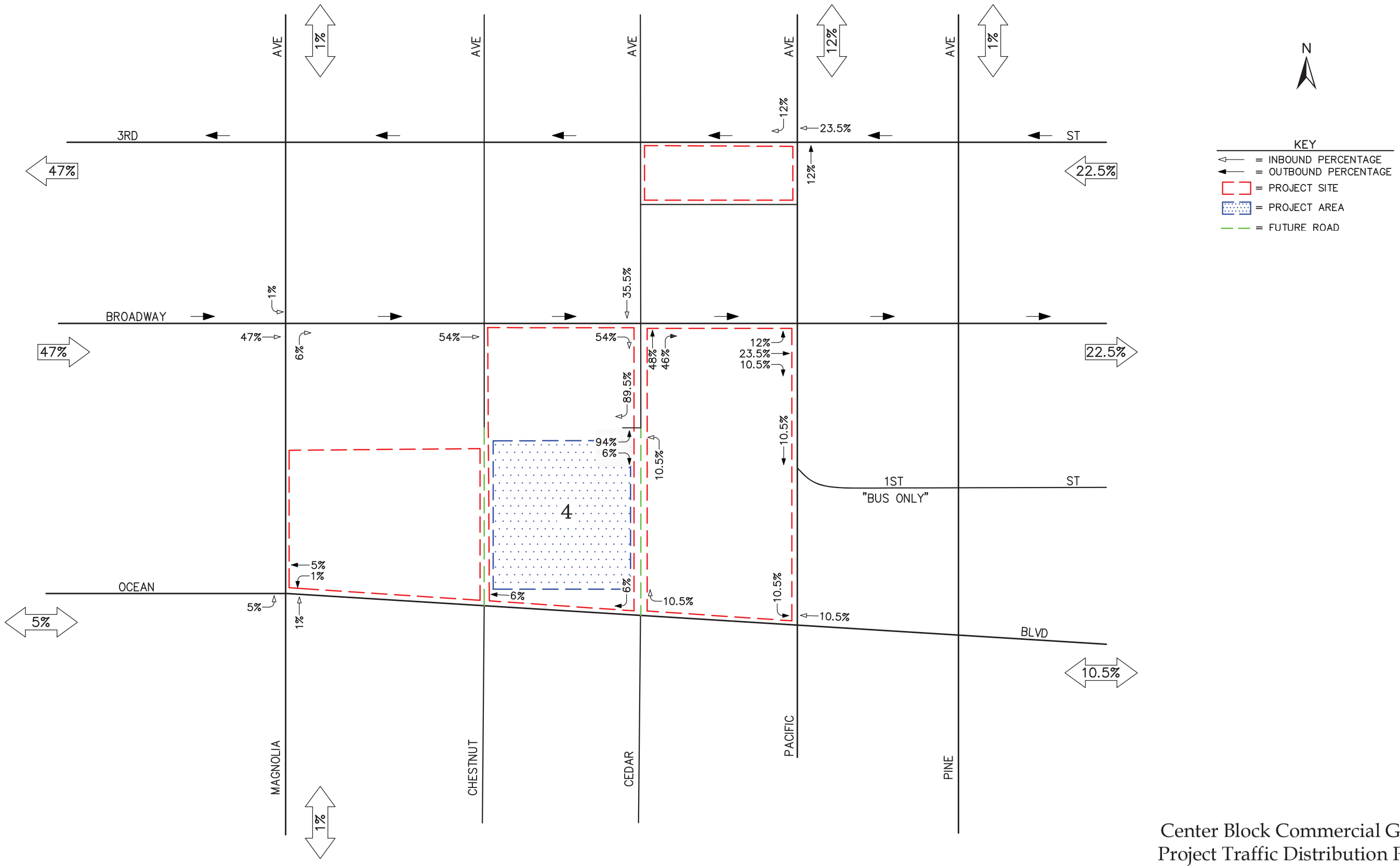
Figure 4.6-3c



Center Block Broadway Garage:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

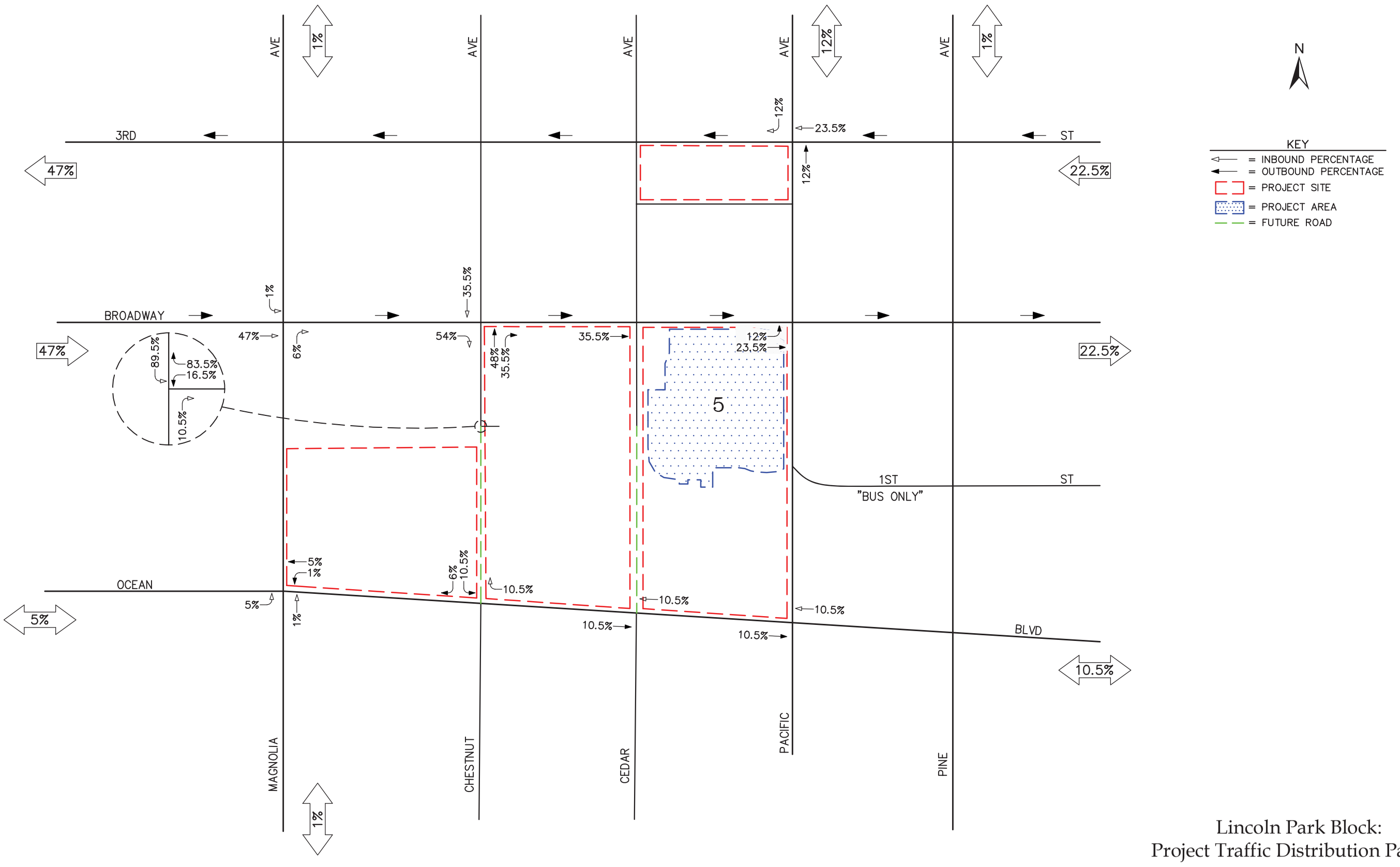
Figure 4.6-3d



Center Block Commercial Garage:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

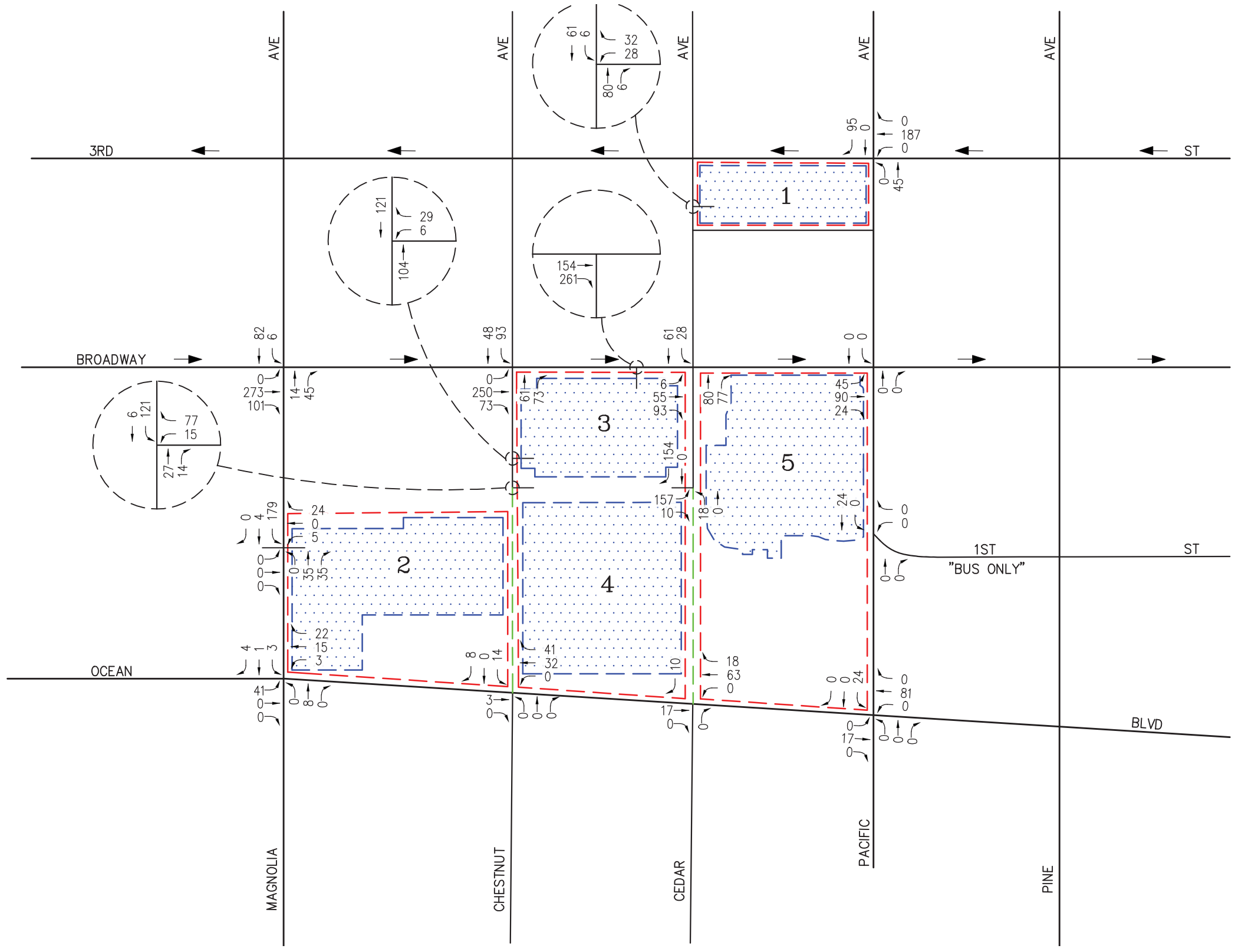
Figure 4.6-3e



Lincoln Park Block:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

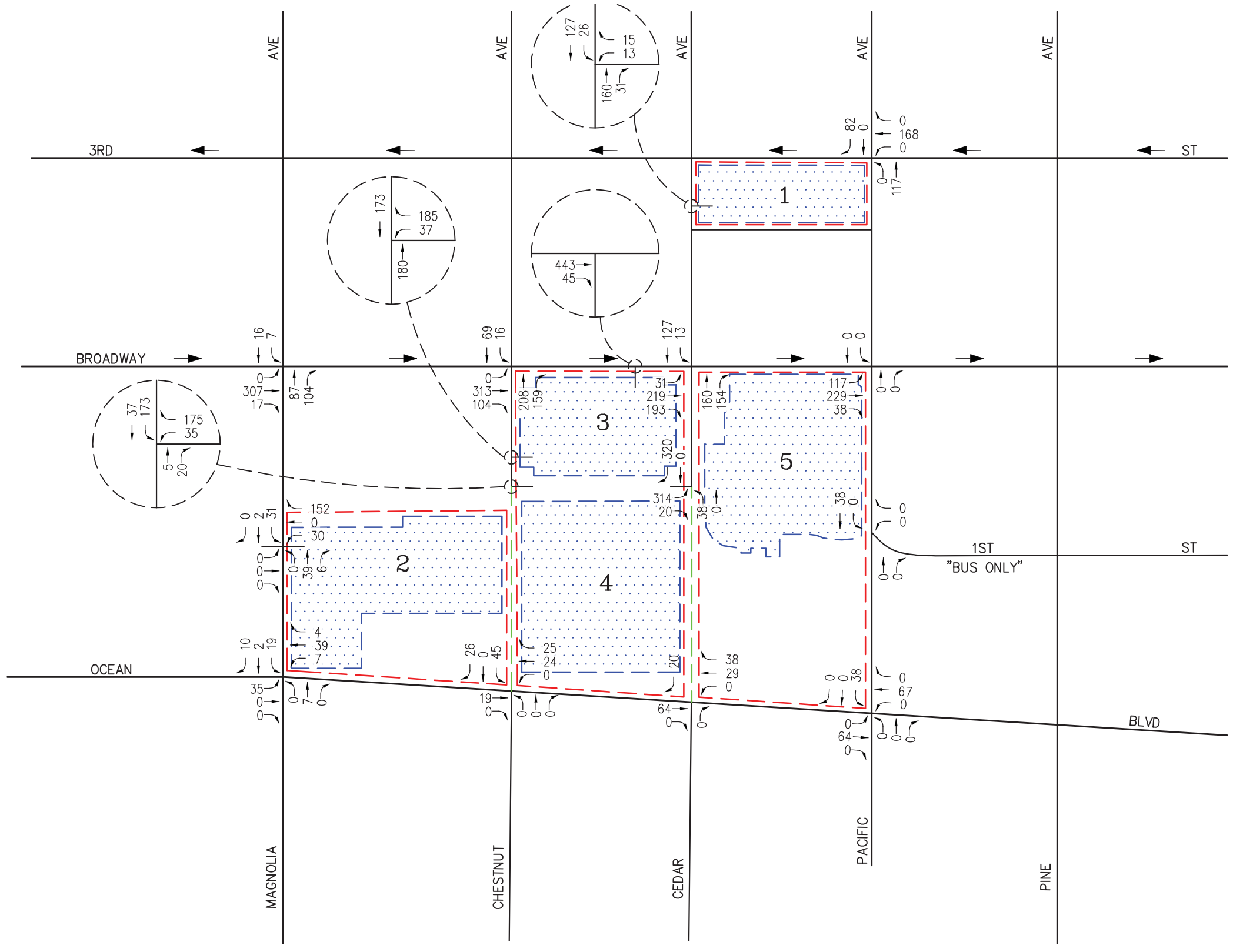
Figure 4.6-3f



A.M. Peak Hour Project Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

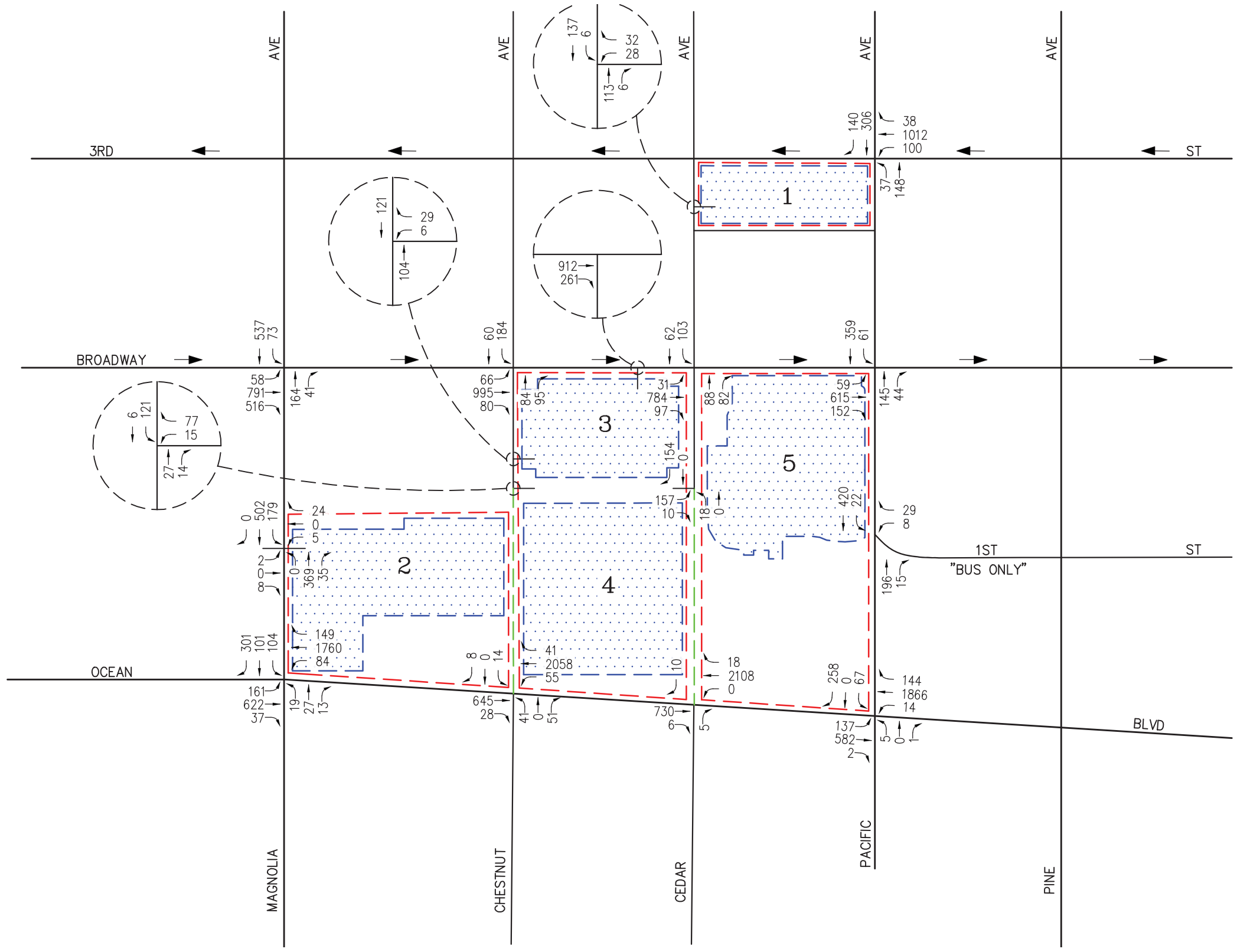
Figure 4.6-4a



P.M. Peak Hour Project Traffic Volumes

Figure 4.6-4b

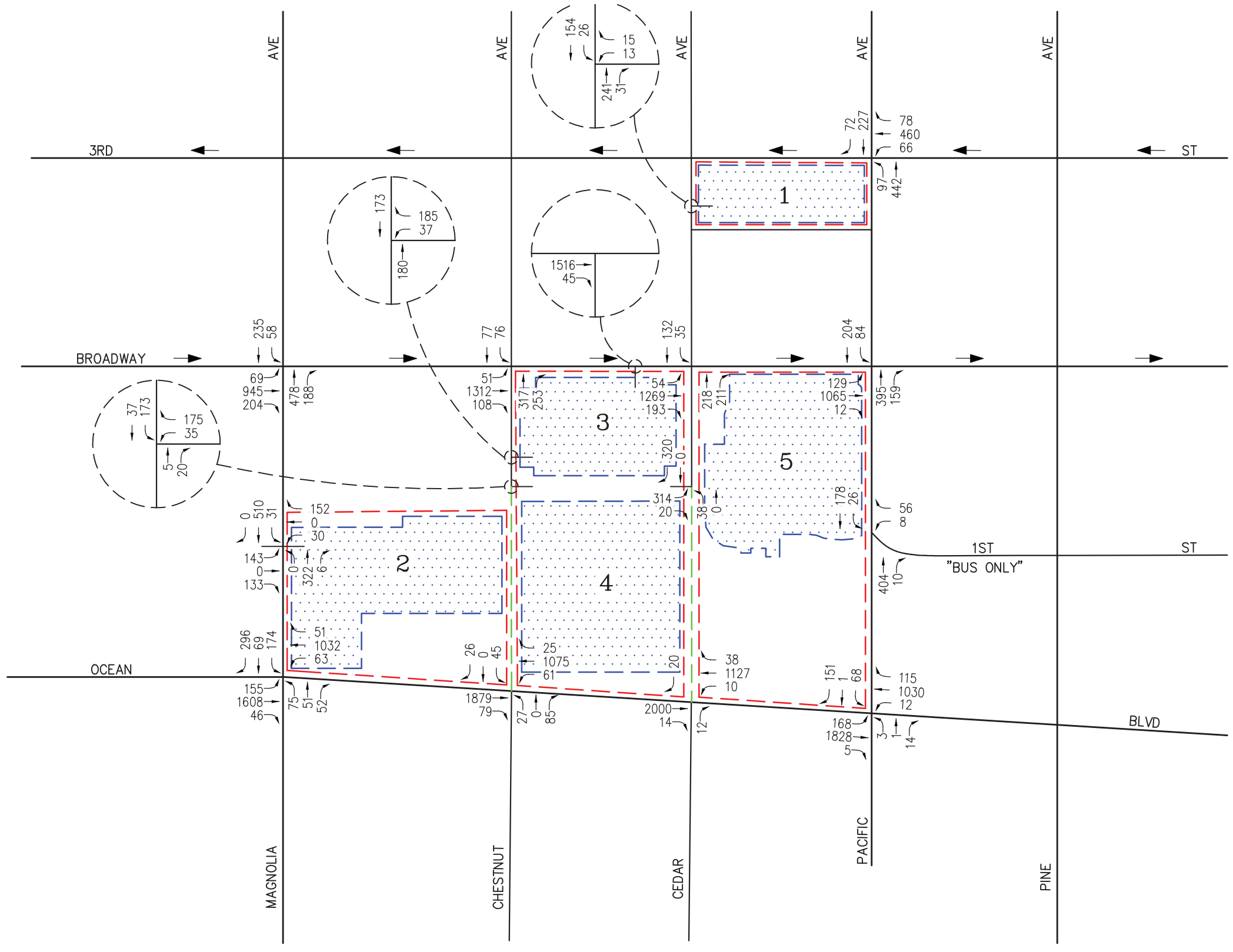
Source: Linscott, Law & Greenspan, 2015



Existing Plus Project A.M. Peak Hour Traffic Volumes

Figure 4.6-5a

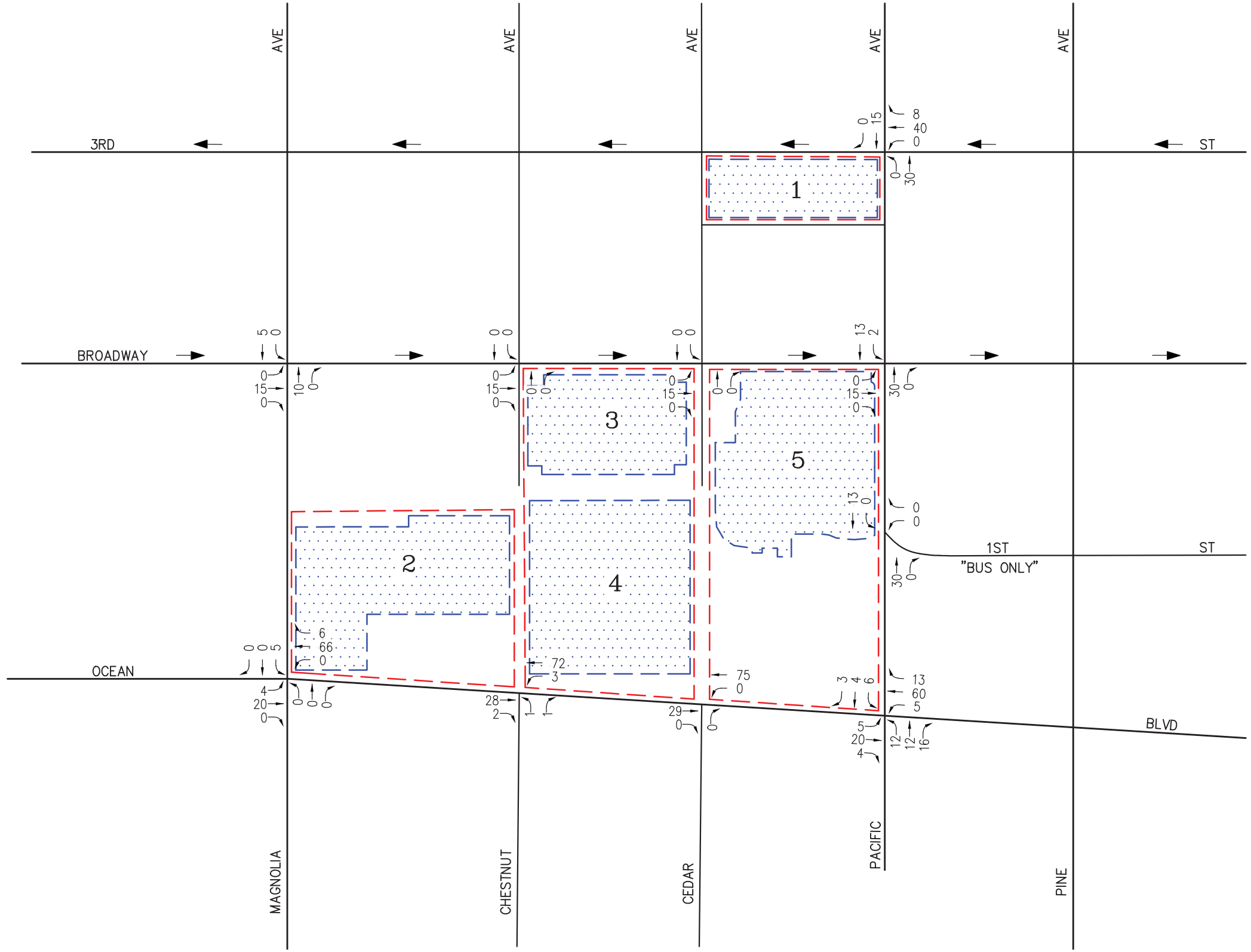
Source: Linscott, Law & Greenspan, 2015



Existing Plus Project P.M.
Peak Hour Traffic Volumes

Figure 4.6-5b

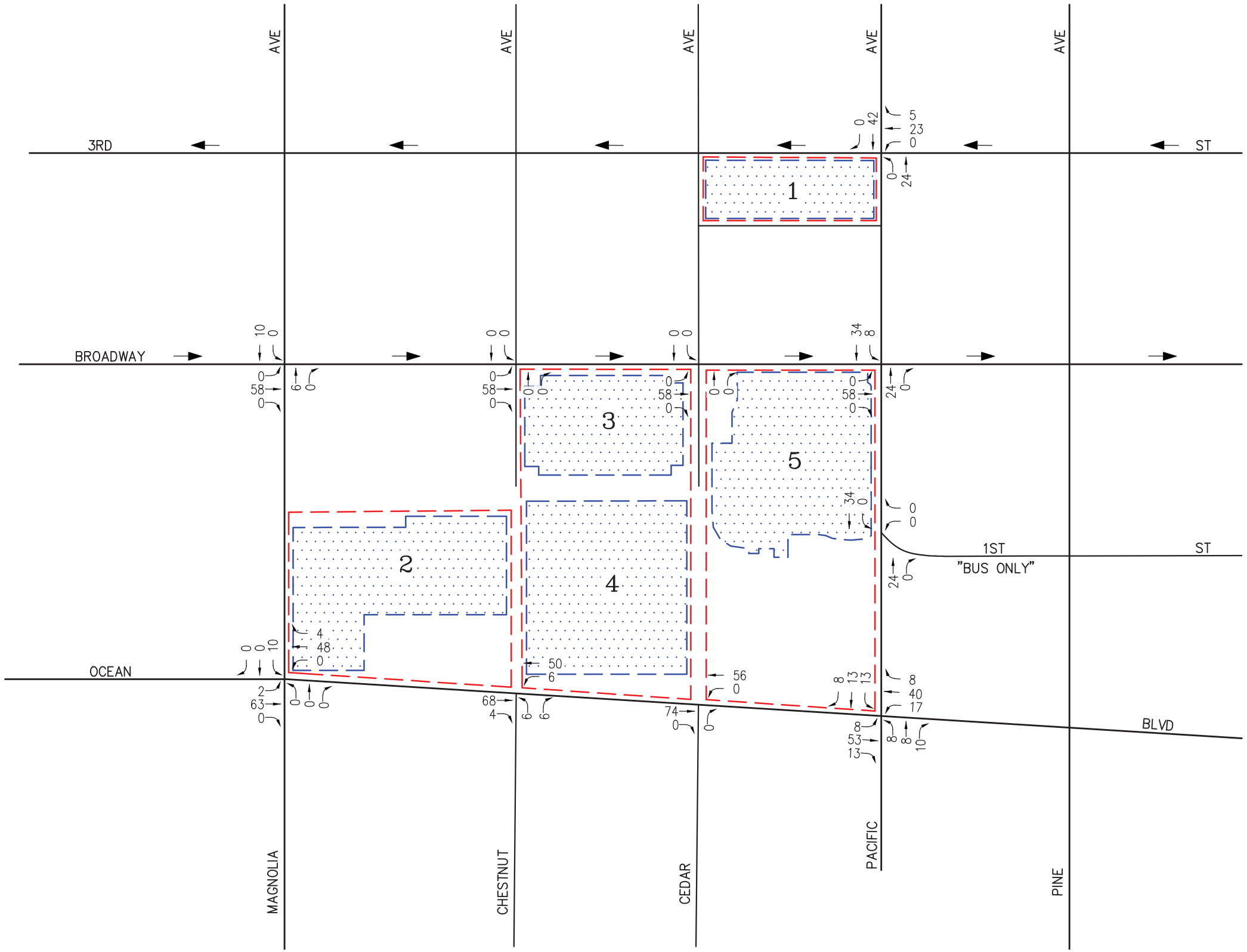
Source: Linscott, Law & Greenspan, 2015



A.M. Peak Hour Cumulative Traffic Volumes

Figure 4.6-6a

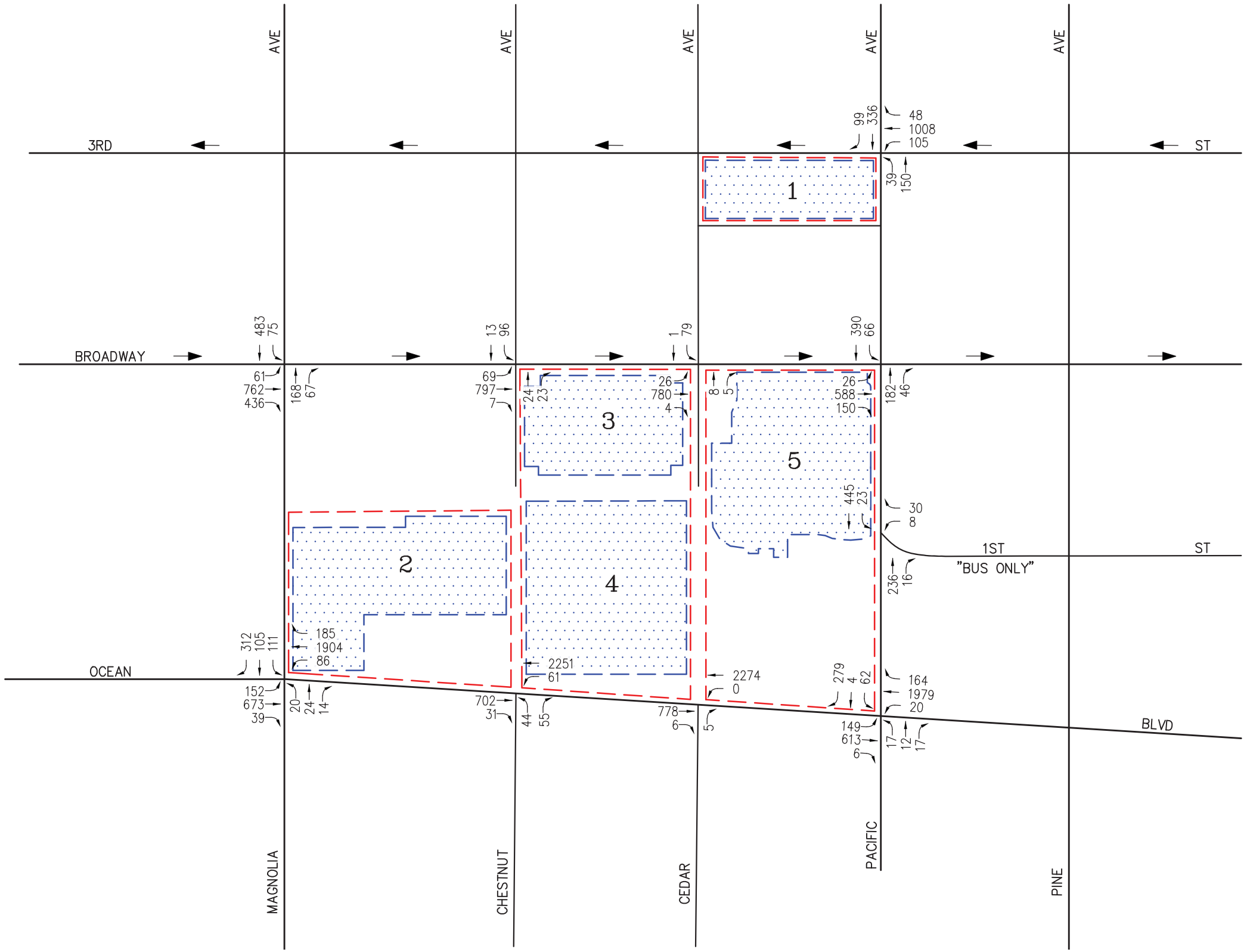
Source: Linscott, Law & Greenspan, 2015



P.M. Peak Hour Cumulative Traffic Volumes

Figure 4.6-6b

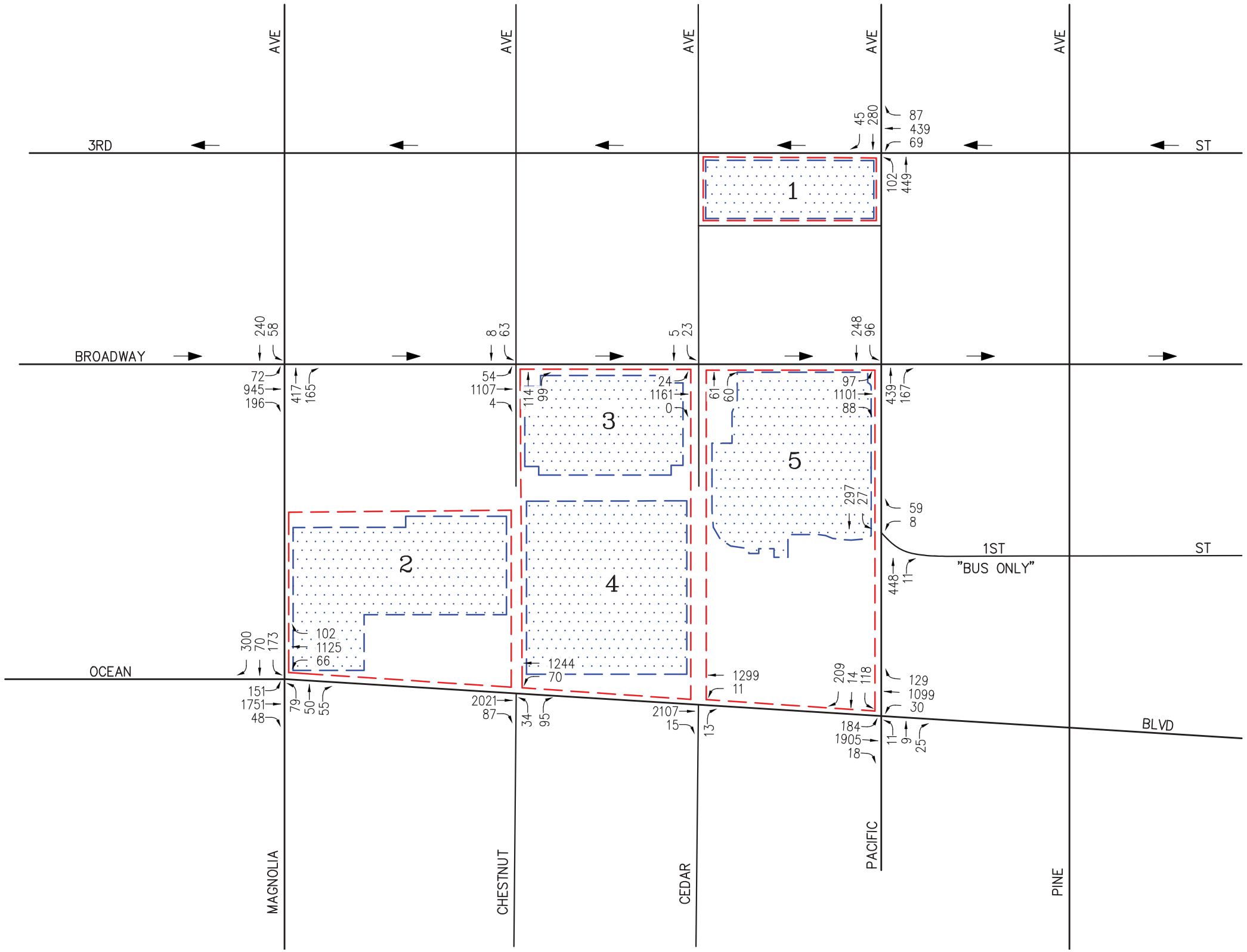
Source: Linscott, Law & Greenspan, 2015



Year 2020 Cumulative
A.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

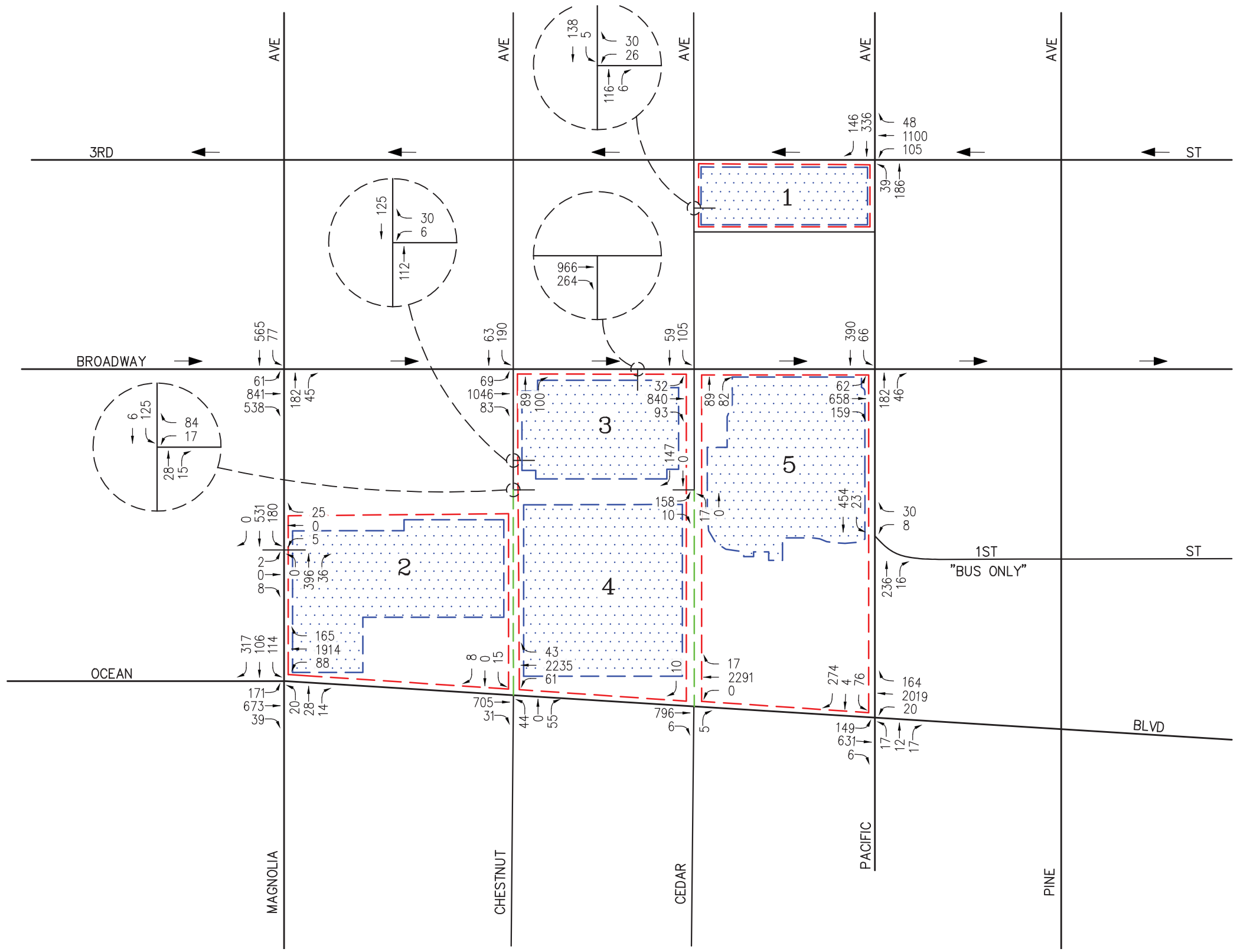
Figure 4.6-7a



Year 2020 Cumulative
P.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

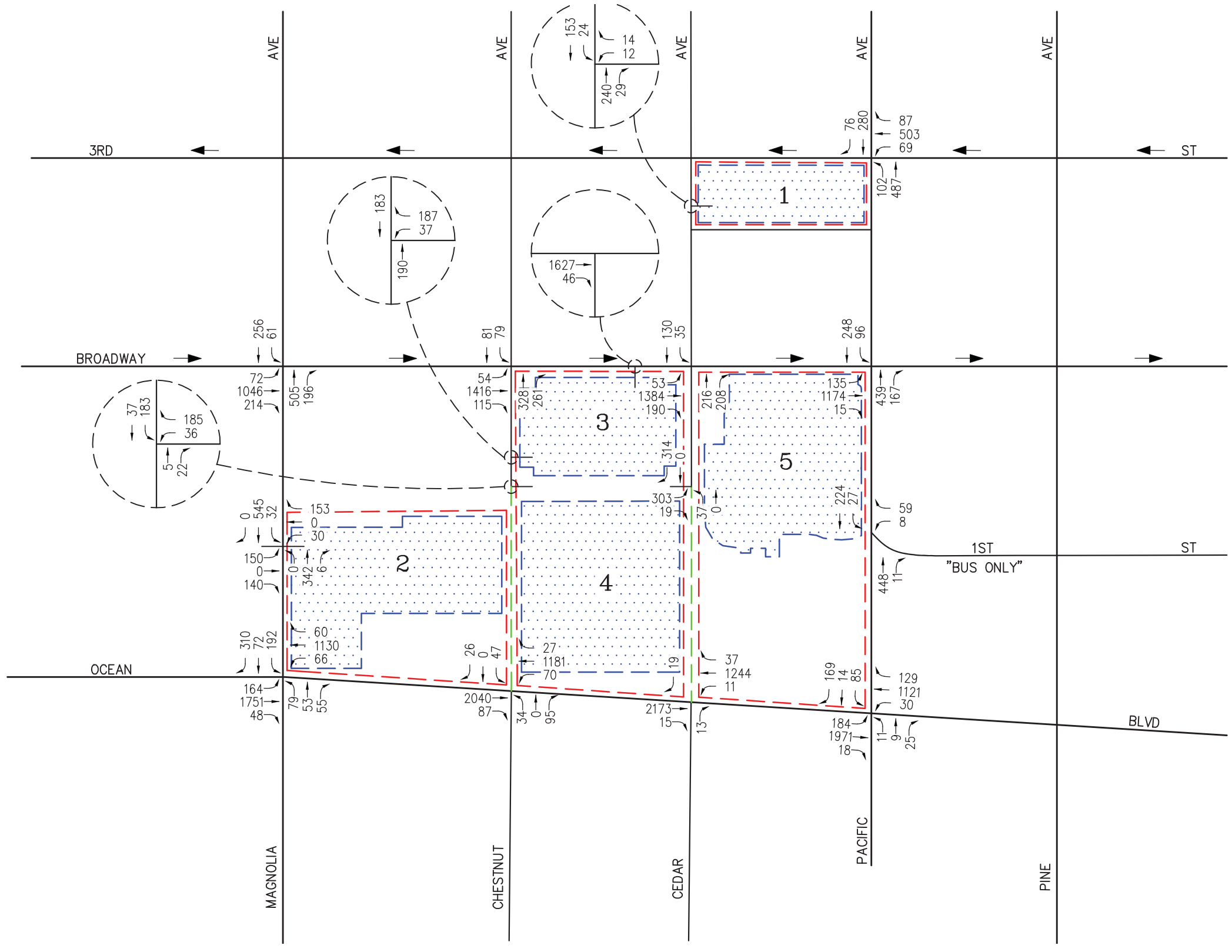
Figure 4.6-7b



Year 2020 Cumulative Plus Project
A.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-8a



Year 2020 Cumulative Plus Project
P.M. Peak Hour Traffic Volumes

Figure 4.6-8b

Source: Linscott, Law & Greenspan, 2015

Significance Thresholds. Impacts related to transportation and circulation would be potentially significant if development facilitated by the proposed project would:

- *Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of a circulation system, taking into account all modes of transportation, including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit*
- *Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways*
- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks*
- *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
- *Result in inadequate emergency access*
- *Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities*

The intersections of Alamitos Avenue with Seventh Street and with Ocean Boulevard are the only Downtown Plan Area intersections that are CMP arterial monitoring locations (Los Angeles County Metropolitan Transportation Authority, 2010). Both CMP arterial monitoring locations within the Downtown Plan Area are outside the project study area. The Downtown Plan Final EIR identified unavoidably significant impacts at both locations, but traffic generated by the proposed project is less than what was considered in the Downtown Plan Final EIR. Therefore, the proposed project would not create any new impact related to the Los Angeles County CMP beyond what was identified in the Downtown Plan Final EIR.

According the City of Long Beach, impacts to intersections are considered significant if:

- *An unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained; and*
- *The project increases traffic demand at the study intersection by 2% of capacity (ICU increase ≥ 0.020), causing or worsening LOS E or F (ICU > 0.901). At unsignalized intersections, a "significant" adverse traffic impact is defined as a project that: adds 2% or more traffic delay (seconds per vehicle) at an intersection operating LOS E or F.*

The Initial Study for the proposed project (Appendix A) determined that the following issues are less than significant and, therefore, thresholds related to these topics are not discussed further in this SEIR:

- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks*
- *Result in inadequate emergency access*
- *Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities*

Regarding adopted alternative transportation plans, the Downtown Plan EIR determined that the Downtown Plan would have no impact with regard to alternative transportation. The proposed project is within the parameters of the Downtown Plan. Therefore, the Civic Center Project would not result in any new significant impacts to alternative transportation plans or increase the severity of significant impacts to alternative transportation plans beyond those identified in the Downtown Plan EIR.

Traffic Impact Analysis Scenarios. The following scenarios are those for which V/C calculations have been performed using the ICU/HCM methodologies:

1. *Existing Traffic Conditions;*
2. *Existing Plus Project Traffic Conditions;*
3. *Existing Plus Project Traffic Conditions with Improvements, if necessary;*
4. *Year 2020 Cumulative Traffic Conditions;*
5. *Year 2020 Cumulative Plus Project Traffic Conditions; and*
6. *Year 2020 Cumulative Plus Project Traffic Conditions with Improvements, if necessary.*

b. Project Impacts and Mitigation Measures.

Threshold	*Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of a circulation system, taking into account all modes of transportation, including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit;*
Quantitative Threshold	*An unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained*
Quantitative Threshold	*The project increases traffic demand at the study intersection by 2% of capacity (ICU increase ≥ 0.020), causing or worsening LOS E or F (ICU > 0.901). At unsignalized intersections, a "significant" adverse traffic impact is defined as a project that: adds 2% or more traffic delay (seconds per vehicle) at an intersection operating LOS E or F.*

Impact T-1 **Implementation of the proposed project would increase traffic on the surrounding street network. The Downtown Plan EIR determined that buildout of the Downtown Plan would result in Class I, significant and unavoidable traffic impacts. The proposed project would contribute to this impact; however, project-generated traffic would not cause any intersection to exceed City standards under existing plus project traffic conditions. Impacts associated with the proposed project would be Class III, *less than significant*.**

Table 4.6-7 summarizes the peak hour LOS results at the study intersections for existing plus project traffic conditions. Under existing conditions, all ten intersections operate at acceptable LOS C or better during the a.m. and p.m. peak hours. As shown in Table 4.6-7, traffic associated with the proposed project would not significantly impact any of the ten intersections, as all ten intersections would continue to operate at acceptable LOS D or better during the a.m. and p.m. peak hours with the addition of project generated traffic to existing traffic. Therefore, the impacts to local intersections would be less than significant under existing plus project traffic conditions.

Table 4.6-7
Existing Plus Project Conditions for Study Intersections

Key Intersection	Time Period	Existing Traffic Conditions		Existing Plus Project Traffic Conditions			
		ICU/HCM	LOS	ICU/HCM	LOS	Increase	Significant Impact?[1] (<LOS D)
1. Magnolia Avenue at Broadway	a.m.	0.502	A	0.591	A	0.089	No
	p.m.	0.570	A	0.640	B	0.070	No
2. Chestnut Avenue at Broadway	a.m.	0.432	A	0.626	B	0.194	No
	p.m.	0.553	A	0.847	D	0.294	No
3. Cedar Avenue at Broadway	a.m.	0.432	A	0.581	A	0.149	No
	p.m.	0.531	A	0.843	D	0.312	No
4. Pacific Avenue at Broadway	a.m.	0.478	A	0.502	A	0.024	No
	p.m.	0.663	B	0.663	B	0.000	No
5. Magnolia Avenue at Ocean Boulevard	a.m.	0.770	C	0.787	C	0.017	No
	p.m.	0.730	C	0.736	C	0.006	No
6. Chestnut Avenue at Ocean Boulevard	a.m.	0.564	A	0.584	A	0.020	No
	p.m.	0.595	A	0.645	B	0.050	No
7. Cedar Avenue at Ocean Boulevard	a.m.	9.7 s/v	A	14.7 s/v	B	5.0 s/v	No
	p.m.	17.2 s/v	C	18.0 s/v	C	0.8 s/v	No
8. Pacific Avenue at Ocean Boulevard	a.m.	0.689	B	0.694	B	0.005	No
	p.m.	0.559	A	0.562	A	0.003	No
9. Pacific Avenue at Third Street	a.m.	0.569	A	0.598	A	0.029	No
	p.m.	0.430	A	0.457	A	0.027	No
10. Pacific Avenue at First Street	a.m.	0.302	A	0.304	A	0.002	No
	p.m.	0.336	A	0.336	A	0.000	No

Source: LLG, July 2015; see Appendix E for full TIA report.

s/v = seconds per vehicle, LOS = Level of Service

[1] According the City of Long Beach, impacts to intersections are considered significant if an unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained.

Mitigation Measures. Mitigation would not be required.

Significance After Mitigation. Impacts would be less than significant without mitigation. Nonetheless, Downtown Plan EIR Mitigation Measure Traf-1(a) includes implementing transit facilities and programs to encourage public transit usage and development of Transportation Demand Management Policies. Downtown Plan EIR Mitigation Measures AQ-2(a) includes measures to require commercial development to promote a ride-share program for employees, and secure bicycle parking areas, which would apply to the proposed project. These measures would further reduce the project's traffic generation.

Threshold	*Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Impact T-2 The proposed project does not include any hazardous design features. Impacts associated with the proposed project would be Class III, *less than significant*.

Access to the project site could result in hazardous design features, if project driveways operate at LOS that would prevent motorists from entering and exiting the project site safely. The proposed project will provide three new parking garages which also includes a new

subterranean garage below the proposed City Hall and Port Building. Vehicular access for the proposed project includes the following:

- ***Civic Block:*** *Primary access to the Civic Block subterranean parking structure will be provided from Magnolia Avenue (Project Driveway F). Access to the existing Broadway garage will continue to be provided by an ingress-only driveway on Broadway (Project Driveway B) as well as an egress-only driveway along Chestnut (Project Driveway C).*
- ***Center Block:*** *A new subterranean parking structure will be constructed, with primary vehicular access provided by the future extension of Cedar Avenue between Broadway and Ocean Boulevard (Project Driveway E).*
- ***Lincoln Park and New Library Block:*** *Access to the existing Lincoln garage will continue to be provided from the Cedar Avenue and Pacific Avenue access ramps in the interim, but will ultimately be served by the "Lincoln Alley" (Project Driveway D).*
- ***Third and Pacific Block:*** *Access to the site's parking garage will be provided from Cedar Avenue (Project Driveway A).*

Table 4.6-8 summarizes the Year 2020 cumulative plus peak hour level of service results for the six project driveways. The project driveways are forecast to operate at an acceptable LOS C or better during the a.m. and p.m. peak hours in the Year 2020. As such, motorists entering and exiting the project site would be able to do so comfortably, safely, and without undue congestion. Therefore, the proposed project would have a less than significant impact on access to the project site or surrounding properties.

Table 4.6-8
Year 2020 Cumulative Plus Project
Driveway Peak Hour Levels of Service Summary

Driveway	Control Type	Time Period	HCM (s/v)	LOS
A. Cedar Avenue at Project Driveway A	One-Way Stop	a.m. p.m.	9.7 10.8	A B
B. Project Driveway B at Broadway	Uncontrolled Ingress Only	a.m. p.m.	-- --	-- --
C. Chestnut Avenue at Project Driveway C	One-Way Stop	a.m. p.m.	9.0 10.2	A B
D. Chestnut Avenue at Project Driveway D	One-Way Stop	a.m. p.m.	9.2 10.1	A B
E. Cedar Avenue at Project Driveway E	One-Way Stop	a.m. p.m.	9.4 11.0	A B
F. Magnolia Avenue at Project Driveway F	Two-Way Stop	a.m. p.m.	12.0 21.4	B C

Source: LLG, July 2015; see Appendix E for full TIA report.
s/v = seconds per vehicle (delay), LOS = Level of Service

Mitigation Measures. Mitigation would not be required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

b. Cumulative Impacts. Cumulative development within the project area would cause increases in traffic on area roadways. Section 3, Environmental Setting, describes planned and pending projects in the vicinity of the project site. Table 4.6-9 summarizes existing, cumulative, and cumulative plus project intersection capacities. Table 4.6-9 indicates that all ten intersections are forecast to operate at an acceptable LOS D or better during the a.m. and p.m. peak hour with the addition of ambient traffic growth and cumulative development. Therefore, the project's impact to local intersections would be less than significant under Year 2020 cumulative traffic conditions.

Table 4.6-9
Year 2020 Cumulative Plus Project Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Time Period	Existing Conditions		Year 2020 Cumulative (No Project) Conditions		Year 2020 Cumulative Plus Project Conditions		Project Increase	Significant Impact?[1] (< LOSD)
		ICU/ HCM	LOS	ICU/ HCM	LOS	ICU/ HCM	LOS		
1. Magnolia Avenue at Boradway	a.m. p.m.	0.502 0.570	A A	0.523 0.613	A B	0.613 0.684	B B	0.090 0.071	No No
2. Chestnut Avenue at Broadway	a.m. p.m.	0.432 0.553	A A	0.450 0.591	A A	0.644 0.884	B D	0.194 0.293	No No
3. Cedar Avenue at Broadway	a.m. p.m.	0.432 0.531	A A	0.450 0.568	A A	0.600 0.880	A D	0.150 0.312	No No
4. Pacific Avenue at Broadway	a.m. p.m.	0.478 0.663	A B	0.503 0.719	A C	0.527 0.719	A C	0.024 0.000	No No
5. Magnolia Avenue at Ocean Boulevard	a.m. p.m.	0.770 0.730	C C	0.819 0.773	D C	0.836 0.779	D C	0.017 0.006	No No
6. Chestnut Avenue at Ocean Boulevard	a.m. p.m.	0.564 0.595	A A	0.603 0.642	B B	0.623 0.692	B B	0.020 0.050	No No
7. Cedar Avenue at Ocean Boulevard	a.m. p.m.	9.7 s/v 17.2s/v	A C	9.9 s/v 19.4 s/v	A C	15.7 s/v 20.3 s/v	C C	5.8s/v 0.9s/v	No No
8. Pacific Avenue at Ocean Boulevard	a.m. p.m.	0.689 0.559	B A	0.755 0.629	C B	0.761 0.632	C B	0.006 0.003	No No
9. Pacific Avenue at Third Street	a.m. p.m.	0.569 0.430	A A	0.609 0.466	B A	0.638 0.486	B A	0.029 0.020	No No
10. Pacific Avenue at First Street	a.m. p.m.	0.302 0.306	A A	0.313 0.352	A A	0.316 0.352	A A	0.003 0.000	No No

Source: LLG, July 2015; see Appendix E for full TIA report.

s/v = seconds per vehicle, LOS = Level of Service

[1] According the City of Long Beach, impacts to intersections are considered significant if an unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained.

5 OTHER CEQA-REQUIRED DISCUSSIONS

This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the project.

5.1 GROWTH INDUCEMENT

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is therefore considered significant if it could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

The proposed project would add up to 780 residential units in Downtown Long Beach. The current population of Long Beach is 472,779 and the City has approximately 2.82 persons per household (California Department of Finance, 2015). Development of the proposed project would therefore add an estimated 2,200 residents (780 dwelling units x 2.82 people/dwelling unit), thus increasing the City's population to 474,979. The Southern California Association of Government's (SCAG) population growth forecast for Long Beach is 491,000 in 2020 and 534,100 in 2035 (SCAG RTP-SCS, 2012a). According to the City's General Plan Housing Element, realization of future housing development potential (7,270 new dwelling units by 2021) would result in an increase in the City's population of 20,501 persons, for a total population of 490,793 in 2021. Consequently, the population increase generated by the proposed project would not exceed SCAG or City of Long Beach citywide population forecasts.

As discussed in Section 3.0, *Environmental Setting*, planned and pending development within the City would add approximately 1,187 new residential units to the City. Based on the estimate of 2.82 persons per household, cumulative development within the City (including the proposed project) would add 5,547 people (1,187 units x 2.82 people/unit + 2,200 residents for proposed project) bringing the total population to 478,326 (472,779 + 5,547). This would not exceed SCAG's 2020 population projection for Long Beach of 491,000 or the Long Beach General Plan Housing Element's population projection of 490,793 by 2021.

5.1.2 Economic Growth

The project would generate temporary employment opportunities during construction, which would be expected to draw workers from the existing regional work force. Therefore, construction of the project would not be considered growth-inducing from a temporary employment standpoint.

The proposed project involves 240,000 gross square feet (gsf) of office space for the Port Building, 270,000 gsf of office space for City Hall staff and elected officials, a new 92,000 gsf library, 32,000 gsf of retail space, 8,000 gsf of restaurant space, and an estimated 290,400 gsf for a 200-room hotel. Of these uses, the retail space, restaurant space, and hotel would generate new

jobs. The Port Building, City Hall, and library would accommodate existing jobs that would be relocated to the new facilities. Table 5-1 shows the estimated jobs generated by the other proposed uses.

Table 5-1
New Employees Accommodated by Proposed Project

Land Use	Area (sf)	Area (acres)	Employees per Acre	Total Employees
Retail	32,000	0.73	18.86	14
Restaurant[1]	8,000	0.18	25.76	5
Hotel	290,400	6.67	51.91	346
			Total	**365**

Source: Table C-1, Range of Employment Densities (Employees Per Acre) by County (Southern California Association of Governments (SCAG), Employment Density Study Summary Report, October 31, 2001).
[1] Employee rate for "Other Retail/Services" in SCAG Table C-1 was used, as "Restaurant" is not listed.

The proposed project would generate an estimated 2,200 new residents and 365 new jobs in Long Beach. This would contribute to economic growth. The additional population would likely contribute to the local economy as demand for general goods increases, which in turn could result in economic growth for various sectors. Nevertheless, the proposed project would not be expected to induce economic expansion to the extent that significant environmental impacts directly associated with the project's contribution would occur.

The Southern California Association of Government estimated employment (jobs) in the City to be 168,100 in 2008. SCAG's employment growth forecast for Long Beach is 176,000 in 2020 and 184,800 in 2035 (SCAG, 2012a). Therefore, jobs are expected to increase in the City by approximately 7,900 between 2008 and 2020 and approximately 16,700 between 2008 and 2035. Consequently, the employment increase generated by the proposed project would account for approximately 4.6 percent of job growth between 2008 and 2020 and would not exceed SCAG employment forecasts.

5.1.3 Removal of Obstacles to Growth

The project site is located in a fully urbanized area that is well served by existing infrastructure. Existing utilities in Long Beach would be adequate to serve the proposed project. The project would be served by the Sanitation Districts of Los Angeles County (LACSD), with wastewater going to the Joint Water Pollution Control Plan (JWPCP). The JWPCP has the capacity to treat 400 million gallons per day (mgd) and currently processes an average flow of ~~263.4~~263.1 mgd (LACSD, ~~May 14~~September 23, 2015 ~~NOP~~ NOA Response; see ~~Appendix A~~Section 8.0, *Response to Comments*). This existing wastewater infrastructure would be adequate to serve the proposed project and no capacity expansion would be necessary. Potable water is served by the Long Beach Water Department. As discussed in Section XVII, *Utilities and Service Systems,* and IX, *Hydrology and Water Quality,* of the Initial Study, the proposed project is well served by existing infrastructure. The existing infrastructure would be adequate and no capacity expansion would be necessary to serve the project.

The proposed project would include the extension of Chestnut Avenue and Cedar Avenue through the project site. However, these roads would connect existing roads in an urban environment and would not provide for any substantial capacity increasing transportation or circulation improvements. Because the project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

The *CEQA Guidelines* require that EIRs evaluating projects involving amendments to public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

The proposed project would redevelop an urban area within the City of Long Beach. No previously undeveloped land would be converted for the project. Construction and operation of the project would irreversibly commit construction materials and non-renewable energy resources. The project would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and are not unique to the project. The increased intensity of residential, office, and commercial development would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, increasingly efficient building design and automobile engines are expected to offset this demand to some degree. In addition, the proposed project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The project is required to exceed Title 24 standards that are in effect at the time of development by 20 percent and to achieve a 25 percent reduction in electricity use through such measures as photovoltaic cells in compliance with Downtown Area Plan EIR Mitigation Measure AQ-2.

The project would require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section XIV, *Public Services,* and Section XVII, *Utilities and Service Systems* of the Initial Study, impacts to these service systems would be less than significant.

Primary impacts related to consumption of non-renewable and slowly renewable resources would be less than significant because the proposed project would not use unusual amounts of energy or construction materials, as development would be primarily comprised of residential uses, office space, and retail space. Consumption of these resources would occur with any development in the region and are not unique to the proposed project. Additional vehicle trips associated with the proposed project would incrementally increase local traffic and regional air pollutant and greenhouse gas emissions as discussed in Sections 4.2, *Air Quality,* Section 4.4, *Greenhouse Gas Emissions,* and Section 4.6, *Transportation and Traffic*. Impacts resulting from

traffic generated by future development would be less than significant or would be less than significant with mitigation incorporated.

The project would contribute to significant and unavoidable impacts previously identified in the Downtown Plan EIR. The Downtown Plan EIR determined that operational emissions associated with buildout of the Downtown Plan would result in a significant and unavoidable impact. Operation of the project would generate reactive organic gas (ROG) emissions that would exceed South Coast Air Quality Management District (SCAQMD) operational significance thresholds and contribute to this impact. In addition, the Downtown Plan EIR determined that implementation of the Downtown Plan could result in exposure of receptors to short- and long-term emissions of toxic air contaminants (TACs) from onsite and offsite stationary and mobile sources; this impact was determined by the Downtown Plan EIR to be significant and unavoidable. The project would place residential uses within the Downtown Plan Area, contributing to this significant and unavoidable impact. Furthermore, the Downtown Plan EIR determined that implementation of the Downtown Plan would result in significant and unavoidable cumulative air quality impacts. As development of the project site was anticipated in the Downtown Plan EIR, the project would contribute to the Downtown Plan's cumulative air quality impacts and would be significant and unavoidable.

The project would result in a significant and unavoidable impact to cultural resources. Construction of the project would involve the demolition of the Old Courthouse and the Long Beach City Hall-Library Complex, which have been identified as historical resources for the purposes of CEQA. Demolition of these buildings would contribute to the significant and unavoidable impact identified in the Downtown Plan EIR.

Lastly, construction activities associated with the project would generate noise that could exceed City of Long Beach standards at existing receptors; this impact would be significant and unavoidable. In addition, construction activities could subject nearby residents to excessive levels of ground-borne vibration. The Downtown Plan EIR and Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to construction-generated vibration would be significant and unavoidable. The project would contribute to the significant and unavoidable impact identified by the Downtown Plan EIR.

5.3 ENERGY EFFECTS

The *CEQA Guidelines* Appendix F requires that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy.

The proposed project would involve the use of energy during the construction and operational phases of the project. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment. Long-term operation of the proposed project would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with the project would increase fuel consumption within the City.



Electricity service for the proposed project would be provided by Southern California Edison (SCE). SCE's power mix consists of approximately 20 percent renewable energy sources (wind, geothermal, solar, small hydro, and biomass) (SCE website, 2015). Gas service would be provided by the Long Beach Gas and Oil Department.

California used 296,628 gigawatt-hours (GWh) of electricity in 2013 (CEC, 2014a) and 2,313 billion cubic feet of natural gas in 2012 (CEC, 2012). Californians presently consume over 18 billion gallons of motor vehicle fuels per year (CEC, 2014b).

The proposed project's estimated motor vehicle fuel use is detailed in Table 5-2.

Table 5-2
Estimated Project-Related Annual Motor Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Annual Vehicle Miles Traveled[2]	Average Fuel Economy (miles/gallon)[3]	Total Annual Fuel Consumption (gallons)
Existing				
Passenger Cars	51.45%	7,337,324	27.5	266,812
Light/Medium Trucks	44.45%	6,339,048	23.5	269,747
Heavy Trucks/Other	3.67%	523,381	7.7	67,972
Motorcycles	0.43%	61,381	50	1,228
Total	**100%**	**14,261,076**	**--**	**605,759**
With Project				
Passenger Cars	50.46%	16,660,171	27.5	605,824
Light/Medium Trucks	44.89%	14,821,146	23.5	630,687
Heavy Trucks/Other	4.22%	1,393,300	7.7	180,948
Motorcycles	0.43%	141,971	50	2,839
Total	**100%**	**33,016,588**	**--**	**1,420,298**
Net Change				
Passenger Cars		9,322,847	27.5	339,012
Light/Medium Trucks		8,482,098	23.5	360,940
Heavy Trucks/Other		869,919	7.7	112,976
Motorcycles		80,590	50	1,611
Total Net Change		**18,755,512**	**--**	**814,539**

[1] Percent of vehicle trips found in Table 4.3 "Trip Type Information" in CalEEMod output (see Appendix B)
[2] Mitigated annual VMT found in Table 4.2 "Trip Summary Information" in CalEEMod output (see Appendix B)
[3] Average fuel economy provided by the United States Department of Transportation, Bureau of Transportation Statistics (2010).

Total estimated energy usage, including motor vehicle fuel, calculated using CalEEMod and shown in CalEEMod output files in Appendix B, is summarized and compared to state-wide usage in Table 5-3. Final energy use is shown as a net increase over the energy use from the existing use of the project site. The proposed project would make a minimal contribution to state-wide energy consumption in these categories.

Table 5-3
Estimated Project-Related Energy Usage
Compared to State-Wide Energy Usage

Form of Energy	Units	Annual Project-Related Energy Use	Annual State-Wide Energy Use	Project % of State-Wide Energy Use
Existing				
Electricity	megawatts per hour	6,830[1]	296,628,000[2]	0.0002%
Natural Gas	billion BTU	5.69[1]	2,313,000[3]	0.000002%
Motor Vehicle Fuels	gallons	605,759[4]	18,019,000,000[5]	0.00003%
Proposed Project				
Electricity	megawatts per hour	10,637	296,628,000	0.00004%
Natural Gas	billion BTU	23.88	2,313,000	0.00001%
Motor Vehicle Fuels	gallons	1,420,298	18,019,000,000	0.00008%
Net Change				
Electricity	megawatts per hour	3,807	296,628,000	0.00001%
Natural Gas	billion BTU	18.19	2,313,000	0.000008%
Motor Vehicle Fuel	gallons	814,539	18,019,000,000	0.00005%

[1] CalEEMod output provided in the Air Quality Analysis (see Appendix C for calculation results); Table 5.2
[2] California Energy Commission, California Energy Almanac,2013 Total Electricity System Power, data as of September 2014. Available: http://energyalmanac.ca.gov/electricity/total_system_power.html
[3] California Energy Commission, California Energy Almanac, Overview of Natural Gas in California – Natural Gas Supply. Available: http://energyalmanac.ca.gov/naturalgas/overview.html
[4] See Table 5-2
[5] California Energy Commission, 2014 Integrated Energy Policy Report, Available: http://www.energy.ca.gov/2014publications/CEC-100-2014-001/CEC-100-2014-001-CMF.pdf.

The proposed project would also be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy efficiency measures. The California Green Building Standards Code sets targets for: energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels.

The project is required to exceed Title 24 standards that are in effect at the time of development by 20 percent and to achieve a 25 percent reduction in electricity use through such measures as photovoltaic cells in compliance with Downtown Area Plan EIR Mitigation Measure AQ-2. Exceedance of Title 24 energy conservation requirements would ensure that energy is not used in an inefficient, wasteful, or unnecessary manner.

5.4 PUBLIC HEALTH HAZARDS

An SEIR scoping meeting was held on April 30, 2015 to solicit further public comment on the scope and content of the SEIR. One commenter expressed concern that the project's proposed demolition could result in vermin from the existing buildings invading adjacent properties. Demolition could potentially disturb vermin in existing buildings, which, if substantial, could pose a public health hazard. The commenter suggested mitigation requiring existing buildings to be fumigated prior to demolition.

Mitigation Measures. The following mitigation measure would reduce potential public health impacts from vermin due to proposed demolition to a less than significant level.

Other-1 **Fumigation.** Prior to issuance of demolition permits, the project applicant shall fumigate all buildings.

Significance After Mitigation. Implementation of Mitigation Measure Other-1 would reduce impacts to a less than significant level.

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6 ALTERNATIVES

As required by Section 15126.6 of the *CEQA Guidelines*, this SEIR examines a range of reasonable alternatives to the proposed project that would attain most of its basic objectives (stated in Section 2.5 of this SEIR) but would avoid or substantially lessen any of its significant effects.

The key objectives of the project are to:

- *Replace seismically deficient City Hall and Main Library in an expeditious manner.*
- *Reduce public safety hazards by eliminating the risk of fire, structural collapse, personal injury to trespassers, vandalism and crime, by demolishing the structurally unsound, abandoned, and deteriorated former Long Beach Courthouse building.*
- *Meet the long term goal of the Harbor Department to bring its headquarters downtown.*
- *Redevelop the Civic Center mega-block into a vibrant mix of public and private space, including a grand Civic Plaza, which asserts the value and importance of the public realm, and which functions as the City's center for governance, civic engagement and cultural and educational exchange.*
- *Consider opportunities to redevelop Old Courthouse site with public uses as part of the Civic Center mega-block redevelopment.*
- *Improve connections between the new Civic Center and greater Downtown through the reestablishment of the small block grid of the historic downtown street fabric and encouragement of a more pedestrian friendly environment.*
- *Redevelop the Main Library within Lincoln Park and ensure that future library space needs will be considered in the context of the changing role of the modern city library, and revolutionary change in media and technology that will influence the library of the future.*
- *Revitalize Lincoln Park into a destination park with amenities appropriate for visitors, residents and Downtown workers.*
- *Cap the City's ongoing maintenance costs, increase energy efficiency, and consolidate offsite City leases, when feasible.*
- *Consider private development elements and/or disposition of surplus property for private development, such as new housing, office, hotel and retail. If housing is proposed, 10 percent of all housing units must be affordable to moderate income persons.*
- *Design buildings to interface with the streets and draw pedestrians into the civic spaces. Proposed solutions must address the vision, guiding principles and design guidelines of the Downtown Plan 2012 (see Planned Development District Ordinance PD-30).*
- *Connect the Civic Center to surrounding business and residential uses. Be highly accessible to pedestrians and bicycles and include convenient automobile access. All private uses should complement the civic functions.*
- *Activate the perimeter streetscape, access points and all public components. Provide appropriate lighting and wayfinding signage for pedestrians, bicycles and automobiles.*

The guiding principles for downtown Long Beach from the Downtown Plan are as follows:

- *We promote the development of a distinctive downtown skyline, providing a vibrant, compact city core attracting cosmopolitan and creative people.*
- *Our lively Downtown acts as the heart of the city, connecting with the neighborhoods and coastline.*

- *We encourage an infrastructure to accommodate a future that is less dependent on fossil fuels and more focused on walking, bicycling, and public transportation.*
- *We invite and support new industries to invest in our future so that we can continue to diversify our economy and promote job growth while strengthening our existing backbone of convention, tourism, and port business.*
- *We endorse bold architecture, planning, and construction that utilize green building technology and incorporate sustainable energy.*
- *We demand quality in building practices in order to ultimately create historical masterpieces.*
- *We value our buildings of historic merit and seek to preserve or restore them through adaptive reuse.*

Included in this analysis are four alternatives, including the CEQA-required "no project" alternative, that involve changes to the project to help reduce its environmental impacts as identified in this SEIR. This section also identifies the Environmentally Superior Alternative.

The following alternatives are evaluated in this SEIR:

- *Alternative 1: No Project*
- *Alternative 2: Downtown Plan Buildout of Civic Center Area*
- *Alternative 3: Adaptive Reuse Alternative*
- *Alternative 4: Reduced Density*

The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.4.

Table 6-1 provides a summary comparison of the development characteristics of the proposed project and each of the alternatives considered. A more detailed description of the alternatives is included in the impact analysis for each alternative.

Table 6-1
Comparison of Project Alternatives' Buildout Characteristics

Characteristic	Alternatives				
	Proposed Project	**No Project Alternative**	**Downtown Plan Buildout of Civic Center Area[1]**	**Adaptive Reuse Alternative**	**Reduced Density[4]**
Number of Residential Units	780 DU	None	800 DU	780 DU	741 DU
Number of Hotel Rooms	200 rooms	None	None	200 rooms	190 rooms
Office Square Footage	510,000 GSF	283,000 GSF	460,000 GSF	510,000GSF[2]	484,500 GSF
Commercial Square Footage: Retail: Restaurant:	 32,000 GSF 8,000 GSF	None	 64,000 GSF 16,000 GSF	 32,000 GSF 8,000 GSF	 30,400 GSF 7,600 GSF
Lincoln Park and Main Library *Total Park Area:* *Open Space (ac):* *Library (ac/GSF):*	 4.8 ac 3.17 ac 1.63 ac / 92,000 GSF[3]	 4.8 ac 2.6 ac 2.2 ac / 138,000 GSF[3]	 4.8 ac 2.6 ac 2.2 ac / 138,000 GSF[3]	 4.8 ac 3.17 ac 1.63 ac / 92,000 GSF[3]	 4.8 ac 3.17 ac 1.63 ac / 87,400 GSF[3]
Vacant Square Footage (former Long Beach Courthouse)	None	277,000 GSF	None	None	None
Grading Import: Export:	 68,200 cy 380,000 cy	None	 11,200 cy 350,000 cy	 68,200 cy 200,000 cy	 68,200 cy 380,000 cy
Construction Schedule	74 months	None	69 months[6]	74 months	71 months[5]

DU = dwelling units; ac = acres; GSF: gross square footage; cy = cubic yards
[1] Source: Iteris, Long Beach Downtown Community Plan EIR Traffic Impact Analysis, 2010. Assumes that the existing Lincoln Park and the Library would be retained.
[2] Although the entire Courthouse would be used as City Hall, only approximately 180,000 GSF of the Courthouse would be useable as office space (RRM Design Group, 2014; see Appendix H of the Long Beach Courthouse Demolition Project Draft EIR). Therefore, it is assumed that the Port Building would be approximately 330,000 GSF and would accommodate City Hall and Port Building uses to accommodate all uses proposed by the project.
[3] GSF for Library uses.
[4] Assumes five percent reduction in residential, commercial, and office/Library uses.
[5] Estimated by reducing the proposed project's building construction schedule by five percent. The Reduced Density Alternative would include the same demolition, grading, and paving schedule.
[6] Eliminated Phase 3, which includes Main Library demolition and park construction.

All of these alternatives are described and analyzed below. Following the analysis of these four alternatives is a discussion of alternatives that were considered for analysis, but rejected as infeasible. These include several alternatives suggested by the State Historic Preservation Officer of the Office of Historic Preservation, as part of the SEIR scoping process. In addition, this section includes a discussion of the "environmentally superior alternative" among the alternatives studied.

6.1 NO PROJECT ALTERNATIVE

This alternative assumes that the proposed project is not constructed on the site. It assumes that the site would continue in its current condition and that the existing City Hall, Main Library, Lincoln Park, vacant former Long Beach Courthouse, and associated parking structures and parking lots would remain. However, implementation of the no project alternative at this time

would not preclude development of the site at some point in the future. The No Project Alternative is required by CEQA and also suggested by the Office of Historic Preservation during the SEIR scoping process.

6.1.1 Impact Analysis

No change in environmental conditions would occur under this alternative because no development would occur and site conditions would not change. This alternative would avoid the proposed project's significant and unavoidable impacts related to operational air pollutant emissions; exposing sensitive receptors to toxic air contaminants from Port of Long Beach and offsite stationary sources; demolishing historic resources; construction noise and vibration; and cumulative air quality impacts. In addition, this alternative would avoid significant, but mitigable impacts related to construction air pollutant emissions, operational noise, and exposing sensitive receptors to excessive noise. No significant impacts would occur under this alternative and none of the mitigation measures recommended for the proposed project would apply.

This alternative would not include demolition or rehabilitation of the former Long Beach Courthouse. Consequently, the critical functional and physical deficiencies identified for the former Courthouse by the statewide Task Force on Court Facilities in 1997 and the Administrative Office of the Courts in 2001 would remain. These deficiencies are described in detail in Section 2.0, *Project Description*, but include Americans with Disabilities Act (ADA) accessibility issues and seismic deficiencies. Despite a limited retrofit at an estimated cost of $13.9 million by the County of Los Angeles, the Courthouse is expected to remain standing long enough to evacuate, but would not be capable of being re-occupied following a medium-sized earthquake. Under this alternative, the structurally unsound, abandoned, and deteriorated former Courthouse would remain a public safety hazard, vulnerable to risk of fire, structural collapse, personal injury to trespassers, and vandalism and crime.

Overall, this alternative's impacts would be less than those of the proposed project. However, the selection of the no project alternative would not preclude the future redevelopment of the Civic Center area. Furthermore, this alternative would not fulfill any of the project objectives, nor would it meet the Downtown Plan guiding principles for the Downtown Plan Area.

6.2 DOWNTOWN PLAN BUILDOUT OF CIVIC CENTER AREA ALTERNATIVE

The Downtown Plan EIR assumed development of up to 800 residential units, 460,000 gross square feet (GSF) of office/commercial floor area, 64,000 GSF of retail space and 16,000 GSF of restaurant uses for the Civic Center area in the Downtown Plan traffic analysis. This alternative assumes the existing Main Library and Lincoln Park would be retained and Lincoln Parking Garage would not be renovated. In addition, this alternative does not include the construction of a hotel. As the existing Library and Lincoln Park would be retained, grading would be reduced in comparison to the proposed project to 11,200 cy of import and 350,000 cy of export and the construction schedule would likely be reduced to 69 months. Similar to the proposed project, this alternative would include demolition of the former Courthouse and City Hall.

6.2.1 Aesthetics

Similar to the proposed project, the Downtown Plan Buildout of the Civic Center Area Alternative would introduce new high-rise structures and full-block complexes at locations within the Downtown Plan Area. The alternative would increase the number of residential units and the commercial area constructed on the project site, but would generally be similar in regards to the visual character of the proposed development. As this alternative would not include the hotel component, it would likely not increase the height of the two Center Block mixed-use buildings proposed by the project despite the additional residential and commercial area this alternative would accommodate and the site constraints caused by retaining the existing Main Library. The aesthetic impact to scenic vistas, scenic resources, and the site's visual character associated with this development would be similar to that of the proposed project and would be less than significant. Implementation of this alternative would result in a roughly similar significant, but mitigable aesthetic impact from construction when compared to the proposed project, as it would occur over the same period of time and in the same general locations as the proposed project. Therefore, Mitigation Measure AES-1 (Construction Screening) would be required to screen construction sites from public viewpoints. Shadows or shading could be generated by this alternative that would affect shadow-sensitive land uses; however, because this alternative does not include the hotel component, this alternative would not create new significant shading impacts to shadow-sensitive land uses. Overall, impacts from this alternative would be similar to those of the proposed project.

6.2.2 Air Quality

The Downtown Plan Buildout of Civic Center Area Alternative would not include a 200-room hotel component, but would increase the number of residential units and the commercial area constructed on the project site; therefore, this alternative would likely have similar operational emissions as the proposed project. As this alternative would retain the existing Main Library and Lincoln Park, soil import and export would be reduced by approximately seven percent in comparison to the proposed project. Therefore, this alternative would have slightly lower overall construction emissions than the proposed project.

Similar to the proposed project, this alternative would include demolition of existing buildings and would require implementation of Mitigation Measure AQ-2 (Air Quality Safety Plan). As this alternative would have similar operational emissions compared to the proposed project, it would also require implementation of Mitigation Measure AQ-3 (Low-VOC Paint). Nonetheless, similar to the proposed project, this alternative's operational and cumulative air quality impacts would remain significant and unavoidable. In addition, this alternative would place sensitive receptors in the Downtown Plan Area like the proposed project; therefore, impacts related to toxic air contaminants from Port of Long Beach and offsite stationary sources would remain significant and unavoidable.

6.2.3 Cultural Resources

Like the proposed project, the Downtown Plan Buildout of Civic Center Area Alternative would include the demolition of the former Courthouse and City Hall, but would retain the existing Main Library; therefore, this alternative's impact would be less than that of the proposed project, but would still be significant. As with the proposed project, Mitigation Measures CR-

1(a) (Historic Artifact Collection Program) and CR-1(b) (Building Documentation) would apply to this alternative, but would not reduce the impact to below a level of significance. This alternative's cultural resource impact would be less than that of the proposed project because it would retain the Main Library, but would be significant and unavoidable, as determined in the Downtown Plan EIR.

6.2.4 Greenhouse Gas Emissions/Climate Change

The Downtown Plan Buildout of Civic Center Area Alternative would not include a 200-room hotel component, but would increase the number of residential units and the commercial area constructed on the project site; therefore, this alternative would have similar operational greenhouse gas (GHG) emissions as the proposed project. Similar to the proposed project, this alternative's GHG emissions and climate change impacts would be less than significant. Similar to the proposed project, this alternative would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals.

6.2.5 Noise and Vibration

The Downtown Plan Buildout of Civic Center Area Alternative would increase the number of residential units proposed by 20 units and the commercial area constructed on the project site by 40,000 GSF. Construction would likely occur over a shorter period of time (69 months) when compared to the proposed project. Nonetheless, due to the project site's proximity to sensitive receptors Mitigation Measure Noise-1 (Noise Control Plan) would be required. As with the proposed project, this alternative would have significant and unavoidable noise and vibration impacts due to the demolition of the former Long Beach Courthouse and City Hall. However, noise and vibration impacts would be slightly reduced because this alternative would not include demolition of the Main Library. Operational impacts associated with location of commercial uses in proximity to existing and planned residential uses would be similar to those of the proposed project and Mitigation Measures Noise-2(a) (Loading Areas) and Noise-2(b) (Sound-Rated Windows and Sliding Glass Doors Near Commercial Uses) would apply to this alternative.

As described in detail in Section 6.2.6, this alternative would generate an estimated 3,181 more daily trips, 39 more a.m. peak hour trips, and 288 more p.m. peak hour trips when compared to the proposed project. This represents an approximately 23 percent increase in daily traffic compared to the proposed project.

The proposed project's traffic noise impacts would not exceed the 3 dBA significance threshold at any receptor location. However, the 23 percent increase in traffic due to this alternative may result in an exceedance of the relevant thresholds at certain locations. The receptor located at Chestnut Avenue between Third Street and Broadway would experience a noise increase of 2.5 dBA as a result of the proposed project and this alternative would likely result in an exceedance of the 3 dBA significance threshold at this location.

The Downtown Plan Buildout of Civic Center Area Alternative's impacts related to construction-generated noise and vibration would be less than those of the proposed project,

however impacts related to traffic-generated noise would be greater. Overall, construction noise and vibration impacts would continue to be significant and unavoidable.

6.2.6 Transportation and Traffic

Table 6-2 shows the trip generation potential for the mix of uses assumed for buildout of the Civic Center. Buildout of the Downtown Plan Civic Center Area would generate an estimated 14,104 daily trips, with 710 trips (337 inbound, 373 outbound) produced in the a.m. peak hour, and 840 trips (439 inbound, 401 outbound) produced in the p.m. peak hour. A comparison of the trips generated by the proposed project to the trips generated by the mix of uses assumed in the Downtown Plan for the Civic Center area shows that that this alternative would result in 3,181 more daily trips, 39 more a.m. peak hour trips, and 288 more p.m. peak hour trips.

Table 6-2
Trip Generation Forecast – Downtown Plan Civic Center Area

ITE Reference	Average Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
LU Zone 8: Residential Condos	1,769	16	81	97	78	37	115
LU Zone 9:Residential Condos, Office, Shopping Center, Restaurant	15,229	607	332	939	411	606	1,017
Total Downtown Plan Civic Center Area Trips	**16,998**	**623**	**413**	**1,036**	**489**	**643**	**1,132**
Existing City Hall Trips[a]	**2,894**	**286**	**40**	**326**	**50**	**242**	**292**
Net Downtown Plan Civic Center Area Alternative Trips (Alternative – Existing)	**14,104**	**337**	**373**	**710**	**439**	**401**	**840**

Source: Linscott, Law and Greenspan June 2015; see Appendix E for full TIA report.
[a] The Downtown Plan Buildout of the Civic Center Area Alternative would include demolition of City Hall.

The Downtown Plan EIR determined that traffic generated by buildout of the Downtown Plan would result in significant and unavoidable impacts to traffic and transportation. This alternative would contribute to this impact and impacts would be greater than those of the proposed project.

6.3 ADAPTIVE REUSE ALTERNATIVE

This alternative considers the potential impacts of rehabilitating the former Long Beach Courthouse to be adaptively reused primarily as City Hall and/or municipal offices. This alternative responds to requests from the California Office of Historic Preservation and others during the SEIR scoping process to consider an alternative that would preserve existing onsite historic resources. This alternative also considers the demolition of the City Hall-Library Complex to occur by means other than implosion.

The Adaptive Reuse Alternative assumes the former Courthouse building would be rehabilitated for a government office use in conformance with the Secretary of the Interior Standards for the Treatment of Historic Properties. Rehabilitation of the building would be

conducted in accordance with the California Historic Building Code, which allows for more flexible application of building regulations when impacting a historic resource. It is assumed that all identified character-defining features of the Courthouse building interior would be repaired and maintained in-situ to the highest degree feasible and in accordance with the Secretary's Rehabilitation Standards and Guidelines. Nonetheless, the majority of these spaces would be altered to accommodate government office uses.

RRM Design Group conducted a conceptual feasibility study assessment to re-purpose the former Courthouse building for a government office use. That study is included in Appendix H of the Long Beach Courthouse Demolition Project Draft EIR. In summary, the assessment concludes that the building would require substantial upgrades to the building's structural, mechanical, plumbing, fire protection, lighting and electrical systems. All levels of the building's interior would require substantial modernization to comply with the California's building codes, energy efficiency regulations and disabled access for a government office use. Virtually all of the exterior glass panels and metal building skin would need to be replaced with dual glazed high efficiency glass to meet current energy regulations. Similarly, to meet disabled access regulations several upgrades to the building entries, lobby, circulation, parking, and restrooms would require substantial renovation. While the gross building area is approximately 277,000 square feet, the net useable area for office conversion would be much less. The estimated usable office area would be in the 60 to 70 percent range or approximately 180,000 square feet; therefore, it is assumed that the Port Building would be approximately 330,000 GSF (rather than 240,000 GSF proposed by the project) and would accommodate City Hall and Port Building uses. Therefore, this alternative would reduce new office square footage construction by approximately 35 percent, when compared to the proposed project.

The conceptual feasibility study determined that substantial investment would be required to modernize the existing building systems and to renovate interior finish materials. Renovation projects are labor intense for activities such as selective demolition and preservation of character defining features. The cost premium for a public sector renovation project may add upwards of 25 to 30 percent beyond the cost of new construction to account for prevailing wage requirements, which are not applicable to private sector projects. Renovation budget contingencies would also be much higher than new construction due to the likelihood of finding unknown deficiencies such as hazardous material abatement. Major cost factors include significant renovation of all major building systems. Seismic strengthening of the existing building structural systems is needed to remain habitable after a seismic event. According to the conceptual feasibility study, a renovation project of this size and complexity would cost far more than demolishing and replacing the existing building with entirely new construction; the study estimated that the cost for the rehabilitation of the former Courthouse and conversion to municipal office use would range from $124,650,000 to $138,500,000.

6.3.1 Aesthetics

The Adaptive Reuse Alternative would involve the same amount of residential and commercial space as the proposed project. This alternative would result in the reconstruction of the former Long Beach Courthouse to be used as 180,000 GSF of useable office space. This alternative would increase the size of the Port Building to 330,000 GSF to accommodate the office space needs of City Hall and the Harbor Department; therefore, the Port Building would be four stories taller than the proposed project and would be approximately 15 stories tall.

Adaptive reuse of the former Courthouse may contribute less to the visual character of the area than the proposed project, which would introduce new structures that are more visually consistent with the surrounding area and that would be visually compatible with one another. Overall, this alternative would result in a change in visual character similar to that of the proposed project and the aesthetic impact to scenic vistas, scenic resources, and the site's visual character associated with this development would also be less than significant. Implementation of this alternative would result in a roughly similar significant, but mitigable impact from construction when compared to the proposed project, as construction would occur over the same period of time and in the same general locations as under the proposed project. Therefore, Mitigation Measure AES-1 (Construction Screening) would be required to screen construction sites from public viewpoints. Construction impacts associated with the demolition of the former Long Beach Courthouse would not occur, but other construction impacts would occur throughout the project site. Although the Port Building would be four stories taller than the proposed project, shadows or shading generated by this alternative would not create new shadow impacts to shadow-sensitive land uses. Overall, impacts from this alternative would be similar to those of the proposed project.

6.3.2 Air Quality

The Adaptive Reuse Alternative would involve the same amount of residential and commercial space as the proposed project. This alternative would result in the reconstruction of the former Long Beach Courthouse to be used as 180,000 GSF of office space. This alternative would build 330,000 GSF of new office space to accommodate City Hall and the Harbor Department's office space needs. Therefore, this alternative would reduce new office square footage construction by approximately 35 percent, when compared to the proposed project.

Construction would occur over the same length of time as compared to the proposed project and in the same locations. This alternative would result in the same operational emissions compared to the proposed project due to the same amount of overall residential, commercial, and office uses. This alternative would have lower overall construction emissions because demolition of the former Long Beach Courthouse would not occur and the square footage of new office construction would be reduced by approximately 35 percent. Similar to the proposed project, construction-related air quality impacts would be less than significant with implementation of Mitigation Measure AQ-2 (Air Quality Safety Plan), which would mitigate impacts related to the demolition of the City Hall-Library Complex. Because this alternative would include the same overall residential, commercial, and office uses as the proposed project, implementation of Mitigation Measure AQ-3 (Low-VOC Paint) would also be required and the impact of operational air pollutant emissions would remain significant and unavoidable, similar to the proposed project. This alternative's air quality impacts would be similar to that of the proposed project; operational and cumulative air quality impacts would remain significant and unavoidable. Similar to the proposed project, this alternative would place sensitive receptors in the Downtown Plan Area; therefore, impacts related to toxic air contaminants from Port of Long Beach and offsite stationary sources would also remain significant and unavoidable.

6.3.3 Cultural Resources

The former Long Beach Courthouse building was found individually eligible for the California Register of Historic Resources and also eligible for City of Long Beach Landmark Designation.

This alternative would preserve this building and eliminate the significant and unavoidable impact resulting from demolition of the building. The adaptive reuse of the building, however, would require substantial alteration of interior and exterior features. The adaptive reuse would maintain the structure of the building, but its appearance and historic value may be diminished. Similar to the proposed project, the Adaptive Reuse Alternative would include demolition of the City Hall-Library Complex; therefore, similar to the proposed project, this alternative would have a significant impact to this resource and Mitigation Measures CR-1(a) (Historic Artifact Collection Program) and CR-1(b) (Building Documentation) would apply. This alternative's cultural resource impact would be less than that of the proposed project with respect to the former Long Beach Courthouse and equal to that of the proposed project with respect to the City Hall-Library Complex. Therefore, although the impact would be lower than that of the proposed project, the impact associated with demolition of the City Hall-Library Complex would remain significant and unavoidable.

6.3.4 Greenhouse Gas Emissions/Climate Change

The Adaptive Reuse Alternative would include the same amount of office, residential, and commercial uses on the project site; therefore, operational GHG emissions would be the same as the proposed project. This alternative would have ~~slightly~~ lower construction GHG emissions than the proposed project due to the adaptive reuse of the former Long Beach Courthouse, rather than the demolition of the building. This alternative's climate change impacts would be ~~slightly~~ less than those of the proposed project and, as with the proposed project, would ~~remain~~ be less than significant. Similar to the proposed project, this alternative would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals.

6.3.5 Noise and Vibration

Construction would occur over the same length of time as compared to the proposed project and in the same locations. However, the significant and unavoidable impacts associated with noise and vibration generated by the demolition of the former Long Beach Courthouse would not occur under this alternative, nor would the significant and unavoidable impacts associated with noise and vibration generated by the potential demolition by implosion of the City Hall-Library Complex. The significant and unavoidable impact associated with noise generated by other construction activities, such as from the use of jackhammers, generators, and compactors, would, however, occur. Operational impacts associated with location of commercial uses in proximity to existing and planned residential uses would be similar to those of the proposed project and mitigation measures Noise-2(a) (Loading Areas) and Noise-2(b) (Sound-Rated Windows and Glass Doors Near Commercial Uses) would apply to this alternative.

As described in detail in Section 6.3.6, this alternative would have similar traffic volumes as the proposed project because it would not change the office, commercial, and residential square footages of the proposed project. Therefore, similar to the proposed project, traffic noise impacts would be less than significant.

6.3.6 Transportation and Traffic

This alternative would have generally the same traffic volumes as the proposed project because it would not change the office, commercial, and residential square footages of the proposed project. Access to the project site would be similar to the proposed project, and would not include any hazardous design features. Similar to the proposed project, impacts to traffic would be less than significant.

6.4 REDUCED DENSITY

This alternative involves reducing the amount of residential, commercial, and office/library uses proposed for the project site by five percent. Therefore, this alternative assumes the construction of 741 dwelling units, a 190 room hotel, 484,500 GSF of office uses, 30,400 GSF of retail uses, 7,600 GSF of restaurant uses, and 87,400 GSF of library uses. It is assumed that the footprint of proposed land uses would remain the same; therefore, this alternative would utilize 3.17 acres of Lincoln Park as open space and would have the same overall grading as the proposed project. The construction schedule would be shorter than the proposed project and would occur over approximately 71 months.

The intent of this alternative is to reduce any potentially significant impacts associated with the project that would result from its intensity, such as the potentially significant but mitigable impacts mentioned above. This alternative also has the potential to reduce other, less than significant impacts of the proposed project such as aesthetics, GHGs, traffic and roadway noise. This alternative would meet the objectives of the project, but to a lesser degree than the project, because it would not involve the same amount of housing or office/library and commercial space creation as the proposed project.

6.4.1 Aesthetics

The Reduced Density Alternative would lead to a reduced amount of residential, office, and commercial space being built on the project site as compared to the proposed project. While this alternative would result in a change in visual character similar to that the proposed project since commercial, office, and residential uses would be developed throughout the area, buildings would be slightly smaller with slightly less visual impact. The aesthetic impact to scenic vistas, scenic resources, and the site's visual character associated with this development would be reduced when compared to the proposed project. Implementation of this alternative would result in a roughly similar, but slightly reduced significant but mitigable impact associated with construction when compared to the proposed project since it would occur in the same general locations as the proposed project over a shorter period of time. Mitigation Measure AES-1 (Construction Screening) would be required to screen construction sites from public viewpoints. Shadows or shading generated by this alternative would be slightly reduced compared to the proposed project because building heights would be lower. Similar to the proposed project, this alternative would have less than significant shadow impacts. Overall, impacts from this alternative would be slightly less than those of the proposed project and would be significant, but mitigable.

6.4.2 Air Quality

The Reduced Density Alternative involves a five percent reduction in overall development intensity as compared to the proposed project. This alternative would have slightly lower overall construction emissions than the proposed project due to the reduced number of units and square footage to be built, but grading emissions would not change substantially because this alternative would require the same grading as the proposed project. Because this alternative would include demolition of existing buildings, it would require implementation of Mitigation Measure AQ-2 (Air Quality Safety Plan). Table 6-3 shows that with implementation of Mitigation Measure AQ-3 (Low-VOC Paint), this alternative would result in operational emissions of reactive organic gases (ROG) that are less than SCAQMD's significance threshold. The proposed project had significant, but mitigable construction-related air quality impacts and significant and unavoidable operational air quality impacts. This alternative's operational and construction-related air quality impacts would be less than those of the proposed project and both impacts would be less than significant with mitigation. Similar to the proposed project, however, this alternative would place sensitive receptors in the Downtown Plan Area; therefore, impacts related to toxic air contaminants from Port of Long Beach and offsite stationary sources would remain significant and unavoidable.

Table 6-3
Long-Term Operational Emissions (lbs/day) with Mitigation Measure AQ-3

Emission Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Reduced Density Alternative Emissions						
Area	**54.8**	0.7	61.2	<0.1	0.3	0.3
Energy	**0.7**	7.1	4.8	<0.1	0.6	0.6
Mobile	**50.5**	130.6	560.5	1.8	127	35.5
Total Project Emissions	**105.9**	**138.4**	**626.9**	**1.8**	**128.0**	**36.4**
Existing Emissions						
Area	18.2	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	0.2	1.5	1.3	<0.1	0.1	0.1
Mobile	35.0	78.5	323.7	0.6	55.3	15.7
Total Existing Emissions	**53.4**	**80.1**	**325.1**	**0.6**	**55.4**	**15.8**
Net Emissions (Project – Existing)	***52.5***	***58.3***	***301.8***	***1.2***	***72.6***	***20.6***
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: See Appendix B for CalEEMod calculations. Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 and Architectural Coating Rule 1113,and Downtown Plan EIR Mitigation Measure AQ-2 and GHG-2(b).
Note: Totals may not add up due to rounding.

6.4.3 Cultural Resources

Like the proposed project, the Reduced Density Alternative would include the demolition of the former Courthouse and City Hall-Library Complex; therefore, this alternative's cultural resource impact would be similar to that of the proposed project and would be significant. Mitigation Measures CR-1(a) (Historic Artifact Collection Program) and CR-1(b) (Building Documentation) would apply to this alternative and would reduce impacts to the degree feasible. Nevertheless, as with the proposed project, the impact would remain significant and unavoidable due to the demolition of historic resources.

6.4.4 Greenhouse Gas Emissions/Climate Change

Because of the five percent reduction in the total development under the Reduced Density Alternative, this alternative would lead to a roughly five percent reduction in operational GHG emissions compared to the proposed project. A minor reduction in overall construction-related GHG emissions would also occur, although grading GHG emissions would not be substantially reduced because this alternative would require the same grading as the proposed project.

Similar to the proposed project, this alternative would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals. The Reduced Density Alternative's GHG Emissions/Climate Change impacts would be less than the already less than significant impacts of the proposed project.

6.4.5 Noise and Vibration

The Reduced Density Alternative would reduce the amount of residential, office, and commercial space by five percent compared to the proposed project. Construction would occur over approximately 71 months, a three month reduction compared to the proposed project, thereby reducing the duration of the significant and unavoidable noise and vibration impacts generated near existing sensitive receptors. This alternative would have the same significant and unavoidable impacts related to noise and vibration due to the demolition of the former Long Beach Courthouse and City Hall-Library Complex and Mitigation Measure Noise-1 (Noise Control Plan) would be required. Operational impacts associated with the location of commercial uses in proximity to existing and planned residential uses would be similar to the proposed project and mitigation measures Noise-2(a) (Loading Areas) and Noise-2(b) (Sound-Rated Windows and Glass Doors Near Commercial Uses) would apply to this alternative. Similar to the proposed project, the operational noise impacts of this alternative would be less than significant.

As described in detail in Section 6.4.6, this alternative would result in a five percent reduction in traffic generation when compared to the proposed project. The impacts of project-related traffic noise would be less than significant and this alternative would result in less traffic-generated noise. Therefore, this alternative's impacts related to noise and vibration would be less than significant.

6.4.6 Transportation and Traffic

The Reduced Density Alternative would reduce project-generated traffic by five percent. The impacts of project-related traffic would be less than significant; therefore, because the Reduced Density Alternative would generate five percent fewer new trips, its impact would also be less than significant. Access to the project site would be similar to the proposed project, and would not include any hazardous design features; therefore, transportation impacts related to hazardous design features would also be less than significant.

6.5 ALTERNATIVES CONSIDERED BUT REJECTED

During the preparation of this SEIR, consideration was given to three alternatives that were suggested by the Office of Historic Preservation, as part of the SEIR scoping process, but were ultimately rejected. The three alternatives that were considered but rejected are an Alternate Site Alternative, an Infill Alternative, and an Alternative-Use Alternative. An Alternate Site Alternative and Infill Alternative would have located the entire proposed project or project components on one or more different sites within the Downtown Plan Area and an Alternative-Use Alternative would have placed different uses within the existing buildings on the project site. A fourth alternative, the Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative, was considered, but rejected. This alternative would have adaptively

reused the Courthouse as office space (similar to that described in the Adaptive Reuse Alternative above) and rehabilitated the seismic deficiencies within the City Hall-Library Complex.

The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, residential development, and commercial mixed use development. In total, the proposed project includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. Existing buildings that would be demolished include the former Long Beach Courthouse and the City Hall-Library Complex. Moving the project to another site, as would occur in the Alternate Site and Infill Alternatives, would not meet many of the key project objectives since it would not replace seismically deficient structures, reduce public safety hazards, or improve and revitalize the Civic Center Area. In addition, it would not be feasible to place different uses in existing buildings on the project site, as would occur in the Alternate-Use Alternative, since additional buildings would need to be constructed to house displaced civic uses. Displaced civic uses then would not be located within the Civic Center Area, as identified in the adopted Downtown Plan.

The Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was also considered, but rejected. This alternative would have adaptively reused the Courthouse as office space (similar to that described in Section 6.3, *Adaptive Reuse Alternative*) and rehabilitated the seismic deficiencies within the City Hall-Library Complex. Unlike the Adaptive Reuse Alternative described in Section 6.3, *Adaptive Reuse Alternative*, this alternative would have placed the Port Building within the former Courthouse and retained the City Hall and Library uses within the existing buildings. This alternative was rejected because, as discussed in Section 2.0, *Project Description*, there are critical functional and physical deficiencies identified for the former Courthouse by the statewide Task Force on Court Facilities in 1997 and the Administrative Office of the Courts in 2001 that would make rehabilitation of the former Courthouse, infeasible. RRM Design Group prepared an Adaptive Reuse Study for the former Long Beach Courthouse in September 2014 that determined adaptive reuse of the former Courthouse would require substantial upgrades to the building's structural, mechanical, plumbing, fire protection, lighting and electrical systems. All levels of the building's interior would require substantial modernization to comply with the California's building codes, energy efficiency regulations and disabled access for a government office use. The Study estimated that costs for rehabilitation of the former Courthouse and conversion to municipal office use would range from $124,650,000 to $138,500,000. City Hall has seismic deficiencies that would increase rehabilitation costs associated with the Courthouse. Moreover, the project site is largely built out; retaining the former Courthouse and the City Hall-Library Complex would restrict space available to achieve project objectives, such as redeveloping the site into a vibrant mix of public and private space with a grand Civic Plaza; improving connections with greater Downtown; reestablishing the small block grid of the historic downtown street fabric; private development of housing, office, hotel, and retail; and increasing affordable housing.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The environmental analysis contained in the SEIR determined that the proposed project would result in several significant and unavoidable and potentially significant but mitigable

environmental impacts. Each of the alternatives considered would reduce or avoid one or more of the proposed project's significant and unavoidable or significant but mitigable impacts, as discussed below.

The No Project Alternative would avoid or reduce the proposed project's potential impacts in all environmental impact areas and would have no environmental impact. Consequently, the No Project Alternative is considered environmentally superior. However, this alternative would not meet any of the project objectives (stated in Section 2.0, *Project Description*) because it would not carry out the proposed project, nor would it meet the Downtown Plan guiding principles for the Downtown Plan Area.

Section 15126.6(e)(2) of the *CEQA Guidelines* requires that, if the environmentally superior alternative is the No Project Alternative, the SEIR must also identify an environmentally superior alternative among the other alternatives. Of the remaining three alternatives, the Reduced Density Alternative, which would reduce the proposed project's potential impacts in aesthetics, air quality, GHG emissions, noise and vibration, and traffic and transportation, is the environmentally superior alternative. The only environmental impact areas for which impacts would not be reduced is cultural resources, for which the Reduced Density Alternative would have impacts similar to those of the proposed project. This alternative would meet the basic objectives of the project because it would allow for replacement of seismically deficient buildings, reduce public safety hazards, locate the Harbor Department headquarters in the Downtown Plan Area, redevelop the Civic Center mega-block, redevelop the former Courthouse, improve connections between the new Civic Center and greater Downtown, redevelop the Main Library, revitalize Lincoln Park, cap the City's ongoing maintenance costs, increase energy efficiency, provide affordable housing, connect to surrounding businesses and residential uses, and activate the perimeter streetscape. However, because the Reduced Density Alternative would involve a reduction in the total amount of residential, office, and commercial uses developed, it would meet the project objectives to a proportionally lesser degree than the proposed project.

The Adaptive Reuse Alternative would reduce, but would not eliminate impacts to cultural resources and would also incrementally lessen impacts to GHG emissions, and noise and vibration. The Adaptive Reuse Alternative would not ~~fail to~~ meet the project's objective of redeveloping the Civic Center mega-block into a vibrant mix of public and private space, including a grand Civic Plaza. As discussed in Section 6.3, *Adaptive Reuse Alternative*, it would also require substantial renovation at an estimated cost ranging from $124,650,000 to $138,500,000

Table 6-4 indicates whether each alternative's environmental impact is greater than, less than, or similar to the proposed project.

Table 6-4
Comparison of Environmental Impacts of Alternatives

Issue	No Project	Downtown Plan Buildout of Civic Center Area	Adaptive Reuse	Reduced Density
Aesthetics	-	=	=	-
Air Quality	-	=	=	-
Cultural Resources	-	-	-	=
GHG Emissions/ Climate Change	-	=	-	-
Noise and Vibration	-	- / +	- / +	-
Transportation and Traffic	-	+	=	-
Overall	**-**	**=**	**-**	**-**

+Impacts greater than those of the proposed project
- Impacts less than those of the proposed project
= Impacts similar impact to the proposed project
- / + Impacts both greater and less than the proposed project

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7 REFERENCES AND REPORT PREPARERS

7.1 REFERENCES

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7.1.2 Persons Contacted

Amy Bodek. Long Beach Development Services, Executive Office. April-July 2015.
Craig Chalfant. Long Beach Development Services, Planning Bureau. April-July 2015.
Shane Green. Linscott, Law & Greenspan, Engineers (LLG). June 26, 2015.
Stephanie Kemp. City of Long Beach, Human Resources. July 2015.

7.2 REPORT PREPARERS

This EIR was prepared by the City of Long Beach, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

Rincon Consultants, Inc.
Shannon Carmack, Architectural Historian
Aubrey Mescher, Senior Environmental Planner
Joe Power, AICP, Principal in Charge
Sarah Richman, Associate Environmental Planner
Lindsey Sarquilla, Associate Environmental Planner
Wade Sherman, Graphics Technician
Katherine Warner, GIS Technician

Traffic Impact Analysis- Linscott, Law & Greenspan, Engineers
Richard E. Barretto, Principal
Shane Green, Transportation Engineer III

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8 RESPONSES TO COMMENTS ON THE DRAFT SEIR

8.1 INTRODUCTION

In accordance with Section 15088 of the California Environmental Quality Act (CEQA) *Guidelines*, the City of Long Beach, as the lead agency, has reviewed the comments received on the Draft Supplemental Environmental Impact Report (Draft SEIR) for the Civic Center Project and has prepared written responses to the written comments received. The Draft SEIR was circulated for a 45-day public review period that began August 4, 2015 and concluded on September 17, 2015. A study session to receive public comment on the Draft SEIR was conducted on August 20, 2015.

Each verbal and written comment that the City received is included in this section. Responses to comments have been prepared to address the environmental concerns raised by the commenters and to indicate where and how the Draft SEIR addresses pertinent environmental issues. The comment letters included herein were submitted by public agencies and private citizens or groups.

Any changes made to the text of the Draft SEIR correcting information, data or intent, other than minor typographical corrections or minor working changes, are noted in the Final SEIR text as changes from the Draft SEIR.

The focus of the responses to comments is the disposition of environmental issues that are raised in the comments, as specified by Section 15088(c) of the *CEQA Guidelines*. Detailed responses to comments on the merits of the proposed project are not provided. However, comments that are not directed to an environmental issue have been forwarded to City decision-makers for review and consideration.

Where a comment results in a change to the Draft SEIR text, a notation is made in the response indicating that the text is revised. Changes in text are signified by strikeouts (~~strikeouts~~) where text is removed and by bold font (**bold font**) where text is added. If text is added where the font is already bold, additions are noted using underlined bold font (**underlined bold font**).

8.2 RESPONSES TO PUBLIC TESTIMONY

On August 20, 2015, City Staff conducted a study session during the Planning Commission Public Hearing regarding the Draft SEIR for the Civic Center Project. The hearing provided an opportunity for members of the public to receive a summary presentation of the project as well as the major findings of the Draft SEIR. The primary purpose of the public comment portion of the hearing was to receive input from interested parties regarding the adequacy of the Draft SEIR. Seven individuals spoke at the hearing. Table 8-1 summarizes verbal comments made by the seven speakers in the order received. No approvals or formal actions were taken by the Planning Commission at this hearing.

Table 8-1
August 20, 2015, Study Session and Verbal Comment Summary

Num.	Speaker/Affiliation	Comments
1	Gary Shelton, Long Beach Area Coalition for the Homeless	a. Stated appreciation for mitigation measure to address vermin from demolition. b. Asked about the existing mature trees on the project site and how the project would address removing them.
2	Margaret Smith, Vice President, Long Beach Library Foundation	a. Requested adequate funding for the new library.
3	Laura Myers, Private Citizen	a. Requested adequate funding for the new library.
4	Bob Ladd, Private Citizen	a. Stated that residential uses would be disruptive to the Civic Center. Suggested that the new Library should front Ocean Boulevard and that commercial uses should be at edges of the project site and not near the center.
5	Alice, Friends of Lincoln Park	a. Suggested that information on social services should be available within the new Lincoln Park.
6	Mark Christoffels, Planning Commissioner	a. Expressed concern with potential wind tunnel creation due to the design of the project. b. Asked if project design has addressed glare. c. Stated that programmed spaces should be illuminated. d. Asked why the project does not include any water features.
7	Jane Templin, Planning Commissioner	a. Asked to see details regarding the project's compliance with Title 24 and Leadership in Energy & Environmental Design (LEED) gold certification.

Responses to verbal comments are provided below.

1. Gary Shelton, Long Beach Area Coalition for the Homeless

a. The commenter asked about the existing mature trees on the project site and how the project would address removing. As discussed in Section IV, *Biological Resources*, of the Initial Study (see Appendix A of the Draft SEIR), the proposed project would involve the reconstruction of Lincoln Park, which would require the removal of vegetation, including mature trees. All vegetation within the Park is ornamental landscaping that does not include native biological resources or habitats. Therefore, the Civic Center Project would not result in any significant impacts to biological resources or increase the severity of significant impacts to biological resources beyond those identified in the Downtown Plan EIR. In accordance with the City's Tree Maintenance Policy, all trees within the public right-of-way would be replaced with an approved 15-gallon tree. In addition, the project proponent looked into the feasibility of relocating some of the mature trees on the project site, but found that it would be infeasible because the existing parking garage cannot bear the weight of the trucks necessary to for tree relocation.

2. Margaret Smith, Vice President, Long Beach Library Foundation

a. This comment has been forwarded to City decision makers for their consideration.

3. Laura Myers, Private Citizen

a. This comment has been forwarded to City decision makers for their consideration.

4. Bob Ladd, Private Citizen

a. This comment is about the project and not the SEIR. This comment has been forwarded to City decision makers for their consideration.

5. Alice, Friends of Lincoln Park

a. This comment has been forwarded to City decision makers for their consideration.

6. Mark Christoffels, Planning Commissioner

a. Expressed concern with potential wind tunnels due to the design of the project. The project is consistent with the Downtown Plan, which envisions buildings of up to 150 feet in height. This type of development may increase overall wind tunnel effects, but such effects would not constitute a significant environmental effect under CEQA.
b. Asked if project design has addressed glare. The Initial Study that was prepared for the proposed project (see Appendix A of the Draft EIR) included an initial evaluation of aesthetic impacts, and determined that the project would not result in a significant impact associated with the introduction of a new source of substantial light or glare; therefore, this issue is not further addressed in the SEIR.
c. Stated that programmed spaces should be illuminated. The project would comply with City lighting requirements.
d. Asked why the project does not include any water features. This comment is about the project rather than the SEIR. Water features have not been proposed, but presumably could be if desired.

7. Jane Templin, Planning Commissioner

a. Asked to see details regarding the project's compliance with Title 24 and LEED gold certification. The proposed project would be required to exceed Title 24 standards that are in effect at the time of development by 20 percent (Downtown Area Plan EIR Mitigation Measure AQ-2). The project would be equipped with equipment (e.g. HVAC systems), lighting fixtures, and lighting that exceed Title 24 requirements.

8.3 WRITTEN COMMENTS AND RESPONSES ON THE DRAFT SEIR

Each written comment regarding the Draft SEIR that the City received is included in this section (refer to Table 8-2). Responses to these comments have been prepared to address the environmental concerns raised by the commenters and to indicate where and how the Draft SEIR addresses pertinent environmental issues. The comment letters included herein were submitted by public agencies, local interest groups, and private citizens. Each comment letter has been numbered sequentially and each separate issue raised by the commenter, if more than one, has also been assigned a number. Each comment letter is reproduced in its entirety with

the issues of concern lettered in the right margin. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 2.1, for example, indicates that the response is for the first comment raised in Letter 2).

Table 8-2
Written Comments on the Draft SEIR

Letter	Commenter	Affiliation	Date Received
State Public Agencies			
1	Julianne Polanco, State Historic Preservation Officer	California Office of Historic Preservation	September 14, 2015
2	Dianne Watson, IGR/CEQA Branch Chief	California Department of Transportation (Caltrans), District 7	September 17, 2015
3	Scott Morgan, Director	State Clearinghouse	September 28, 2015
Regional Public Agencies			
4	Kevin T. Johnson, Acting Chief, Forestry Division	County of Los Angeles Fire Department	September 1, 2015
5	Jillian Wong, Ph.D., Program Supervisor, Planning, Rule Development & Area Sources	South Coast Air Quality Management District	September 16, 2015
6	Adriana Raza, Customer Service Specialist, Facilities Planning Department	County Sanitation Districts of Los Angeles County	September 23, 2015
Local Interest Groups			
7	Cheryl Perry, President	Long Beach Heritage	September 10, 2015
8	Adrian Scott Fine, Director of Advocacy	Los Angeles Conservancy	September 17, 2015
Private Citizen			
9	Jim Coke	Private Citizen	September 7, 2015

Letter 1

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
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September 14, 2015

Craig Chalfant
Planning Bureau, Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802
Sent via email September 14, 2015

Dear Mr. Chalfant,

RE: **DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT**

Thank you for including the California Office of Historic Preservation (OHP) in the environmental review process for the proposed Long Beach Civic Center Project. Pursuant to the National Historic Preservation Act and the California Public Resources Code, the State Historic Preservation Officer (SHPO) and the OHP have broad responsibility for the implementation of federal and state historic preservation programs in California. We have a long history of working with the City of Long Beach (Lead Agency) through our Certified Local Government program. Our comments are offered with the intent of protecting historic and cultural resources, while allowing the City of Long Beach to meet its program needs. The following comments are based on the information included in the Draft Supplemental Environmental Impact Report (SEIR) for the Civic Center Project.

The proposed project is located in downtown Long Beach, and includes demolition and replacement of the existing Courthouse, City Hall, Public Library, and Lincoln Park. The proposed project also includes construction of a new Port of Long Beach administration facility. In addition to these civic buildings, the proposed project includes construction of three residential/commercial buildings, one at the corner of 3rd Street and Pacific Boulevard, and two on the site of the existing City Hall. The two existing parking structures currently occupying the site would remain. In previous comments provided to the Lead Agency on May 13, 2015, the OHP suggested several mitigation measures that might be considered if impacts to historic resources could not be avoided through project alternatives. The OHP also suggested the Draft SEIR include an updated study of the project area to determine if the Civic Center merits local, state, or national register listing as a historic district. 1

Mitigation Measures

The Draft SEIR § 4.3-14 suggests that the mitigation measures offered by the OHP lack a nexus to the impacts of the proposed project and therefore would not constitute mitigation under CEQA. The CEQA Guidelines § 15126.4 acknowledge the

constitutional requirements that mitigation measures must have an "essential nexus" to a legitimate government interest, and that those mitigation measures imposed as ad hoc exactions must bear a "rough proportionality" to the project's significant impacts. (14 Cal. Code Regs., § 15126.4(a)(4)(A), (B), citing Nollan v. California Coastal Com'n (1987) 483 U.S. 825, 837; Dolan v. City of Tigard (1994) 512 U.S. 374, 391; Ehrlich v. City of Culver City (1996) 12 Cal.4th 854, 866-877.) In order for the Lead Agency to determine if there is an essential nexus between the mitigation measures suggested by the OHP and the impacts of the proposed project, the Lead Agency should consider whether the mitigation measures are rationally connected to a valid governmental purpose. Creative mitigation, including funding of historic preservation planning documents has a clear "nexus" to projects with significant impacts to historical resources; historic preservation more broadly has been found to serve a legitimate public benefit and be a valid exercise of municipal police powers. We ask that the Lead Agency reconsider the essential nexus test and consider adopting the suggested off site mitigation measures as a required condition of project approval, including dedicating funding for future local historic preservation efforts that have a tangible public benefit component.

1, cont'd

Evaluation and Identification

The SEIR includes a survey of the project area (Appendix C) and identifies three historical resources eligible for listing on the CRHR as landmarks (Courthouse, City Hall, and Library). The three resources identified in the cultural resources survey appear to be unified geographically, historically, and architecturally. The three landmarks taken together may meet the definition of a historic district provided in Public Resources Code (PRC) Title 14, Chapter 11.5, Section 4852 (a)(5). It is somewhat unclear why this grouping of landmarks is not being treated as a historic district in light of their historic context and similar architectural style. Additionally, the landscape of the Civic Center is not discussed or evaluated as being a potential contributing resource to a potential district. The historic district criteria and determination of ineligibility should be further clarified in the Final SEIR.

2

The Cultural Section (4.3) of the SEIR and the historical resources survey report (Appendix C) both determine the Courthouse, Library, and City Hall are eligible for listing in the CRHR under Criteria # 3 for their architectural merit, but the evaluation is largely silent on CRHR Criteria # 1. Based on the historic context statement included in Appendix C, the Civic Center appears to be associated with events that have made a significant contribution to the broad patterns of Long Beach history. As described by the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (incorporated by reference into the CRHR, § 4852), when evaluating the integrity of resources eligible under this criteria, design and workmanship may be less important than the other aspects of historic integrity (location, setting, materials, feeling, and association). In the Final SEIR please discuss Criteria # 1 within the historic context of the Long Beach Civic Center and clarify why the buildings and park are ineligible under this criterion.

3

We thank the Lead Agency for seriously considering our previous suggestion to include an adaptive reuse alternative in the Draft SEIR. To reduce impacts to cultural resources, we encourage the Lead Agency to adopt the reuse scheme developed for the Courthouse building. Given the significant impacts to historical resources, we again encourage the Lead Agency to adopt mitigation measures that go beyond commonly considered measures such as HABS documentation and salvaging historic artifacts, and to adopt mitigation measures that have a public benefit component. 4

If you have questions, please contact Sean de Courcy of the Local Government and Environmental Compliance Unit, at (916) 445-7042 or at Sean.deCourcy@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

Letter 1

COMMENTER: Julianne Polanco, State Historic Preservation Officer, California Office of Historic Preservation

DATE: September 14, 2015

RESPONSE:

Response 1.1

The commenter asks that the Lead Agency reconsider the essential nexus test and consider adopting the off site mitigation measures suggested by the Office of Historic Preservation (OHP) in the May 13, 2015 comment letter it submitted during the scoping period. Recommended mitigation included dedicating funding for future local historic preservation efforts that have a "tangible public benefit component."

Mitigation Measures CR-1(a), Historic Artifact Collection Program, and CR-1(b), Building Documentation, described on pages 4.3-13 through 4.3-14 provide both a tangible public benefit and directly mitigate the impacts of the proposed project. The measures suggested by OHP in its May 13, 2015 comment letter include: (1) additional historic surveys in parts of the City that have previously not been surveyed; (2) development of design guidelines for future re-use of public buildings; and (3) creation of a Historic Preservation Mitigation Fund. These suggestions would have a tangible public benefit, but do not mitigate the impacts of the proposed project. For example, as OHP suggests, the creation of a Historic Preservation Mitigation Fund may have a governmental purpose, but the measure does not address the identified impact related to demolition of the Old Courthouse and the Long Beach City Hall-Library Complex. Nonetheless, this comment has been forwarded to City decision makers, who may consider including one or more of the commenter's suggestions as conditions of project approval.

Response 1.2

The commenter requests that the historic district criteria and determination of ineligibility be further clarified in the Final SEIR.

The project site and the adjacent Public Safety Building were assessed for potential eligibility in the California Register of Historic Resources (CRHR) or at the local level as a historic district. Five resources were identified within the study area and were considered as a potential contributors to a Civic Center historic district; these include: (1) the City Hall-Library Complex, (2) the Old Courthouse, (3) Public Safety Building, (4) Lincoln Park and the (5) Broadway Parking Garage. The City Hall-Library Complex and associated landscaping (the landscape elements designed by Peter Walker, which include the "berm" around the Main Library, the tiled plaza and the rooftop garden elements, but do not include Lincoln Park) were designed and constructed as a singular entity and evaluated as one historic resource for this study. Each of the buildings and structures within the Civic Center are functionally related and were designed for municipal purposes. However, three of the extant resources - the Public Safety Building, Lincoln Park and the Broadway Parking Garage -were found ineligible for listing in the CRHR or as local landmarks. With a majority of the resources identified as not eligible for

the CRHR or local designation, it was determined that a historic district is not present due to the lack of contributing resources.

The landscape elements found within the City Hall-Library Complex are discussed in detail in the Cultural Resources Study (Appendix C of the Draft SEIR) and are noted as contributing elements to the project site's significance. These include the brick surfaced Centennial Plaza, and terraced roof gardens with seating areas, stairs and walkways that connect each of the buildings. None of these elements extend beyond the footprint of the City Hall-Library Complex property and were not incorporated into the site plan for the Old Courthouse, Public Safety Building or Lincoln Park. In addition, there is an overall lack of cohesion throughout the site. Therefore, there is no overall landscape theme or specific elements to consider for historic designation or as a contributing element to a historic district.

Response 1.3

The commenter requests that the SEIR include a discussion of the eligibility of the cultural resources within the context of CRHR Criterion 1.

The City Hall-Library Complex and the Old Courthouse are also considered eligible for listing in the CRHR under Criterion 1 for their contribution to the civic development of the City of Long Beach.

Pages 4.3-8 and 4.3-9 of the Draft SEIR have been revised to include the following information:

> **The Old Long Beach Courthouse also appears eligible for listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Competed in 1960 the Old Courthouse was one of the first projects of the long-awaited Civic Center Master Plan.** The Old Long Beach Courthouse **also** appears eligible for listing in the CRHR as an individual resource under Criterion 3 within the context of the architectural evolution of Long Beach, as one of a limited number of ~~fine~~ examples of the Corporate International Style of architecture remaining in the City. The building embodies the distinctive characteristics of the Corporate International Style, and is a representative example of the style designed by local architects, Francis Heusel and Kenneth S. Wing. Despite having undergone a 60,000 square foot alteration in 1971, the building's exterior appearance still reflects its period of construction and retains a high degree of integrity of location, feeling, association, setting, design, materials and workmanship. The building has retained most of its character-defining features: curtain wall construction and glass windows inset in recliner grids, recessed first floor and use of squared columns, terrazzo floors, and windows and vertical surfaces on the same plane. ~~Competed in 1960 the Old Courthouse was one of the first projects of the Civic Center Master Plan.~~

And

> Completed in 1977 by Allied Architects, the Long Beach City Hall-Library Complex is an intact example of Late Modern architecture that retains integrity of design, materials, feeling, workmanship, association and location. The City

> Hall-Library Complex appears individually eligible for listing in the CRHR **under Criterion 1 for its association with the civic development of Long Beach. Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project. The complex also appears eligible for individual listing** ~~as an individual resource~~ under Criterion 3 as a representative example of the Late Modern-style with unique landscape design elements and as the work of a group of local master architects. The complex is one of a limited number of ~~fine~~ examples of the Late Modern Style of architecture remaining in the city. Designed by a consortium of local architects that consisted of Hugh and Donald Gibbs, Frank Homolka, Ed Killingsworth, Brady and Associates, and Kenneth S. Wing Jr. and Sr., each considered local masters in their own right, the complex is unique for its collaborative design amongst local architects and represents the collective work of a group of masters. The Library rooftop design contributions of master landscape architect Peter Walker also contribute to the significance and eligibility of the complex. ~~Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project.~~

Page 1of the Cultural Resources Study (see Appendix C of the Draft SEIR) has been revised to include the following information:

> The Old Courthouse was previously evaluated and found individually eligible for historic significance on two occasions: in 2006, it was found eligible for local listing as a City of Long Beach Historic Landmark, and in 2008, the property was found eligible for listing in the California Register of Historical Resources (CRHR) **under Criterion 3, as an example of Corporate International style architecture. Rincon concurs with this finding and ~~.~~notes it is also eligible for listing in the CRHR under Criteria 1, for its association with the civic development of Long Beach, it** ~~It~~ is therefore considered a historical resource for the purposes of the California Environmental Quality Act (CEQA).

And

> Rincon found that the City Hall-Library Complex appears individually eligible for listing in the CRHR as an individual resource under Criterion **1, for its association with the civic development of Long Beach and under** ~~on~~ **Criteria** 3 as a representative example of the Late Modern-style with unique landscape design elements and as the work of a group of local master architects.

Page 53 of the Cultural Resources Study (see Appendix C of the Draft SEIR) has been revised to include the following information:

> Completed in 1977 by Allied Architects, the Long Beach City Hall-Library Complex is an intact example of Late Modern architecture that retains integrity of design, materials, feeling, workmanship, association and location. The complex appears eligible for individual listing in the CRHR **under Criterion 1 for its association with the civic development of Long Beach. Designed in**

fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project. The complex also appears eligible for individual listing under Criterion 3 within the context of the architectural evolution of Long Beach. Although the City Hall-Library Complex is less than 50 years in age (constructed in 1977) the complex is one of a limited number of ~~fine~~ examples of the Late Modern Style of architecture remaining in the city. Designed by a consortium of local architects that consisted of Hugh and Donald Gibbs, Frank Homolka, Killingsworth, Brady and Associates, and Kenneth S. Wing Jr. and Sr., **e**~~E~~ach considered local masters in their own right, the complex is unique for its collaborative design amongst local architects and represents the collective work of a group of masters. The Library rooftop design contributions of master landscape architect Peter Walker also contribute to the significance and eligibility of the complex. ~~Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project.~~

Although completion of the Civic Center took over two decades to complete and deviates from the original 1950s design layout, the buildings within the Civic Center represent a distinct grouping of civic and governmental properties ~~united historically by plan and physical development~~.

Page 54 of the Cultural Resources Study (see Appendix C of the Draft SEIR) have been revised to include the following information:

The Old Long Beach Courthouse also appears eligible for listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Competed in 1960 the Old Courthouse was one of the first projects of the long-awaited Civic Center Master Plan. The Old Long Beach Courthouse **also** appears eligible for listing in the CRHR as an individual resource under Criterion 3 within the context of the architectural evolution of Long Beach, as one of a limited number of ~~fine~~ examples of the Corporate International Style of architecture remaining in the City. The building embodies the distinctive characteristics of the Corporate International Style, and is a representative example of the style designed by local architects, Francis Heusel and Kenneth S. Wing. Despite having undergone a 60,000 square foot alteration in 1971, the building's exterior appearance still reflects its period of construction and retains a high degree of integrity of location, feeling, association, setting, design, materials and workmanship. The building has retained most of its character-defining features: curtain wall construction and glass windows inset in recliner grids, recessed first floor and use of squared columns, terrazzo floors, and windows and vertical surfaces on the same plane. ~~Competed in 1960 the Old Courthouse was one of the first projects of the Civic Center Master Plan.~~



Response 1.4

The commenter encourages the City to adopt the Adaptive Reuse Alternative to reduce cultural resource impacts. The commenter also encourages the City to adopt its suggested mitigation measures.

The Draft SEIR included a partial preservation alternative, the Adaptive Reuse Alternative, discussed in Section 6.3. This alternative would preserve the former Courthouse building, but demolish the City Hall-Library complex. The Draft SEIR found that the Adaptive Reuse Alternative would reduce impacts to cultural resources, as well as greenhouse gas emissions/climate change.

As discussed in Section 6.5, *Alternatives Considered But Rejected*, an alternative that would adaptively reuse the Courthouse as office space (similar to that described in the Adaptive Reuse Alternative) and rehabilitate the seismic deficiencies within the City Hall-Library Complex in the Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was considered. However, as discussed on pages 6-14 and 6-15 of the Draft SEIR, this alternative was rejected because of the functional and physical deficiencies of the buildings and because most of the project objectives would not be feasibly attainable.

It is acknowledged that an alternative that preserves and rehabilitates existing structures would reduce impacts to historic resources and is physically feasible. However, such an alternative would conflict with objectives for the currently proposed project as well as those of the adopted Downtown Plan and would be prohibitively expensive, ranging from more than $124,650,000 to $138,500,000 for conversion of the former Courthouse alone. Therefore, a full preservation alternative is not a feasible alternative under CEQA.

This comment has been forwarded to City decision makers for their consideration.

Letter 2

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
www.dot.ca.gov

Serious Drought.
Serious drought.
Help save water!

September 17, 2015

Mr. Craig Chalfant
City of Long Beach
Development Services
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Re: **Civic Center Project**
Draft Environmental Impact Report
IGR No: 150807/EA, SCH#2015041054
Vic: LA / 710 /6.058-6.273

Dear Mr. Chalfant

The California Department of Transportation (Caltrans) has reviewed Traffic Impact Analysis (TIA) included in the Draft Environmental Impact Report (DEIR) for the proposed Civic Center Project. The proposed project includes a new 11-story City Hall, a main library, a Port Building for Harbor Department administration, the relocating of the Main Library, the redevelopment of Lincoln Park, a 580 residential building, a 200-room hotel, and a commercial mixed use development consisting of an 8,000 square foot restaurant and 32,000 square feet of retail space. The project also involves the demolition of the existing City Hall and library buildings.

As the State agency with jurisdiction over State highway transportation facilities, Caltrans is concerned with potential increase in traffic volumes directed to them as it might exacerbate existing congestion. Regional access to the Long Beach Civic Center area is provided via I-710 and State Route 1. 1

After the existing buildings are demolished, there will be a deductions of vehicle trips, therefore the proposed project is estimated to generate a net of 10,923 average daily trips of which 671 would occur during the AM peak hour and 552 during the PM peak hour (Table 5-1). A vehicle trip deduction of 26% is also taken to account for transit usage. The 26% transit reduction seems high, please explain how the figure was arrived at. Survey data from similar uses in the vicinity project site would be justifiable information. Caltrans recommends that the City monitor transit usage within its different neighborhoods in order to justify the transit usage assumptions.

We note that 47% of the net vehicle trips are distributed to I-710, however the TIA does not evaluate potential impacts to it. The magnitude of the proposed development meets the CEQA criteria of regional significant and as such it should have evaluated potential impacts to the regional highway system including I-710 nearest intersections and interchanges. We also requested analysis of state highway facilities in our comments to the Notice of Preparation of a Draft EIR. I-710 currently operates over capacity during peak hours in Long Beach and additional traffic from anticipated growth with the Long Beach Downtown plan could potentially exacerbate existing conditions. 2

We acknowledge the Long Beach Downtown Plan EIR includes implementation of transit facilities and programs to encourage public transit usage and development of Transportation Demand Management Policies. Please include more specific information as to how the proposed Civic Center project will encourage transit usage and other alternate modes of transportation. Proximity to public transit may not be enough incentive to cause the desired mode switch. Caltrans also promotes utilization of alternate modes of transportation including public transit, bicycle, and walking. To the extent that more of the population shifts to transit for some of their inter-regional trips, traffic impacts to state facilities can be satisfactorily mitigated 3

In the spirit of mutual cooperation, Caltrans staff is available to work with the project's traffic engineers to perform traffic analysis of state highway facilities to identify potential impacts and mitigation measures, if any are necessary.

If you have any questions regarding these comments, please feel free to contact Elmer Alvarez, Project Coordinator at (213) 897-6696 or electronically at elmer.alvarez@dot.ca.gov.

Sincerely,

Elmer Alvarez for:

DIANNA WATSON
IGR/CEQA Branch Chief
Caltrans District 7

cc: Scott Morgan, State Clearinghouse

Letter 2

COMMENTER: Dianna Watson, IGR/CEQA Branch Chief, California Department of Transportation (Caltrans)

DATE: September 17, 2015

RESPONSE:

Response 2.1

The commenter requests justification for the 26 percent vehicle trip deduction for transit use assumed in the Draft SEIR. The commenter suggests that survey data from similar uses in the vicinity of the project site would be justifiable information and recommends that the City monitor transit use to justify the transit use assumptions.

The SEIR traffic analysis applies the same 26 percent vehicle trip reduction for transit use that was applied to trip generation in the Downtown Plan EIR. Justification for the transit service, pass-by, and other mode trip generation adjustment are included on pages 40 to 41 of the *Long Beach Downtown Community Plan EIR Traffic Impact Analysis* (prepared by Iteris and included in Appendix F of the Downtown Plan EIR). The 26 percent reduction is from an analysis of mode share (percent of trips via auto versus transit) based on review of actual vehicle trips into and out of Downtown Long Beach, plus data from the 2000 U.S. Census Journey to Work data. In addition, it should be noted that the reduction was only applied to home-to-work trips, which are the most common type of trips to occur on transit. This is a conservative assumption, since some of the commercial trips would also occur on transit, but are not included; thus, they are all assumed to occur via passenger auto and further analysis in the SEIR is not warranted.

Response 2.2

The commenter states that the Draft EIR should have evaluated the project's traffic impacts on the I-710 intersections and interchanges. The commenter states that the I-710 currently operates over capacity during peak hours in Long Beach and additional traffic from the proposed project could exacerbate existing conditions.

The Downtown Plan EIR found that implementation of the Downtown Plan would result in significant and unavoidable impacts to traffic and transportation, including to the I-710. Downtown Plan EIR Mitigation Measure Traf-1(a) requires enhancement to freeway access to the I-710 from the Downtown area and Mitigation Measure Traf-1(b) required a series of traffic signal improvements. As discussed in the traffic impact analysis prepared for the proposed project (see Appendix E of the Draft SEIR) and shown in Table 6-2, Trip Generation Forecast – Downtown Plan Civic Center Area, of Section 6.0, *Alternatives*, of the Draft SEIR, buildout of the Civic Center Area as analyzed in the Downtown Plan EIR would generate more trips than the proposed project. Therefore, the project would not result in any new transportation impacts, or increase the severity of significant impacts to the I-710 beyond those identified in the Downtown Plan EIR. Thus, further analysis in the SEIR is not warranted.

Response 2.3

The commenter requests specific information about how the proposed project would encourage transit use and other alternate modes of transportation.

Downtown Plan EIR Mitigation Measure AQ-2 requires the project to include a number of measures that would encourage alternate modes of transportation and a reduction in single-occupancy vehicle use. Specifically, the mitigation measure requires the project to include a secure bicycle parking area within the project site for employees and customers, requires commercial development operators to operate, maintain, and promote a ride-share program for employees, and requires all new commercial developments to include or provide access to convenient shower and locker facilities to employees to encourage bicycle, walking, and jogging options for commuting. Specific project design elements may include additional incentives for commuters and residences to use alternative modes of transportation beyond the immediate convenience of being located near transit services. The project is also expected to result in additional bus stops planned throughout the new Civic Center complex. The project would include two bicycle parking areas and locker rooms in the new underground parking garage to serve City Hall and the Port Building, and the project would also include installation of numerous electric vehicle charging stations for City and Port employees.



Letter 3

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

September 18, 2015

Craig Chalfant
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Subject: Civic Center Project
SCH#: 2015041054

Dear Craig Chalfant:

The State Clearinghouse submitted the above named Supplemental EIR to selected state agencies for review. The review period closed on September 17, 2015, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

City of Long Beach
RECEIVED
SEP 28 2015
Planning Bureau

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	**2015041054**
Project Title	Civic Center Project
Lead Agency	Long Beach, City of

Type	**SIR** Supplemental EIR
Description	The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. The project also includes the demolition of the former Long Beach Courthouse building. In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. The Lincoln Park garage and Broadway garage would be preserve and would be used by city staff and public parking as it is today. Existing buildings that would be demolished include the former Long Beach Courthouse, Long Beach City Hall, and Long Beach Main Library.

Lead Agency Contact

Name	Craig Chalfant		
Agency	City of Long Beach		
Phone	562 570 6368	*Fax*	
email			
Address	333 W. Ocean Boulevard, 5th Floor		
City	Long Beach	*State* CA	*Zip* 90802

Project Location

County	Los Angeles		
City	Long Beach		
Region			
Lat / Long	33° 46' 5.59" N / 118° 11' 45.61" W		
Cross Streets	Ocean Blvd, Pacific Ave, Broadway, and Magnolia Ave. Pacific Ave, Third St and Cedar		
Parcel No.	728002-5902, -5900, -2914		
Township	*Range*	*Section*	*Base*

Proximity to:

Highways	I-710, SR-1
Airports	No
Railways	Port of Los Angeles
Waterways	Los Angeles River
Schools	
Land Use	Mixed Use (LUD 7) / Downtown Plan (PD-30)

Project Issues	Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects
Reviewing Agencies	Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Resources, Recycling and Recovery; California Highway Patrol; Caltrans, District 7; Air Resources Board; Regional Water Quality Control Board, Region 4; Native American Heritage Commission; Public Utilities Commission; Other Agency(ies)

Date Received	08/04/2015	*Start of Review*	08/04/2015	*End of Review*	09/17/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

Letter 3

COMMENTER: Scott Morgan, Director, State Clearinghouse

DATE: September 28, 2015

RESPONSE:

The commenter acknowledges that the Draft EIR complied with the State Clearinghouse review requirements and that no state agencies submitted comments to the State Clearinghouse.

This comment is noted.

Letter 4

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

City of Long Beach
RECEIVED
SEP 09 2015
Planning Bureau

September 1, 2015

Craig Chalfant, Planner
City of Long Beach
Development Services Department
333 West Ocean Boulevard
Long Beach, CA 90802

Dear Mr. Chalfant:

NOTICE OF AVAILABILITY OF A DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, "CIVIC CENTER PROJECT", INCLUDES A NEW CITY HALL, A NEW PORT BUILDING FOR HARBOR DEPARTMENT ADMINISTRATION, AND A COMMERICIAL MIXED DEVELOPMENT, LONG BEACH (FFER 201500152)

The Notice of Availability of a Draft Supplement Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION: 1

1. The subject property is entirely within the City of Long Beach, which is not a part of the emergency response of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department.

LAND DEVELOPMENT UNIT:

1. This project is located entirely in the City of Long Beach. Therefore, the City of Long Beach Fire Department has jurisdiction concerning this project and will be

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS	CALABASAS	DIAMOND BAR	HIDDEN HILLS	LA MIRADA	MALIBU	POMONA	SIGNAL HILL
ARTESIA	CARSON	DUARTE	HUNTINGTON PARK	LA PUENTE	MAYWOOD	RANCHO PALOS VERDES	SOUTH EL MONTE
AZUSA	CERRITOS	EL MONTE	INDUSTRY	LAKEWOOD	NORWALK	ROLLING HILLS	SOUTH GATE
BALDWIN PARK	CLAREMONT	GARDENA	INGLEWOOD	LANCASTER	PALMDALE	ROLLING HILLS ESTATES	TEMPLE CITY
BELL	COMMERCE	GLENDORA	IRWINDALE	LAWNDALE	PALOS VERDES ESTATES	ROSEMEAD	WALNUT
BELL GARDENS	COVINA	HAWAIIAN GARDENS	LA CANADA FLINTRIDGE	LOMITA	PARAMOUNT	SAN DIMAS	WEST HOLLYWOOI
BELLFLOWER	CUDAHY	HAWTHORNE	LA HABRA	LYNWOOD	PICO RIVERA	SANTA CLARITA	WESTLAKE VILLAG
BRADBURY							WHITTIER

setting conditions. This project is located in close proximity to the jurisdictional area of the Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates a comment concerning general requirements from the Land Development Unit of the Los Angeles County Fire Department.

1, cont'd

2. Should any questions arise regarding subdivision, water systems, or access, please contact the County of Los Angeles Fire Department's Land Development Unit's Inspector Nancy Rodeheffer at (323) 890-4243.

3. The County of Los Angeles Fire Department's Land Development Unit appreciates the opportunity to comment on this project.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance.

2

2. The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

HEALTH HAZARDOUS MATERIALS DIVISION:

1. The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department previously provided our comments regarding this project in May 2015. HHMD has no additional comments at this time. In addition, HHMD has no jurisdiction over environmental matters in the City of Long Beach, which has its own local Certified Unified Program Agency (CUPA).

4

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

KEVIN T. JOHNSON, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

KTJ:ad

Letter 4

COMMENTER: Kevin T. Johnson, Acting Chief, Forestry Division, County of Los Angeles Fire Department

DATE: September 1, 2015

RESPONSE:

Response 4.1

The commenter states that the project site is outside of the Los Angeles County Fire Department jurisdiction and thus would not have any impact on the emergency or general responsibilities of the Department. This comment is noted.

Response 4.2

The commenter states that the County of Los Angeles Fire Department's Forestry Division has no comments on the project. This comment is noted.

Response 4.3

The commenter states that the Health Hazardous Materials Division of the County of Los Angeles Fire Department has no jurisdiction over environmental matters in the City of Long Beach, which has its own local Certified Unified Program Agency (CUPA), and has no comments on the project. This comment is noted.

Letter 5

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL AND USPS: September 16, 2015

Craig.chalfant@longbeach.gov
Craig Chalfant, Planner
Planning Bureau, Development Services Department
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Draft Environmental Impact Report (Draft EIR) for the Civic Center Project (SCH# 2015041054)

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the lead agency and should be incorporated into the Final CEQA document. The lead agency plans to demolish three buildings and construct six new governmental and mixed use buildings. Demolition would either be carried out by traditional techniques or by implosion. Based on a review of the Draft EIR, the SCAQMD staff has several concerns regarding the potential air quality impacts of the Long Beach Civic Center Project.

In the Air Quality Section, the lead agency quantified the project's construction and operation air quality impacts and compared those impacts with the SCAQMD's recommended regional and localized daily significance thresholds. Based on its analyses, the lead agency has determined that operational air quality impacts will exceed the recommended regional daily threshold for ROG emissions. Even with mitigation measures, the project related impacts to regional air quality would remain significant and unavoidable. The SCAQMD staff recommends additional mitigation measures that could be used to further reduce ROG emissions. Please see the attachment for more information. 1

The SCAQMD staff is available to work with the lead agency to address these concerns and any other air quality questions that may arise. Please contact Jack Cheng, Air Quality Specialist at (909) 396-2448, if you have any questions regarding these comments. We look forward to reviewing and providing comments for the Final CEQA document associated with this project.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

JW:JC
LAC150805-02
Control Number
Attachment

Attachment

Air Quality Analysis

1. The lead agency failed to properly quantify PM emissions from implosion. CalEEMod estimates emissions from traditional demolition methods and does not quantify fugitive PM emissions from implosion. SCAQMD staff recommends the lead agency revise the air quality analysis to include the emissions from implosion demolition. 2

   Mitigation Measure AQ-2 and the Air Quality Safety Plan do not identify how the lead agency will comply with SCAQMD Rule 401 – Visible Emissions and Rule 403 – Fugitive Dust. Specifically, Mitigation Measure AQ-2 does not utilize any form of dust suppression and fugitive dust control measures outlined in SCAQMD Rule 403. Furthermore, demolition by implosion is not exempt from any of the requirements of SCAQMD Rule 401 and 403. Please provide additional detailed information on the mitigation measures for both traditional and implosion demolition in the Final EIR. 3

2. The lead agency states that construction-related daily emissions would not exceed any regional SCAQMD thresholds from criteria pollutants during any individual construction phases. However, the air quality impacts from construction are underestimated because the air quality analysis does not account for overlapping construction phases. For example, Phase One: Architectural Coating overlaps with Phase Three: Demolition, Grading, and Construction. SCAQMD staff recommends revising the air quality analysis to account for overlapping construction phases and comparing the peak impacts to SCAQMD's CEQA significance thresholds for construction. 4

3. The SCAQMD staff recommends that overlapping construction and operational air quality impacts starting in 2020 through project build out 2022 be estimated, compared with the recommended SCAQMD long-term operational thresholds of significance, and then included in the Final EIR. Based on SCAQMD staff review, Phase Four: Grading air quality impacts will overlap with the operational emissions generated from occupancy during Phase One and Two. Individually, construction and operational NOx impacts for these separate activities (Phase Four: Grading and Phases 1 & 2 Operations) were shown as less than significant. However, when the overlap phases are combined, the peak impact would exceed the SCAQMD's CEQA significance thresholds for operation. 5

Additional Mitigation Measures

During project operations, the lead agency has determined that project operation emissions are significant for ROGs. Therefore, SCAQMD staff recommends additional mitigation measures to further reduce ROG emissions.

- Provide electric vehicle (EV) Charging Stations

  It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Similar to the City of Los Angeles requirements for all new projects, the SCAQMD staff recommends that the Lead Agency require at least 5% of all vehicle parking spaces include EV charging stations.[1] At a minimum, electrical panels should appropriately sized to allow for future expanded use. 1, cont'd

- Provide outlets for electric and propane barbecues in residential areas.

[1] http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf

Letter 5

COMMENTER: Jillian Wong, Ph.D., Program Supervisor, Planning, Rule Development & Area Sources, South Coast Air Quality Management District (SCAQMD)

DATE: September 16, 2015

RESPONSE:

Response 5.1

The commenter recommends additional mitigation measures to further reduce reactive organic gas (ROG) emissions. Recommendations include providing electric vehicle charging stations at five percent of all vehicle parking spaces or ensuring electrical panels are appropriately sized to allow for future expanded use of electric vehicle charging, and providing outlets for electric and propane barbecues in residential areas.

The proposed project would meet LEED Gold standards, which requires approximately three percent of all spaces to have Electric Vehicle Charging Stations. Pages 4.2-20 and 4.2-21 of the Draft SEIR have been revised to include the following:

AQ-3(a) **Low-VOC Paint.** The project applicant shall require all development operator(s) to use low-VOC paint on all interior and exterior surfaces. Paint should not exceed 50 g/L for all interior surfaces and exterior surfaces.

AQ-3(b) **Barbecue Outlets. Provide electric and propane barbecue outlets in all residential outdoor areas.**

Significance After Mitigation. As shown in Table 4.2-9, implementation of Mitigation Measure AQ-3**(a)** would reduce ROG emissions to the maximum extent feasible. **Mitigation Measure AQ-3(b) would further reduce ROG emissions, however, it is not possible to quantify reductions with CalEEMod.** ~~However, p~~**P**roject-related long-term impacts to regional air quality would remain significant and unavoidable.

Response 5.2

The commenter states that the Draft SEIR fails to properly quantify particulate matter (PM) emissions from implosion because CalEEMod estimates emissions only from traditional demolition methods.

Impact AQ-2 on Page 4.2-15 of the Draft SEIR states that project emissions would not exceed SCAQMD regional thresholds, but acknowledges that if demolition occurs by implosion, the project would result in significant impacts related to localized PM emissions without implementation of Mitigation Measure AQ-2. If demolition occurs by implosion, Mitigation Measure AQ-2 requires the development of an Air Quality Safety Plan to be approved by the SCAQMD. The plan would include the following measures:

- *A radius around the project site in which the public is prevented from being outdoors;*
- *Advanced notification of potential particulate matter and asbestos exposure to all land uses within 1,000 feet of the project site;*
- *Notice that windows should be closed at all buildings within the safety radius during the implosion until the City has provided notice that particulate matter and asbestos concentrations have reached background concentrations;*
- *Air quality monitoring during the day of the implosion to confirm when particulate matter and asbestos concentrations have reached background concentrations.*

Page 4.2-10 of the Draft SEIR has been revised to include the following clarification:

> **[…]**However, the air quality models identified in the CEQA Air Quality Handbook are outdated; therefore, CalEEMod Version 2013.2.2 was used to estimate regional air pollutant emissions associated with project construction and operation. **Modeling assumed demolition would occur by traditional methods, as it is not possible to model demolition by implosion in CalEEMod.**

Response 5.3

The commenter states that Mitigation Measure AQ-2, which requires the development of an Air Quality Safety Plan, does not identify how the Lead Agency will comply with SCAQMD Rule 401 – Visible Emissions and Rule 403 – Fugitive Dust and requests that detailed information be included in the mitigation measures for both traditional and implosion demolition. The commenter also states that demolition by implosion is not exempt from any of the requirements of SCAQMD Rule 401 and 403.

The Draft SEIR details that the project would be required to comply with SCAQMD Rule 403 and lists the measures to reduce fugitive dust that are required to be implemented at all construction sites located within the South Coast Air Basin on page 4.2-15 of Section 4.2, *Air Quality*. The following sentence on page 4.2-16 has been revised to clarify that Rule 403 applies to all phases of construction:

> Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for ~~the site preparation and grading~~ **all** phases of construction.

In addition, Page 4.2-6 of the Draft SEIR has been revised to include the following information:

> ***SCAQMD Rules and Regulations.*** **All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated under the Plan may include the following:**
>
> > **Rule 401 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.**

> **Rule 403 – Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.**
>
> **Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule.**

Response 5.4

The commenter states that regional air quality impacts from construction are underestimated because the air quality analysis does not account for overlapping construction phases. The commenter gives as an example, Phase One: Architectural Coating overlapping with Phase Three: Demolition, Grading, and Construction. The commenter recommends revising the air quality analysis to account for overlapping phases and comparing the peak impacts to SCAQMD regional thresholds for construction.

The air quality analysis, which is reproduced in Appendix B of the Draft SEIR, does account for overlapping phases. Page 4.2-10 of the Draft SEIR has been revised to include the following clarification:

> […] Phase 1 **would span January 2016 to November 2019 and** includes demolition of the former Courthouse, grading, construction of City Hall, the Port Building, the new Library, Civic Block parking garage and associated architectural coating and paving. Phase 1 also includes the grading and construction of the residential building and parking garage within the Third and Pacific Block. Phase 2 **would span April 2017 to December 2017 and** includes architectural coating and paving for the residential building within the Third and Pacific Block. Phase 3 **would span July 2019 to March 2020 and** includes demolition of the existing Main Library, and grading and construction of Lincoln Park. Phase 4 **would span January 2020 to July 2022 and** includes demolition of the existing City Hall and grading and construction of the Center Block components, including associated architectural coating and paving.

As described on page 18 of SCAQMD's CalEEMod User's Guide, Appendix A, Calculation Details for CalEEMod, "Since construction phases may or may not overlap in time, the maximum daily construction emissions will not necessarily be the sum of all possible daily emissions. CalEEMod therefore calculates the maximum daily emissions for each construction phase. The program will then add together the maximum daily emissions for each construction phase that overlaps in time. Finally the program will report the highest of these combined overlapping phases as a daily maximum." The maximum daily emissions reported in Table 4.2-6, Estimated Construction Maximum Daily Air Pollutant Emissions (lbs/day), on page 4.2-17 of the Draft SEIR account for the overlapping phases of construction described in the revision above and are "peak" emissions associated with construction of the project. As shown in Table 4.2-6, the project's maximum emissions are below SCAQMD's regional thresholds.

Response 5.5

The commenter recommends overlapping construction and operational air quality emissions starting in 2020 through project buildout in 2022 and comparing the combined emissions with recommended SCAQMD long-term operational thresholds of significance. The commenter states that overlapping construction and operational emissions would exceed SCAQMD's operational threshold.

SCAQMD's construction and operational thresholds are detailed on page 4.2-11 of the Draft SEIR. The construction emissions threshold applies to construction-related activities, such as architectural coating (i.e., interior and exterior painting), grading, and building construction; whereas, the operational emissions threshold applies to operational emissions associated with waste generation, vehicle trips, and water use of the proposed project's long term use. Construction emissions are temporary in nature and would not contribution to long-term operational emissions. Use of the approach suggested by the commenter could apply to any project, but the City has never received a similar request on any other project, nor has such an approach been used in the past. To maintain consistency with past City practice and SCAQMD recommendations, the approach used in the Draft SEIR (analyzing temporary construction emissions and long-term operational emissions separately and comparing emissions to the applicable thresholds) has not been revised.

Letter 6

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

September 16, 2015

Ref File No.: 3408681

Mr. Craig Chalfant, Planner
Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Chalfant:

Civic Center Project

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Supplemental Environmental Impact Report for the subject project on August 5, 2015. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments:

1. Previous comments submitted by the Districts in correspondence dated May 14, 2015 (copy enclosed) still apply to the subject project with the following updated information.

2. The Joint Water Pollution Control Plant currently processes an average flow of 263.1 million gallons per day.

3. All other information concerning Districts' facilities and sewerage service contained in the document is current.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

Enclosure

cc: M. Sullivan
J. Ganz

DOC: #3448741.D03

Recycled Paper

COUNTY SANITATION DISTRICTS
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GRACE ROBINSON HYDE
Chief Engineer and General Manager

May 14, 2015

Ref File No.: 3290765

Mr. Craig Chalfant, Planner
Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Chalfant:

Civic Center Project

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on April 17, 2015. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' De Forest Avenue Trunk Sewer, located in Broadway at the Long Beach Freeway. This 36–inch diameter trunk sewer has a design capacity of 39.4 million gallons per day (mgd) and conveyed a peak flow of 5.6 mgd when last measured in 2012.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a design capacity of 400 mgd and currently processes an average flow of 263.4 mgd.

3. The expected increase in average wastewater flow from the proposed project consisting of a 270,000-square-foot city hall building, a 240,000-square-foot port building, a 92,000-square-foot library, 40,000 square feet of retail structure, a total of 780 apartment units, and a 200-room hotel, is 113,690 gallons per day, after all structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is

issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Hyde

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: M. Sullivan
J. Ganz

DOC: #3316480.D03

Letter 6

COMMENTER: Adriana Raza, Customer Service Specialist, Facilities Planning Department, County Sanitation Districts of Los Angeles County

DATE: September 23, 2015

RESPONSE:

The commenter refers to its letter submitted during the scoping period. The commenter states that all information contained in the Draft SEIR concerning the County Sanitation Districts of Los Angeles County's facilities and services is current, except that the Joint Water Pollution Control Plant currently processes an average flow of 263.1 million gallons per day.

The average flow of the Joint Water Pollution Control Plant has been updated from 263.4 million gallons per day, which was based on the Districts' May 14, 2015 comment letter, to 263.1 million gallons per day throughout the Draft SEIR.

Letter 7

LONG BEACH HERITAGE



September 10, 2015

LONG BEACH HERITAGE RESPONSE TO THE CIVIC CENTER PROJECT SEIR, SECTION 4.3

The mid-twentieth century Civic Center is a significant element in the built environment of our city and its demolition should be mitigated by a substantial contribution to future historic preservation in Long Beach. Merely documenting the destroyed buildings in photographs and saving a few artifacts for tourists to view does not make up for the loss of such notable structures by important local architects. The former Los Angeles County Courthouse of 1958-60 on Ocean Boulevard, designed by Francis Heusel and Kenneth Wing, is deemed eligible for local and state landmark status, according to CEQA guidelines. It is a prime and intact example of Mid-Century Modern curtain wall architecture. Although the City Hall and Main Library buildings are only 38 years old, they are the product of the Allied Architects, who included the internationally esteemed Edward Killingsworth; Wing & Wing; Gibbs & Gibbs; and Frank Homolka. The structures embody the Late Modern style current in America in the 1970s, with their striking combination of concrete and tinted glass, as well as the use of a rooftop garden on the Library, an innovative concept at the time. This unique complex is eligible for listing in the State Register of Historic Resources as well. Many years of planning went into the final concept for our Civic Center buildings and landscaping. 1

Long Beach Heritage agrees with the State Historic Preservation Office that mitigation for the loss of the Civic Center should include depositing a substantial sum of money into the Long Beach Navy Memorial Heritage Association trust fund to be used for future preservation grants in the city. This fund originated with mitigation money for the destruction of the architecturally noteworthy Roosevelt Navy Base designed by Adrian Wilson and Paul Revere Williams. Demolition of our Civic Center, which is considered aesthetically significant by architects and preservationists, should be assuaged by a meaningful contribution from the developer to preservation efforts in Long Beach. 2

Cheryl Perry

Cheryl Perry

President, Long Beach Heritage

Letter 7

COMMENTER: Cheryl Perry, President, Long Beach Heritage

DATE: September 10, 2015

RESPONSE:

Response 7.1

The commenter states that building documentation and preserving "a few articles for tourists to view" does not make up for the loss of the former Los Angeles County Courthouse, City Hall, or Main Library. The commenter states that the complex is eligible for listing in the State Register of Historic Resources.

The Draft SEIR acknowledges that the former Los Angeles County Courthouse and City Hall-Library Complex both appear eligible for listing in the CRHR (see page 4.3-8 of Section 4.3, *Cultural Resources*). The Draft SEIR also acknowledges that Mitigation Measures CR-1(a), Historic Artifact Collection Program, and CR-1(b), Building Documentation, would reduce significant impacts to cultural resources to the degree feasible, but not to below a level of significance. Therefore, the Draft SEIR found that impacts to cultural resources would contribute to the Downtown Plan EIR finding that impacts to cultural resources would be significant and unavoidable.

Response 7.2

The commenter states agreement with the OHP that cultural resource mitigation should include funding for historic preservation and suggests depositing a "substantial sum of money" into the Long Beach Navy Memorial Heritage Association trust fund to be used for future preservation grants in the City. The commenter notes that this fund originated with mitigation money for the destruction of the architecturally noteworthy Roosevelt Navy Base.

OHP's recommendation that the City establish a historic preservation mitigation fund does not directly address the identified impact related to demolition of the Old Courthouse and the Long Beach City Hall-Library Complex. Nonetheless, this comment has been forwarded to City decision makers, who may consider including the suggestion as conditions of project approval.

Letter 8

LOS ANGELES CONSERVANCY

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Submitted electronically
September 17, 2015

Craig Chalfant, Planner
Long Beach Development Services
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802
Email: craig.chalfant@longbeach.gov

Re: Draft Supplemental Environmental Impact Report, Long Beach Civic Center Project

Dear Mr. Chalfant,

On behalf of the Los Angeles Conservancy, thank you for the opportunity to comment on the Draft Supplemental Environmental Impact Report (SEIR).

The Conservancy has previously raised concerns over the environmental review process for the proposed demolition of the Long Beach Courthouse, and we appreciate the completion of a Draft SEIR that examines the Long Beach Civic Center as a whole. Nonetheless, the current analysis for the proposed Civic Center Project contains significant flaws with respect to cultural resources in several key areas and fails to adequately evaluate a range of meaningful preservation alternatives. **Most concerning is that no single preservation alternative is offered (only partial-preservation alternatives) within the Draft SEIR that assesses the reuse and continued eligibility of all of the affected cultural resources, despite being required by CEQA. This is in violation of CEQA and further demonstrates that the City is not seriously looking at preservation solutions and options in a good faith manner.**

1

We strongly believe that there are viable opportunities to retain and adaptively reuse the historic Courthouse, City Hall, and Main Library buildings as part of the proposed redevelopment of the site, and we urge the City to further analyze and select a true preservation alternative as the environmentally superior alternative.

I. Historic significance of the Long Beach Civic Center.

The proposed project seeks to demolish the Long Beach Courthouse, City Hall, and Main Library, three known historic resources that are eligible for listing in the California Register of Historical Resources and as Long Beach Historic Landmarks.

2

The Courthouse was determined eligible for the California Register in 2008 as part of the the City of Long Beach's citywide survey of historic resources. The assessment identified the building as an excellent example of the Corporate International Style that retains most of its character-defining features. Completed in 1960, the steel-framed building was designed by master architect Kenneth S. Wing in conjunction with Francis J. Heusel. The rectangular-plan courthouse has curtain walls set with panels of glass and blue porcelain enamel corresponding to each floor and floor plate, while the west and east elevations have a contrasting treatment with precast aggregate concrete panels. Other distinguishing features of the building's design include the recessed first floor set behind the columns of the structural framing, the transparant quality of the glass-enclosed staircase of the building's southwest section, and terrazzo paving and raised concrete planters.

Completed in 1977, City Hall and the Main Library represented the realization of the 1950s Civic Center Master Plan, which envisioned a modern centralized hub for civic engagement and municipal services. The complex was designed by Allied Architects, which included Hugh and Donald Gibbs; Homolka & Associates; Killingsworth, Brady & Associates; Kenneth S. Wing and Associates; and Peter Walker as landscape architect. As built, City Hall and the Main Library are excellent examples of the Late Modern Style with integrated landscaping and reveal the collective efforts of this consortium of local master architects. The two buildings are connected by an open plaza, constructed primarily of brick and concrete with a designed modern landscape and amphitheater. 2, cont'd

The fifteen-story glass, concrete, and aluminum City Hall building is the centerpiece of the Civic Center, designed to accommodate all City departments within the central tower. Distinctive features include monumental precast concrete corner piers, sleek glass curtain walls, and the plaza-facing glass door entrance. The council chambers are located on the plaza level and visible through a glass viewing area, which Docomomo Southern California has recognized as "a forward-thinking nod to transparency in local government."

The two-story, rectangular-plan Main Library building was designed to be an integral part of the surrounding Lincoln Park and features a flat roof with planters and grass berms above reinforced concrete walls. In juxtaposition to the solid concrete massing, large clerestory windows allow natural light to filter into the public spaces.

II. Cultural Resources evaluation in Draft SEIR contains significant flaws.

The Conservancy believes that the Cultural Resources evaluation prepared for the Draft SEIR is flawed in several key areas and is inadequate for purposes of conducting a thorough environmental review. While the study acknowledges the eligibility of the Courthouse, City Hall, and the Main Library for listing on the California Register of Historical Resources and as City of Long Beach Historic Landmarks, we disagree with the methodology applied in the evaluation of a potential Civic Center historic district. 3

First, the Draft SEIR erroneously treats City Hall and the Main Library as a single historic resource as opposed to two separate resources. Though they are inextricably linked as part of the fulfillment of the 1950s Civic Center Master Plan under the direction of Allied Architects, they are distinct buildings in 4

design and execution. As such, they should have been evaluated separately for individual eligibility, as well as for eligibility as contributors to the potential historic district.

4, cont'd

Second, the Conservancy disputes the proposed boundaries for and assessment of the potential Civic Center historic district and believes that the project site does indeed contain an eligible historic district. The Cultural Resources Study in the Draft SEIR states: "[w]hile the buildings and structures within the Civic Center are all functionally related and were each designed for municipal purposes, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district."[1] We recognize that the 1960 Public Safety Building, though one of the first buildings to be constructed as part of the postwar redevelopment of the Civic Center, has been altered significantly over the years and no longer retains integrity. Similarly, Lincoln Park has been modified from its 1964 redesign and does not appear to be an eligible historic resource either. We question, however, the decision to evaluate the 1980s Broadway Parking Garage within the boundaries of the potential district, since it does not represent the realization of the Civic Center Master Plan and was constructed outside of the potential period of significance.

5

Despite alterations to the Public Safety Building and Lincoln Park, Conservancy strongly believes that the Civic Center superblock, its associated buildings (including the Courthouse, City Hall, and Main Library), and its designed plaza and landscapes do compose an eligible and intact historic district. The period of significance for the potential district is 1960 to 1977. Together, the contributing buildings and integrated landscapes express the vision of the 1950s Civic Center Master Plan, namely the creation of a modern, transparent, and consolidated governmental complex within the core of the city.

The Civic Center Project seeks to demolish the Courthouse, City Hall, and Main Library as well as the historic and cultural landscape in order to fulfill a proposed plan to redevelop the entire Civic Center site. This action would lead to the complete and significant loss of three individually eligible historic resources, which would be compounded by the loss of an eligibile historic district. To this end, the Draft SEIR should have also evaluated the overall impacts to cultural resources that would occur as a result of the proposed project, from the standpoint of indivually-eligble resources and as a historic district

6

III. Overly Narrow Project Objectives Improperly Limit the Full Consideration of Preservation Alternatives

Paradoxically, the project seeks to demolish the historic Courthouse and Civic Center in order to redevelop the site. As recognized by the DEIR, a significant adverse impact -- the loss of the Courthouse and Civic Center -- is the result of any attempt to meet these objectives. We strongly feel that the City cannot legitimately justify demolishing the Courthouse and Civic Center and obliterating significant and unique historic resources without the full consideration of viable preservation alternatives. As narrowly defined within the SEIR, it is virtually impossible to achieve a preservation outcome. We recognize that preserving and reusing the Courthouse and Civic Center may not be the City's preference, but the project

7

[1] City of Long Beach, *Civic Center Project Draft Supplemental Impact Report, Appendix C* (2).

objectives cannot simply be assumed to be superior to the value of the historic resources that is being compromised.

The underlying purpose of the project is summarized in the following objective: "Redevelop the Civic Center mega-block into a vibrant mix of public and private space, including a grand Civic Plaza, which asserts the value and importance of the public realm, and which functions as the City's center for governance, civic engagement and cultural and educational exchange." Rehabilitating and reusing the historic resources within the potential Civic Center Historic District would reinforce the area's civic and cultural identity, reinvigorate it for contemporary uses, and promote long-term sustainability.

As currently outlined, many of the proposed project objectives in the Draft SEIR are too narrowly defined and reveal the City's pre-commitment to demolition as opposed to rehabilitation and potential reuse, which could similarly address public safety concerns. These include the first two objectives:

- Replace seismically deficient City Hall and Main Library in an expeditious manner; and
- Reduce public safety hazards by eliminating the risk of fire, structural collapse, personal injury to trespassers, vandalism and crime, by demolishing the structurally unsound, abandoned, and deteriorated former Long Beach Courthouse building.

It is well recognized that an overly narrow definition of project objectives undermines the purpose of CEQA by foreclosing consideration of less harmful alternatives.[2] With regard to the proposed project, two of the five objectives are so narrowly defined and subjective as to essentially eliminate any possibility of their being met by a preservation alternative. The Conservancy therefore requests that the DEIR contain a broader definition of project objectives, allowing for the full consideration of preservation alternatives.

7, cont'd

IV. The Final SEIR should evaluate and select a bona fide preservation alternative as the environmentally superior alternative.

The Conservancy is deeply concerned over the absence of a range of meaningful preservation alternatives in the Draft SEIR. In our comments on the Draft EIR for the now-withdrawn Long Beach Courthouse Demolition Project, we urged the City to mandate the study of bona fide alternatives for retaining and reusing the Courthouse as part of a thoughtful planning process for the Civic Center at large. With the Draft SEIR, the City has once more failed to demonstrate the infeasibility of incorporating the Courthouse, City Hall, and Main Library into the new plan for revitalizing the Civic Center.

8

a. Deficiencies in current study of project alternatives, as no preservation alternative is offered that maintains eligibility of all of the affected cultural resources

[2] See City of Santee v. County of San Diego (1989) 214 Cal.App.3d 1438 (holding that when project objectives are defined too narrowly an EIR's treatment of analysis may also be inadequate).

In addition to the required No Project/No Build Alternative, the Draft SEIR analyzes three alternatives, of which two would slightly reduce impacts to cultural resources. Alternative 2/Downtown Plan Buildout of Civic Center Area Alternative would retain the Main Library and Lincoln Park, but demolish the Courthouse and City Hall. Though few details are provided, this alternative's impact on historic resources would remain significant. Alternative 3/Adaptive Reuse Alternative would rehabilitate the Courthouse according to the *Secretary of the Interior's Standards for Rehabilitation* and reuse the building for governmental offices. While the Courthouse would retain its eligibility for the California Register under this alternative, City Hall and the Main Library would still be demolished, resulting in significant impacts.

8, cont'd

Alternative 3 references an Adaptive Reuse Study (Study) prepared by RRM Design Group in 2014, which was also included in the Draft EIR for the Long Beach Courthouse Demolition Project. The Study is intended to "understand on a conceptual level the impacts of re-furbishing existing building configuration to be used primarily as City Hall and/or municpal offices." As we pointed out in our comment letter on the proposed Courthouse Demolition Project, this analysis is minimal in scope and provides few actual details on the existing conditions of the various building systems. The Study includes inaccurate information in key areas, stating that "the original heating, cooling, and ventilation systems are well beyond the normal service life expectancy." Furthermore, it fails to acknowledge that, in 1996, the County of Los Angeles undertook a major $1.8 million energy efficiency upgrade of the building that focused on HVAC and lighting.[3]

The analysis in Alternative 3 of the proposed Civic Center Project does not address these deficiencies or offer any additional evidence to support claims that adaptive reuse would be infeasible. In assessing the impacts of Alternative 3 on Cultural Resources, the Draft SEIR states: "The adaptive reuse of the building, however, would require substantial alteration of interior and exterior features. The adaptive reuse would maintain the structure of the building, but its appearance and historic value may be diminished." While the project would adhere to the *Standards for Rehabilitation*, the City does not offer any insights into how the Courthouse's integrity could be compromised, and its discussion of this Alternative underscores the predisposition towards demolition.

A key policy under the California Environmental Quality Act (CEQA) is the lead agency's duty to "take all action necessary to provide the people of this state with historic environmental qualities and preserve for future generations examples of major periods of California history."[4] To this end, CEQA requires public

[3] Energy Star Labeled Building Profile: http://www.energystar.gov/index.cfm?fuseaction=labeled_buildings.showProfile&profile_id=1313: This 6-story, 215,880 sq. ft., air-conditioned facility (302,896 GSF including parking lot and garage) received two new chillers; two sets of chilled water and condenser water pumps, each with premium efficiency pump motors, 24 variable frequency drives and compatible premium efficiency motors for air handling units; an airside economizer cycle; and a new analog/digital energy management system with centralized and local HVAC access control of the entire facility. The building's lighting system was also retrofitted with T8/electronic ballasts (from T12/magnetic ballast fluorescent); compact fluorescent lamps (from incandescent), high pressure sodium lamps (from mercury vapor); and LED exit signs.

[4] Public Resource Code, Sec. 21001 (b), (c).

agencies to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects."[5]

Courts often refer to the EIR as "the heart" of CEQA because it provides decision makers with an in-depth review of projects with potentially significant environmental impacts and analyzes a range of alternatives that reduce those impacts.[6] Based on objective analyses found in the EIR, agencies "shall mitigate or avoid the significant effects on the environment whenever it is feasible to do so."[7] The lead agency cannot merely adopt a statement of overriding considerations and approve a project with significant impacts; it must first adopt feasible alternatives and mitigation measures.[8]

8, cont'd

While the Adaptive Reuse Study ultimately concludes that "a renovation project of this size and complexity would cost far more than demolishing and replacing the existing building with entirely new construction," **the fact that an environmentally superior alternative may be more costly or fails to meet all project objectives does not necessarily render it infeasible under CEQA.**

b. Meaningful adaptive reuse alternatives will meet most of the project objectives.

The Draft SEIR contends that the environmentally superior alternative is Alternative 1/Reduced Density Alternative, which does not include any preservation components that would reduce significant impacts to cultural resources. This determination is in error and inherently flawed and reveals the broader and problematic deficiencies with the City's analysis and this SEIR The Final SEIR should, in good faith, examine a range of additional preservation alternatives that retain and adaptively reuse the Courthouse, City Hall, and Main Library buildings as part of a comprehensive approach to the Civic Center. **Further, the SEIR needs to offer at least one preservation alternative that maintains the eligibility of the affected cultural resources, including the Courthouse and overall Civic Center complex (which includes the historic City Hall, Library and associated designed landscape). This alternative is not provided at all which does not adhere to CEQA provisions. Only partial-preservation alternatives are offered in the Draft SEIR. As stated, the City simply rejected considering and studying this option.[9]**

9

The Draft SEIR states that a Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was considered, but ultimately rejected. Though the 2014 Adaptive Reuse Study of the Courthouse is cited as evidence of this alternative's infeasibility, no studies appear to have been conducted on City Hall and the Main Library. Without sufficient evidence, including detailed cost analyses and a thorough assessment of existing building conditions, we question how the City arrived at its determination that rehabilitation and reuse are infeasible.

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[5] *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41; also see PRC Secs. 21002, 21002.1.
[6] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795; *Laurel Heights Improvement Association v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123.
[7] Public Resource Code, Sec. 21002.1.
[8] Public Resource Code, Sec. 21081; *Friends of Sierra Madre v. City of Sierra Madre* (2001) 25 Cal.4th 165, 185.
[9] Civic Center Project SEIR, 6-14

Furthermore, we strongly believe that greater consideration and analysis should have been given to the three alternatives suggested by the Office of Historic Preservation, including the proposed Infill Alternative. The Draft SEIR fails to demonstrate, for example, the infeasibility of integrating sensitive infill development into the underutilized portions of the site. Adaptively reusing the Courthouse, City Hall, and Main Library buildings – in tandem with compatible infill construction – would meet most the central project objectives, including revitalizing the Civic Center area, enhancing connectivity between Downtown and the Civic Center, and facilitating a vibrant mix of public and private space. There are other civic center developments that have successfully been reused and upgraded to meet current government and alternative use requirements, including those involving similar Modernist structures that also required seismic and life safety solutions, not unlike those present for Long Beach. One example is the Civic Center in Richmond, California.[10] We encourage the City to look to this example and others before foreclosing options for a viable preservation alternative.

While we recognize that the proposed Civic Center project reflects many of the guiding principles of the 2012 Downtown Plan, retaining and rehabilitating these known historic resources is also consistent with the City's outlined vision, which states: "[w]e value our buildings of historic merit and seek to preserve or restore them through adaptive reuse."[11] Though the Downtown Plan EIR found that the implementation of the Downtown Plan would have a "significant and unavoidable impact resulting from the potential redevelopment of properties that are eligible [historic resources]," the City must also demonstrate a good-faith effort to examine and pursue the environmentally superior alternative that mitigates and/or avoids significant impacts.

9, cont'd

Studies have consistently shown that, when comparing buildings of equal size and function, adaptive reuse nearly always offers greater environmental savings over demolition and new construction.[12] New energy efficient buildings can take up to eighty years to overcome the climate change impacts that result from their construction, whereas building reuse and retrofits can substantially reduce greenhouse gas emissions. Though the Draft SEIR notes that Alternative 3/Adaptive Reuse Alternative would "incrementally lessen impacts to GHG emissions," it fails to explore the full environmental benefits of preservation.

10

Conclusion

Thank you for the opportunity to comment on the Draft SEIR for the Long Beach Civic Center Project. We welcome the opportunity to continue working with the City on efforts to identify opportunities for rehabilitation and adaptive reuse within the potential Civic Center Historic District. Please do not hesitate to contact me at (213) 430-4203 or afine@laconservancy.org should you have any questions or concerns.

About the Los Angeles Conservancy:

[10] Richmond, California Civic Center, http://aiasf.org/programs/competition/design-awards/2010/richmond-civic-center/

[11] City of Long Beach, *Civic Center Project Draft Supplemental Impact Report* (2-28).

[12] Preservation Green Lab, National Trust for Historic Preservation, *The Greenest Building: Quantifying the Environmental Value of Building Reuse*, January 2012.

The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with more than 6,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural and cultural heritage of Los Angeles County through advocacy and education. For over twenty-five years, the Conservancy and its volunteer Modern Committee have worked to raise awareness about Los Angeles' unique collection of mid-20th century modernist structures.

10, cont'd

Sincerely,



Adrian Scott Fine
Director of Advocacy

cc: Long Beach Heritage
California Office of Historic Preservation
Docomomo-Southern California

Letter 8

COMMENTER: Adrian Scott Fine, Director of Advocacy, Los Angeles Conservancy

DATE: September 17, 2015

RESPONSE:

Response 8.1

The commenter states that the Draft SEIR is in violation of CEQA because it fails to include an alternative that preserves all cultural resources on the project site. The commenter opines that there are viable opportunities to retain and adaptively reuse the historic Courthouse, City Hall, and Main Library buildings.

CEQA Guidelines Section 15126.6 (a) states that an EIR shall describe a range of reasonable alternatives to the project, however an EIR does not need to consider every conceivable alternative to the project. The same *CEQA Guidelines* section goes on to state that the alternatives should feasibly attain most of the objectives for a project, but avoid or substantially lessen any of the significant effects of the project.

The Draft SEIR includes a partial preservation alternative, the Adaptive Reuse Alternative, discussed in Section 6.3. This alternative would preserve the former Courthouse building, but demolish the City Hall-Library complex. The Draft SEIR found that the Adaptive Reuse Alternative would reduce impacts to cultural resources, as well as greenhouse gas emissions/climate change.

As discussed in Section 6.5, *Alternatives Considered But Rejected*, an alternative that would adaptively reuse the Courthouse as office space (similar to that described in the Adaptive Reuse Alternative) and rehabilitate the seismic deficiencies within the City Hall-Library Complex in the Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was considered. However, as discussed on pages 6-14 and 6-15 of the Draft SEIR, this alternative was rejected because of the functional and physical deficiencies of the buildings and because most of the project objectives would not be feasibly attainable.

Response 8.2

The commenter states that the project would involve the demolition of three buildings eligible for listing in the California Register of Historic Resources.

The commenter is correct. If City decision makers approve the project, they would have to adopt a Statement of Overriding Considerations setting forth the reasons that they believe the project's benefits outweigh this significant environmental impact.

Response 8.3

The commenter states that the Cultural Resources Study included as Appendix C of the Draft SEIR is flawed and disagrees with the finding that the Civic Center is not a historic district.

Refer to Response 1.2 for a response to this comment.

Response 8.4

The commenter states that City Hall and Main Library should not have been evaluated as one resource.

Consideration was given to how each of the resources within the project area should be evaluated and documented as part of the study. The City Hall-Library Complex spaces share a physical connection: a narrow wing of single-story offices extends off the west elevation of the Main Library and connects to the City Hall between the western and southern piers of the tower. The rooftop landscaping elements continue these connections throughout the space. Therefore the City Hall-Library Complex buildings and the associated landscape elements were considered a single resource. Treating the two buildings separately rather than as the "City Hall-Library Complex" would not change the SEIR conclusions given that the impact associated with demolition of the complex has been identified as unavoidably significant.

Response 8.5

The commenter disputes the boundary used for assessing the Civic Center historic district and opines that the Broadway Parking Garage should not have been included in the assessment.

The Broadway Parking Garage was included in the historic assessment of the project because it is located within the physical property of the Civic Center space. Although the parking garage was constructed in the 1980s and does not meet the typical 50-year threshold for historic significance (as only the former Courthouse meets the 50-year threshold), it was evaluated because of its function as part of the Civic Center and its location within the Civic Center. Further, placement of the Broadway Parking Garage within the Civic Center is integral to evaluating the important components of the property, its spaces and overall cohesion. Even if the Broadway Parking Garage were excluded from the assessment, a historic district would still not be present due to the lack of contributing resources.

Response 8.6

The commenter re-states an opinion that the Civic Center superblock comprise an eligible and intact historic district.

Refer to Response 1.2, Response 8.4 , and Response 8.5 for a response to this comment.

Response 8.7

The commenter states that the project objectives are overly narrow making it virtually impossible to achieve a preservation outcome.

The project objectives are commensurate with the guiding principles of the adopted Long Beach Downtown Plan, described on Page 2-10 of the Draft SEIR, and include "promoting the development of a distinctive downtown skyline", "providing a vibrant, compact city core", and "demand[ing] quality in building practices in order to ultimately create historical masterpieces". In addition, Section 6.0, *Alternatives,* of the Draft SEIR analyzed three alternatives that would reduce impacts to cultural resources, the No Project Alternative, the Adaptive Reuse Alternative, and the Downtown Plan Buildout of Civic Center Area Alternative.

It is acknowledged that an alternative that preserves and rehabilitates existing structures would reduce impacts to historic resources and is physically feasible. However, such an alternative would conflict with objectives for the currently proposed project as well as those of the adopted Downtown Plan and would be prohibitively expensive, ranging from more than $124,650,000 to $138,500,000 for conversion of the former Courthouse alone, which would still suffer from functional and physical deficiencies. Therefore, a full preservation alternative is not a feasible alternative under CEQA.

Response 8.8

The commenter re-states an opinion that the Draft SEIR is in violation of CEQA because it fails to include an alternative that preserves all cultural resources on the project site. The commenter also states that an environmentally superior alternative may be more costly or fail to meet project objectives, but this does not render it "infeasible under CEQA."

Refer to Response 8.1 and Response 8.7, for a response to this comment.

Response 8.9

The commenter states that adaptive reuse would meet most of the project objectives. The commenter also believes that the OHP suggested alternatives that were considered, but rejected should have been more fully considered.

The last paragraph of Section 6.5, *Alternatives Considered But Rejected*, on pages 6-14 and 6-15 of the Draft SEIR, describes the objectives that a full adaptive reuse alternative would fail to meet project objectives because retaining the former Courthouse and the City Hall-Library Complex would restrict space available to achieve project objectives; these include:

- Redeveloping the site into a vibrant mix of public and private space with a grand Civic Plaza
- Improving connections with greater Downtown
- Reestablishing the small block grid of the historic downtown street fabric;
- Private development of housing, office, hotel, and retail; and
- Increasing affordable housing.

The other suggested alternatives included an Alternate Site Alternative, an Infill Alternative, and an Alternative-Use Alternative. These are discussed on page 6-14 of the Draft EIR. An Alternate Site Alternative and Infill Alternative would have located the entire proposed project or project components on one or more different sites within the Downtown Plan Area and an Alternative-Use Alternative would have placed different uses within the existing buildings on the project site. As discussed in the Draft SEIR, moving the project to another site, as would occur in the Alternate Site and Infill Alternatives, would not meet many of the key project objectives since it would not replace seismically deficient structures, reduce public safety hazards, or improve and revitalize the Civic Center Area. In addition, it would not be feasible to place different uses in existing buildings on the project site, as would occur in the Alternate-Use Alternative, since additional buildings would need to be constructed to house displaced civic uses. Displaced civic uses then would not be located within the Civic Center Area, as identified in the adopted Downtown Plan.

Response 8.10

The commenter states that the Adaptive Reuse Alternative fails to fully account for the greenhouse gas emission reduction benefits of preservation, stating that new energy efficient buildings can "take up to eighty years to overcome the climate change impacts that result from construction."

The proposed project's impact related to greenhouse gas emissions was found to be less than significant and the Draft SEIR acknowledges that the impact of the Adaptive Reuse Alternative would be lower than that of the proposed project. In response to this comment, page 6-10 of the Draft SEIR has been revised:

> This alternative would have ~~slightly~~ lower construction GHG emissions than the proposed project due to the adaptive reuse of the former Long Beach Courthouse, rather than demolition of the building. This alternative's climate change impacts would be ~~slightly~~ less than those of the proposed project and**, as with the proposed project,** would **be** ~~remain~~ less than significant.

Letter 9

-----Original Message-----
From: JIM COKE [mailto:jimcoke@usa.net]
Sent: Monday, September 07, 2015 4:32 PM
To: Craig Chalfant
Subject: civic center solar array on roof of new library will be in the shade during winter

Hello Craig,

April Economides suggested reaching out to you regarding the civic center design flaw mentioned in the subject line above.
I pointed this out at a meeting about 18 months ago at Los Altos library with city and developer people. Plan looked the same from latest pictures I saw at the meeting at MADE last month.

Deadline for input in Sept 17? Cambodian community leaders meeting Sept 19? Is this information correct?

thank you,
Jim

Letter 9

COMMENTER: Jim Coke, Private Citizen

DATE: September 7, 2015

RESPONSE:

The commenter states that the proposed solar array on the new library would be shaded during the winter.

Figures 4.1-7a through 4.1-7d in Section 4.1, *Aesthetics*, of the Draft SEIR show the results of a shadow study prepared for the proposed project. As shown on Figure 4.1-7a, the library roof would be shaded by surrounding existing buildings during the early morning hours at the height of winter. Figure 4.1-7b shows that the library would be unshaded during the late morning at the height of winter. Figures 4.1-7c and 4.1-7d indicate that the library roof would be shaded by the proposed mixed-use tower and surrounding existing buildings during the early afternoon at the height of winter. Figures 4.1-7a through 4.1-7d show that the library would be unshaded by existing or proposed buildings throughout the day during the height of summer.

While the solar array efficiency may be reduced during those limited winter solstice hours each year, the overall system would still produce sufficient solar energy to reduce the project's nonrenewable energy demands and associated greenhouse gas emissions. Downtown Plan EIR Mitigation Measure AQ-2 states that "The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day." The proposed project's design and solar array would be in compliance with this mitigation measure, as winter solstice is not indicative of an "average sunny day."

MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires adoption of a monitoring and reporting program (MMRP) for the mitigation measures necessary to mitigate or avoid significant effects on the environment. The MMRP is designed to ensure compliance with adopted mitigation measures during project implementation.

This MMRP includes applicable mitigation measures from both the Downtown Plan Final Program Environmental Impact Report (PEIR) and the Civic Center Project Supplemental Environmental Impact Report (SEIR). For each measure, specifications are made herein that identify the action required and the monitoring that must occur. In addition, the party for verifying compliance with individual mitigation measures is identified.

In some cases, applicable measures from the Downtown Plan PEIR were fully or partially implemented as part of the Civic Center Project SEIR. In such cases, the MMRP indicates that no further action is required or revises the monitoring requirements outlined in the PEIR to reflect the specific circumstance for the Civic Center Project. When monitoring requirements from the PEIR and the SEIR differ, the requirements of the SEIR supersede those of the PEIR.

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
AESTHETICS							
DT Mitigation Measure AES-2(a) Lighting Plans and Specifications. Prior to the issuance of building permits for new large development projects, the applicant shall submit lighting plans and specifications for all exterior lighting fixtures and light standards to the Development Services Department for review and approval. The plans shall include a photometric design study demonstrating that all outdoor light fixtures to be installed are designed or located in a manner as to contain the direct rays from the lights onsite and to minimize spillover of light onto surrounding properties or roadways. All parking structure lighting shall be shielded and directed away from residential uses. Rooftop decks and other similar amenities are encouraged in the Plan. Lighting for such features shall be designed so that light is directed so as to provide adequate security and minimal spill-over or nuisance lighting.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			
DT Mitigation Measure AES-2(b) Building Material Specifications. Prior to the issuance of any building permits for development projects, applicants shall submit plans and specifications for all building materials to the Development Services Department for review and approval. The Plan provides measures to ensure that the highest quality materials are used for new development projects. This is an important consideration, since high-quality materials last longer. Quality development provides an impression of permanence and can encourage additional private investment in Downtown Long Beach.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			

Key: **LBPWD – City of Long Beach Public Works Department**
LBDS – City of Long Beach Development Services Department
OCM – Onsite Construction Manager
DT – Downtown Plan Final EIR
SEIR – Civic Center Project Supplemental EIR

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DT Mitigation Measure AES-2(c) Light Fixture Shielding. Prior to the issuance of building permits for development projects within the Downtown Plan Project area, applicants shall demonstrate to the Development Services Department that all night lighting installed on private property within the project site shall be shielded, directed away from residential and other light-sensitive uses, and confined to the project site. Rooftop lighting, including rooftop decks, security lighting, or aviation warning lights, shall be in accordance with Airport/Federal Aviation Administration (FAA) requirements. Additionally, all lighting shall comply with all applicable Airport Land Use Plan (ALUP) Safety Policies and FAA regulations.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			
DT Mitigation Measure AES-2(d) Window Tinting. Prior to the issuance of any building permits, the applicant shall submit plans and specifications showing that building windows are manufactured or tinted to minimize glare from interior lighting and to minimize heat gain in accordance with energy conservation measures.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			
DT Mitigation Measure AES-3 Shadow Impacts. Prior to the issuance of building permits for any structure exceeding 75 feet in height or any structure that is adjacent to a light sensitive use and exceeds 45 feet in height, the applicant shall submit a shading study that includes calculations of the extent of shadowing arches for winter and equinox conditions. If feasible, projects shall be designed to avoid shading of light sensitive uses in excess of the significance thresholds outlined in this EIR. If avoidance of shadows exceeding significance thresholds is determined to be infeasible, the shadow impact will be disclosed as part of a project environmental impact report (EIR).	Implemented in Civic Center Project SEIR; no further action required	Prior to issuance of building permits	Once per individual project component	LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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SEIR Mitigation Measure AES-2 Construction Screening. Temporary fencing comprising of chainlink or wood with screening material attached shall be used around the perimeter of the active construction site to buffer views of construction activities, as well as the staging of vehicles, equipment, and materials. In addition, the contractor shall affix or paint a plainly visible sign on publically accessible portions of the temporary fencing, with the following language: "POST NO BILLS." Such language shall appear at intervals of no less than 25 feet along the length of the publically accessible portions of the barrier. The contractor shall ensure through daily visual inspections that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that such temporary barriers and walkways are maintained in a visually attractive manner, including the prompt removal of graffiti, throughout the construction period.	Verification that temporary fencing is installed around the perimeter of the construction site and that signs are posted on fencing	During construction	Periodically throughout construction	OCM			
AIR QUALITY							
DT Mitigation Measure AQ-1(a) To reduce short-term construction emissions, the City shall require that all construction projects that would require use of heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used during construction shall require their contractors to implement the Enhanced Exhaust Control Practices (listed below) or whatever mitigation measures are recommended by SCAQMD at the time individual portions of the site undergo construction. Enhanced Exhaust Control Practices • The project applicant shall provide a plan for approval by the City, demonstrating that the heavy-duty (50 hp or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_X reduction, 20 percent VOC reduction, and 45 percent particulate reduction compared to the 2011 ARB fleet average, as contained in the URBEMIS	Field verification of compliance for individual project components	During construction	Periodically throughout construction of individual project components	OCM			

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output sheets in Appendix C. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. SCAQMD, which is the resource agency for air quality in the Project area, can be used in an advisory role to demonstrate fleet-wide reductions. SCAQMD's mitigation measures for off-road engines can be used to identify an equipment fleet that achieves this reduction (SCAQMD 2007b). • The project applicant shall submit to the City a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 hp, that would be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the hp rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of heavy-duty off-road equipment, the project representative shall provide the City with the anticipated construction timeline including start date and name and phone number of the project manager and onsite foreman. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed and the dates of each survey. SCAQMD staff and/or other officials may conduct periodic site inspections to determine compliance. • If, at the time of construction, SCAQMD, CARB, or the EPA has adopted a regulation or new guidance applicable to construction emissions, compliance with							

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the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination must be supported by a project-level analysis and be approved by the City. •							
DT Mitigation Measure AQ-1(b) Prior to construction of each development phase of onsite land uses that are proposed within 1,500 feet of sensitive receptors, each project applicant shall perform a project-level CEQA analysis that includes a detailed LST analysis of construction-generated emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ to assess the impact at nearby sensitive receptors. The LST analysis shall be performed in accordance with applicable SCAQMD guidance that is in place at the time the analysis is performed. The project-level analysis shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur.	Implemented in Civic Center Project SEIR; no further action required						
DT Mitigation Measure AQ-2 Mitigation to reduce mobile source emissions due to implementation of the Plan addresses reducing the number of motor vehicle trips and reducing the emissions of individual vehicles under the control of the project applicant(s). The following measures shall be implemented by project applicant(s) unless it can be demonstrated to the City that the measures would not be feasible. • The project applicant(s) for all project phases shall require the commercial development operator(s) to operate, maintain, and promote a ride-share program for employees of the various businesses. • The project applicant(s) for all project phases shall include one or more secure bicycle parking areas within the property and encourage bicycle riding for both employees and customers.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	OCM, LBDS			

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• The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day. • The City shall ensure that all new commercial developments include or have access to convenient shower and locker facilities for employees to encourage bicycle, walking, and jogging as options for commuting. • The project applicant(s) for all project phases shall require that all equipment operated by the businesses within the facility be electric or use non-diesel engines. • All truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two-dock door. Diesel trucks shall be prohibited from idling more than 5 minutes and must be required to connect to the 110/208-volt power to run any auxiliary equipment. Signs outlining the idling restrictions shall be provided. If, at the time of construction, SCAQMD, CARB, or EPA has adopted a regulation or new guidance applicable to mobile- and area-source emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination shall be supported by a project-level analysis that is approved by the City.							

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
DT Mitigation Measure AQ-4(a) The following measures shall be implemented to reduce exposure of sensitive receptors to operational emissions of TACs: • Proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located away from existing and proposed onsite sensitive receptors such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0. • Where necessary to reduce exposure of sensitive receptors to an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0, proposed commercial and industrial land uses that would host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. • Signs shall be posted in at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by the California Office of Administrative Law in January 2005. • Proposed facilities that would require the long-term use of diesel equipment and heavy-duty trucks shall develop a plan to reduce emissions, which may include such measures as scheduling activities when the residential uses are the least occupied, requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling. • When determining the exact type of facility that would occupy the proposed commercial space, the City shall take into consideration its toxic-producing potential.	HRA implemented in Civic Center Project SEIR; verification of compliance with requirements related to diesel equipment and signage required during final building plan review	Prior to issuance of building permits	Once per individual project involving loading docks and/or diesel equipment	OCM, LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
• Commercial land uses that accommodate more than 100 trucks per day, or 40 trucks equipped with TRUs, within 1,000 feet of sensitive receptors (e.g., residences or schools) shall perform a site-specific project-level HRA in accordance with SCAQMD guidance for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles (SCAQMD 2003b). If the incremental increase in cancer risk determined by the HRA exceeds the threshold of significance recommended by SCAQMD or ARB at the time (if any), then all feasible mitigation measures shall be employed to minimize the impact.							
DT Mitigation Measure AQ-4(b) The City shall verify that the following measures are implemented by new developments to reduce exposure of sensitive receptors to emissions of TACs from POLB and stationary sources in the vicinity of the Downtown Plan Project area: • All proposed residences in the Downtown Plan Project area shall be equipped with filter systems with high Minimum Efficiency Reporting Value (MERV) for removal of small particles (such as 0.3 micron) at all air intake points to the home. All proposed residences shall be constructed with mechanical ventilation systems that would allow occupants to keep windows and doors closed and allow for the introduction of fresh outside air without the requirement of open windows. • The heating, ventilation, and air conditioning (HVAC) systems shall be used to maintain all residential units under positive pressure at all times. • An ongoing education and maintenance plan about the filtration systems associated with HVAC shall be developed and implemented for residences. • To the extent feasible, sensitive receptors shall be located as far away from the POLB as possible.	Review of final building plans to verify that required systems are included	Prior to issuance of building permits	Once per each residential building	OCM, LBDS			

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DT Mitigation Measure AQ-5 The following additional guidelines, which are recommended in ARB's *Land Use Handbook: A Community Health Perspective* (ARB 2005) shall be implemented. The guidelines are considered to be advisory and not regulatory: Sensitive receptors, such as residential units and daycare centers, shall not be located in the same building as dry-cleaning operations that use perchloroethylene. Dry-cleaning operations that use perchloroethylene shall not be located within 300 feet of any sensitive receptor. A setback of 500 feet shall be provided for operations with two or more machines.	Review of occupancy clearance required for any proposed dry cleaning operation	Prior to issuance of occupancy permits	Once per individual dry cleaning operation proposal	OCM, LBDS			
DT Mitigation Measure AQ-6 The following mitigation measures shall be implemented to control exposure of sensitive receptors to operational odorous emissions. The City shall ensure that all project applicant(s) implement the following measures: • The City shall consider the odor-producing potential of land uses when reviewing future development proposals and when the exact type of facility that would occupy areas zoned for commercial, industrial, or mixed-use land uses is determined. Facilities that have the potential to emit objectionable odors shall be located as far away as feasible from existing and proposed sensitive receptors. • Before the approval of building permits, odor-control devices shall be identified to mitigate the exposure of receptors to objectionable odors if a potential odor-producing source is to occupy an area zoned for commercial land use. The identified odor-control devices shall be installed before the issuance of certificates of occupancy for the potentially odor-producing use. The odor-producing potential of a source and control devices shall be determined in coordination with SCAQMD and based on the number of complaints associated with existing sources of the same nature. • Truck loading docks and delivery areas shall be located	Review and approval of final building plans and applicant-proposed odor control methods for individual project components	Prior to issuance of building permits	Once per individual project component involving potential odor issues	OCM, LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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as far away as feasible from existing and proposed sensitive receptors. • Signs shall be posted at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by California's Office of Administrative Law in January 2005. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) • Proposed commercial and industrial land uses that have the potential to host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) In addition, mitigation measures identified under AQ-4(b) to reduce indoor exposure to TACs would also result in a reduction in the intensity of offensive odors from the surrounding odor sources.							
SEIR Mitigation Measure AQ-2 Air Quality Safety Plan. If demolition occurs by implosion, the City shall approve an Air Quality Safety Plan that protects public health. The Plan shall be prepared with and approved by the South Coast Air Quality Management District. Public safety measures include: • A radius around the project site in which the public is prevented from being outdoors. • Advanced notification of potential particulate matter and asbestos exposure to all land uses within 1,000 feet of the project site. • Notice that windows shall be closed at all buildings	Verification that an Air Quality Safety Plan approval by the South Coast Air Quality Management District has been prepared	Prior to issuance of demolition permit	Once per each demolition involving implosion	LBDS			

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within the safety radius during the implosion until the City has provided notice that particulate matter and asbestos concentrations have reached background concentrations. • Air quality monitoring during the day of the implosion to confirm when particulate matter and asbestos concentrations have reached background concentrations.							
SEIR Mitigation Measure AQ-3(a) Low VOC Paint. The project applicant shall require all development operator(s) to use low-VOC paint on all interior and exterior surfaces. Paint should not exceed 50 g/L for all interior surfaces and exterior surfaces.	Review and approval of final building plans to verify use of low-VOC paint	Prior to issuance of building permits	Once per individual project component	OCM, LBDS			
SEIR Mitigation Measure AQ-3(b) Barbecue Outlets. Provide electric and propane barbecue outlets in all residential outdoor areas.	Review and approval of final building plans to verify that electric and propane barbecue outlets are provided in all outdoor areas	Prior to issuance of building permits	Once per individual project component	OCM, LBDS			
CULTURAL RESOURCES							
DT Mitigation Measure CR-1(a) The City shall encourage the designation as local landmarks of 21 properties identified in Table 4.3-3 with the "Desired Outcome" of "Pursue Local Designation." The City will encourage the on-going maintenance and appropriate adaptive reuse of all properties in Table 4.3-2 (existing landmarks), and Table 4.3-3 as historic resources.	Review and approval of final building plans involving potential historic resources	Prior to issuance of demolition permits	Once per individual project component with the potential to adversely affect historic resources	LBDS			
DT Mitigation Measure CR-1(b) The following procedures shall be followed prior to issuance of a demolition permit or a building permit for alteration of any property listed in the Historic Survey Report (ICF Jones & Stokes 2009) by Status Code 3S, 3CS, 5S1, or 5S3; designated as a Historic Landmark (City of Long Beach 2010a); listed in Tables 4.3-2 and 4.3-3 of this PEIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or	Partially implemented in Civic Center Project SEIR; documentation program remains to be prepared to the satisfaction of the City Development Services Department	Prior to issuance of demolition permits	Once per individual project component with the potential to adversely affect historic resources	LBPWD, LBDS			

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Local Landmark (Status Code 6L and 6Z): <u>Notification of Historic Preservation Staff</u> Historic Preservation staff in the City Development Services Department shall be notified upon receipt of any demolition permit or building permit for alteration of any property listed in the Historic Survey Report or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z) <u>Determination of Need for Historic Property Survey</u> In consultation with Historic Preservation staff, the City Development Services Department shall determine whether a formal historic property survey is needed and may require that the owner or applicant provide photographs of the property, including each building façade, with details of windows, siding, eaves, and streetscape views, and copies of the County Assessor and City building records, in order to make this determination. <u>Determination of Eligibility</u> If City Development Services Department staff determines that the property may be eligible for designation, the property shall be referred to the Cultural Heritage Commission, whose determination of eligibility shall be considered as part of the environmental determination for the project in accordance with CEQA. <u>Documentation Program</u> If the Cultural Heritage Commission determines that the property is eligible for historic listing, the City Development Services Department shall, in lieu of preservation, require that prior to demolition or alteration a Documentation Program be prepared to the satisfaction of the City Development Services Department, which shall include the following: A. Photo Documentation							

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Documentation shall include professional quality photographs of the structure prior to demolition with 35 mm black and white photographs, 4" x 6" standard format, taken of all four elevations and with close-ups of select architectural elements, such as but not limited to, roof/wall junctions, window treatments, decorative hardware, any other elements of the building's exterior or interior, or other property features identified by the City Development Services Department to be documented. Photographs shall be of archival quality and easily reproducible. B. Required Drawings Measured drawings of the building's exterior elevations depicting existing conditions or other relevant features shall be produced from recorded, accurate measurements. If portions of the building are not accessible for measurement or cannot be reproduced from historic sources, they should not be drawn, but clearly labeled as not accessible. Drawings shall be produced in ink on translucent material or archivally stable material (blueline drawings are acceptable). Standard drawing sizes are 19" x 24" or 24" x 36" and standard scale is ¼" = 1 foot. C. Archival Storage Xerox copies or CD of the photographs and one set of the measured drawings shall be submitted for archival storage with the City Development Services Department; and one set of original photographs, negatives, and measured drawings shall be submitted for archival storage with such other historical repository identified by the City Development Services Department.							

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DT Mitigation Measure CR-2(a) A qualified project archaeologist or archaeological monitor approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of cultural resources. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities to allow the find to be evaluated. If the archaeological monitor determines the find to be significant, the project applicant and the City shall be notified and an appropriate treatment plan for the resources shall be prepared. The treatment plan shall include notification of a Native American representative and shall consider whether the resource should be preserved in place or removed to an appropriate repository as identified by the City.	Verification that a qualified monitor has been retained for individual project components involving excavation in native sediments; field verification of monitoring	Verification that a monitor has been retained prior to issuance of demolition permit; field verification during construction	Once for verification that a monitor has been retained; periodically throughout construction for field verification	LBDS, OCM			
DT Mitigation Measure CR-2(b) The project archaeologist shall prepare a final report of the find for review and approval by the City and shall include a description of the resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historic Resources and the National Register of Historic Places. The report shall be filed with the California Historic Resources Information System South Central Coastal Information Center. If the resources are found to be significant, a separate report including the results of the recovery and evaluation process shall be prepared.	Review and approval of report (if required)	Prior to re-initiating work (if resources unearthed)	As needed throughout construction	LBDS, OCM			

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DT Mitigation Measure CR-2(c) If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the corner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains. Preservation in place and project design alternatives shall be considered as possible courses of action by the project applicant, the City, and the Most Likely Descendent.	Verification that County Coroner and/or NAHC consultation has occurred (if human remains unearthed)	Prior to re-initiating work (if human remains unearthed)	As needed throughout construction	LBDS, OCM			
DT Mitigation Measure CR-3(a) A qualified paleontologist approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of paleontological resources. Monitoring shall consist of visually inspecting fresh exposures of rock for fossil remains and, where appropriate, collection of sediment samples for further analysis. The frequency of inspections shall be based on the rate of excavation and grading activities, the materials being excavated, the depth of excavation, and, if found, the abundance and type of fossils encountered.	Verification that a qualified paleontologist has been retained for individual project components involving excavation of native sediments; field verification of monitoring	Verification that a monitor has been retained prior to issuance of demolition permit; field verification during construction	Once for verification that a monitor has been retained; periodically throughout construction for field verification	LBDS, OCM			

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DT Mitigation Measure CR-3(b) If a potential fossil is found, the paleontologist shall be allowed to temporarily divert or redirect excavation and grading in the area of the exposed fossil to evaluate and, if necessary, salvage the find. All fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County and shall be accompanied by a report on the fossils collected and their significance, and notes, maps, and photographs of the salvage effort.	Verification that any paleontological resources identified during grading and construction of individual project components have been appropriately salvaged	Prior to re-initiating work (if fossils unearthed)	As necessary throughout construction of individual project components	LBDS, OCM			
SEIR Mitigation Measure CR-1(a) Historic Artifact Collection Program. Impacts resulting from the demolition of the City Hall-Library Complex and Courthouse shall be minimized through development of an archival identification and collections program. The purpose of this program will be to identify the existing historic artifacts, documents and other objects that are currently stored at the Main Library, City Hall and Port of Long Beach facilities, as well as key components of the Old Courthouse and City Hall-Library Complex to be demolished, so that these important relics can be utilized in the future by researchers and the public for educational purposes. As part of the program, the City will itemize, catalogue and rehouse the items, and establish appropriate conservation and storage measures for long-term preservation. One possible location for rehousing items would be as a museum in the proposed project's new Library.	Identification of existing historic artifacts, documents, and other objects; itemize, cataloguing and rehousing of items	Prior to issuance of demolition permits	Once	LBDS			

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SEIR Mitigation Measure CR-1(b) Building Documentation. Impacts resulting from the demolition of the City Hall-Library Complex and Old Courthouse shall be minimized through archival documentation of as-built and as-found condition. Prior to issuance of the first occupancy permit for the project, the lead agency shall ensure that documentation of the building is completed in accordance with the general guidelines of Historic American Building Survey (HABS) documentation. The documentation shall include large-format photographic recordation, a historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to repositories that will make it available for current and future generations. Archival copies of the documentation also would be submitted to the City of Long Beach Development Services Department, the downtown branch of the Long Beach Public Library, and the Historical Society of Long Beach where it would be available to local researchers.	Verification that archival documentation of the City Hall-Library Complex has been completed	Prior to issuance of demolition permits	Once	LBDS			
GEOLOGY AND SEISMICITY							
DT Mitigation Measure Geo-1 New construction or structural remodeling of buildings proposed within the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, OCM			

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DT Mitigation Measure Geo-2 Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.	Review and approval of geotechnical investigations for individual project components and verification that appropriate standards have been incorporated into final building plans	Geotechnical investigation and final building plan review prior to issuance of building permits	Once per individual project component	LBPWD, OCM			
DT Mitigation Measure Geo-3 Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. For areas where the expansion index is found to be greater than 20, grading and foundation designs shall be engineered to withstand the existing conditions. The expansion testing may be omitted if the grading and foundations are engineered to withstand the presence of highly expansive soils.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			

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GREENHOUSE GAS EMISSIONS							
DT Mitigation Measure GHG-1(a) Implement Mitigation Measure AQ-1. Implementation of the mitigation measures described in Section 4.2, Air Quality, of the Downtown Plan PEIR, which would reduce construction emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The construction mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.	Review and approval of final building plans to verify compliance with applicable measures	Prior to issuance of building permits	Once per individual project component	LBDS			
DT Mitigation Measure GHG-1(b) Implement Additional Measures to Control Construction-Generated GHG Emissions. To further reduce construction-generated GHG emissions, the project applicant(s) of all public and private developments shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction. Such measures may reduce GHG exhaust emissions from the use of onsite equipment, worker commute trips, and truck trips carrying materials and equipment to and from the project site, as well as GHG emissions embodied in the materials selected for construction (e.g., concrete). Other measures may pertain to the materials used in construction. Prior to the construction of each development phase, the project applicant(s) shall obtain the most current list of GHG-reduction measures that are recommended by the City and/or SCAQMD and stipulate that these measures be implemented during the appropriate construction phase. The project applicant(s) for any particular development phase may submit to the City a report that substantiates why specific measures are considered infeasible for construction of that particular development phase and/or at that point in time. The report, including the substantiation for not implementing particular GHG-reduction measures, shall be approved by the City.	Verification that construction specifications include City and SCAQMD recommended measures; field verification of compliance	Construction specification review and approval prior to issuance of grading permits; field verification during construction	Once per individual project component for construction specification review/approval;field verification periodically throughout construction	LBDS, OCM			

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The City's recommended measures for reducing construction-related GHG emissions at the time of writing the Downtown Plan PEIR are listed below and the project applicant(s) shall, at a minimum, be required to implement the following: • Improve fuel efficiency from construction equipment: o reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort), o perform equipment maintenance (inspections, detect failures early, corrections), o train equipment operators in proper use of equipment, o use the proper size of equipment for the job, and o use equipment with new technologies (repowered engines, electric drive trains). • Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power. • Use an ARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment (emissions of NO_X from the use of low carbon fuel must be reviewed and increases mitigated). Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program (ARB 2010a). • Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes. • Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones. • Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75 percent by weight). • Use locally sourced or recycled materials for							

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construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials). • Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option. • Produce concrete onsite if determined to be less emissive than transporting ready mix. • Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from ARB's Heavy-Duty Vehicle GHG Measure (ARB 2010b) and EPA (EPA 2010). • Develop a plan to efficiently use water for adequate dust control. This may consist of the use of non-potable water from a local source.							
DT Mitigation Measure GHG-2(a) Implement Mitigation Measure AQ-3. Implementation of the mitigation measures described in Section 4.2, which would reduce operational emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The operational mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.	Verification that required measures have been incorporated into final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			
DT Mitigation Measure GHG-2(b) Implement Additional Measures to Reduce Operational GHG Emissions. For each increment of new development within the Project area requiring a discretionary approval (e.g., tentative subdivision map, conditional use permit, improvement plan), measures that reduce GHG emissions to the extent feasible and to the extent appropriate with respect to the state's progress at the time toward meeting GHG emissions reductions required by the California Global Warming Solutions Act of 2006 (AB 32) shall be imposed, as follows:	Verification that required measures have been incorporated into final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			

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• The project applicant shall incorporate feasible GHG reduction measures that, in combination with existing and future regulatory measures developed under AB 32, will reduce GHG emissions associated with the operation of future project development phases and supporting roadway and infrastructure improvements by an amount sufficient to achieve the goal of 6.6 CO_2e/SP/year, if it is feasible to do so. The feasibility of potential GHG reduction measures shall be evaluated by the City at the time each phase of development is proposed to allow for ongoing innovations in GHG reduction technologies and incentives created in the regulatory environment. • For each increment of new development, the project applicant shall obtain a list of potentially feasible GHG reduction measures to be considered in the development design from the City. The City's list of potentially feasible GHG reduction measures shall reflect the current state of the regulatory environment, which will continuously evolve under the mandate of AB 32. The project applicant(s) shall then submit to the City a mitigation report that contains an analysis demonstrating which GHG reduction measures are feasible for the associated reduction in GHG emissions, and the resulting CO_2e/SP/year metric. The report shall also demonstrate why measures not selected are considered infeasible. The mitigation report must be reviewed and approved by the City for the project applicant(s) to receive the City's discretionary approval for the applicable increment of development. In determining what measures should appropriately be imposed by a local government under the circumstances, the following factors shall be considered: o The extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the Project site are projected to decrease over time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted							

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in the future by ARB or other public agency pursuant to AB 32, or by EPA; o The extent to which mobile-source GHG emissions, which at the time of writing this PEIR comprise a substantial portion of the state's GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length; o The extent to which GHG emissions emitted by the mix of power generation operated by SCE, the electrical utility that will serve the Project site, are projected to decrease pursuant to the Renewables Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation; o The extent to which replacement of CCR Title 24 with the California Green Building Standards Code or other similar requirements will result in new buildings being more energy efficient and consequently more GHG efficient; o The extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies, and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB's implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions; o The extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, effecting cost-benefit analyses that determine economic feasibility; and o Whether the total costs of proposed mitigation for GHG emissions, together with other mitigation measures required for the proposed development, are so great that a reasonably prudent property							

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owner would not proceed with the project in the face of such costs. • In considering how much, and what kind of, mitigation is necessary in light of these factors, the following list of options shall be considered, though the list is not intended to be exhaustive, as GHG-emission reduction strategies and their respective feasibility are likely to evolve over time. These measures are derived from multiple sources including the Mitigation Measure Summary in Appendix B of the California Air Pollution Control Officer's Association (CAPCOA) white paper, *CEQA & Climate Change* (CAPCOA 2008); CAPCOA's *Model Policies for Greenhouse Gases in General Plans* (CAPCOA 2009); and the California Attorney General's Office publication, The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level (California Attorney General's Office 2010). **Energy Efficiency** o Include clean alternative energy features to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines). o Design buildings to meet CEC Tier II requirements (e.g., exceeding the requirements of Title 24 [as of 2007] by 20 percent). o Site buildings to take advantage of shade and prevailing winds and design landscaping and sun screens to reduce energy use. o Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings. o Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes. **Water Conservation and Efficiency**							

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o With the exception of ornamental shade trees, use water-efficient landscapes with native, drought-resistant species in all public area and commercial landscaping. Use water-efficient turf in parks and other turf-dependent spaces. o Install the infrastructure to use reclaimed water for landscape irrigation and/or washing cars. o Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. o Design buildings and lots to be water efficient. Only install water-efficient fixtures and appliances. o Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces. These restrictions should be included in the Covenants, Conditions, and Restrictions of the community. o Provide education about water conservation and available programs and incentives. o To reduce storm water runoff, which typically bogs down wastewater treatment systems and increases their energy consumption, construct driveways to single-family detached residences and parking lots and driveways of multi-family residential uses, with pervious surfaces. Possible designs include Hollywood drives (two concrete strips with vegetation or aggregate in between) and/or the use of porous concrete, porous asphalt, turf blocks, or pervious pavers. **Solid Waste Measures** o Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). o Provide interior and exterior storage areas for recyclables and green waste at all buildings.							

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o Provide adequate recycling containers in public areas, including parks, school grounds, golf courses, and pedestrian zones in areas of mixed-use development. o Provide education and publicity about reducing waste and available recycling services. **Transportation and Motor Vehicles** o Promote ride-sharing programs and employment centers (e.g., by designating a certain percentage of parking spaces for ride-sharing vehicles, designating adequate passenger loading zones and waiting areas for ride-share vehicles, and providing a website or message board for coordinating ride-sharing). o Provide the necessary facilities and infrastructure in all land use types to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations). o At industrial and commercial land uses, all forklifts, "yard trucks," or vehicles that are predominately used onsite at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption.							

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HAZARDS AND HAZARDOUS MATERIALS							
DT Mitigation Measure Haz-1(a) Prior to issuance of a demolition or renovation permit, a lead-based paint and asbestos survey shall be performed by a licensed sampling company. The lead-based paint survey shall be prepared for any structures pre-dating 1982; an asbestos survey shall be performed for asbestos-containing insulation for any structure pre-dating 1986; and an asbestos survey shall be performed for asbestos-containing drywall for all structures for which drywall is to be removed. All testing procedures shall follow California and federal protocol. The lead-based paint and asbestos survey report shall quantify the areas of lead-based paint and asbestos-containing materials pursuant to California and federal standards.	Review and approval of survey findings for individual project components involving demolition of a pre-1986 structure; verification that abatement has been conducted	Prior to issuance of demolition permits	Once per individual project component involving demolition of a pre-1986 structure	LBDS			
DT Mitigation Measure Haz-1(b) Prior to any demolition or renovation, onsite structures that contain asbestos must have the asbestos-containing material removed according to proper abatement procedures recommended by the asbestos consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only asbestos trained and certified abatement personnel shall be allowed to perform asbestos abatement. All asbestos-containing material removed from onsite structures shall be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. Following completion of the asbestos abatement, the asbestos consultant shall provide a report documenting the abatement procedures used, the volume of asbestos-containing material removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party and a copy shall be submitted to the City of Long Beach prior to issuance of a demolition or construction permit.	Review and approval of survey findings for individual project components involving demolition of a pre-1986 structure; verification that abatement has been conducted	Prior to issuance of demolition permits	Once per individual project component involving demolition of a pre-1986 structure	LBDS			

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DT Mitigation Measure Haz-1(c) Prior to the issuance of a permit for the renovation or demolition of any structure, a licensed lead-based paint consultant shall be contracted to evaluate the structure for lead-based paint. If lead-based paint is discovered, it shall be removed according to proper abatement procedures recommended by the consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only lead-based paint trained and certified abatement personnel shall be allowed to perform abatement activities. All lead-based paint removed from these structures shall be hauled and disposed of by a transportation company licensed to transport this type of material. In addition, the material shall be taken to a landfill or receiving facility licensed to accept the waste. Following completion of the lead-based paint abatement, the lead-based paint consultant shall provide a report documenting the abatement procedures used, the volume of lead-based paint removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party, with a copy submitted to the City of Long Beach prior to issuance of a demolition or construction permit.	Review and approval of survey findings for individual project components involving demolition of a pre-1982 structure; verification that abatement has been conducted	Prior to issuance of demolition permit	Once per individual project component involving demolition of a pre-1982 structure	LBDS, OCM			

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DT Mitigation Measure Haz-3(a) All excavation and demolition projects conducted within the Project area shall be required to prepare a contingency plan to identify appropriate measures to be followed if contaminants are found or suspected or if structural features that could be associated with contaminants or hazardous materials are suspected or discovered. The contingency plan shall identify personnel to be notified, emergency contacts, and a sampling protocol to be implemented. The excavation and demolition contractors shall be made aware of the possibility of encountering unknown hazardous materials and shall be provided with appropriate contact and notification information. The contingency plan shall include a provision stating under what circumstances it would be safe to continue with the excavation or demolition, and shall identify the person authorized to make that determination.	Review and approval of Contingency Plan prior to issuance of grading permits for individual project components	Prior to issuance of grading permits	Once per individual project component	LBDS, OCM			
DT Mitigation Measure Haz-3(b) If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (Long Beach/Signal Hill Certified Unified Program Agency [CUPA], LARWQCB, or the state DTSC). Prior to any other ground disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received. Groundwater is subject to pre-treatment during de-watering activities to meet National Pollutant Discharge Elimination System (NPDES) Construction Dewatering permit limits. The construction activities shall conform to the NPDES requirements. The RWQCB requires the water to be tested for possible pollutants. The developer shall collect groundwater samples from existing site wells to determine pre-treatment system requirements for extracted groundwater. A water treatment system shall be designed and installed for treatment of extracted groundwater removed during dewatering activities so that such water	Verification that a RWQCB de-water and discharge permit has been obtained for individual project components (if necessary)	Prior to issuance of demolition permits	As necessary for individual project components	LBDS			

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complies with the applicable RWQCB and NPDES permit standards before disposal.							
DT Mitigation Measure Haz-3(c) If concentrations of contaminants warrant site remediation, contaminated materials shall be remediated either prior to construction of structures or concurrent with construction. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation. The remediation program shall also be approved by a regulatory oversight agency (Long Beach/Signal Hill CUPA, LARWQCB, or the state DTSC). All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, the analytical results after completion of the remediation, and all waste disposal or treatment manifests.	Verification that remediation has occurred for individual project components (if necessary)	Prior to issuance of grading permits	As necessary for individual project components	LBDS			
DT Mitigation Measure Haz-3(d) If during the soil sampling, groundwater contamination is suspected or soil contamination is detected at depths at which groundwater could be encountered during demolition or construction, a groundwater sampling assessment shall be performed. If contaminants are detected in groundwater at levels that exceed maximum contaminant levels for those constituents in drinking water, or if the contaminants exceed health risk standards such as Preliminary Remediation Goals, 1 in 1 million cancer risk, or a health risk index above 1, the results of the groundwater sampling shall be forwarded to the appropriate regulatory agency (Long Beach/Signal Hill CUPA, LARWQCB, or the State DTSC). Prior to any other ground-disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received.	Verification that site closure has been obtained from the applicable regulatory body for individual project components	Review prior to issuance of demolition permit; field verification during construction	Review; as needed throughout construction for field verification	LBDS			

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HYDROLOGY AND WATER QUALITY							
DT Mitigation Measure Hydro-1 Prior to issuance of a grading permit, the City Department of Development Services shall determine the need for the developer to prepare a SWPPP for the site. If required, the SWPPP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any grading or building permits. The SWPPP shall fully comply with City and LARWQCB requirements and shall contain specific BMPs to be implemented during project construction to reduce erosion and sedimentation to the maximum extent practicable. The following BMPs or equivalent measures to control pollutant runoff shall be included within the project's grading and construction plans, if applicable: <u>Pollutant Escape: Deterrence</u> • Cover all storage areas, including soil piles, fuel and chemical depots. Protect from rain and wind with plastic sheets and temporary roofs. • Implement tracking controls to reduce the tracking of sediment and debris from the construction site. At a minimum, entrances and exits shall be inspected daily and controls implemented as needed. • Implement street sweeping and vacuuming as needed and as required. <u>Pollutant Containment Areas</u> • Locate all construction-related equipment and related processes that contain or generate pollutants (i.e., fuel, lubricants, solvents, cement dust, and slurry) in isolated areas with proper protection from escape. • Locate construction-related equipment and processes that contain or generate pollutants in secure areas, away from storm drains and gutters. • Place construction-related equipment and processes that contain or generate pollutants in bermed and plastic-lined depressions to contain all materials within	Review and approval of final grading and construction plans for individual project components to verify compliance with applicable SWPPP requirements	Prior to issuance of grading permits	Once per individual project component for which an SWPPP is required	LBDS, OCM			

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that site in the event of accidental release or spill. • Park, fuel, and clean all vehicles and equipment in one designated, contained area. <u>Pollutant Detainment Methods</u> • Protect downstream drainages from escaping pollutants by capturing materials carried in runoff and preventing transport from the site. Examples of detainment methods that retard movement of water and separate sediment and other contaminants are silt fences, hay bales, sand bags, berms, and silt and debris basins. <u>Recycling/Disposal</u> • Develop a protocol for maintaining a clean site. This includes proper recycling of construction-related materials and equipment fluids (i.e., concrete dust, cutting slurry, motor oil, and lubricants). • Provide disposal facilities. Develop a protocol for cleanup and disposal of small construction wastes (i.e., dry concrete). <u>Hazardous Materials Identification and Response</u> • Develop a protocol for identifying risk operations and materials. Include protocol for identifying source and distribution of spilled materials. • Provide a protocol for proper clean-up of equipment and construction materials, and disposal of spilled substances and associated cleanup materials. • Provide an emergency response plan that includes contingencies for assembling response teams and immediately notifying appropriate agencies.							

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DT Mitigation Measure Hydro-2 Prior to issuance of a building permit, the Department of Development Services shall determine the need for the developer to prepare a SUSMP for the site. If required, the SUSMP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any building permits. The City's review shall include a determination of whether installation of pollutant removal technology in existing or proposed storm drains adjacent to the project site should be required. The City's review is required to confirm that the SUSMP is consistent with the City's NPDES Permit No. CAS 004003 or a subsequently issued NPDES permit applicable at the time of project construction. A SUSMP consistent with the City's NPDES permit shall be incorporated into the project design plans prior to issuance of any building permits.	Review and approval of SUSMP for individual project components for which an SUSMP is required	prior to issuance of grading permits	Once per individual project component for which an SUSMP is required	LBDS			
DT Mitigation Measure Hydro-3 Prior to issuance of a building permit, the City Stormwater Management Division shall determine the need for the developer to conduct an analysis of the existing stormwater drainage system and to identify improvements needed to accommodate any projected increased runoff that would result from the proposed Project. The evaluation conducted by the developer shall include a determination of whether Low Impact Development (LID) practices and strategies should be incorporated into the project to reduce post-development peak stormwater runoff discharge rates to not exceed the estimated pre-development discharge rates.	Verification that required review of storm drain systems has been conducted for individual project components and that needed improvements have been incorporated	Prior to issuance of building permits	Once per individual project component	LBDS, LBPWD			
NOISE							
DT Mitigation Measure Noise-1(a) The following measures shall be applied to proposed construction projects that are determined to have potential noise impacts from removal of existing pavement and structures, site grading and excavation, pile driving, building framing, and concrete pours and paving: • All internal combustion-engine-driven equipment shall be equipped with mufflers that are in good operating	Review of construction specifications to verify incorporation of applicable requirements; field verification of compliance	Construction specification review prior to issuance of demolition permits; field verification during construction	Once per individual project component for construction specification review; field verification periodically throughout	LBDS, OCM			

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condition and appropriate for the equipment. • "Quiet" models of air compressors and other stationary construction equipment shall be employed where such technology exists. • Stationary noise-generating equipment shall be located as far as reasonable from sensitive receptors when sensitive receptors adjoin or are within 150 feet of a construction site. • Unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes) shall be prohibited. • Foundation pile holes shall be predrilled, as feasible based on geologic conditions, to minimize the number of impacts required to seat the pile. • Construction-related traffic shall be routed along major roadways and away from noise-sensitive receptors. • Construction activities, including the loading and unloading of materials and truck movements, shall be limited to the hours specified in the City Noise Ordinance (Section 8.80.202). • Businesses, residences, and noise-sensitive land uses within 150 feet of construction sites shall be notified of the construction. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of the complaint and response procedure. • Each project implemented as part of the Plan shall designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. A telephone number for the liaison shall be conspicuously posted at the construction site. • If a noise complaint(s) is registered, the liaison, or project representative, shall retain a City-approved noise consultant to conduct noise measurements at the			construction of individual project components				

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location that registered the complaint. The noise measurements shall be conducted for a minimum of 1 hour and shall include 1-minute intervals. The consultant shall prepare a letter report summarizing the measurements and potential measures to reduce noise levels to the maximum extent feasible. The letter report shall include all measurement and calculation data used in determining impacts and resolutions. The letter report shall be provided to code enforcement for determining the adequacy and if the recommendations are adequate.							
DT Mitigation Measure Noise-1(b) The City will require the following measures, where applicable based on noise level of source, proximity of receptors, and presence of intervening structures, to be incorporated into contract specifications for construction projects within 150 feet of existing residential uses implemented under the proposed Plan: • Temporary noise barriers shall be constructed around construction sites adjacent to, or within 150 feet of, operational business, residences, or other noise-sensitive land uses. Temporary noise barriers shall be constructed of material with a minimum weight of 4 pounds per square foot with no gaps or perforations. Noise barriers may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. If a project-specific noise analysis determines that the barriers described above would not be sufficient to avoid a significant construction noise impact, a temporary sound control blanket barrier, shall be erected along building façades facing construction sites. This mitigation would only be necessary if conflicts occurred that were irresolvable by proper scheduling and other means of noise control were unavailable. The sound blankets are required to have a minimum breaking and tear strength of 120 pounds and 30 pounds, respectively. The sound blankets shall have a minimum sound transmission classification of 27 and noise reduction coefficient of 0.70.	Verification that construction specifications for individual project components within 150 feet of noise sensitive uses incorporate applicable requirements; field verification of compliance	Construction specification review prior to issuance of demolition permits; field verification during construction	Once per individual project component for construction specification review; field verification periodically throughout construction of individual project components	LBDS, OCM			

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The sound blankets shall be of sufficient length to extend from the top of the building and drape on the ground or be sealed at the ground. The sound blankets shall have a minimum overlap of 2 inches.							
DT Mitigation Measure Noise-2 The City shall review all construction projects for potential vibration-generating activities from demolition, excavation, pile– driving, and construction within 100 feet of existing structures and shall require site-specific vibration studies to be conducted to determine the area of impact and to identify appropriate mitigation measures. The studies shall, at a minimum, include the following: • Identification of the project's vibration compaction activities, pile driving, and other vibration-generating activities that have the potential to generate ground-borne vibration; and the sensitivity of nearby structures to ground-borne vibration. This task should be conducted by a qualified structural engineer. • A vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; establish a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for actions to be taken when vibration levels approached the defined vibration limits. • Maintain a monitoring log of vibrations during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for a more or less intensive measurement schedule. • Vibration levels limits for suspension of construction activities and implementation of contingencies to either lower vibration levels or secure the affected structures. • Post-construction survey on structures where either monitoring has indicated high vibration levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.	Vibration analysis conducted as part of the SEIR; verification that vibration plans, ongoing monitoring, and post-construction survey are conducted is required	Verification that vibration analysis and plan prepared prior to issuance of demolition/ grading permits; verification that monitoring log maintained through construction; verification that post-construction survey conducted prior to issuance of occupancy permits	Once per individual project component for vibration analysis/plan and post-construction survey; periodically throughout construction for monitoring log	LBDS, OCM			

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DT Mitigation Measure Noise-5 In areas where new residential development would be exposed to L_{dn} of greater than 65 dBA, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following: • Utilize site planning to minimize noise in shared residential outdoor activity areas by locating the areas behind the buildings or in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible. • Provide mechanical ventilation in all residential units proposed along roadways or in areas where noise levels could exceed 65 dBA L_{dn} so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 45 dBA L_{dn}. Install sound-rated windows and construction methods to provide the requisite noise control for residential units proposed along roadways or in areas where noise levels could exceed 70 dBA L_{dn}.	Implemented in Civic Center Project SEIR; no further action is required						
DT Mitigation Measure Noise-6 In areas where new residential development would be located adjacent to commercial uses, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following: • Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses. • Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible. Require the provision of localized noise barriers or rooftop	Implemented in Civic Center Project SEIR; no further action is required						

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parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.							
DT Mitigation Measure Noise-7 The project developer shall retain the services of a qualified acoustical engineer with expertise in design of building sound isolations, who shall submit a signed report to the City during plan check for review and approval, which demonstrates that the proposed building design for the residential uses and the hotel building achieves an interior sound environment of 45 dBA (CNEL), as required by City's building code.	Verification that a signed acoustical report has been submitted by the applicant for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			
SEIR Mitigation Measure Noise-1 Noise Control Plan. If demolition occurs by implosion, the City shall approve a Noise Control Plan that protects public health and includes: • A site-specific map that delineates the hearing damage radius. • Safety measures to ensure that community members would not be within this radius during implosion. • Control measures designed by an implosion expert to reduce noise at the source of the implosion. • A statement that all demolition-related damage shall be repaired.	Verification that a Noise Control Plan is prepared	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-2(a) Loading Areas. The applicant shall submit site plans to the Department of Development Services showing that all loading and unloading areas would be oriented away from existing sensitive receptors and/or shielded by the proposed buildings such that the line-of-sight would be broken.	Review of final building plans to verify that loading areas are oriented away from existing sensitive receptors	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-2(b) Sound-Rated Windows and Glass Doors Near Commercial Uses. The applicant shall install sound-rated windows and sliding glass doors on all residential units that are within 50 feet of commercial uses. Windows shall be at least STC 35 to ensure that commercial activities do not result in interior noise levels exceeding 35 dBA when the windows are closed.	Review of final building plans to verify use of sound-rated windows and glass doors	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			

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SEIR Mitigation Measure Noise-3 Vibration Control Plan. If demolition occurs by implosion, the City shall approve a Vibration Control Plan that promotes public health and adjacent buildings, and includes: • A site-specific estimate of the potential zones of vibration perceptibility and building damage. • A pre-construction survey to assess the foundations and facades of buildings within the damage zone. • A post-construction survey to assess damage, if any, caused by implosion. • A statement that all demolition-related damage shall be repaired.	Verification that a Vibration Control Plan is prepared	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-6(a) Mechanical Ventilation. The applicant shall provide mechanical ventilation in all residential units proposed along Broadway, Pacific Avenue, Third Street, Cedar Avenue, Chestnut Avenue, and First Street so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 35 dBA Ldn.	Review of final building plans to verify use of mechanical ventilation in all residential units	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-6(b) Sound-Rated Windows and Sliding Glass Doors. The applicant shall install sound-rated windows and sliding glass doors on the residential units that face Broadway, Pacific Avenue, Third Street, and Cedar Avenue, as well as the proposed library, such that interior noise levels would not exceed 35 dBA Ldn when the windows are closed.	Review of final building plans to verify use of sound-rated windows and sliding glass doors on residential units	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
Traffic and Circulation							
DT Mitigation Measure Traf-1(a) As the system's capacity is reached, it will become important to manage the street system in a more efficient and coordinated manner. Improvements to the Project area transportation system are proposed as part of the overall Downtown development, including improvements that have been required of other area projects previously approved by the City. Therefore, the mitigation focuses on improvements that would not require significant additional rights-of-way and are achievable within the life of the Plan. There are five proposed mitigation measures for the Downtown Plan,	Implemented in Civic Center Project SEIR; no further action is required						

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as follows: 1. Implement traffic control system improvements in Downtown on selected arterials. 2. Improve the Alamitos Avenue corridor via removal of selected parking spaces and the implementation of additional travel lanes plus bike lanes in each direction. 3. Reconfigure the 6th Street and 7th Street intersections with Martin Luther King Jr. Avenue and Alamitos Avenue for safety and traffic flow enhancements. 4. Enhance freeway access to I-710 to and from Downtown Long Beach. 5. Implement transit facilities and programs to encourage public transit usage and Transportation Demand Management Policies.							
DT Mitigation Measure Traf-1(b) A series of traffic signal system improvements are recommended in Downtown to accommodate the anticipated growth in travel. The following traffic signal system improvements are recommended as part of this mitigation measure: 1. Implement Adaptive Traffic Signal Control System (ATCS) improvements throughout Downtown consistent with currently planned improvements on Ocean Boulevard and Atlantic Avenue. Streets that are proposed to be included in the ATCS as a mitigation measure for the Downtown Long Beach Strategic Plan include the following: • Alamitos Avenue north of Ocean Boulevard • Pine Avenue north of Ocean Boulevard • Pacific Avenue north of Ocean Boulevard • 7th Street from I-710 to Alamitos Avenue • 6th Street from I-710 to Alamitos Avenue • Broadway from I-710 to Alamitos Avenue • Ocean Boulevard from Shoreline to Alamitos Avenue (to join the proposed system starting at Alamitos Avenue)	Based on SEIR traffic analysis, these DT PEIR requirements not specifically needed for the Civic Center Project; no further action required						

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• Others as needed, to be determined by the City Traffic Engineer and Public Works Director 2. Implement pan/tilt/zoom Closed Circuit Television Camera (CCTV) surveillance and communications with power and control capability to the Department of Public Works to monitor real-time traffic operations from rooftops of selected new buildings as needed and to be determined based on the location of appropriate new high-rise structures along the Alamitos Avenue, Shoreline Drive, and Ocean Boulevard corridors. 3. Implement transit signal priority for Long Beach Boulevard and upgrade traffic signal system equipment and operations along the Blue Line light rail route. 4. Upgrade and improve traffic signal equipment throughout Downtown for safety and operational enhancements.							
DT Mitigation Measure Traf-1(c) As part of this mitigation measure, a number of intersections would receive major or minor signal modifications, depending on their current status. In addition to the enhancements listed, other potential improvements that can be included are: • Bicycle improvements (detection, signalization, etc.) • In-pavement LED crosswalk lights • Automatic pedestrian detection (i.e., infrared, microwave, or video detection) • Illuminated push buttons • Countdown pedestrian signals • Adaptive pedestrian clearance (increasing the flashing DON'T WALK time based on location of pedestrians in the crosswalk) • Enhanced signal equipment including mast arms, poles, signal heads, and other necessary enhancements for safety and operations Communications enhancements as needed to tie the system together with the Traffic Control Center in City Hall.	Review of traffic impacts completed as part of the Civic Center Project SEIR; no specific requirements identified, but final building plans to be reviewed to determine whether listed improvements would enhance conditions at study intersections	Prior to issuance of building permits	Once per individual project component				

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DT Mitigation Measure Traf-1(d) Traffic Calming and Pedestrian Amenities. Appropriate traffic calming and pedestrian amenities shall be provided in conjunction with development projects. Potential improvements include corner curb extensions, enhanced paving of crosswalks, and pedestrian-activated signals at mid-block crossings to make it easier for pedestrians to cross the street and to make them more visible to motorists. Other potential improvements include wider sidewalks in locations where the existing sidewalks are less than 10 feet wide, pedestrian-scale street lights, and street furniture (City of Long Beach 2005).	Review and approval of improvement plans for individual project components to verify compliance with City requirements	Prior to issuance of building permits	Once per individual project component	LBPWD			
DT Traf-1(e) Currently, due to on-street parking, there is only one lane of travel on Alamitos Avenue in the southbound direction between 3rd Street and Broadway. Parking spaces on the west side of Alamitos Avenue will be removed, the street will be restriped and reconstructed, a bike lane will be added in each direction of travel, and the street will provide for two travel lanes in each direction plus exclusive left turn lanes from 7th Street to Ocean Boulevard. Traffic signal enhancements to implement the Alamitos Avenue improvements shall also be implemented as needed.	Not applicable to location of project site						
DT Traf-1(f) Developments in the project area will be required to coordinate with area transit providers to accommodate and encourage transit use by residents and patrons. For non-residential sites, appropriate programs and facilities will be included to encourage car and van pooling, provide information on transportation alternatives, and encourage trip reduction strategies in accordance with the City's TDM policies for non-residential development.	Review and approval of improvement plans for individual project components to verify compliance with City requirements	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			

Key: **LBPWD – City of Long Beach Public Works Department**
LBDS – City of Long Beach Development Services Department
OCM – Onsite Construction Manager
DT – Downtown Plan Final EIR
SEIR – Civic Center Project Supplemental EIR

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
UTILITIES/SERVICE SYSTEMS							
DT Mitigation Measure Utilities-3(a) All construction related to Project implementation shall include verification by the construction contractor that all companies providing waste disposal services recycle all demolition and construction-related wastes. The contract specifying recycled waste service shall be submitted to the City Building Official prior to approval of the certificate of occupancy	Verification that construction specifications for individual project components include use of a waste disposal company that recycles demolition and construction wastes	Prior to issuance of demolition or building permits	Once per individual project component	LBDS			
DT Mitigation Measure Utilities-3(b) In order to facilitate onsite separation and recycling of construction related wastes, all construction contractors shall provide temporary waste separation bins onsite during demolition and construction.	Review and approval of construction waste management plan for individual project components; field verification of compliance	Review and approval of construction waste management plan prior to issuance of demolition permit; field verification during construction	Once per individual project component for plan review; periodically throughout construction	LBDS, OCM			
DT Mitigation Measure Utilities-3(c) All future developments in the Project area shall include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and all other recyclable materials. Materials from these bins shall be collected on a regular basis consistent with the City's refuse disposal program.	Review and approval of final building plans for individual project components; field verification of compliance	Building plan review and approval prior to issuance of building permit; field verification prior to issuance of occupancy permits	Once per individual project component for building plan review and approval; once for field verification	LBDS			
DT Mitigation Measure Utilities-3(d) All Project area residents and commercial tenants shall be provided with educational materials on the proper management and disposal of household hazardous waste, in accordance with educational materials made available by the Los Angeles County Department of Public Works.	Verification that educational materials are made available to project occupants of individual project components	Prior to issuance of occupancy permits	Once per individual project component	LBDS			

Key: **LBPWD – City of Long Beach Public Works Department**
LBDS – City of Long Beach Development Services Department
OCM – Onsite Construction Manager
DT – Downtown Plan Final EIR
SEIR – Civic Center Project Supplemental EIR

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
OTHER CEQA							
SEIR Mitigation Measure Other-1 Fumigation. Prior to issuance of demolition permits, the project applicant shall fumigate all buildings.	Verification that fumigation has occurred	Prior to issuance of demolition permits	Once per individual project component	LBDS			

Key: **LBPWD – City of Long Beach Public Works Department**
LBDS – City of Long Beach Development Services Department
OCM – Onsite Construction Manager
DT – Downtown Plan Final EIR
SEIR – Civic Center Project Supplemental EIR

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Appendix A

Initial Study/NOP and NOP Comment Letters



City of Long Beach

Civic Center Project

Draft

Initial Study

July 2015

Environmental Scientists Planners Engineers

Civic Center Project

Draft
Initial Study

Prepared by:

City of Long Beach
333 West Ocean Boulevard 5th Floor
Long Beach, CA 90802
Craig Chalfant, Planner
(562) 570-6368

Prepared with the assistance of:

Rincon Consultants, Inc.
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Ventura, California 93003

July 2015

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INITIAL STUDY

1. **Project Title:**
   Civic Center Project

2. **Lead Agency Name and Address:**
   City of Long Beach
   333 West Ocean Boulevard 5th Floor
   Long Beach, California 90802

3. **Contact Person and Phone Number:**
   Craig Chalfant, Planner
   (562) 570-6368

4. **Project Location:**
   The project site includes several areas throughout downtown Long Beach: Civic Block, Lincoln Park Block, Third & Pacific Block, and Center Block. The larger portion of the project site is bounded by Magnolia Avenue and Chestnut Avenue to the west, Broadway to the north, Pacific Avenue to the east, and Ocean Boulevard to the south. A smaller part of the project site is bounded by Third Street, Cedar Avenue, and Pacific Avenue. Figure 1 shows the regional location. Figure 2 shows the project site location.

5. **Project Sponsor's Name and Address:**
   City of Long Beach
   333 West Ocean Boulevard 5th Floor
   Long Beach, California 90802

6. **General Plan Designation:**
   Mixed Use (LUD 7)

7. **Zoning:**
   Downtown Plan (PD-30)

8. **Description of Project:**
   The design of the proposed Civic Center project follows the guidance of the Downtown Plan (the "Downtown Plan"), which was adopted in January 2012. A Final Program Environmental Impact Report (FEIR) was prepared for the Downtown Plan in accordance with the California Environmental Quality Act (CEQA) and was certified in January 2012. The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. The Lincoln Park garage and Broadway garage would be preserved and would be used by city staff and public parking as it is today. Both the City Hall and Port buildings would be up to 11 stories in height. See Figure 3 for a detailed site plan of all proposed components. See Figure 4a and 4b for aerial photosimulations of the project.

The project includes the demolition of the former Long Beach Courthouse building. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014. The former courthouse would be demolished leaving the building foundation partially deconstructed with stem walls along the north and east property lines left in place. Prior to demolition, equipment and materials would be removed. Hazardous materials, if present, would be removed in accordance with federal and State abatement policies and procedures.

Specific project components are described in more detail below:

Civic Block

The Civic Block consists of three major components:

Port Building

The Port Building would be up to 11-stories, utilizing a concrete frame structure of up to 240,000 gross square feet (gsf). It would be designed to house the administrative functions of the Harbor Department. The space within this building would be primarily office space.

City Hall Building.

The City Hall building would be an approximately 270,000 gsf, up to 11-story concrete frame structure that includes office space for City staff and elected officials. The structure would also include Council Chambers, meeting rooms, transaction counters and other public serving components. Located around and between the City Hall and Port Building would be a 73,000 square foot (sf) Civic Plaza, which would include hardscape and landscape elements appropriate for larger spontaneous gatherings as well as planned events.

Port and City Hall Foundations.

The Port and City Hall buildings would share a common underground parking structure that includes shared infrastructure such as the combined central plant, common points of vehicular access and shared loading dock services. Up to 510 new spaces of underground parking would be available to the Harbor Department and the City's priority parking users, including Americans with Disabilities Act (ADA) accessible parking spaces, in a 2 to 2.5 level below grade structure that includes a below grade loading dock.

Construction on the Civic Block would begin once the former Long Beach Courthouse building occupying the site is removed.

Lincoln Park Block

Improvements to the Lincoln Park Block consist of two primary components:

Main Library

A new two-story Main Library of up to 92,000 gsf would be constructed utilizing a wood frame structure built on top of the existing Lincoln Parking Garage roof deck. In addition to the aboveground component, service, support and archive functions would be constructed on the P1 level of the Lincoln Parking Garage. Lincoln Parking Garage renovations would include enhancements to the existing parking structure necessary to support the Library and would allow access to the garage using the existing Pacific and Cedar Street access ramps.

These temporary ramps would be modified and replaced with a new ramp system as part of the Center Block work described below.

Lincoln Park
After occupation of the new Library, the existing Main Library would be demolished. The site would be redeveloped into a new Lincoln Park. The deeded 4.8 acres of Lincoln Park would remain in its current location. The new Main Library would be located in the park under a conditional use permit. The planned park area, not including the library footprint, would be approximately four acres.

Lincoln Park would include California friendly landscaping and hardscape treatment to support planned programs and events. The planned park amenities include a multi-purpose event lawn, a dog park, and a children's play area. A new public washroom would also be added.

Third & Pacific Block
The commercial parcel at Third Street and Pacific Avenue is currently an approximately 0.9 acre surface parking lot. The project would include construction of a seven story, multi-family residential complex on this lot. The structure would have up to 200 units and be up to 235,000 gsf. The proposed building is a five to seven-story structure of a combination of concrete and wood frame. The complex would also include a parking structure with up to two levels below grade and up to three levels above ground partially wrapped by the residential units. Up to 250 parking stalls would be included in this structure and the building would be serviced by at grade loading facilities.

Center Block
After the New City Hall is operational, the existing City Hall structure would be demolished and a mixed use project would be developed in its place. The Center Block commercial development would include up to 580 residential units totaling up to 650,000 gsf and up to 40,000 gsf of retail. A 200 room hotel may also be included as part of the project. An underground parking garage would service this parcel with up to 725 new parking spaces and the two buildings comprising the new development would be serviced by at-grade loading facilities. In the event of a hotel use within the Ocean Boulevard parcel, a port-cochere would be provided at the corner of Ocean Boulevard and Cedar Street.

Site Infrastructure
The project would require site infrastructure improvements to service the buildings. The primary infrastructure components include:

Street Extensions
Chestnut Street would be extended to connect Broadway to Ocean Boulevard as part of the Civic Block work discussed above. Cedar Street would be extended to connect Broadway to Ocean as part of the Center Block work discussed above. A section of First Street with non-traditional paving and a curbless design would be developed as a privately owned and operated street between Chestnut and Cedar Streets as part of the Center Block development. Street improvements would include new streetscape treatments and traffic signalization, cross walks, and on-street parking where feasible.

Utilities
Existing utilities that are not required to remain would be cut, capped and removed as necessary for each phase of construction. Utilities that need to remain in service, but that conflict with elements of the Downtown Plan would be re-located in coordination with appropriate utility provider.

Landscaping
Landscaping for the site was designed at a Downtown Plan level to bring landscape consistency to the entire project and to ensure the project meets the City's requirements for streetscape improvements. Specific landscape and hardscape plans would be included with each of the major work components outlined above.

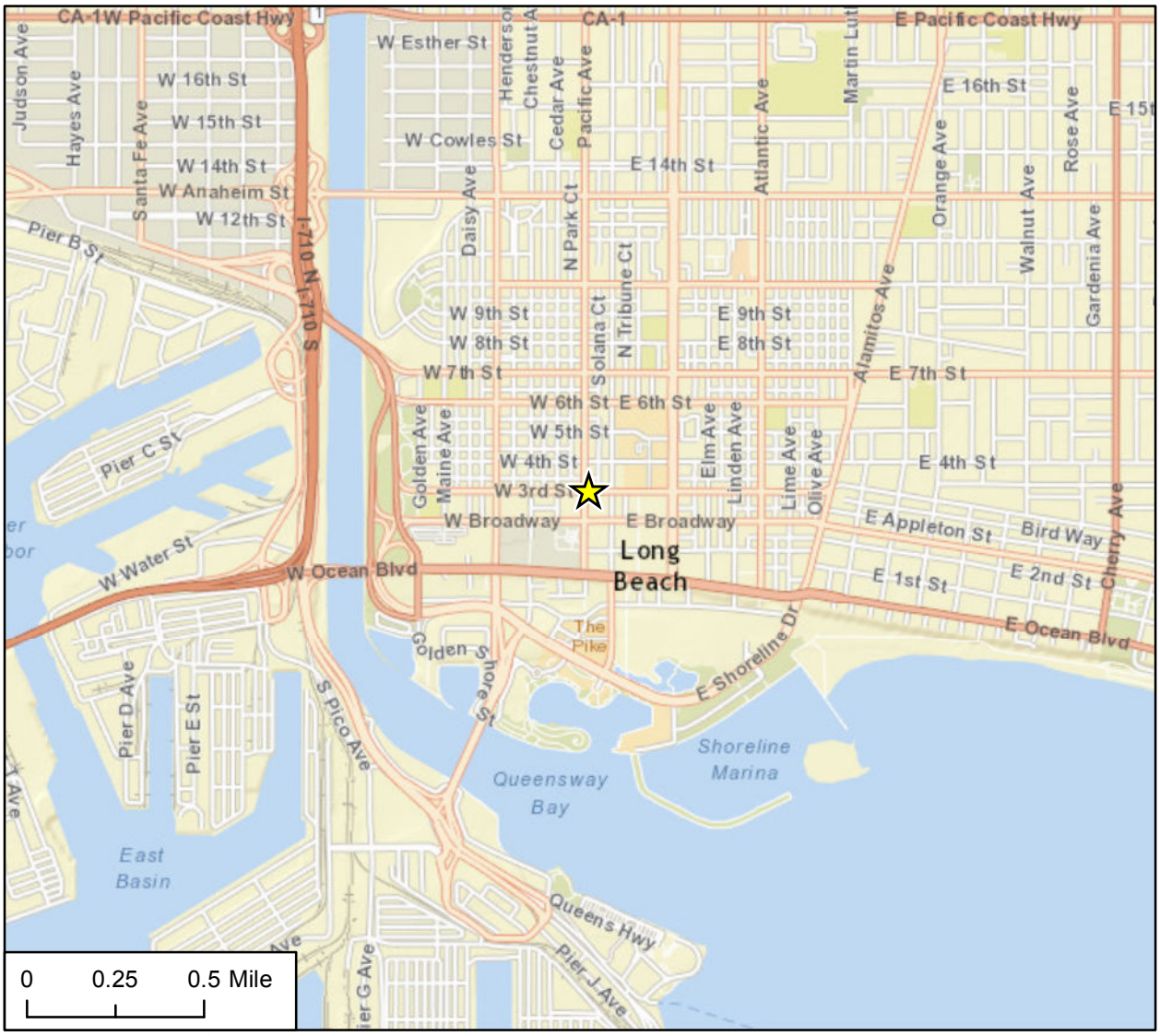
9. Surrounding Land Uses and Setting:
Generally, the project is located in the Civic Center portion of the Downtown Plan area of Long Beach surrounded by a mix of uses, including residential, retail, commercial space, and recreational areas (including parks). This area is also identified as the Institutional District of PD-30 in Figure 4.8-1 of the Downtown Plan EIR. The Long Angeles River is less than one mile to the west of the Downtown area.

10. Other Public Agencies Whose Approval is Required:
The following City of Long Beach approvals will be required:

- Long Beach Planning Bureau will review, comment and ultimately provide recommendations to the Planning Commission on the site plan, zoning and subdivision entitlement applications outlined above.
- Long Beach Planning Commission will review in a public hearing and consider approval recommendations for the entitlement applications and CEQA review documentation.
- Long Beach City Council will review in a public hearing and approve any Statutory Development Agreements related to private development site plans and other subdivision and zoning actions.
- Long Beach City Council will review in a public hearing (a portion of which may be in closed session) and approve project's transactional documents.
- Long Beach Parks and Recreation Commission will review and approve the Lincoln Park Design.
- Long Beach Gas and Oil will review and approve the gas service utility design.
- Long Beach Water Department will review and approve the water service utility design.
- Long Beach Traffic & Transportation Bureau, Traffic Engineering Division will review and approve the street and intersection improvement designs.
- Long Beach Department of Public Works will review and approve the utility excavation plans, management of traffic plans and work related to improvements within the Public Right of Way.
- Long Beach Building and Safety Bureau will review and approve the building plans and issue permits.

- Long Beach Fire Department will review and approve the building plans for fire and life safety issues.

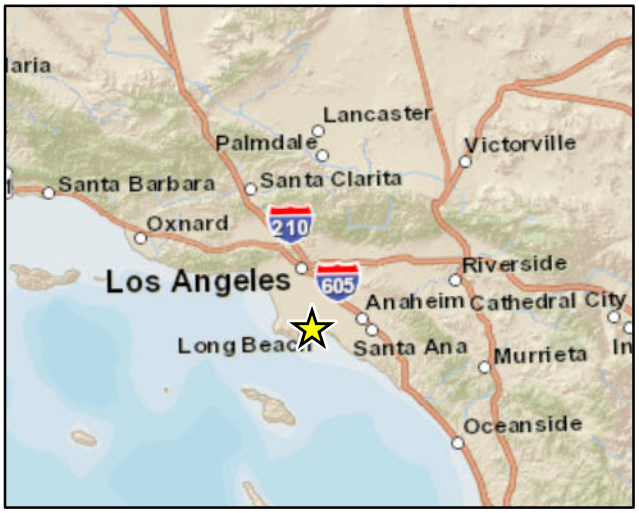
In addition to the above City approvals, the Board of Harbor Commissioners will review and approve their components of the project, including any direct contracts between Plenary-Edgemoor Civic Partners (PECP), the City's development partner, and the Harbor Department that are not a part of the City's agreements.



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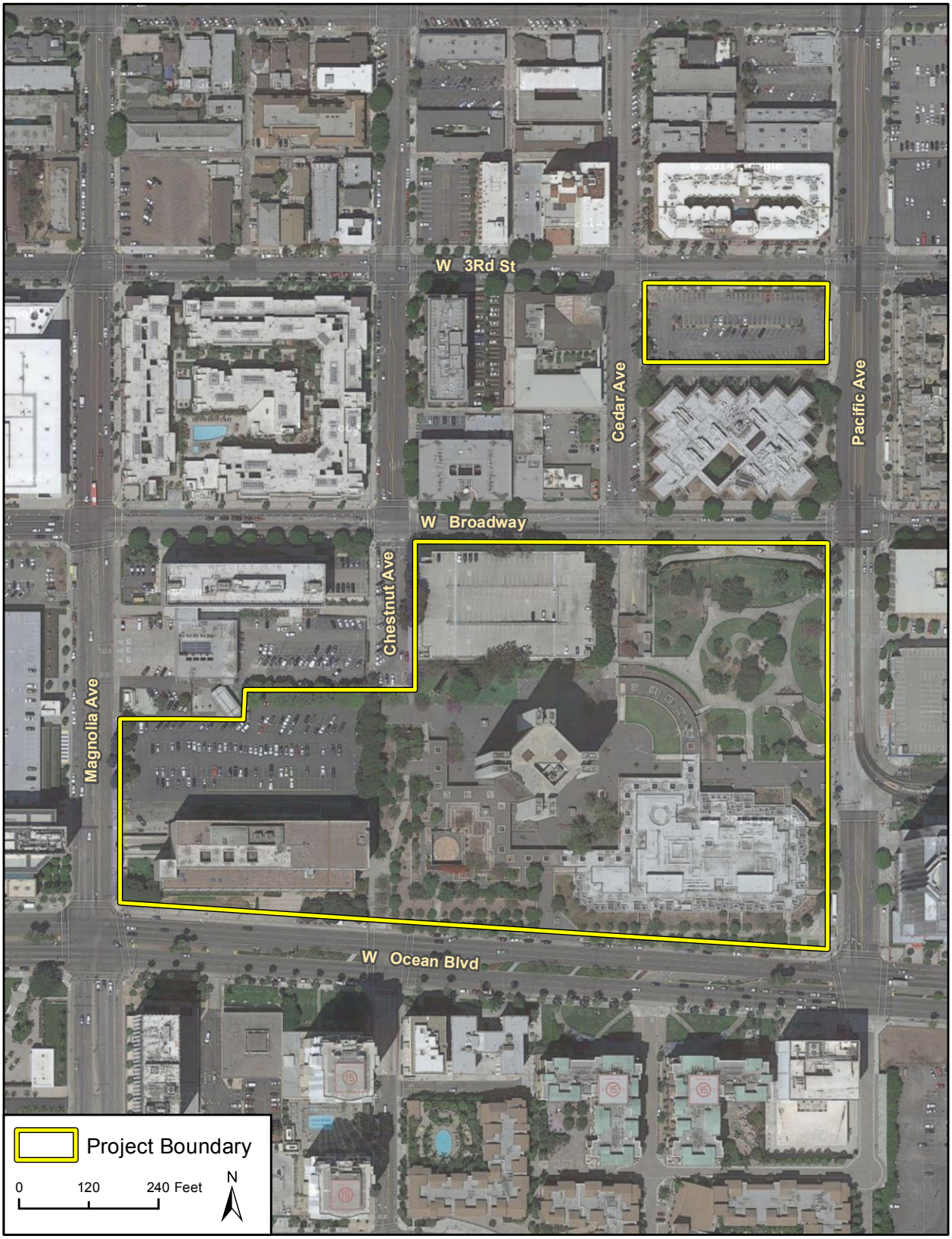
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Project Location



Regional Location

Figure 1

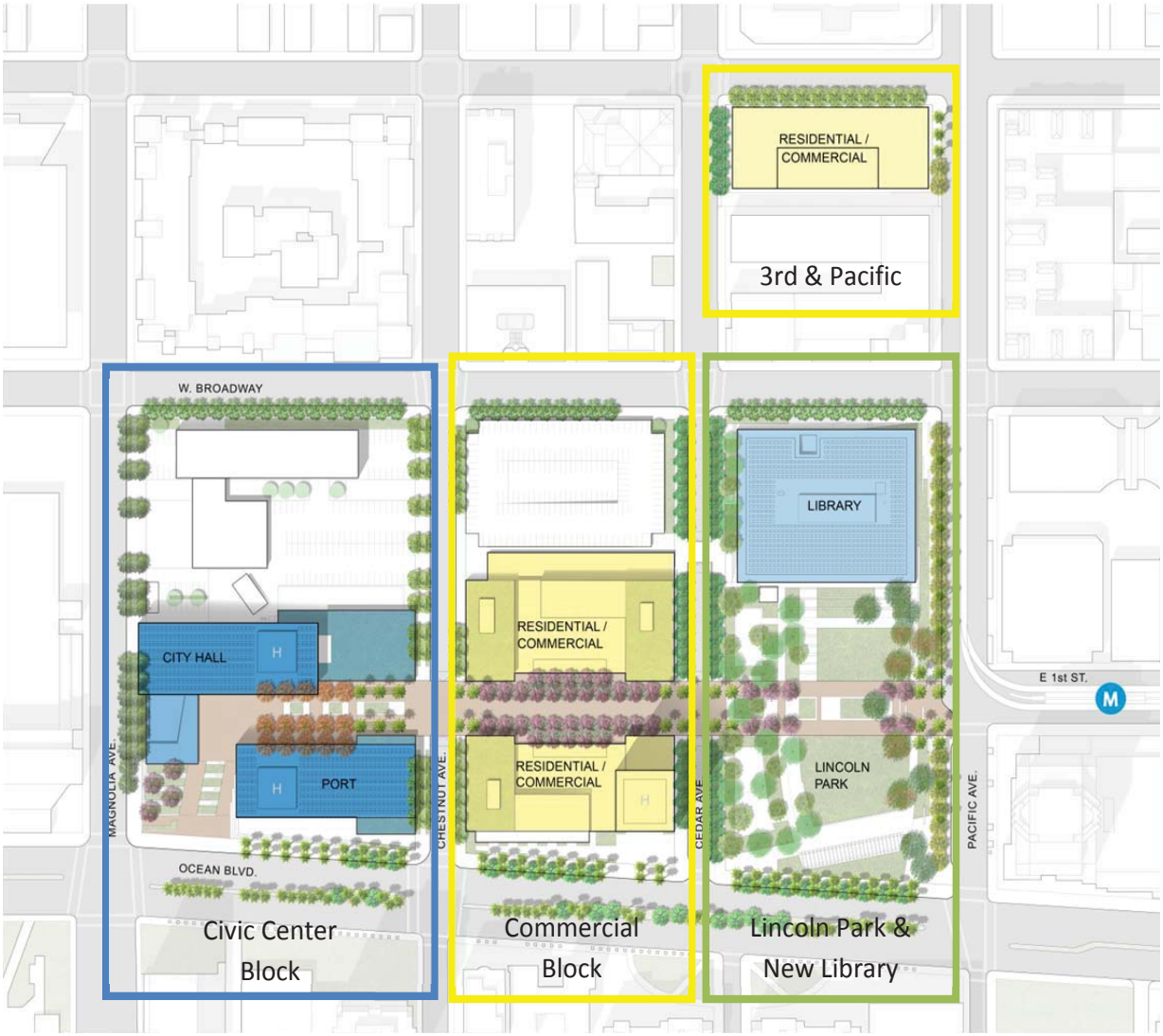


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Project Location

Figure 2

City of Long Beach



Source: PECP, 2015.

Site Plan

Figure 3



Looking southwest through project area, Pacific Avenue shown in lower left.

Source: Skidmore, Owings & Merrill LLP, March 2015.

Aerial Photosimulations

Figure 4a



Looking east through project area, Ocean Boulevard shown on right.

Source: Skidmore, Owings & Merrill LLP, March 2015.

Aerial Photosimulations

Figure 4b

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

■ Aesthetics	☐ Agriculture and Forestry Resources	■ Air Quality
☐ Biological Resources	■ Cultural Resources	☐ Geology/Soils
■ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	■ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
■ Transportation/Traffic	☐ Utilities/Service Systems	■ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

■ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A Supplemental ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

4/16/15
Date

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. Aesthetics				
-- Would the Project:				
a) Have a substantial adverse effect on a scenic vista?	■	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	■	☐	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	■	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	■	☐

a) Would the project have a substantial adverse effect on a scenic vista?

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

The City of Long Beach Downtown Plan Final Program Environmental Impact Report (SCH No. 2009071006) (the "FEIR") included environmental review of the Downtown Plan, which proposed development throughout the downtown area, including the project site. It was determined that impacts to the visual character would be altered as a result of development. The FEIR found that design review as outlined in the Downtown Plan would ensure that such alterations would benefit the area's overall visual character.

Visual corridors in Downtown Long Beach include Ocean Boulevard (a designated scenic highway) and Alamitos Avenue (which is recommended for scenic highway designation in the proposed Long Beach General Plan update, based on views available from the right-of-way). Several other locations within the Downtown Plan area contain visual resources or viewsheds that require protection. These include roadways that approach the coastal bluff from the north and connect Downtown to the Pike and Shoreline Village, such as Linden and Pine Avenues and Magnolia Avenue/Queens Way. In addition, sites where streets terminate at historic landmarks such as the Villa Riviera, or iconic buildings such as the City Hall building at the western terminus of 1st Street, and the termination of Long Beach

Performing Arts Center, are visually significant. Views of designated historic landmarks within Downtown identified in Section 4.3 of the FEIR as potentially historic structures are also considered to be visual amenities.

The six new buildings (three of which are over 11 stories tall), three new parking garages, and related infrastructure and landscaping improvements included in the proposed project would alter the visual character of the area and have the potential to impact the visual corridors, viewsheds, and resources in the area. Two existing parking garages (Broadway and Lincoln Garages) would remain. One new parking garage would be subterranean and located below the proposed mixed use Center Block development. The second new garage would be a combined subterranean garage below the proposed City Hall and Port buildings. The third new garage would include one below grade level and three above grade levels that partially wrap around the Third and Pacific Block multi-family residential complex. Design of these elements would be subject to the review as outlined in the Downtown Plan and described in the FEIR. Because this specific project was not analyzed in the FEIR, the Supplemental EIR (SEIR) will analyze what, if any, additional measures may be required to minimize visual impacts associated with the currently proposed development.

Because of the high-rise development anticipated in the Downtown Plan, and without knowledge of exactly where all of these structures were likely to occur within the project boundary at the time of the FEIR's adoption, it was also determined that shade and shadow impacts on existing and potential future sensitive receptor land uses were likely to occur. This impact was determined to be significant and unavoidable. The project would be subject to FEIR Measure AES-3, which requires submittal of a shading study prior to issuance of any building permits for structures exceeding 75 feet in height or any structure that is adjacent to a light sensitive use and exceeds 45 feet in height. Because the buildings included in the proposed project were not analyzed in the FEIR, the SEIR will analyze what specific impacts the project would have and what, if any, further mitigation measures may be available to reduce shadow impacts.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to the existing visual character or quality of the site would be less than significant with implementation of mitigation measures, which include the installation of temporary fencing with screening material, site maintenance to address litter and debris, and maintenance of temporary construction barriers and walkways.

POTENTIALLY SIGNIFICANT IMPACT

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Downtown Plan FEIR determined that impacts related to light and glare would be significant but mitigable for the Downtown Plan. The project would be subject to the same general mitigation measures identified and analyzed in the FEIR, specifically AES-2(a-d), which require submittal of lighting plans and specification building material plans and specifications, light fixture shielding, and window tinting. Because the project is within an urbanized area already characterized by high levels of light and glare and because all project development

would comply with existing City requirements as well as the light and glare measures included in the Downtown Plan FEIR, no project-specific light/glare impacts beyond those identified in the FEIR are anticipated and further study of this issue in the SEIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. Agriculture and Forestry Resources				
-- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:				
a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. Agriculture and Forestry Resources				
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	■

a) Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

There are no agricultural zones or forest lands within Long Beach, which is a fully urbanized community that has been urbanized for over half a century. The Downtown Plan FEIR determined that the Downtown Plan would not have any significant irreversible impacts on agricultural resources, as the area would not be conducive to agricultural production. The project area was included in the analysis of the Downtown Plan. Therefore, the Civic Center Project would not result in any significant impacts to agricultural resources.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. Air Quality				
-- Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	■	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. Air Quality				
-- Would the project:				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	■	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	■	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	■	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The project site is within the South Coast Air Basin (the Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The local air quality management agency is required to monitor air pollutant levels to ensure that applicable air quality standards are met and, if they are not met, to develop strategies to meet the standards. The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards.

According to the SCAQMD Guidelines, to be consistent with the AQMP, a project must conform to the local General Plan and must not result in or contribute to an exceedance of the City's projected population growth forecast. The Downtown Plan FEIR determined that the proposed project would not increase the allowable density in the Downtown area and therefore operational emissions associated with land use development on the site, including vehicle trip generation would have been accounted for in the AQMP. However, it was also determined that construction and operational area- and mobile-source emissions from implementation of the Downtown Plan would result in or substantially contribute to emissions concentrations that exceed the national or California standards causing significant and unavoidable impacts.

The proposed project is within the parameters and growth forecasts of the Downtown Plan and would generate short-term air pollutant emissions associated with construction, as well as long-term operations, which would contribute to the significant and unavoidable impacts determined in the Downtown Plan FEIR. Emissions have the potential to contribute to an existing project air quality violation or result in a cumulatively considerable net increase of criteria pollutants for which the region is in non-attainment. Development of the proposed project would be subject to the same general mitigation measures identified in the FEIR, specifically AQ-1(b), which requires individual projects within 1,500 feet of sensitive receptors to undergo project-specific construction-related air quality analysis, and AQ-1(c), which required individual projects to include specific provisions, such as temporary traffic controls, the use of 2010 or newer diesel trucks, and more, to reduce construction-related air quality impacts.

Certain population groups, such as children, the elderly, and people with health problems, are considered particularly sensitive to air pollution. Sensitive receptors consist of land uses that are more likely to be used by these population groups. Sensitive receptors include health care facilities, retirement homes, school and playground facilities, and residential areas. Traffic associated with the project has the potential to expose sensitive receptors to substantial pollutant concentrations. Development of the proposed project would be subject to the same general mitigation measures identified and analyzed in the Downtown Plan FEIR, specifically AQ-4(a), which requires a project-level health risk assessment (HRA) for commercial land uses that accommodate more than 100 trucks per day within 1,000 feet of sensitive receptors. Development of the proposed project would also be subject to Downtown Plan FEIR Measure AQ-2, which requires implementation of measures to reduce motor vehicle trips and reduce other mobile emissions.

The SEIR will analyze project-specific construction and operational emissions and identify what, if any, further mitigation measures may be required to reduce air quality impacts, including those associated with the most recent air quality plans.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to construction emissions exceeding SCAQMD's daily regional and localized construction thresholds would be less than significant with implementation of mitigation involving the development and implementation of an Air Quality Safety Plan, if the demolition occurs by implosion.

POTENTIALLY SIGNIFICANT IMPACT

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

The Downtown Plan FEIR determined that implementation of the Downtown Plan would result in the exposure of receptors to short- and long-term emissions of Toxic Air Contaminants (TACs) from onsite and offsite stationary and mobile sources. Impacts associated with the Port of Long Beach and offsite stationary sources were determined to be significant and unavoidable, while impacts related to short-term construction, long-term onsite stationary sources, and offsite mobile-sources were determined to be less than significant. The proposed project would be subject to the same general mitigation measures identified in the Downtown Plan FEIR,

specifically AQ-4(a) and AQ-4(b), which require location of TAC emitters away from existing and proposed onsite receptors; implementation of idle-reduction strategies for diesel trucks; posting of signs; and other measures specific to both TAC generators and TAC receptors to reduce risks to sensitive receptors. The SEIR will analyze construction and operational emissions of TACs and determine what, if any, further mitigation measures may be available to reduce impacts to sensitive receptors.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to TAC emissions would be less than significant with implementation of mitigation involving the development and implementation of an Air Quality Safety Plan, if the demolition occurs by implosion.

POTENTIALLY SIGNIFICANT IMPACT

e) Would the project create objectionable odors affecting a substantial number of people?

As stated in the Downtown Plan FEIR, project construction activities associated with the development of onsite land uses could result in odorous emissions from diesel exhaust generated by construction equipment. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction and the impact related to the Downtown Plan was determined to be less than significant. The proposed project would occur within the 25-year buildout assessed in the Downtown Plan FEIR and would not include any uses expected to generate odors outside of what was considered in the FEIR. Therefore, the Civic Center Project would not result in any new significant odor impacts to or increase the severity of significant odor impacts beyond those identified in the Downtown Plan FEIR. Further analysis of odor issues in the SEIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. Biological Resources				
-- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. Biological Resources				
-- Would the project:				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	■	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	■	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	■	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	■	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	■	☐

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The City of Long Beach is a fully urbanized community that has been urbanized for over half a century. The Initial Study and FEIR for the Downtown Plan (June 29, 2009) determined that the Downtown Plan would not have any significant impacts on biological resources, as the area does not include any native biological resources or habitats, nor is it within the area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project area was included in this determination. The proposed project would involve the relocation of Lincoln Park, which would require the removal of vegetation. All vegetation within the park is ornamental landscaping that does not include native biological resources or habitats. Therefore, the Civic Center Project would not result in any significant impacts to biological resources or increase the severity of significant impacts to biological resources beyond those identified in the FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. Cultural Resources				
-- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	■	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	■	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	■	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

The Downtown Plan FEIR determined that the Downtown Plan would have a significant and unavoidable impact resulting from the potential redevelopment of properties that are eligible for listing on the National Register of Historic Places or the California Register of Historic Places, or that are determined eligible for listing as a City Landmark or Landmark District. The project would be subject to the same general mitigation measures identified in the FEIR, specifically CR-1(b), which outlines procedures to be followed prior to issuance of a demolition permit or building permit for alteration of any property listed in the Historic Survey Report, designated as a Historic Landmark, listed in the FEIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for listing as a historic resource. The SEIR will analyze potential impacts to potential historic resources and determine what, if any, further mitigation measures may be required and available to reduce impacts to potential historic resources that may be affected by the proposed project.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to the significance of a historical resource would be significant and unavoidable despite implementation of required mitigation involving documentation of the courthouse in accordance with the general guidelines of Historic American Building Survey documentation.

POTENTIALLY SIGNIFICANT IMPACT

b) Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

The Downtown Plan FEIR determined that the Downtown Plan would have a significant but mitigable impact on archaeological resources. This determination was due to the fact that no surveys could be conducted prior to onset of demolition or other ground-disturbing activities. The project would be subject to the same general mitigation measures identified and analyzed in the FEIR, specifically CR-2(a) through CR-2(c), which require a qualified project archaeologist or archaeological monitor approved by the City to be present during excavation into native sediments; that the monitor shall also prepare a final report of any cultural resource finds; and that if human remains are encountered during excavation and grading activities, proper handling procedures shall be implemented, as regulated by the State Health and Safety Code. These measures apply to the currently proposed project and would reduce impacts to a less than significant level. Further analysis of these issues in the SEIR is not warranted.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to the significance of archaeological resources and disturbance of human remains would be less than significant with implementation of required mitigation involving archaeological monitoring during ground-disturbing activities and adherence to State of California Health and Safety Code Section 7050.5 in the event that human remains are discovered.

LESS THAN SIGNIFICANT IMPACT

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Downtown Plan FEIR determined that the Downtown Plan would have a significant but mitigable impact on paleontological resources. This determination was due to the fact that no surveys could be conducted prior to onset of demolition or other ground-disturbing activities. The project would be subject to the same general mitigation measures identified and analyzed in the FEIR, specifically CR-3(a) and CR-3(b), which require a qualified paleontologist approved by the City to be present during excavation into native sediments and that if a potential fossil is found, the paleontologist shall be allowed to temporarily divert or redirect excavation in the area and evaluate the find. CR-3(b) specifies further procedures for the handling of any fossils. These measures apply to the currently proposed project and would reduce impacts to a less than significant level. Further analysis of this issue in the SEIR is not warranted.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to the significance of paleontological resources would be less than significant with implementation of mitigation requiring paleontological monitoring during ground-disturbing activities that could potentially affect previously undisturbed Quaternary older paralic deposits at depths greater than five feet.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. Geology and Soils				
-- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	■	☐
ii) Strong seismic ground shaking?	☐	☐	■	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
iv) Landslides?	☐	☐	☐	■
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	■

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. Geology and Soils				
-- Would the project:				
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	■	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■

The Initial Study for the Downtown Plan determined that the relatively level site conditions and extent of developed lands in the Downtown Plan area would avoid potential impacts associated with landslides, soil erosion, or loss of topsoil, and also determined that all development in the Downtown Plan area would be served by the City's sewage disposal system. Therefore, items a.iv), b), and e) listed above were determined not to apply to the Downtown Plan, nor would they apply to the proposed project, as the project area was included in the area analyzed in the FEIR.

a.i) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.ii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

As described in the Downtown Plan FEIR, the Newport-Inglewood Fault Zone, which is mapped as an Alquist-Priolo Earthquake Fault Zone, is located within approximately two miles of the Downtown Plan area. Several other fault zones located within approximately five to 30 miles also have the potential to impact the area. Therefore, impacts related to seismically induced ground shaking were determined to be significant but mitigable. The project would be subject to the same general mitigation measures identified in the FEIR, specifically Geo-1, which requires that new construction or structural remodeling of buildings be engineered to withstand the expected ground acceleration that may occur at the site. The measure also required that onsite structures comply with applicable provisions of the most recent Uniform Building Code (UBC) adopted by the City of Long Beach. It was determined that this measure would reduce

impacts to a less than significant level for all projects within the Downtown Plan area. With compliance with this measure, the Civic Center Project would not result in any new significant impacts related to Alquist-Priolo Earthquake Fault Zones or seismic ground shaking or increase the severity of significant impacts related to Alquist-Priolo Earthquake Fault Zones or seismic ground shaking beyond those identified in the FEIR. As such, further analysis of these issues in the SEIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

a.iii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The Downtown Plan FEIR determined that seismic activity could induce ground shaking that results in liquefaction and this impact would be significant but mitigable. FEIR Measure Geo-2 requires that for any project involving a subterranean level, prior to issuance of a building permit for new structures, the City shall determine whether a comprehensive geotechnical investigation and geo-engineering study shall be completed. Adherence to this measure, which includes potential engineering measures to reduce liquefaction impacts, would ensure that impacts related to the proposed project would also be less than significant. Therefore, the Civic Center Project would not result in any new significant liquefaction impacts or increase the severity of significant liquefaction impacts beyond those identified in the Downtown Plan FEIR. Further analysis of this issue in the SEIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

c) Would the project be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

d) Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?

The Downtown Plan FEIR determined that the potential exists within the Downtown Plan area to encounter expansive soils or soils that are unstable or would become unstable as a result of new development. This could result in onsite or offsite lateral spreading or subsidence. The project would be subject to the same general mitigation measures identified and analyzed in the FEIR, specifically Geo-3, which requires that the City Department of Development Services determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. Implementation of this mitigation measure and any further engineering required, based on the City's determination, as described in Geo-3, would reduce project impacts to a less than significant level. Therefore, the Civic Center Project would not result in any new significant impacts related to expansive soils, lateral spreading, or subsidence or increase the severity of significant impacts related to expansive soils, lateral spreading, or subsidence beyond those identified in the Downtown Plan FEIR. Further analysis of this issue in the SEIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. Greenhouse Gas Emissions				
-- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	■	□	□	□
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	■	□	□	□

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs), analogous to the way in which a greenhouse retains heat. Common GHG include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O_x), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6) (Cal EPA, 2006).

The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (Cal EPA, 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The Downtown Plan FEIR determined that construction activities associated with full buildout of the Downtown Plan would result in the generation of GHG emissions that would cause a

significant and unavoidable impact. The project would contribute to this impact, as it would generate GHG emissions through the burning of fossil fuels or other GHG emissions during construction, creating temporary emissions, including on-site stationary emissions and off-site mobile emissions. The project would be subject to the mitigation measures identified and analyzed in the FEIR, specifically, GHG-1(a) and GHG-1(b), which requires that project applicant(s) obtain the most current list of construction-related GHG-reduction measures recommended by the City and/or SCAQMD and stipulate that these measures be implemented. Emissions estimates from construction may be lower than predicted due to increased efficiency in technology since the FEIR was adopted. The SEIR will determine the approximate amount of GHG emissions that would be generated by construction, as well as the appropriate local City or SCAQMD measures that would reduce these emissions.

The Downtown Plan FEIR determined that operation of uses facilitated by the Downtown Plan would also result in generation of GHG emissions that would cause a significant and unavoidable impact. Mitigation GHG-2(a) and GHG-2(b) would reduce these operational impacts to the extent feasible and would be applicable to the proposed project. The proposed project would be required to implement energy efficiency, water efficiency, solid waste reduction, mobile strategies, and other measures to reduce GHG emissions. Emissions estimates from operation may also be lower than predicted due to increased efficiency in technology since the FEIR was adopted. Because the specific buildings and improvements associated with the proposed project were not analyzed in the FEIR, the SEIR will analyze project-specific emissions and determine what, if any, further mitigation measures may be required to reduce GHG impacts. The SEIR will also analyze the proposed project's consistency with Assembly Bill 32 and other GHG reduction strategies.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that the demolition would not generate significant GHG emissions, and would not interfere with State, regional, or climate change plans, policies, or regulations. Impacts of the demolition project were determined to be less than significant.

POTENTIALLY SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. Hazards and Hazardous Materials				
-- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. Hazards and Hazardous Materials				
-- Would the project:				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	☐	■	☐
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	■

As discussed in the Initial Study for the Downtown Plan, the nearest boundary of the Downtown Plan area is located approximately three miles from the nearest airport/airstrip; the Downtown Plan would maintain accessibility required by any adopted emergency response plan or emergency evacuation plan; and the Downtown Plan area does not contain wildlands nor is it adjacent to wildlands. Therefore, criteria e), f), g), and h) listed above were determined

not to apply to the Downtown Plan. The same criteria are not applicable to the proposed project, based on its location within the Downtown Plan area.

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?

d) Would the project be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The Downtown Plan FEIR determined that the types of commercial and residential land uses envisioned for the Downtown Plan would not typically contain businesses involved in transport, use, or disposal of substantial quantities of hazardous materials. Impacts were determined to be significant but mitigable. Measures Haz-1(a) through Haz-1(c) would apply to the proposed project. These measures would ensure that demolition and renovation of buildings potentially containing asbestos and lead-based paints and materials would avoid potential onsite impacts to construction workers as well as impacts from the release of hazardous materials from construction sites near residences, schools, or other properties. Surveys and proper handling procedures would be implemented prior to issuance of any demolition or renovation permits.

The Downtown Plan FEIR also determined that historic activity involving industrial uses and storage of potentially hazardous materials may have contaminated onsite soils and/or groundwater quality. This potential impact was significant but mitigable for the Downtown Plan and measures Haz-3(a) through Haz-3(d) would apply to the proposed project. All excavation and demolition projects conducted as part of the proposed project would be required to include contingency plans to be followed if contaminants are found or suspected, and appropriate sampling and remediation of soil and water must be completed. This would ensure that impacts would be reduced to a less than significant level. Therefore, the Civic Center Project would not result in any new significant impacts related to hazards and hazardous materials or increase the severity of significant impacts related to hazards and hazardous materials beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. Hydrology and Water Quality				
-- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	■	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	■	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	■	☐
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	■	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	■	☐
f) Otherwise substantially degrade water quality?	☐	☐	■	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	■

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. Hydrology and Water Quality				
-- Would the project:				
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	■
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	■	☐

The Initial Study for the Downtown Plan determined that the City of Long Beach and the Federal Emergency Management Agency Flood Insurance Rate maps show that the Downtown Plan area is not within the 100-year flood zone. There have not been any changes to these maps since the FEIR was adopted. In addition, there are no dams or levees in the vicinity of the area, nor are there any landlocked water bodies were impacts from a seiche could occur. The area is also protected from inundation from a tsunami by its elevation approximately 30 feet above mean sea level. Therefore, criteria g), h), i), and j), listed above would not apply to the Downtown Plan or the proposed project, which is located within the area analyzed under the Downtown Plan. Criteria b) is discussed in Section XVII below.

a) Would the project violate any water quality standards or waste discharge requirements?

f) Would the project otherwise substantially degrade water quality?

The Downtown Plan FEIR determined that construction activities associated with development of the Downtown Plan could result in discharge of urban pollutants into the City drainage system. This determination included impacts associated with construction of the proposed project and the impacts were determined to be significant but mitigable. Measure Hydro-1 from the FEIR would apply to the proposed project and would require that prior to issuance of a grading permit, a determination will be made regarding the necessity of a Storm Water Pollution Prevention Plan (SWPPP). Implementation of this measure and development of a SWPPP, if required, would reduce project-related impacts to water quality to a less than significant level. Therefore, the Civic Center Project would not result in any new significant impacts related to water quality or increase the severity of significant impacts related to water quality beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The Downtown Plan FEIR determined that development of the Downtown Plan would generate urban pollutants and could also result in an increase in impervious surfaces. Impacts associated with these changes would be mitigated to a less than significant level with implementation of FEIR Measure Hydro-2, which would be applicable to the proposed project. The measure requires the Department of Development Services to determine the necessity for a Standard Urban Stormwater Mitigation Plan (SUSMP) to be developed for the proposed project and, if necessary, for the development of one to be completed. The measures included in the FEIR, as well as new, more stringent municipal separate storm sewer system (MS4s) requirements, which have been adopted since 2010, would apply to the Civic Center Project. The new MS4 requirements include Order No. R4-2014-0024 from the California Regional Water Quality Control Board for the Los Angeles Region, which covers all areas within Long Beach boundaries that drain into the MS4 with the objective of ensuring that discharges from the MS4 comply with water quality standards, including protecting the beneficial uses of receiving waters. The Order requires that permitees (the City of Long Beach) shall implement a Planning and Land Development Program pursuant to part VII.J for all new development, including smart growth practices, compact development, and Best Management Practices. A Public Information and Participation Program (PIPP), including public reporting and outreach and education are also required by the Order. Integrated Water Quality/ Flow Reduction/Resources Management Criteria would be applied to the proposed project. The new requirements, as well as the other permitting requirements, would ensure that the Civic Center Project would not result in any new significant impacts related to drainage patterns or increase the severity of significant impacts related to drainage patterns beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The Downtown Plan FEIR determined that the increased intensity of land use associated with the Downtown Plan could increase the volume of stormwater discharges into existing storm drain infrastructure. Impacts to storm drain infrastructure were determined to be significant but mitigable. FEIR Measure Hydro-3 would apply to the proposed project and requires that prior to issuance of a building permit, a determination must be made regarding the necessity of a drainage system analysis and/or Low Impact Development practices and strategies. This measure would reduce impacts from potentially increased volumes of stormwater discharges to a less than significant level for all projects within the Downtown Plan area. Therefore, the Civic Center Project would not result in any new significant impacts related to stormwater discharge or increase the severity of significant impacts related to stormwater discharge beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. Land Use and Planning				
-- Would the project:				
a) Physically divide an established community?	☐	☐	☐	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	☐	☐	■	☐

a) Would the project physically divide an established community?

As concluded in the Initial Study for the Downtown Plan, the Downtown Plan area, including the proposed project site, is currently urbanized with street and circulation patterns that would not be altered by the Downtown Plan. The Downtown Plan would not to have the potential to physically divide an established community. Therefore, the Civic Center Project would not result in any new significant impacts related to physically dividing an established community or increase the severity of significant impacts related to physically dividing an established community beyond those identified in the Downtown Plan FEIR.

NO IMPACT

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The Downtown Plan FEIR determined that implementation of the Downtown Plan would have a less than significant impact with regard to conflicts with land use plans, policies, or regulations. Development would be consistent with the Long Beach General Plan. The proposed project would be consistent with the Downtown Plan. All uses planned for the project are consistent with current zoning (Planned Development). The only zoning actions necessary for the project would be to make application for a general plan conformity finding and for a conditional use permit for the New Main Library. Therefore, the Civic Center Project would not result in any new significant impacts related to land use policies or increase the severity of significant impacts related to land use policies beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

c) Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?

As concluded in the Initial Study of the Downtown Plan, the Downtown Plan area, including the project site, is not located within an area governed by a habitat conservation plan or natural community conservation plan. The Downtown Plan would not to have the potential to impact any such plan. Therefore, the Civic Center Project, which is located within the area analyzed as part of the Downtown Plan, would not result in any new significant impacts related to a habitat conservation plan or natural community conservation plan or increase the severity of significant impacts related to such a plan beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. Mineral Resources				
-- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The Initial Study for the Downtown Plan determined that the Downtown Plan would not have any significant irreversible impacts on mineral resources, as the area does not include mineral resource sites designated on any City land use plan. The proposed project is located within the area analyzed in the Initial Study for the Downtown Plan and no new mineral resources sites have been designated since the Downtown Plan's adoption. Therefore, the Civic Center Project would not result in any new significant impacts to mineral resources or increase the severity of significant impacts related to mineral resources beyond those identified in the Downtown FEIR.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. Noise				
-- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	■	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	■	☐	☐	☐
c) A substantial permanent increase in ambient noise levels above levels existing without the project?	■	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	■	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?	☐	☐	☐	■

Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA).

Some land uses are considered more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. Residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, parks and outdoor recreation areas are more sensitive to noise than are commercial and industrial land uses.

The City of Long Beach uses the State Noise/Land Use Compatibility Standards, which suggests a desirable exterior noise exposure at 65 dBA Community Noise Equivalent Level (CNEL) for sensitive land uses such as residences. Less sensitive commercial and industrial uses

may be compatible with ambient noise levels up to 70 dBA. The City of Long Beach has adopted a Noise Ordinance (Long Beach Municipal Code Chapter 8.80) that sets exterior and interior noise standards.

Vibration is a unique form of noise. It is unique because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

c) Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project?

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The Downtown Plan FEIR determined that construction noise impacts associated with the Downtown Plan would be significant but mitigable because Plan implementation would expose businesses and residences throughout the Plan area to temporary elevated levels of noise throughout years of construction. The project would be subject to the mitigation measures identified in the FEIR, specifically Noise-1(a), which required noise reduction techniques such as equipment mufflers, "quiet" construction equipment models, prohibition of idling, and routing of construction-related traffic, as well as Noise-1(b), which requires the construction of temporary noise barriers and a project-specific noise analysis to determine further necessary noise reduction techniques. The SEIR will analyze site-specific impacts associated with the proposed project and identify additional mitigation that may be needed for construction noise.

The Downtown Plan FEIR determined that operational noise associated with traffic generated by the Downtown Plan would be less than significant, but that traffic noise and land use compatibility impacts would be significant but mitigable. Operation of the proposed project would generate traffic and would locate sensitive receptors, including residences, in areas that could be exposed to levels of noise that exceed applicable standards. The project would be subject to the mitigation measures identified in the FEIR, specifically Noise-5, which required that in areas where new residential development would be exposed to noise levels exceeding 65 dBA, a site-specific noise study be conducted. Therefore, the SEIR will include a site-specific noise analysis to determine land use and noise compatibility and identify additional mitigation as appropriate.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to noise and vibration would be significant and unavoidable despite implementation of mitigation involving

the erection of temporary sound barriers, installation of mufflers, use of electric equipment, and the establishment of a noise disturbance coordinator. If demolition occurs by implosion, required mitigation requires the development and approval of a Noise Control Plan and a Vibration Control Plan to protect human health and adjacent buildings.

POTENTIALLY SIGNIFICANT IMPACT

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The FEIR determined that construction of the Downtown Plan would include vibration sources, including pile driving, which would result in a significant and unavoidable impact. The project would be subject to FEIR Measure Noise-2(a), which requires a site-specific vibration study for all construction projects in order to determine the area of impact and identify appropriate mitigation measures. Therefore, project-specific vibration impacts will be analyzed in the SEIR and additional mitigation will be developed as appropriate.

POTENTIALLY SIGNIFICANT IMPACT

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?

The Initial Study for the Downtown Plan determined that the Downtown Plan area is further than two miles from the Long Beach Airport and that there would be no impact associated with public or private airports. The Civic Center Project is located within the Downtown Plan area and is also greater than two miles from the Long Beach Airport. Therefore, the proposed project would not result in any new significant noise impacts related to airport or increase the severity of significant noise impacts related to airports beyond those identified in the Downtown Plan FEIR.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. Population and Housing				
-- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. Population and Housing				
-- Would the project:				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	■	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	■	☐

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The Downtown Plan FEIR determined that because the Downtown Plan was intended to accommodate substantial population growth in the Downtown area, population growth impacts would be significant and unavoidable. Development of the proposed project, including the population growth that it would generate by creating employment opportunities and adding a residential building, would be within the growth forecasts in the Downtown Plan, which included 14,500 new residents and 5,200 jobs. Therefore, the Civic Center Project would not result in any new significant population growth impacts or increase the severity of significant population growth impacts beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Downtown Plan FEIR determined that development of the Downtown Plan would result in the displacement of substantial numbers of housing and people, which could create a need for construction of housing elsewhere. It was determined that this impact would be significant and unavoidable. Development of the proposed project would not involve the displacement of any existing housing or the permanent displacement of any people. It would create additional residential units in three buildings. In the 2015 Biennial Homeless Count, the Long Beach Community Health Bureau counted approximately 41 homeless people encamping on the project site during the day. This population encamps at Lincoln Park and within the Civic Center area during the day, but does not live or sleep on the project site overnight. Although displacement of this population is a social impact, because of the temporary nature of proposed construction, the project would not necessitate the construction of replacement housing

elsewhere, which could result in adverse environmental impacts. Therefore, the Civic Center Project would not result in any new significant impacts related to the displacement of people or housing or increase the severity of significant impacts related to the displacement of people or housing beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. Public Services				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	■	☐
ii) Police protection?	☐	☐	■	☐
iii) Schools?	☐	☐	■	☐
iv) Parks?	☐	☐	■	☐
v) Other public facilities?	☐	☐	■	☐

a.i) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

Fire protection is provided by the Long Beach Fire Department (LBFD). The Downtown Plan FEIR determined that the Downtown Plan would incrementally increase demands on the LBFD but that this increase would not require the construction of new fire protection facilities. The proposed project is within the growth forecast considered in the Downtown Plan. Therefore, the Civic Center Project would not result in any new significant impacts to fire protection services or increase the severity of significant impacts to fire protection services beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

a.ii) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

Police protection is provided by the Long Beach Police Department (LBPD). The Downtown Plan FEIR determined that the Downtown Plan would incrementally increase demands on the LBPD and that this increase would have the potential to require the expansion or replacement of existing facilities. However, the potential impact from construction of such facilities was determined to be similar to the impact from construction of other development facilitated by the Downtown Plan and therefore would be less than significant. The proposed project is within the growth forecast considered in the Downtown Plan. Therefore, the Civic Center Project would not result in any new significant impacts to police protection services or increase the severity of significant impacts to police protection services beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

a.iii) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?

The Downtown Plan FEIR determined that the Downtown Plan would generate an estimated 670 school-age students and that while this could adversely affect schools, payment of the required school impacts fees would reduce this impact to a less than significant level. The proposed project is within the growth forecast considered as part of the Downtown Plan. The project would be required pay school impact fees. Under Section 65996 of the California Government Code, the payment of such fees is deemed to fully mitigate the impacts of new development on school facilities. Therefore, the Civic Center Project would not result in any new significant impacts to schools or increase the severity of significant impacts to schools beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

a.iv) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?

The Downtown Plan FEIR determined that the Downtown Plan would have a significant and unavoidable impact on parks. Although applicants for residential development projects would be required to pay park and recreation facilities in-lieu fees, it would not be feasible to meet the City standard for parkland acreage per 1,000 residents. The proposed project includes residential development that as a condition of approval would be required to pay in-lieu fees. The project also includes the relocation of Lincoln Park, which would be constructed in place of

the existing Main Library, the environmental impacts of which will be considered in the SEIR. Therefore, the Civic Center Project would not result in any new significant impacts to parks or increase the severity of significant impacts to parks beyond those identified in the FEIR.

LESS THAN SIGNIFICANT IMPACT

a.v) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

Buildout of the Downtown Plan was determined to have the potential to incrementally increase demand for library services in the City, and cause demands for library services to exceed the capacity of the Main Library and at branch libraries that serve the Downtown Plan area. Expansion of the Main Library or development of an additional branch library to serve the Downtown Plan area may be necessary during the life of the plan. However, the potential impact from construction of new library facilities was found to be similar to the impact from construction of development as analyzed in the Downtown Plan FEIR and would therefore be less than significant**.** The proposed project may generate additional demand on libraries. It also includes development of a new Main Library, and these expanded facilities may serve the additional population. Environmental impacts related to the development of Main Library will be considered in the SEIR as part of the proposed project. Therefore, the Civic Center Project would not result in any new significant impacts to libraries or other public facilities or increase the severity of significant impacts to libraries or other public facilities beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	■	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	■	☐

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The City of Long Beach owns and operates approximately 3,100 acres of public land for recreation, including community parks, neighborhood parks, sports parks, open spaces, beaches, community centers, and marinas. While Recreation impacts were not specifically addressed within the Downtown Plan FEIR, impacts to parks and recreational facilities were discussed in the FEIR Public Services section. Please see Section XIV(a.iv) above for discussion.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. Transportation/Traffic				
-- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	■	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	■	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	■	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	■	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. Transportation/Traffic				
-- Would the project:				
otherwise substantially decrease the performance or safety of such facilities?				

a) Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The Congestion Management Program (CMP) for Los Angeles County requires that the traffic impact of individual development projects of potential regional significant be analyzed. A significant impact would occur when the proposed project increases traffic demand on a CMP facility by two percent of capacity, causing LOS F. If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by two percent of capacity. Construction of the proposed project would generate temporary construction-related traffic such as deliveries of equipment and materials to the project site and construction worker traffic. The project would also generate traffic during its operation. The Downtown Plan FEIR determined that the Downtown Plan would result in significant impacts at 16 intersections and would result in a significant and unavoidable impact. The impact of construction and operational traffic for the proposed project will be analyzed in the SEIR and additional project-specific mitigation will be developed as appropriate.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to conflicts with applicable plans and a CMP would be less than significant with implementation of mitigation involving the development of a Construction Management Plan.

POTENTIALLY SIGNIFICANT IMPACT

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The Initial Study for the Downtown Plan determined that the Plan would not result in a change in air traffic patterns. The proposed project is within the parameters of the Downtown Plan and included in the area analyzed by the Initial Study. Therefore, the Civic Center Project would not result in any new significant impacts related to air traffic patterns or increase the severity of significant impacts to air traffic patterns beyond those identified in the Downtown Plan FEIR.

NO IMPACT

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

The Downtown FEIR determined that the Downtown Plan would not result in any significant impacts related to design hazards. Construction of the proposed project would generate temporary construction-related traffic such as deliveries of equipment and materials to the project site and construction worker traffic. The project would also generate traffic during its operation. This traffic and the proposed changes to the circulation system would have the potential to increase hazards due to design features. This impact will be analyzed in the Downtown Plan SEIR.

POTENTIALLY SIGNIFICANT IMPACT

e) Would the project result in inadequate emergency access?

The Downtown Plan FEIR determined that impacts related to emergency access would be less than significant because the Downtown Plan would not alter through-traffic operations for emergency vehicles or eliminate existing roads or cause more circuitous access conditions. The proposed project is within the parameters of the Downtown Plan. Therefore, the Civic Center Project would not result in any new significant impacts to emergency access or increase the severity of significant impacts to emergency access beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

The Downtown Plan FEIR determined that the Downtown Plan would have no impact with regard to an adopted alternative transportation plan. The proposed project is within the parameters of the Downtown Plan. Therefore, the Civic Center Project would not result in any new significant impacts to alternative transportation plans or increase the severity of significant impacts to alternative transportation plans beyond those identified in the FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. Utilities and Service Systems				

-- Would the project:

a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	■	☐
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	■	☐
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	■	☐
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	■	☐
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	■	☐
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	■	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	■	☐

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

e) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The Downtown Plan FEIR determined that buildout of the Downtown Plan would incrementally increase wastewater treatment demand in the City. Wastewater treatment services would be supplied to the proposed project through the Sanitation Districts of Los Angeles County (LACSD). Currently, a majority of the City's wastewater is delivered to the Joint Water Pollution Control Plant (JWPCP) of the LACSD. The remaining portion of the City's wastewater is delivered to the Long Beach Water Reclamation Plant (WRP) of the LACSD.

According to a May 14, 2015 comment letter received in response to the Notice of Preparation for the Draft SEIR, the wastewater generated by the project would be treated at the JWPCP in the City of Carson, which has a design capacity of 400 million gallons per day (mgd) and an average flow of 263.4 mgd (LACSD, Notice of Preparation Response letter). Buildout of the Downtown Plan would increase average wastewater flow by approximately 1.834 million gallons/day (mgd), which is within the capacity of the JWPCP.

According to LACSD's comment letter, the wastewater from the proposed project would discharge to a local sewer line for conveyance to LACSD's De Forest Avenue Trunk Sewer, which, as of 2012, had a design capacity exceeding its peak flow conveyance. Currently, local sewer lines have design capacity exceeding peak flow; however, if sewer improvements were conducted in conjunction with the proposed project, pipe replacement and improvements would be in the same location as existing sewer lines; therefore, any upgrades required by the proposed project would not create long-term environmental impacts. In addition, LACSD charges a connection fee in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. According to LACSD's comment letter, expansion of facilities would be sized and service phased in a manner that is consistent with the Southern California Association of Government's regional growth forecast. Treatment infrastructure serving the City has sufficient excess capacity to meet anticipated peak flow demands. Therefore, the impact on wastewater treatment facilities was determined to be less than significant. The proposed project would implement the Downtown Plan and its wastewater treatment demand was accounted for in the Downtown Plan FEIR. Therefore, no new impacts would occur and further analysis of these issues in the SEIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Please see Section IX, *Hydrology and Water Quality*, for discussion of potential project impacts to the City's storm drain system.

LESS THAN SIGNIFICANT IMPACT

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Water for the Long Beach service area is supplied by groundwater, imported water, and reclaimed wastewater. Buildout of the Downtown Plan would incrementally increase water demand in the City. However, Long Beach Water Department (LBWD) water supplies were determined to be sufficient to meet the projected demand based on the FEIR. Therefore, the impact on water supply and demand was determined to be less than significant. All projects built within the Downtown Plan would be required to comply with all applicable City ordinances and Best Management Practices pertaining to water conservation. These may include the use of water efficient plumbing fixtures, landscape water conservation, and payment of water demand mitigation fees (Downtown Plan FEIR, 2011). A Water Availability Assessment (WAA) for the Downtown Plan was prepared by the LBWD, and adopted by the Water Board on August 12, 2010. According to the WAA and the FEIR, LBWD extracts virtually

all of its groundwater from the Central Basin, and it is reasonable to assume that no difficulties would be encountered extracting this groundwater through 2030 based on the following combination of factors:

- The Central Basin adjudication prevents over-drafting by imposing strict limits on extraction from the basin;
- The adjudication has imposed upon the Water Replenishment District of Southern California (WRD) the mandate to provide for the continual replenishment of the basin;
- WRD has fulfilled this mandate well, increasing the amount of water stored in the basin since the time of adjudication; and
- WRD is expected to continue to maintain the groundwater level in the basin in the future, given its mandate and access to resources, through the fee it imposes whenever water is extracted.

According to the Downtown Plan FEIR, development projects built within the Downtown Plan that conform to the provisions of the plan have been anticipated by the LBWD and would not be required to prepare a project-specific Water Availability/Supply Assessment during the development review phase of project entitlement. This will be the case unless unanticipated water demand or significant changes in the circumstances or conditions affecting the availability of the public water system to provide sufficient supply of water for the proposed Project, as noted in the WAA. The recent drought has changed conditions affecting the availability of water in southern California.

In July 2014 and in response to recent drought conditions, the State Water Resources Control Board (SWRCB) adopted new water conservation regulations (Resolution 2014-0038), including select prohibitions for all water users and required actions for all water agencies. Local water agencies have responded with declarations that prohibit water users from filling pools and spas or restrict when or for how long users can irrigate landscaping. On February 27, 2014, the Long Beach Board of Water Commissioners declared an Imminent Water Supply Shortage for the City followed by a Stage 1 Water Supply Shortage on November 20, 2014 (LBWD, website, accessed March 18, 2015). The declarations prohibit the use of potable water for filling residential pools and spas and have restricted the days and durations during which residents can irrigate landscaping in order to conserve remaining water reserves. In February 2015, the Metropolitan Water District of Southern California (Metropolitan) reevaluated its water supplies and outlined scenarios that could require the agency to limit water deliveries by 5 to 10 percent by July 1, 2015 and prompt mandatory rationing during summer months. More recently, the California Department of Water Resources (DWR) announced that Metropolitan's 15 percent State Water Project allocation would be increased to 20 percent in 2015. Despite this anticipated increase, Metropolitan reiterated its commitment in March 2015 to carefully managing water supplies in case drought conditions continue to persist.

To increase water conservation, Metropolitan has implemented rebate programs to incentivize the use of water efficient fixtures and equipment for residences, businesses, industry, institutions, and large landscapes in southern California (Metropolitan, website, accessed March 9, 2015). Metropolitan's rebate programs include SoCalWater$mart, which assists customers with installing high-efficiency toilets, clothes washers, plumbing fixtures, HVAC, sprinkler controllers, soil moisture sensors and more (Additional information at

www.socalwatersmart.com). Metropolitan's Water Savings Incentive Program assists large water volume users in implementing large scale water saving projects, such as projects to overhaul industrial processes to increase water reuse or install valves and pumps to improve agricultural irrigation efficiency (Additional information at http://bewaterwise.com/Water_Saving_Incentive_Program_Brochure_WEB.pdf). More water conservation resources and tips from Metropolitan and information on how Metropolitan is responding to the drought are available at bewaterwise.com.

As described above, the recent drought has led to restrictions on water use in southern California, increased incentives for water conservation, and the potential for water rationing during summer months. If MWD implements water rationing in the summer months, the proposed project would be required to comply with any additional restrictions on water use that the City implements, which may include additional restrictions on landscape irrigation and promotion of non-potable water use, such as grey water, as described in SWRCB's Resolution 2014-0038. Therefore, the Civic Center Project would not result in any new significant impacts to water supplies or increase the severity of significant impacts to water supplies beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Buildout of the Downtown Plan would incrementally increase solid waste disposal treatment demand in the City. Based on LACSD's operation of the Mesquite Regional Landfill, which is permitted for up to 20,000 tons per day for approximately 100 years, adequate landfill capacity exists to accommodate solid waste disposal needs of buildout under the Downtown Plan. The Downtown Plan FEIR determined that impacts related to solid waste disposal would be significant but mitigable for the Downtown Plan. The project would be subject to the same general mitigation measures identified and analyzed in the FEIR, specifically Utilities-3(a) through Utilities-3(d), which require verification that construction waste disposal services recycle all demolition and construction-related waste, the provisioning of temporary waste separation bins onsite during demolition and construction, and the provisioning of recycling bins and educational materials during operation of the project to residential and commercial tenants. The FEIR determined that impacts related to solid waste would be significant but mitigable for implementation of the Downtown Plan. The proposed project is within the growth forecast considered in the Downtown Plan. Therefore, the Civic Center Project would not result in any new significant impacts related to solid waste or increase the severity of significant impacts related to solid waste beyond those identified in the Downtown Plan FEIR.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	■	□	□	□
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	■	□	□	□
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	■	□	□	□

a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

As described in the sections above, the proposed project may generate impacts in the following areas: Aesthetics, Air Quality, Cultural Resources, Greenhouse Gas Emissions, Noise, and Transportation/Traffic. These issue areas as well as potential cumulative impacts will be

evaluated in the SEIR and any feasible mitigation measures will be identified to avoid and/or reduce any significant impacts.

POTENTIALLY SIGNIFICANT IMPACT

REFERENCES

Bibliography

California Environmental Protection Agency (CalEPA). Climate Action Team Report to Governor Schwarzenegger and the Legislature. March 2006. Available: http://www.climatechange.ca.gov/climate_action_team/reports/2006-04-03_FINAL_CAT_REPORT_EXECSUMMARY.PDF

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Metropolitan Water District of Southern California. March 2, 2015. Metropolitan General Manager issues statement on revised State Water Project allocation. Accessed March 17, 2015. Accessed at http://www.mwdh2o.com/mwdh2o/pages/news/press_releases/2015-03/GMstatement_revisedSWPallocation.pdf

Sanitation Districts of Los Angeles County. Website. Accessed March 2015. Available at: http://www.lacsd.org/wastewater/wwfacilities/jwpcp/default.asp

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SCAQMD. Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15: "Proposed Tier 3 Quantitative Thresholds – Option 1", September 2010.

CITY OF LONG BEACH

DEPARTMENT OF DEVELOPMENT SERVICES

333 W. Ocean Blvd. Long Beach, CA 90802 (562) 570-6458 - FAX (562) 570-6068

NOTICE OF PREPARATION

TO: Agencies, Organizations and Interested Parties

SUBJECT: Notice of Preparation of a Draft Supplemental Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations

Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the Lead Agency responsible for preparation of a Supplemental Environmental Impact Report (SEIR) addressing potential impacts associated with the project identified below.

AGENCIES: The purpose of this notice is to serve as a Notice of Preparation (NOP) of a SEIR pursuant to the State CEQA Guidelines Section 15082, and solicit comments and suggestions regarding the scope and content of the SEIR to be prepared for the proposed project. Specifically, the City of Long Beach requests input on environmental information germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the Draft SEIR prepared by the City when considering permits or other approvals for this project.

ORGANIZATIONS AND INTERESTED PARTIES: The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the SEIR.

PROJECT TITLE: Civic Center Project

PROJECT LOCATION: The project site includes several areas throughout downtown Long Beach: Civic Block, Lincoln Park Block, Third & Pacific Block, and Center Block. The larger portion of the project site is bounded by Magnolia Avenue and Chestnut Avenue to the west, Broadway to the north, Pacific Avenue to the east, and Ocean Boulevard to the south. In addition, a smaller part of the project site is bounded by Third Street, Cedar Avenue, and Pacific Avenue.

PROJECT DESCRIPTION: The design of the proposed Civic Center project follows the guidance of the Downtown Plan, which was adopted in January 2012. A Final Program Environmental Impact Report (FEIR) was prepared for the Downtown Plan in accordance with CEQA and certified in January 2012. The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. Both the City Hall and Port buildings would be 11 stories in height. The project also includes the demolition of the former Long Beach Courthouse building. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014.

PROBABLE ENVIRONMENTAL EFFECTS OF THE PROJECT: Based on the findings of the Initial Study, the proposed project could have potentially significant impacts on the following environmental factors: **Aesthetics, Air Quality, Cultural Resources, Greenhouse Gas Emissions, Noise, and Transportation/Traffic.**

Scoping Meeting. The City of Long Beach, in its role as Lead Agency, will hold a public scoping meeting to provide an opportunity for the public and representatives of public agencies to address the scope of the Supplemental Environmental Impact Report. The Scoping Meeting for the project is scheduled for **Thursday, April 30, 2015, from 5:00 pm to 6:30 pm** at the following location:

Long Beach Main Library Lower Lobby
101 Pacific Avenue
Long Beach, CA

PUBLIC REVIEW PERIOD: This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The public review and comment period during which the City of Long Beach will receive comments on the NOP for this proposed project **begins Thursday, April 16, 2015 and ends Friday, May 15, 2015 at 4:30 pm.**

THE NOP AND INITIAL STUDY ARE AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:

City Hall, 333 W. Ocean Boulevard, 5th Floor
Long Beach Main Library, 101 Pacific Avenue
Online at: www.lbds.info/planning/environmental_planning/environmental_reports.asp

RESPONSES AND COMMENTS: Please list a contact person for your agency or organization, include U.S. mail and email addresses, and send your comments to:

Craig Chalfant
Planning Bureau, Development Services Department
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Or via phone at: (562) 570-6368
Or via email to: craig.chalfant@longbeach.gov

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

City of Long Beach
RECEIVED
MAY 04 2015
Planning Bureau

April 24, 2015

Craig Chalfant
Planning Bureau, Development Services Department
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Notice of Preparation of a CEQA Document for the Civic Center Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the CEQA document upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). SCAQMD staff also recommends that the lead agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts

when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies.
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at Jwong1@aqmd.gov or call me at (909) 396-3176.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

LAC150417-03
Control Number

Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Ken Alex
Director

Notice of Preparation

April 16, 2015

To: Reviewing Agencies

Re: Civic Center Project
SCH# 2015041054

Attached for your review and comment is the Notice of Preparation (NOP) for the Civic Center Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Craig Chalfant
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2015041054
Project Title Civic Center Project
Lead Agency Long Beach, City of

Type NOP Notice of Preparation

Description The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. The project also includes the demolition of the former Long Beach Courthouse building. In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. The Lincoln Park garage and Broadway garage would be preserve and would be used by city staff and public parking as it is today. Both the City Hall and Port buildings would be up to 11 stories in height.

Lead Agency Contact

Name Craig Chalfant
Agency City of Long Beach
Phone 562 570 6368 **Fax**
email
Address 333 W. Ocean Boulevard, 5th Floor
City Long Beach **State** CA **Zip** 90802

Project Location

County Los Angeles
City Long Beach
Region
Cross Streets Ocean Blvd, Pacific Ave, Broadway, and Magnolia Ave. Pacific Ave, Third St and Cedar
Lat / Long 33° 46' 5.59" N / 118° 11' 45.61" W
Parcel No. 728002-5902, -5900, -2914
Township **Range** **Section** **Base**

Proximity to:

Highways I-710, SR-1
Airports No
Railways Port of Los Angeles
Waterways Los Angeles River
Schools
Land Use Mixed Use (LUD 7) / Downtown Plan (PD-30)

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Conservation; Department of Parks and Recreation; Resources, Recycling and Recovery; Department of Water Resources; Department of Fish and Wildlife, Region 5; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Caltrans, District 7; Air Resources Board; Regional Water Quality Control Board, Region 4

Date Received 04/16/2015 **Start of Review** 04/16/2015 **End of Review** 05/15/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

2015041054

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Civic Center Project

Lead Agency: City of Long Beach | Contact Person: Craig Chalfant, Planner

Mailing Address: 333 West Ocean Boulevard 5th Floor | Phone: (562) 570-6368

City: Long Beach | Zip: 90802 | County: Los Angeles

Project Location: County: Los Angeles | City/Nearest Community: Long Beach

Cross Streets: Ocean Blvd, Pacific Ave, Broadway, and Magnolia Ave. Pacific Ave, Third St and Cedar | Zip Code: 90802

Longitude/Latitude (degrees, minutes and seconds): 33 ° 46 ′ 5.59 ″ N / 118 ° 11 ′ 45.61 ″ W | Total Acres: approx. 16

Assessor's Parcel No.: 728002-5902, -5900, -2914 | Section: | Twp.: | Range: | Base:

Within 2 Miles: State Hwy #: I-710, SR-1 | Waterways: Los Angeles River

Airports: None | Railways: Port of Los Angeles | Schools:

Document Type:

CEQA: ☒ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

RECEIVED
APR 16 2015
STATE CLEARING HOUSE

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☒ Site Plan
☒ Rezone ☐ Prezone ☐ Use Permit ☒ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other:

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type ____ MW
☐ Waste Treatment: Type ____ MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☒ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☒ Septic Systems
☒ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☐ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other:

Present Land Use/Zoning/General Plan Designation:

Mixed Use (LUD 7)/Downtown Plan (PD-30)

Project Description: *(please use a separate page if necessary)*

The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. The project also includes the demolition of the former Long Beach Courthouse building. In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. The Lincoln Park garage and Broadway garage would be preserved and would be used by city staff and public parking as it is today. Both the City Hall and Port buildings would be up to 11 stories in height.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

NOP Distribution List

County: Los Angeles SCH# 2015041054

Resources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [x] **Dept. of Boating & Waterways**
  Nicole Wong
- [x] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Lisa Johansen
- [ ] **Dept. of Conservation**
  Elizabeth Carpenter
- [ ] **California Energy Commission**
  Eric Knight
- [ ] **Cal Fire**
  Dan Foster
- [ ] **Central Valley Flood Protection Board**
  James Herota
- [ ] **Office of Historic Preservation**
  Ron Parsons
- [x] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [x] **California Department of Resources, Recycling & Recovery**
  Sue O'Leary
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [x] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Wildlife Region 1**
  Donald Koch
- [ ] **Fish & Wildlife Region 1E**
  Laurie Harnsberger
- [ ] **Fish & Wildlife Region 2**
  Jeff Drongesen
- [ ] **Fish & Wildlife Region 3**
  Charles Armor
- [ ] **Fish & Wildlife Region 4**
  Julie Vance
- [x] **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6**
  Tiffany Ellis
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6 I/M**
  Heidi Sickler
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Wildlife M**
  George Isaac
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- [ ] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Anna Garbeff
  Environmental Services Section
- [ ] **Delta Stewardship Council**
  Kevan Samsam
- [ ] **Housing & Comm. Dev.**
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Michael Machado
- [ ] **OES (Office of Emergency Services)**
  Dennis Castrillo
- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [x] **Public Utilities Commission**
  Leo Wong
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [ ] **State Lands Commission**
  Jennifer Deleong
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Cal State Transportation Agency CalSTA

- [ ] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [ ] **Caltrans – Planning HQ LD-IGR**
  Terri Pencovic
- [x] **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [ ] **Caltrans, District 3**
  Eric Federicks – South
  Susan Zanchi - North
- [ ] **Caltrans, District 4**
  Erik Alm
- [ ] **Caltrans, District 5**
  Larry Newland
- [ ] **Caltrans, District 6**
  Michael Navarro
- [x] **Caltrans, District 7**
  Dianna Watson
- [ ] **Caltrans, District 8**
  Mark Roberts
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [ ] **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- [x] All Other Projects
  Cathi Slaminski
  - [ ] Transportation Projects
    Nesamani Kalandiyur
  - [ ] Industrial/Energy Projects
    Mike Tollstrup
- [ ] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Jeffery Werth
  Division of Drinking Water
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [ ] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [x] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [x] **Other** office of library construction
- [ ] _____
  Conservancy

Last Updated 10/13/2014

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

May 11, 2015

Craig Chalfant, Planner
City of Long Beach
Development Services Department
333 West Ocean Boulevard
Long Beach, CA 90802

Dear Mr. Chalfant:

NOTICE OF PREPARATION OF A DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, "CIVIC CENTER PROJECT", INCLUDES A NEW CITY HALL, A NEW PORT BUILDING FOR HARBOR DEPARTMENT ADMINISTRATION, AND A COMMERICIAL MIXED DEVELOPMENT, LONG BEACH (FFER 201500070)

The Notice of Preparation of a Draft Supplement Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

1. The subject property is entirely with the City of Long Beach, which is not a part of the emergency response area of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to any impact on the emergency responsibilities of this Department

LAND DEVELOPMENT UNIT:

1. This project is located entirely in the City of Long Beach. Therefore, the City of Long Beach Fire Department has jurisdiction concerning this project and will be

setting conditions. This project is located in close proximity to the jurisdictional area of the Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates a comment concerning general requirements from the Land Development Unit of the Los Angeles County Fire Department.

2. Should any questions arise regarding subdivision, water systems, or access, please contact the County of Los Angeles Fire Department's Land Development Unit's Inspector Nancy Rodeheffer at (323) 890-4243.

3. The County of Los Angeles Fire Department's Land Development Unit appreciates the opportunity to comment on this project.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed in the final Document.

HEALTH HAZARDOUS MATERIALS DIVISION:

1. The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department has no objection to the project at this time; however, the future residential development proposed in the project would likely require environmental oversight of an authorized government agency prior to site grading activities.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

KEVIN T. JOHNSON, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

KTJ:ad

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

May 14, 2015

Ref File No.: 3290765

Mr. Craig Chalfant, Planner
Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Chalfant:

Civic Center Project

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on April 17, 2015. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' De Forest Avenue Trunk Sewer, located in Broadway at the Long Beach Freeway. This 36–inch diameter trunk sewer has a design capacity of 39.4 million gallons per day (mgd) and conveyed a peak flow of 5.6 mgd when last measured in 2012.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a design capacity of 400 mgd and currently processes an average flow of 263.4 mgd.

3. The expected increase in average wastewater flow from the proposed project consisting of a 270,000-square-foot city hall building, a 240,000-square-foot port building, a 92,000-square-foot library, 40,000 square feet of retail structure, a total of 780 apartment units, and a 200-room hotel, is 113,690 gallons per day, after all structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is

Recycled Paper

issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

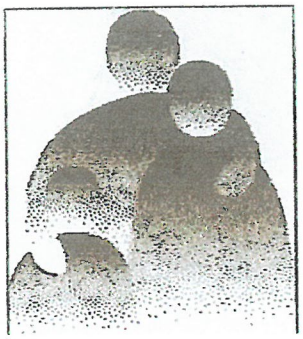
Grace Robinson Hyde

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: M. Sullivan
J. Ganz

DOC: #3316480.D03



Long Beach Area Coalition for the Homeless

P.O. BOX 92365
Long Beach, Ca. 90809
(562) 438-3183

Coalition Officers:
Patricia Benoit President
Kit Wilke V-P Communications
Arlene Mercer Treasurer
Jaylene Westfall-Secretary
Barb McPherson Newsletter Edit.
Sam Dragga Website Manager
Mary Coburn Program Manager

Coalition Directors
James Brown
Linda Dragga
Ron Jordan
Louis Mena
Gary Shelton

Organization:
California Heights United Methodist Church,
CAN-LB Community Action Network
City of Long Beach
Dept. Health and Human Service
Housing Services Bureau
Disabled Resources Center
Downtown Long Beach Associates, Inc.
First Congregational Church
Food Finders
Housing Long Beach
J. S. Gumbiner Foundation
Jewish Family & Children Services
Long Beach Christ Second Baptist Church
Long Beach/South Bay Substance Abuse Coalition
National Coalition on Alcoholism
National Mental Health Assoc of Greater Los Angeles (The Village ISA)
New Image Emergency Shelter
Olive Crest
PATH Ventures
Proclaim International Ministries
South Coast Interfaith Council
St. Luke's Episcopal Church
Universal Unitarian Church—Social Action Committee
Urban Community Outreach—Drop-In-Center
U.S. Vets of Long Beach
VA Long Beach Healthcare System

Individuals:
John Demeduk
Helen Freeborn
Ron Jorday
Edmond King
Sandy Kroll
Alan Lowenthal
Judith Rigney
Peter Rosenwald

May 19, 2015

To: Craig Chalfant
Project Bureau, Development Services Department
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

From: The Long Beach Area Coalition for the Homeless

RE: Scoping for the Civic Center Project Supplemental EIR

Dear Mr. Chalfant:

The Draft Initial Study of April, 2015 overlooks a Potentially Significant Impact which was brought up at the April 24, 2015 Scoping session. The following is a fuller explanation of the oversight and also suggests a possible mitigation for the impact.

Although the Civic Center Project Draft Initial Study does look at whether the project would "displace substantial numbers of people necessitating the construction of housing elsewhere," (XII Population and Housing, pp 37-38), its conclusion that there would not be "any new significant impacts related to the displacement of people..." is not an accurate assessment.

For several decades, a quantified number of people has had a continuous presence in the current Civic Center complex, particularly Lincoln Park and portions of the Main Library's exterior. These are people exposed to and sensitive to the elements. including Special Needs Families—those of women heads of household, large families and those with elderly or disabled members, as defined in the 2013-2021



Long Beach Area
Coalition for the Homeless

Housing Element of the city's General Plan. Lincoln Park is expected to be completely closed from 2016 to 2020. During that time, 100% of the people usually there will be displaced, numbering to 55 persons on any given day.

It is important to note that nowhere in the Downtown Plan PD-30 Final EIR is there any mention of the people who, needing to be somewhere, spend their days in the Civic Center, and thus in the Draft Initial Study there is not any consideration specific to their 100% displacement.

It's difficult to imagine what could be a more "Significant Impact" than the displacement of 100% of a given number of people. That displacement is what should now be considered within the Scope of the Supplemental EIR. Along with such consideration, it should be studied, evaluated and subsequently rated, appropriately, as "Potentially Significant Unless Mitigation Incorporated," rather than ""Less than Significant Impact" as it is now. CEQA calls for the presence of these people to be recognized and that an effort be made to rate this impact on them and that the need to incorporate mitigation be stated.

Another criterion of Potentially Significant Impact to these people is the loss of community cohesion in a project area. In the Long Beach Civic Center and in Lincoln Park, a sense of community has arisen among the people always found outdoors there. 100% displacement of them is certain to occur, is a significant impact and necessitates consideration.

Although the Scoping process itself need not suggest how to bring about mitigation of a Significant Impact (where the displaced people might go, for example), there is a relevant model which can serve as a solution for "necessitating the construction of replacement housing elsewhere." Dozens of cities across the continent have created various types of "Day Shelters" to fill the gap caused by nighttime accommodations being closed during the day. A "Day Shelter" will be needed as soon as Lincoln Park is closed, one with added social services to lead the people to permanent housing, and it.

Regards,

Gary Shelton, Advocacy Chairman
for The Long Beach Area Coalition for the Homeless

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ASSOCIATION of
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Alan Wapner, San Bernardino Associated Governments

May 15, 2015

Mr. Craig Chalfant
City of Long Beach
Planning Bureau, Development Services Department
333 W. Ocean Boulevard, 5th Floor
Long Beach, California 90802
Email: craig.chalfant@longbeach.gov

RE: SCAG Comment on the Notice of Preparation of a Draft Supplemental Environmental Impact Report for the Civic Center Project [SCAG NO. IGR8451]

Dear Mr. Chalfant,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Civic Center Project ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of the regional goals and policies in the RTP/SCS.

SCAG staff has reviewed the Notice of Preparation of a Draft Supplemental Environmental Impact Report for the Civic Center Project in Los Angeles County. The proposed project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. A 200-room hotel may also be included as part of the proposed development.

When available, please send environmental documentation to SCAG's *office in Los Angeles or by email to sunl@scag.ca.gov* providing, at a minimum, the full public comment period for review. If you have any questions regarding the attached comments, please contact Lijin Sun, Esq., Senior Regional Planner, at (213) 236-1882 or sunl@scag.ca.gov. Thank you.

Sincerely,

Ping Chang

Ping Chang,
Program Manager II, Land Use and Environmental Planning

[1] SB 375 amends CEQA to add Chapter 4.2 Implementation of the Sustainable Communities Strategy, which allows for certain CEQA streamlining for projects consistent with the RTP/SCS. Lead agencies (including local jurisdictions) maintain the discretion and will be solely responsible for determining "consistency" of any future project with the SCS. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a finding of consistency under SB 375 for purposes of CEQA streamlining.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE CIVIC CENTER PROJECT [SCAG NO. IGR8451]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS.

2012 RTP/SCS Goals

The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012. The 2012 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations (see http://rtpscs.scag.ca.gov). The goals included in the 2012 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2012 RTP/SCS are the following:

SCAG 2012 RTP/SCS GOALS	
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*
RTP/SCS G3:	*Ensure travel safety and reliability for all people and goods in the region*
RTP/SCS G4:	*Preserve and ensure a sustainable regional transportation system*
RTP/SCS G5:	*Maximize the productivity of our transportation system*
RTP/SCS G6:	*Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)*
RTP/SCS G7:	*Actively encourage and create incentives for energy efficiency, where possible*
RTP/SCS G8:	*Encourage land use and growth patterns that facilitate transit and non-motorized transportation*
RTP/SCS G9:	*Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the policy and supportive analysis in a table format. Suggested format is as follows:

SCAG 2012 RTP/SCS GOALS		
	Goal	Analysis
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
etc.		etc.

RTP/SCS Strategies

To achieve the goals of the 2012 RTP/SCS, a wide range of strategies are included in SCS Chapter (starting on page 152) of the RTP/SCS focusing on four key areas: 1) Land Use Actions and Strategies; 2) Transportation Network Actions and Strategies; 3) Transportation Demand Management (TDM) Actions and Strategies and; 4) Transportation System Management (TSM) Actions and Strategies. If applicable to the proposed project, please refer to these strategies as guidance for considering the proposed project within the context of regional goals and policies. To access a listing of the strategies, please visit http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf (Tables 4.3 – 4.7, beginning on page 152).

Regional Growth Forecasts

At the time of this letter, the most recently adopted SCAG forecasts consists of the 2020 and 2035 RTP/SCS population, household and employment forecasts. To view them, please visit http://scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf. The forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts		Adopted City of Long Beach Forecasts	
	Year 2020	**Year 2035**	**Year 2020**	**Year 2035**
Population	19,663,000	22,091,000	491,000	534,100
Households	6,458,000	7,325,000	175,600	188,900
Employment	8,414,000	9,441,000	176,000	184,800

MITIGATION

SCAG staff recommends that you review the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance, as appropriate. See Chapter 6 (beginning on page 143) at: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/Final2012PEIR.pdf

As referenced in Chapter 6, a comprehensive list of example mitigation measures that may be considered as appropriate is included in Appendix G: *Examples of Measures that Could Reduce Impacts from Planning, Development and Transportation Projects.* Appendix G can be accessed at: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/2012fPEIR_AppendixG_ExampleMeasures.pdf

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DISTRICT 7-OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
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Serious drought.
Help save water!

May 15, 2015

Mr. Craig Chalfant
City of Long Beach
Development Services
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Re: **Civic Center Project**
Notice of Preparation of Draft EIR
IGR No: 150449/EA, SCH#2015041054
Vic: LA / 710 /6.058-6.273

Dear Mr. Chalfant:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the proposed Civic Center Project. The proposed project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. The project involves the demolition of the former Long Beach Courthouse building.

As the State agency with jurisdiction over State highway transportation facilities, Caltrans is concerned with potential increase in traffic volumes directed to them as it might exacerbate existing congestion. Regional access to the Long Beach Civic Center area is provided via Interstate 710 (I-710).

It is Caltrans' mission to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. In an effort to ensure consistency with our mission and state planning priorities of infill, conservation, and efficient development and to ensure a safe, efficient, and reliable transportation system, we encourage the local jurisdictions and project proponents to consult with Caltrans on all development projects that utilize the multimodal transportation network.

Please require that the project traffic engineer conduct a Traffic Impact Analysis (TIA) to evaluate potential transportation impacts to the I-710. Please refer traffic engineers to follow the Caltrans Guide for the Preparation of Traffic Impacts Studies, which can be accessed online at: http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf

The TIA should include evaluation of potential traffic impacts to the regional transportation system including the I-710 mainline, nearest on-and-off ramps, and ramp intersections. Potential impacts to I-710 should be analyzed south of the Anaheim Street interchange. Caltrans request evaluation of potential impacts to freeway ramps and ramp intersections. Vehicle queues to mainline freeway lanes

should be avoided. Please include mitigation improvements if the off-ramp storage capacity is projected to be exceeded. Please consult with Caltrans to obtain concurrence as to the limits of the study area and methods of analysis. Caltrans generally follows Highway Capacity Manual methods of highway analysis.

Listed below are elements of what Caltrans generally expects in a traffic impact study:

- Presentations of assumptions and methods used to develop trip generation, trip distribution, trip assignments, and choice of travel mode. Travel modeling should be consistent with other regional and local modeling forecasts and with travel data.

- Inclusion of all appropriate traffic volumes. Analysis should include a) traffic from the project(s) under consideration, b) cumulative traffic from all approved developments in the area, c) cumulative traffic from likely not-yet-approved developments in the area, and d) traffic growth other than from the project and developments. Any assumptions of vehicle trip reductions due to existing uses, internal captured trips, pass-by trips, or transit usage needs to be justified.

- Analysis of AM, and PM peak-hour volumes for both existing and future conditions in the affected area. Future conditions should extend to the horizon year build-out year of the Specific Plan.

- Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts, including a description of transportation infrastructure improvements, financial costs, funding sources and financing, sequence and scheduling considerations, implementation responsibilities, controls and monitoring.

- A plan of realistic mitigation measures under the control of the lead agency or project sponsors or specification percent shares of the costs for various mitigation actions undertaken by other agencies. Any traffic mitigation fees may be assessed proportionally with the additional traffic generated by the project. (See Caltrans' Traffic Impact Study Guide for a suggested formula).

We encourage the City consider vehicle demand-reducing strategies. These may include incentives for commuters to use transit, park-and-ride lots, discounts on monthly bus and rail passes, shuttle buses, vanpools, etc. To the extent that more of the population shifts to transit for some of their inter-regional trips, future cumulative traffic impacts to freeways may be satisfactorily mitigated. Proximity to public transit may not be enough incentive to cause the desired mode switch.

Caltrans recommends that the City establish a Transportation fund or a funding plan to implement improvements that may be too costly for one specific development. Specific projects can contribute to the funding of improvements to State highways and City streets.

Please be aware that although the lead agency is required to comply with Los Angeles County Congestion Management Program (CMP) standards and thresholds of significance, Caltrans does not consider the Los Angeles County's CMP criteria alone to be adequate for the analysis of transportation impacts pursuant to a CEQA review. The CMP does not adequately address cumulative transportation impacts and does not analyze for safety, weaving problems, or delay. The 2010 CMP Guidelines,

Appendix D, states that Caltrans should be consulted for the analysis of State highway facilities. Caltrans' Guide directs preparers of traffic impact analysis to consult with the local District as early as possible to determine the appropriate requirements of the traffic impact analysis.

In the spirit of mutual cooperation, Caltrans staff is available to work with the project's traffic engineers to identify the parameters of traffic impact analysis such as study area, vehicle trip reduction factors, method of analysis, significant criteria, and possible mitigation measures if any are necessary.

If you have any questions regarding these comments, please feel free to contact Elmer Alvarez, Project Coordinator at (213) 897-6696 or electronically at elmer.alvarez@dot.ca.gov.

Sincerely,

DIANNA WATSON
IGR/CEQA Branch Chief
Caltrans District 7

cc: Scott Morgan, State Clearinghouse

LONG BEACH HERITAGE

POST OFFICE BOX 92521 LONG BEACH CA 90809

562.493.7019 LBHERITAGE.ORG

May 15, 2015

What is the impediment to adaptive re-use for the court house?
Significant measures should be taken to assess the negative impact on the cultural and physical environment and the relationship of people with that environment, as defined in 40 CFR 1508.14.

Has there been adequate consultation?
The State Historic Preservation Officer should be consulted on this project.
A follow up to this project in terms of the "spirit of the law" of Section 106 should be explored, addressing how the city is in compliance.
Given that the City seeks to demolish the courthouse, a recognized and eligible cultural asset to the citizens of Long Beach, we recommend that the SEIR should address the outcome of an assessment by a project team comprised of preservation-architects and -engineers. This team should be compensated and have complete access and opportunity to demonstrate how the current courthouse structure could potentially meet the needs of the proposed Port building.

Historic Structures Report should be completed, along with recommendations on adaptive reuse.
The current DEIR does not adequately address reasonable alternatives. A comprehensive HSR would offer options for reuse, as well as potential mitigation.

What are the specific impacts to Long Beach cultural resources if this building is razed?
The current DEIR does not adequately describe and balance the impact of the current Courthouse on our city's history. Nor does it describe the impact that its demolition will cause, especially if the city loses this only link to our traditional civic core.

If the building is demolished, there should be significant and meaningful mitigation/restitution. What are we to expect in terms of a firm commitment for mitigation? Currently, discussions have centered around a "history component" but that is not enough. We ask that:
- The city consider building and funding a viable Long Beach History Museum of various artifacts (both City owned and private collections)
- Mitigation dollars be used for Long Beach preservation projects (possibly handled through the Long Beach Navy Memorial Heritage Assn.

Cheryl Perry

Cheryl Perry, President
Long Beach Heritage

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City of Long Beach
RECEIVED
MAY 19 2015
Planning Bureau

May 13, 2015

Craig Chalfant
Planning Bureau, Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Chalfant,

RE: **NOTICE OF PREPERATION OF A DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT**

Thank you for including the California Office of Historic Preservation (OHP) in the environmental review process for the proposed Civic Center Project. Pursuant to the National Historic Preservation Act and the California Public Resources Code, the State Historic Preservation Officer (SHPO) and the OHP have broad responsibility for the implementation of federal and state historic preservation programs in California. We have a long history of working with the City of Long Beach (Lead Agency) through our Certified Local Government program. Our comments are offered with the intent of protecting historic and cultural resources, while allowing the City of Long Beach to meet its program needs. The following comments are based on the information included in the Notice of Preparation/Initial Study (NOP/IS) of a Draft Supplemental Environmental Impact Report for the Civic Center Project.

The proposed project is located in downtown Long Beach, and includes demolition and replacement of the existing Courthouse, City Hall, Public Library, and Lincoln Park. The proposed project also includes construction of a new Port of Long Beach administration facility. In addition to these civic buildings, the proposed project includes construction of three residential/commercial buildings, one at the corner of 3rd Street and Pacific Boulevard, and two on the site of the existing City Hall. The two existing parking structures currently occupying the site would remain unaltered.

The existing Civic Center complex was constructed between 1953 and 1977. The Civic Center complex was part of a master planned effort to revitalize the downtown Long Beach after WWII. At that time, cities around the country experienced population decreases downtown, when large numbers of citizens opted for suburban housing over urban amenities. The "Civic Center Addition" plan (Plan, 1953) expanded the Civic Center area west to North Daisy Avenue and north as far as 4th Street. The Public Safety Building and the Courthouse buildings were completed in 1960. Due to an economic downturn, completion of the Plan stalled in the late 1960s. However, by 1977

the city realized the build-out envisioned by the Plan when it finally completed City Hall, the Library, and Lincoln Park.

It is unclear in the NOP/IS what buildings and/or landscapes are considered historic resources for the purposes of CEQA. Pursuant to the CEQA Guidelines § 15064.5 there are four primary ways that a resource is determined to be historic for the purposes of CEQA:

1. A resource listed in, or determined by the State Historical Resources Commission as eligible for listing in, the California Register of Historical Resources (§ 15064.1.a.1);
2. A resource included in a local register of historical resources or identified as significant in an historical resources survey (§ 15064.1.a.2);
3. A Lead Agency determines that a resource meets the criteria for listing in the California Register of Historical Resources (§ 15064.1.a.3); or
4. The Lead Agency uses its discretion to consider any resource as historic for the purposes of CEQA (§ 15064.1.a.4).

The EIR should include an updated study of the project area to determine if the Civic Center meets the eligibility criteria for local, state, or national listing as a historic district; and therefore should be considered historic resources in order to properly identify project impacts. This project-specific survey should meet the requirements of Public Resources Code § 5024.1(g) pursuant to identifying historic resources for the purposes of CEQA. The updated survey should include contributing resources and non-contributing resources and identify character defining features of the contributing resources.

The environmental checklist indicates the proposed project would result in significant impacts to historical resources, but only identifies the Long Beach Courthouse as a historic resource. It is possible that the environmental checklist is considering demolition of the City Hall, Library, Lincoln Park, and the surrounding designed landscape as a significant impact to historical resources, but there is not enough information included in the Initial Study to know what are considered historic resources and what have been determined to lack historic significance or integrity. The updated historic resources survey should inform this portion of the DEIR and make identification of resources and significant impacts more clear.

The NOP/IS references the historic resources survey conducted as part of the Program-level EIR for the Long Beach Downtown Plan; however, there is no reference to the Civic Center complex included in that survey. It appears the Civic Center complex was excluded from the survey during the planning process. While the Civic Center Complex is within the survey area (shown in Appendix D of the PEIR), there is no status code assigned to the resources in the Civic Center. For this reason, the survey included in Appendix D of the PEIR for the Long Beach Downtown Plan is insufficient to evaluate historic resources and impacts that might result as part of the proposed project.

The updated historic resources survey conducted as part of the proposed project DEIR should be used to inform the alternatives discussion, and look for feasible alternatives to demolition of historic resources in the project area. It may be possible to achieve most of the basic project objectives while avoiding impacts to historical resources, but without accurate survey data, this becomes difficult. The DEIR should focus and seriously consider a range of feasible alternatives that will lessen and/or avoid significant environmental impacts. Pursuant to the CEQA Guidelines (§15126.6) the alternatives to the proposed project should be fully explored in the DEIR, including a *No Project Alternative*, *Alternate Site Alternative, Rehabilitation Alternative, Adaptive Reuse Alternative, Infill Alternative, and Alternative-use Alternative.* When addressing alternatives that have the potential to avoid significant environmental impacts of a proposed project, CEQA Guidelines § 615126.6 (b) states:

> *The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*

Therefore, the alternatives discussed in the DEIR should not be discounted merely because they may be more costly than the proposed project. All feasible alternatives that may avoid or substantially lessen significant impacts should be seriously considered in the DEIR so the decision making body and the public is fully informed during the comment and decision-making process.

Based on the information included in the DEIR for the proposed Long Beach Courthouse demolition project, the Courthouse is eligible as a landmark building, but also appears to be part of a larger historic district that includes the entire Civic Center complex. It is unclear if the potential historic district has been evaluated, which makes it difficult for the project proponents and Lead Agency to consider potential alternatives that might minimize impacts to historic resources. This should be corrected by the updated survey and alternatives discussion in the DEIR for the proposed project.

The Initial Study indicates implementation of the proposed project may result in significant impacts to resources potentially eligible for listing on the local, state, and national register. However, in the project approval section (page 4) of the Initial Study, it appears the City of Long Beach Cultural Heritage Commission will not have a chance to consider the eligibility of the resources, nor will the Cultural Heritage Commission have a chance to review and comment during the environmental review process. This omission is directly in conflict with the Downtown Plan PEIR Mitigation Measure CR-1a, which states:

> *If City development Services Department staff determines that the property may be eligible for designation, the property shall be referred to the Cultural Heritage Commission, whose determination of eligibility shall be considered as part of the environmental determination for the project in accordance with CEQA.*

The Cultural Heritage Commission should be included in the environmental review process pursuant to the Program-level EIR for the Long Beach Downtown Plan. Their comments should be given consideration by the decision-making body during the CEQA process as required by Mitigation Measure CR-1a.

If the DEIR determines the project will result in significant impacts to historic resources, and these impacts are truly unavoidable through alternatives or mitigation measures, the Lead Agency will still be required to adopt mitigation measures in order to reduce the environmental impact. These mitigation measures should go beyond commonly considered measures such as Historic American Building Survey (HABS) documentation, plaques, and/or incorporating design features into the new project. The Lead Agency should make a serious attempt to involve the city's Cultural Heritage Commission, local preservation advocacy groups, and other members of the public to develop meaningful mitigation measures that promote the goals and objectives of the City's historic preservation program. Such measures could include additional historic surveys in parts of the city that have not been surveyed and/or development of design guidelines for future re-use of public buildings. Mitigation measures could be funded directly, however, we encourage the City to create a Historic Preservation Mitigation Fund, as a place to deposit compensatory mitigation funding from this and other future projects that may result in significant adverse impacts to historical and cultural resources.

Revitalization of downtown Long Beach and preservation of historic resources should be viewed as mutually beneficial goals for the City. Historic preservation should be incorporated into the planning process and used to encourage reinvestment in the downtown area. Long Beach has gone to great lengths in recent years to update the City's preservation planning tools, including a historic context document (2009), an existing conditions report (2009), and adopting a robust historic preservation element (2010) as part of the city's General Plan. These efforts in proactive preservation planning should be used to advise the current effort to revitalize downtown Long Beach. Instead, the NOP/IS downplays the potential historic significance of the Long Beach Civic Center and may cause the City to miss a great opportunity to incorporate historic resources into its vision for downtown.

If you have questions, please contact Sean de Courcy of the Local Government and Environmental Compliance Unit, at (916) 445-7042 or at Sean.deCourcy@parks.ca.gov.

Sincerely,

Carol Roland-Nawi, Ph.D.

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

Appendix B

Air Quality and Greenhouse Gas Emissions Technical Data



Long Beach Civic Center

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	575.79	1000sqft	3.78	575,793.00	0
Library	92.00	1000sqft	1.73	92,000.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	8.00	1000sqft	0.00	8,000.00	0
Hotel	200.00	Room	0.00	290,400.00	0
Condo/Townhouse High Rise	200.00	Dwelling Unit	0.90	235,000.00	572
Condo/Townhouse High Rise	580.00	Dwelling Unit	6.29	650,000.00	1659
Regional Shopping Center	32.00	1000sqft	0.00	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

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tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.44	1.23
tblVehicleEF	HHD	5.1400e-003	5.1330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4540e-003	1.4080e-003
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.69	0.75
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.54	1.31

tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.77	0.71
tblVehicleEF	LDA	1.39	1.21
tblVehicleEF	LDA	248.70	239.34
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5970e-003	3.6040e-003
tblVehicleEF	LDA	7.6100e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003

tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.86	0.79
tblVehicleEF	LDA	1.09	0.95
tblVehicleEF	LDA	261.60	251.82
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	3.7860e-003	3.7940e-003
tblVehicleEF	LDA	7.5600e-004	7.5400e-004
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003

tblVehicleEF	LDA	0.74	0.68
tblVehicleEF	LDA	1.44	1.25
tblVehicleEF	LDA	244.71	235.50
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5390e-003	3.5450e-003
tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76

tblVehicleEF	LDT1	3.77	3.19
tblVehicleEF	LDT1	303.51	294.33
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52

tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93

tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95
tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28

tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35
tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18

tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10

tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40

tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.2300e-004	5.1800e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003

tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48

tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004

tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
tblVehicleEF	LHD2	0.82	0.77
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30
tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06

tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003

tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004

tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003
tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004

tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21

tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
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tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
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tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003

tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06
tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10

tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.78	12.76
tblVehicleEF	MHD	525.09	525.15
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.48	3.27
tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08

tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.88	0.74
tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.1000e-004	7.7100e-004
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.94	0.79
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	2.74	3.30
tblVehicleEF	OBUS	0.97	0.86
tblVehicleEF	OBUS	8.80	7.92
tblVehicleEF	OBUS	534.88	533.47
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.65	3.20
tblVehicleEF	OBUS	2.28	1.27
tblVehicleEF	OBUS	1.24	1.12
tblVehicleEF	OBUS	9.5470e-003	8.7920e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04

tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	8.7830e-003	8.0890e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.54	0.48
tblVehicleEF	OBUS	5.6700e-003	5.6550e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.1900e-004	5.0200e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.53	0.64
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.58	0.51
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	1.99	2.40
tblVehicleEF	OBUS	0.98	0.86
tblVehicleEF	OBUS	7.12	6.40

tblVehicleEF	OBUS	566.66	565.16
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.79	3.30
tblVehicleEF	OBUS	2.14	1.19
tblVehicleEF	OBUS	1.19	1.08
tblVehicleEF	OBUS	8.0480e-003	7.4120e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	7.4040e-003	6.8190e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.48	0.42
tblVehicleEF	OBUS	6.0070e-003	5.9910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.51	0.45
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	3.78	4.55
tblVehicleEF	OBUS	0.97	0.85
tblVehicleEF	OBUS	8.99	8.09
tblVehicleEF	OBUS	491.00	489.70
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.44	3.06
tblVehicleEF	OBUS	2.24	1.25
tblVehicleEF	OBUS	1.25	1.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	0.01	9.8420e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004

tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.55	0.49
tblVehicleEF	OBUS	5.2050e-003	5.1910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.2200e-004	5.0500e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.57	0.69
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.58	0.52
tblVehicleEF	SBUS	4.4530e-003	4.6460e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.05	1.12
tblVehicleEF	SBUS	2.96	2.66
tblVehicleEF	SBUS	27.16	24.72
tblVehicleEF	SBUS	547.00	552.46
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.58	7.35
tblVehicleEF	SBUS	7.03	6.65
tblVehicleEF	SBUS	2.02	1.89
tblVehicleEF	SBUS	0.01	0.01

tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.30	0.28
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.66	1.48
tblVehicleEF	SBUS	5.7980e-003	5.8560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7600e-003	1.7140e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.77	1.59
tblVehicleEF	SBUS	4.1970e-003	4.3790e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003

tblVehicleEF	SBUS	0.76	0.82
tblVehicleEF	SBUS	3.03	2.73
tblVehicleEF	SBUS	23.01	20.96
tblVehicleEF	SBUS	579.49	585.28
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	9.4430e-003
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.29
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24

tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52
tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68

tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88
tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17

tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004

tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	39.00	0.00
tblWoodstoves	NumberNoncatalytic	39.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.5611	15.8757	14.8099	0.0272	1.9419	0.6454	2.5873	0.7364	0.5966	1.3331	0.0000	2,393.7998	2,393.7998	0.2977	0.0000	2,400.0506
2017	3.4369	13.1616	20.2302	0.0421	3.1264	0.5456	3.6720	1.0755	0.5073	1.5828	0.0000	3,417.9267	3,417.9267	0.2895	0.0000	3,424.0070
2018	3.5586	7.8104	15.8436	0.0363	2.0890	0.2949	2.3838	0.5604	0.2761	0.8365	0.0000	2,815.3216	2,815.3216	0.1752	0.0000	2,819.0002
2019	4.9317	9.5482	12.8772	0.0282	1.4553	0.4010	1.8563	0.4375	0.3725	0.8100	0.0000	2,245.8493	2,245.8493	0.2662	0.0000	2,251.4394
2020	1.1824	10.9821	13.1074	0.0313	1.6706	0.4091	2.0797	0.5624	0.3787	0.9411	0.0000	2,513.0474	2,513.0474	0.2662	0.0000	2,518.6371
2021	3.5131	5.3166	13.0886	0.0350	2.0314	0.1863	2.2177	0.5452	0.1743	0.7195	0.0000	2,532.6288	2,532.6288	0.1435	0.0000	2,535.6425
2022	4.5664	1.3805	3.3252	8.8400e-003	0.4973	0.0570	0.5542	0.1330	0.0533	0.1862	0.0000	633.8594	633.8594	0.0567	0.0000	635.0502
Total	**22.7502**	**64.0752**	**93.2821**	**0.2089**	**12.8119**	**2.5391**	**15.3510**	**4.0504**	**2.3587**	**6.4091**	**0.0000**	**16,552.4331**	**16,552.4331**	**1.4949**	**0.0000**	**16,583.8267**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6365	5.0246	12.7082	0.0272	1.3521	0.0711	1.4233	0.4599	0.0656	0.5255	0.0000	2,393.7988	2,393.7988	0.2977	0.0000	2,400.0495
2017	2.7232	5.8648	19.9582	0.0421	2.6493	0.0856	2.7349	0.8160	0.0789	0.8949	0.0000	3,417.9258	3,417.9258	0.2895	0.0000	3,424.0061
2018	3.2066	4.5994	15.8786	0.0363	2.0890	0.0708	2.1597	0.5604	0.0653	0.6257	0.0000	2,815.3212	2,815.3212	0.1752	0.0000	2,818.9997
2019	4.3658	3.2736	12.6325	0.0282	1.3056	0.0498	1.3554	0.3714	0.0460	0.4174	0.0000	2,245.8484	2,245.8484	0.2662	0.0000	2,251.4384
2020	0.6225	4.6308	12.4834	0.0313	1.3322	0.0795	1.4117	0.4096	0.0734	0.4830	0.0000	2,513.0465	2,513.0465	0.2662	0.0000	2,518.6362
2021	3.3003	3.2830	13.2033	0.0350	2.0314	0.0583	2.0898	0.5452	0.0538	0.5990	0.0000	2,532.6285	2,532.6285	0.1435	0.0000	2,535.6421
2022	4.4905	0.5937	3.4626	8.8400e-003	0.4973	0.0108	0.5080	0.1330	9.9500e-003	0.1429	0.0000	633.8593	633.8593	0.0567	0.0000	635.0500
Total	**19.3455**	**27.2699**	**90.3267**	**0.2089**	**11.2568**	**0.4259**	**11.6827**	**3.2953**	**0.3930**	**3.6883**	**0.0000**	**16,552.4283**	**16,552.4283**	**1.4949**	**0.0000**	**16,583.8220**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**14.97**	**57.44**	**3.17**	**0.00**	**12.14**	**83.23**	**23.90**	**18.64**	**83.34**	**42.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.7277	0.0936	8.1014	4.3000e-004		0.0445	0.0445		0.0445	0.0445	0.0000	13.1990	13.1990	0.0130	0.0000	13.4714
Energy	0.1534	1.3613	0.9289	8.3700e-003		0.1060	0.1060		0.1060	0.1060	0.0000	7,308.5748	7,308.5748	0.2953	0.0829	7,340.4744
Mobile	8.1561	20.5618	87.1250	0.2799	18.8700	0.3768	19.2468	5.0503	0.3476	5.3980	0.0000	19,227.3768	19,227.3768	0.6474	0.0000	19,240.9722
Waste						0.0000	0.0000		0.0000	0.0000	804.6745	0.0000	804.6745	47.5549	0.0000	1,803.3273
Water						0.0000	0.0000		0.0000	0.0000	56.4575	1,021.0818	1,077.5393	5.8457	0.1466	1,245.7540
Total	**20.0372**	**22.0168**	**96.1553**	**0.2887**	**18.8700**	**0.5273**	**19.3973**	**5.0503**	**0.4981**	**5.5484**	**861.1320**	**27,570.2323**	**28,431.3642**	**54.3562**	**0.2295**	**29,643.9992**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.1155	0.0837	7.1245	3.5000e-004		0.0388	0.0388		0.0388	0.0388	0.0000	11.2127	11.2127	9.8600e-003	0.0000	11.4198
Energy	0.1288	1.1429	0.7796	7.0200e-003		0.0890	0.0890		0.0890	0.0890	0.0000	4,318.5119	4,318.5119	0.1644	0.0523	4,338.1810
Mobile	7.3592	14.8803	67.5822	0.1886	12.5192	0.2596	12.7789	3.3506	0.2396	3.5902	0.0000	12,957.7687	12,957.7687	0.4483	0.0000	12,967.1832
Waste						0.0000	0.0000		0.0000	0.0000	804.6745	0.0000	804.6745	47.5549	0.0000	1,803.3273
Water						0.0000	0.0000		0.0000	0.0000	45.1660	866.6250	911.7910	4.6780	0.1176	1,046.4854
Total	**18.6035**	**16.1070**	**75.4862**	**0.1960**	**12.5192**	**0.3874**	**12.9066**	**3.3506**	**0.3673**	**3.7179**	**849.8405**	**18,154.1182**	**19,003.9587**	**52.8554**	**0.1699**	**20,166.5966**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.16**	**26.84**	**21.50**	**32.10**	**33.66**	**26.53**	**33.46**	**33.66**	**26.26**	**32.99**	**1.31**	**34.15**	**33.16**	**2.76**	**25.97**	**31.97**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 475,875; Residential Outdoor: 158,625; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38

Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29

Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2048	0.0000	0.2048	0.0310	0.0000	0.0310	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1844	1.9632	1.5063	1.7200e-003		0.0986	0.0986		0.0919	0.0919	0.0000	159.5187	159.5187	0.0434	0.0000	160.4296
Total	**0.1844**	**1.9632**	**1.5063**	**1.7200e-003**	**0.2048**	**0.0986**	**0.3033**	**0.0310**	**0.0919**	**0.1229**	**0.0000**	**159.5187**	**159.5187**	**0.0434**	**0.0000**	**160.4296**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0168	0.2733	0.2066	7.0000e-004	0.0162	4.1200e-003	0.0203	4.4500e-003	3.7900e-003	8.2400e-003	0.0000	63.7134	63.7134	4.6000e-004	0.0000	63.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	3.8100e-003	0.0396	9.0000e-005	7.0800e-003	6.0000e-005	7.1400e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.6298	6.6298	3.6000e-004	0.0000	6.6373
Total	**0.0194**	**0.2771**	**0.2462**	**7.9000e-004**	**0.0233**	**4.1800e-003**	**0.0275**	**6.3300e-003**	**3.8500e-003**	**0.0102**	**0.0000**	**70.3431**	**70.3431**	**8.2000e-004**	**0.0000**	**70.3602**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0921	0.0000	0.0921	0.0140	0.0000	0.0140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.0883	1.0245	1.7200e-003		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	159.5185	159.5185	0.0434	0.0000	160.4295
Total	**0.0204**	**0.0883**	**1.0245**	**1.7200e-003**	**0.0921**	**4.1000e-004**	**0.0926**	**0.0140**	**4.1000e-004**	**0.0144**	**0.0000**	**159.5185**	**159.5185**	**0.0434**	**0.0000**	**160.4295**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0168	0.2733	0.2066	7.0000e-004	0.0162	4.1200e-003	0.0203	4.4500e-003	3.7900e-003	8.2400e-003	0.0000	63.7134	63.7134	4.6000e-004	0.0000	63.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	3.8100e-003	0.0396	9.0000e-005	7.0800e-003	6.0000e-005	7.1400e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.6298	6.6298	3.6000e-004	0.0000	6.6373
Total	**0.0194**	**0.2771**	**0.2462**	**7.9000e-004**	**0.0233**	**4.1800e-003**	**0.0275**	**6.3300e-003**	**3.8500e-003**	**0.0102**	**0.0000**	**70.3431**	**70.3431**	**8.2000e-004**	**0.0000**	**70.3602**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8675	0.0000	0.8675	0.4718	0.0000	0.4718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7095	8.1921	5.3806	6.7600e-003		0.3925	0.3925		0.3611	0.3611	0.0000	637.2432	637.2432	0.1922	0.0000	641.2797
Total	**0.7095**	**8.1921**	**5.3806**	**6.7600e-003**	**0.8675**	**0.3925**	**1.2600**	**0.4718**	**0.3611**	**0.8329**	**0.0000**	**637.2432**	**637.2432**	**0.1922**	**0.0000**	**641.2797**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1544	2.5065	1.8945	6.3900e-003	0.1820	0.0378	0.2198	0.0490	0.0348	0.0837	0.0000	584.2754	584.2754	4.1800e-003	0.0000	584.3632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8000e-003	0.0129	0.1344	3.0000e-004	0.0240	2.0000e-004	0.0242	6.3800e-003	1.9000e-004	6.5700e-003	0.0000	22.5105	22.5105	1.2100e-003	0.0000	22.5359
Total	**0.1632**	**2.5194**	**2.0289**	**6.6900e-003**	**0.2061**	**0.0380**	**0.2441**	**0.0554**	**0.0350**	**0.0903**	**0.0000**	**606.7859**	**606.7859**	**5.3900e-003**	**0.0000**	**606.8991**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3904	0.0000	0.3904	0.2123	0.0000	0.2123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0828	0.3589	3.8083	6.7600e-003		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	637.2424	637.2424	0.1922	0.0000	641.2790
Total	**0.0828**	**0.3589**	**3.8083**	**6.7600e-003**	**0.3904**	**1.6600e-003**	**0.3921**	**0.2123**	**1.6600e-003**	**0.2140**	**0.0000**	**637.2424**	**637.2424**	**0.1922**	**0.0000**	**641.2790**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1544	2.5065	1.8945	6.3900e-003	0.1820	0.0378	0.2198	0.0490	0.0348	0.0837	0.0000	584.2754	584.2754	4.1800e-003	0.0000	584.3632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8000e-003	0.0129	0.1344	3.0000e-004	0.0240	2.0000e-004	0.0242	6.3800e-003	1.9000e-004	6.5700e-003	0.0000	22.5105	22.5105	1.2100e-003	0.0000	22.5359
Total	**0.1632**	**2.5194**	**2.0289**	**6.6900e-003**	**0.2061**	**0.0380**	**0.2441**	**0.0554**	**0.0350**	**0.0903**	**0.0000**	**606.7859**	**606.7859**	**5.3900e-003**	**0.0000**	**606.8991**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8675	0.0000	0.8675	0.4718	0.0000	0.4718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1982	2.2617	1.5212	2.0100e-003		0.1078	0.1078		0.0992	0.0992	0.0000	186.1402	186.1402	0.0570	0.0000	187.3379
Total	**0.1982**	**2.2617**	**1.5212**	**2.0100e-003**	**0.8675**	**0.1078**	**0.9754**	**0.4718**	**0.0992**	**0.5710**	**0.0000**	**186.1402**	**186.1402**	**0.0570**	**0.0000**	**187.3379**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0432	0.6818	0.5421	1.9000e-003	0.1564	0.0103	0.1667	0.0397	9.4300e-003	0.0491	0.0000	170.5682	170.5682	1.2100e-003	0.0000	170.5937
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	3.4600e-003	0.0360	9.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.4247	6.4247	3.3000e-004	0.0000	6.4316
Total	**0.0455**	**0.6853**	**0.5781**	**1.9900e-003**	**0.1635**	**0.0103**	**0.1739**	**0.0416**	**9.4800e-003**	**0.0510**	**0.0000**	**176.9928**	**176.9928**	**1.5400e-003**	**0.0000**	**177.0253**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3904	0.0000	0.3904	0.2123	0.0000	0.2123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0246	0.1065	1.1303	2.0100e-003		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	186.1400	186.1400	0.0570	0.0000	187.3377
Total	**0.0246**	**0.1065**	**1.1303**	**2.0100e-003**	**0.3904**	**4.9000e-004**	**0.3909**	**0.2123**	**4.9000e-004**	**0.2128**	**0.0000**	**186.1400**	**186.1400**	**0.0570**	**0.0000**	**187.3377**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0432	0.6818	0.5421	1.9000e-003	0.1564	0.0103	0.1667	0.0397	9.4300e-003	0.0491	0.0000	170.5682	170.5682	1.2100e-003	0.0000	170.5937
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	3.4600e-003	0.0360	9.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.4247	6.4247	3.3000e-004	0.0000	6.4316
Total	**0.0455**	**0.6853**	**0.5781**	**1.9900e-003**	**0.1635**	**0.0103**	**0.1739**	**0.0416**	**9.4800e-003**	**0.0510**	**0.0000**	**176.9928**	**176.9928**	**1.5400e-003**	**0.0000**	**177.0253**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1482	1.2400	0.8050	1.1700e-003		0.0856	0.0856		0.0804	0.0804	0.0000	105.3368	105.3368	0.0261	0.0000	105.8854
Total	**0.1482**	**1.2400**	**0.8050**	**1.1700e-003**		**0.0856**	**0.0856**		**0.0804**	**0.0804**	**0.0000**	**105.3368**	**105.3368**	**0.0261**	**0.0000**	**105.8854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	1.3903	1.7922	3.3400e-003	0.0948	0.0220	0.1167	0.0270	0.0202	0.0473	0.0000	303.5079	303.5079	2.2000e-003	0.0000	303.5541
Worker	0.1999	0.2936	3.0508	6.7000e-003	0.5455	4.6400e-003	0.5501	0.1449	4.2700e-003	0.1491	0.0000	511.0643	511.0643	0.0275	0.0000	511.6424
Total	**0.3365**	**1.6839**	**4.8430**	**0.0100**	**0.6403**	**0.0266**	**0.6669**	**0.1719**	**0.0245**	**0.1964**	**0.0000**	**814.5722**	**814.5722**	**0.0297**	**0.0000**	**815.1965**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0142	0.0970	0.7574	1.1700e-003		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	105.3367	105.3367	0.0261	0.0000	105.8853
Total	**0.0142**	**0.0970**	**0.7574**	**1.1700e-003**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**	**0.0000**	**105.3367**	**105.3367**	**0.0261**	**0.0000**	**105.8853**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	1.3903	1.7922	3.3400e-003	0.0948	0.0220	0.1167	0.0270	0.0202	0.0473	0.0000	303.5079	303.5079	2.2000e-003	0.0000	303.5541
Worker	0.1999	0.2936	3.0508	6.7000e-003	0.5455	4.6400e-003	0.5501	0.1449	4.2700e-003	0.1491	0.0000	511.0643	511.0643	0.0275	0.0000	511.6424
Total	**0.3365**	**1.6839**	**4.8430**	**0.0100**	**0.6403**	**0.0266**	**0.6669**	**0.1719**	**0.0245**	**0.1964**	**0.0000**	**814.5722**	**814.5722**	**0.0297**	**0.0000**	**815.1965**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4033	3.4327	2.3568	3.4900e-003		0.2316	0.2316		0.2175	0.2175	0.0000	311.3228	311.3228	0.0766	0.0000	312.9319
Total	**0.4033**	**3.4327**	**2.3568**	**3.4900e-003**		**0.2316**	**0.2316**		**0.2175**	**0.2175**	**0.0000**	**311.3228**	**311.3228**	**0.0766**	**0.0000**	**312.9319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3732	3.7785	5.0754	9.9700e-003	0.2833	0.0586	0.3419	0.0809	0.0539	0.1348	0.0000	892.3358	892.3358	6.3600e-003	0.0000	892.4694
Worker	0.5348	0.7920	8.2224	0.0200	1.6302	0.0134	1.6436	0.4330	0.0123	0.4453	0.0000	1,468.6789	1,468.6789	0.0759	0.0000	1,470.2729
Total	**0.9080**	**4.5704**	**13.2978**	**0.0300**	**1.9135**	**0.0720**	**1.9854**	**0.5138**	**0.0662**	**0.5800**	**0.0000**	**2,361.0146**	**2,361.0146**	**0.0823**	**0.0000**	**2,362.7423**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0424	0.2898	2.2634	3.4900e-003		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	311.3225	311.3225	0.0766	0.0000	312.9315
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**311.3225**	**311.3225**	**0.0766**	**0.0000**	**312.9315**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3732	3.7785	5.0754	9.9700e-003	0.2833	0.0586	0.3419	0.0809	0.0539	0.1348	0.0000	892.3358	892.3358	6.3600e-003	0.0000	892.4694
Worker	0.5348	0.7920	8.2224	0.0200	1.6302	0.0134	1.6436	0.4330	0.0123	0.4453	0.0000	1,468.6789	1,468.6789	0.0759	0.0000	1,470.2729
Total	**0.9080**	**4.5704**	**13.2978**	**0.0300**	**1.9135**	**0.0720**	**1.9854**	**0.5138**	**0.0662**	**0.5800**	**0.0000**	**2,361.0146**	**2,361.0146**	**0.0823**	**0.0000**	**2,362.7423**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9844**	**308.9844**	**0.0756**	**0.0000**	**310.5723**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3504	3.4794	4.8810	0.0100	0.2844	0.0554	0.3398	0.0812	0.0510	0.1322	0.0000	880.7298	880.7298	6.3500e-003	0.0000	880.8631
Worker	0.4821	0.7211	7.4737	0.0201	1.6365	0.0131	1.6496	0.4346	0.0121	0.4467	0.0000	1,419.2991	1,419.2991	0.0707	0.0000	1,420.7842
Total	**0.8325**	**4.2004**	**12.3548**	**0.0301**	**1.9209**	**0.0685**	**1.9893**	**0.5158**	**0.0631**	**0.5789**	**0.0000**	**2,300.0289**	**2,300.0289**	**0.0771**	**0.0000**	**2,301.6473**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.2909	2.2721	3.5000e-003		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**308.9841**	**308.9841**	**0.0756**	**0.0000**	**310.5720**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3504	3.4794	4.8810	0.0100	0.2844	0.0554	0.3398	0.0812	0.0510	0.1322	0.0000	880.7298	880.7298	6.3500e-003	0.0000	880.8631
Worker	0.4821	0.7211	7.4737	0.0201	1.6365	0.0131	1.6496	0.4346	0.0121	0.4467	0.0000	1,419.2991	1,419.2991	0.0707	0.0000	1,420.7842
Total	**0.8325**	**4.2004**	**12.3548**	**0.0301**	**1.9209**	**0.0685**	**1.9893**	**0.5158**	**0.0631**	**0.5789**	**0.0000**	**2,300.0289**	**2,300.0289**	**0.0771**	**0.0000**	**2,301.6473**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1011	0.9015	0.7362	1.1500e-003		0.0553	0.0553		0.0520	0.0520	0.0000	100.6728	100.6728	0.0245	0.0000	101.1872
Total	**0.1011**	**0.9015**	**0.7362**	**1.1500e-003**		**0.0553**	**0.0553**		**0.0520**	**0.0520**	**0.0000**	**100.6728**	**100.6728**	**0.0245**	**0.0000**	**101.1872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1092	1.0567	1.5537	3.2800e-003	0.0937	0.0173	0.1110	0.0268	0.0160	0.0427	0.0000	284.5598	284.5598	2.0500e-003	0.0000	284.6029
Worker	0.1459	0.2179	2.2582	6.6000e-003	0.5392	4.2200e-003	0.5435	0.1432	3.9200e-003	0.1471	0.0000	449.8642	449.8642	0.0218	0.0000	450.3222
Total	**0.2551**	**1.2746**	**3.8119**	**9.8800e-003**	**0.6329**	**0.0216**	**0.6545**	**0.1700**	**0.0199**	**0.1898**	**0.0000**	**734.4240**	**734.4240**	**0.0239**	**0.0000**	**734.9252**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.0958	0.7487	1.1500e-003		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	100.6727	100.6727	0.0245	0.0000	101.1871
Total	**0.0140**	**0.0958**	**0.7487**	**1.1500e-003**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**	**0.0000**	**100.6727**	**100.6727**	**0.0245**	**0.0000**	**101.1871**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1092	1.0567	1.5537	3.2800e-003	0.0937	0.0173	0.1110	0.0268	0.0160	0.0427	0.0000	284.5598	284.5598	2.0500e-003	0.0000	284.6029
Worker	0.1459	0.2179	2.2582	6.6000e-003	0.5392	4.2200e-003	0.5435	0.1432	3.9200e-003	0.1471	0.0000	449.8642	449.8642	0.0218	0.0000	450.3222
Total	**0.2551**	**1.2746**	**3.8119**	**9.8800e-003**	**0.6329**	**0.0216**	**0.6545**	**0.1700**	**0.0199**	**0.1898**	**0.0000**	**734.4240**	**734.4240**	**0.0239**	**0.0000**	**734.9252**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.9789	1.4359	2.1700e-003		0.1110	0.1110		0.1021	0.1021	0.0000	201.7608	201.7608	0.0618	0.0000	203.0590
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1860**	**1.9789**	**1.4359**	**2.1700e-003**		**0.1110**	**0.1110**		**0.1021**	**0.1021**	**0.0000**	**201.7608**	**201.7608**	**0.0618**	**0.0000**	**203.0590**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	7.7900e-003	0.0809	2.0000e-004	0.0161	1.3000e-004	0.0162	4.2600e-003	1.2000e-004	4.3800e-003	0.0000	14.4555	14.4555	7.5000e-004	0.0000	14.4712
Total	**5.2600e-003**	**7.7900e-003**	**0.0809**	**2.0000e-004**	**0.0161**	**1.3000e-004**	**0.0162**	**4.2600e-003**	**1.2000e-004**	**4.3800e-003**	**0.0000**	**14.4555**	**14.4555**	**7.5000e-004**	**0.0000**	**14.4712**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0268	0.1160	1.6504	2.1700e-003		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	201.7606	201.7606	0.0618	0.0000	203.0588
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0268**	**0.1160**	**1.6504**	**2.1700e-003**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**201.7606**	**201.7606**	**0.0618**	**0.0000**	**203.0588**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	7.7900e-003	0.0809	2.0000e-004	0.0161	1.3000e-004	0.0162	4.2600e-003	1.2000e-004	4.3800e-003	0.0000	14.4555	14.4555	7.5000e-004	0.0000	14.4712
Total	**5.2600e-003**	**7.7900e-003**	**0.0809**	**2.0000e-004**	**0.0161**	**1.3000e-004**	**0.0162**	**4.2600e-003**	**1.2000e-004**	**4.3800e-003**	**0.0000**	**14.4555**	**14.4555**	**7.5000e-004**	**0.0000**	**14.4712**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1442	0.1233	2.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	16.8515	16.8515	1.7800e-003	0.0000	16.8888
Total	**1.6362**	**0.1442**	**0.1233**	**2.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**16.8515**	**16.8515**	**1.7800e-003**	**0.0000**	**16.8888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0806	0.8364	2.0400e-003	0.1658	1.3600e-003	0.1672	0.0440	1.2500e-003	0.0453	0.0000	149.3883	149.3883	7.7200e-003	0.0000	149.5505
Total	**0.0544**	**0.0806**	**0.8364**	**2.0400e-003**	**0.1658**	**1.3600e-003**	**0.1672**	**0.0440**	**1.2500e-003**	**0.0453**	**0.0000**	**149.3883**	**149.3883**	**7.7200e-003**	**0.0000**	**149.5505**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	8.5000e-003	0.1209	2.0000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	16.8515	16.8515	1.7800e-003	0.0000	16.8888
Total	**1.6162**	**8.5000e-003**	**0.1209**	**2.0000e-004**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**16.8515**	**16.8515**	**1.7800e-003**	**0.0000**	**16.8888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0806	0.8364	2.0400e-003	0.1658	1.3600e-003	0.1672	0.0440	1.2500e-003	0.0453	0.0000	149.3883	149.3883	7.7200e-003	0.0000	149.5505
Total	**0.0544**	**0.0806**	**0.8364**	**2.0400e-003**	**0.1658**	**1.3600e-003**	**0.1672**	**0.0440**	**1.2500e-003**	**0.0453**	**0.0000**	**149.3883**	**149.3883**	**7.7200e-003**	**0.0000**	**149.5505**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2741					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0196	0.1314	0.1215	1.9000e-004		9.8600e-003	9.8600e-003		9.8600e-003	9.8600e-003	0.0000	16.7238	16.7238	1.5900e-003	0.0000	16.7572
Total	**2.2936**	**0.1314**	**0.1215**	**1.9000e-004**		**9.8600e-003**	**9.8600e-003**		**9.8600e-003**	**9.8600e-003**	**0.0000**	**16.7238**	**16.7238**	**1.5900e-003**	**0.0000**	**16.7572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0485	0.0725	0.7516	2.0200e-003	0.1646	1.3100e-003	0.1659	0.0437	1.2100e-003	0.0449	0.0000	142.7230	142.7230	7.1100e-003	0.0000	142.8723
Total	**0.0485**	**0.0725**	**0.7516**	**2.0200e-003**	**0.1646**	**1.3100e-003**	**0.1659**	**0.0437**	**1.2100e-003**	**0.0449**	**0.0000**	**142.7230**	**142.7230**	**7.1100e-003**	**0.0000**	**142.8723**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2741					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	8.4300e-003	0.1200	1.9000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	16.7238	16.7238	1.5900e-003	0.0000	16.7572
Total	**2.2760**	**8.4300e-003**	**0.1200**	**1.9000e-004**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**16.7238**	**16.7238**	**1.5900e-003**	**0.0000**	**16.7572**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0485	0.0725	0.7516	2.0200e-003	0.1646	1.3100e-003	0.1659	0.0437	1.2100e-003	0.0449	0.0000	142.7230	142.7230	7.1100e-003	0.0000	142.8723
Total	**0.0485**	**0.0725**	**0.7516**	**2.0200e-003**	**0.1646**	**1.3100e-003**	**0.1659**	**0.0437**	**1.2100e-003**	**0.0449**	**0.0000**	**142.7230**	**142.7230**	**7.1100e-003**	**0.0000**	**142.8723**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8305	27.8305	2.3500e-003	0.0000	27.8798
Total	**3.8134**	**0.2001**	**0.2007**	**3.2000e-004**		**0.0140**	**0.0140**		**0.0140**	**0.0140**	**0.0000**	**27.8305**	**27.8305**	**2.3500e-003**	**0.0000**	**27.8798**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.1107	1.1469	3.3500e-003	0.2739	2.1500e-003	0.2760	0.0727	1.9900e-003	0.0747	0.0000	228.4697	228.4697	0.0111	0.0000	228.7024
Total	**0.0741**	**0.1107**	**1.1469**	**3.3500e-003**	**0.2739**	**2.1500e-003**	**0.2760**	**0.0727**	**1.9900e-003**	**0.0747**	**0.0000**	**228.4697**	**228.4697**	**0.0111**	**0.0000**	**228.7024**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2400e-003	0.0140	0.1997	3.2000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	27.8304	27.8304	2.3500e-003	0.0000	27.8798
Total	**3.7876**	**0.0140**	**0.1997**	**3.2000e-004**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**27.8304**	**27.8304**	**2.3500e-003**	**0.0000**	**27.8798**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.1107	1.1469	3.3500e-003	0.2739	2.1500e-003	0.2760	0.0727	1.9900e-003	0.0747	0.0000	228.4697	228.4697	0.0111	0.0000	228.7024
Total	**0.0741**	**0.1107**	**1.1469**	**3.3500e-003**	**0.2739**	**2.1500e-003**	**0.2760**	**0.0727**	**1.9900e-003**	**0.0747**	**0.0000**	**228.4697**	**228.4697**	**0.0111**	**0.0000**	**228.7024**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0347	0.3690	0.3116	4.8000e-004		0.0202	0.0202		0.0186	0.0186	0.0000	43.7928	43.7928	0.0136	0.0000	44.0791
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0347**	**0.3690**	**0.3116**	**4.8000e-004**		**0.0202**	**0.0202**		**0.0186**	**0.0186**	**0.0000**	**43.7928**	**43.7928**	**0.0136**	**0.0000**	**44.0791**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5600e-003	0.0162	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.0687	3.0687	1.5000e-004	0.0000	3.0719
Total	**1.0400e-003**	**1.5600e-003**	**0.0162**	**4.0000e-005**	**3.5400e-003**	**3.0000e-005**	**3.5700e-003**	**9.4000e-004**	**3.0000e-005**	**9.7000e-004**	**0.0000**	**3.0687**	**3.0687**	**1.5000e-004**	**0.0000**	**3.0719**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9000e-003	0.0256	0.3639	4.8000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	43.7927	43.7927	0.0136	0.0000	44.0790
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.9000e-003**	**0.0256**	**0.3639**	**4.8000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**43.7927**	**43.7927**	**0.0136**	**0.0000**	**44.0790**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5600e-003	0.0162	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.0687	3.0687	1.5000e-004	0.0000	3.0719
Total	**1.0400e-003**	**1.5600e-003**	**0.0162**	**4.0000e-005**	**3.5400e-003**	**3.0000e-005**	**3.5700e-003**	**9.4000e-004**	**3.0000e-005**	**9.7000e-004**	**0.0000**	**3.0687**	**3.0687**	**1.5000e-004**	**0.0000**	**3.0719**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1704	1.7848	1.7166	2.6700e-003		0.0967	0.0967		0.0890	0.0890	0.0000	239.4716	239.4716	0.0758	0.0000	241.0627
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1704**	**1.7848**	**1.7166**	**2.6700e-003**		**0.0967**	**0.0967**		**0.0890**	**0.0890**	**0.0000**	**239.4716**	**239.4716**	**0.0758**	**0.0000**	**241.0627**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3200e-003	7.9500e-003	0.0824	2.4000e-004	0.0197	1.5000e-004	0.0198	5.2200e-003	1.4000e-004	5.3700e-003	0.0000	16.4069	16.4069	8.0000e-004	0.0000	16.4236
Total	**5.3200e-003**	**7.9500e-003**	**0.0824**	**2.4000e-004**	**0.0197**	**1.5000e-004**	**0.0198**	**5.2200e-003**	**1.4000e-004**	**5.3700e-003**	**0.0000**	**16.4069**	**16.4069**	**8.0000e-004**	**0.0000**	**16.4236**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0328	0.1422	2.0229	2.6700e-003		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	239.4714	239.4714	0.0758	0.0000	241.0624
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0328**	**0.1422**	**2.0229**	**2.6700e-003**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**239.4714**	**239.4714**	**0.0758**	**0.0000**	**241.0624**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3200e-003	7.9500e-003	0.0824	2.4000e-004	0.0197	1.5000e-004	0.0198	5.2200e-003	1.4000e-004	5.3700e-003	0.0000	16.4069	16.4069	8.0000e-004	0.0000	16.4236
Total	**5.3200e-003**	**7.9500e-003**	**0.0824**	**2.4000e-004**	**0.0197**	**1.5000e-004**	**0.0198**	**5.2200e-003**	**1.4000e-004**	**5.3700e-003**	**0.0000**	**16.4069**	**16.4069**	**8.0000e-004**	**0.0000**	**16.4236**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0679	0.0000	0.0679	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.8668	1.6943	2.2000e-003		0.0905	0.0905		0.0842	0.0842	0.0000	196.0497	196.0497	0.0548	0.0000	197.1995
Total	**0.1827**	**1.8668**	**1.6943**	**2.2000e-003**	**0.0679**	**0.0905**	**0.1584**	**0.0103**	**0.0842**	**0.0945**	**0.0000**	**196.0497**	**196.0497**	**0.0548**	**0.0000**	**197.1995**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9900e-003	0.0721	0.0636	2.3000e-004	5.3900e-003	1.2500e-003	6.6300e-003	1.4800e-003	1.1500e-003	2.6300e-003	0.0000	20.0584	20.0584	1.5000e-004	0.0000	20.0615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e-003	3.6600e-003	0.0379	1.1000e-004	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.5513	7.5513	3.7000e-004	0.0000	7.5590
Total	**7.4400e-003**	**0.0757**	**0.1015**	**3.4000e-004**	**0.0144**	**1.3200e-003**	**0.0158**	**3.8800e-003**	**1.2200e-003**	**5.1000e-003**	**0.0000**	**27.6097**	**27.6097**	**5.2000e-004**	**0.0000**	**27.6205**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0306	0.0000	0.0306	4.6300e-003	0.0000	4.6300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0261	0.1129	1.3104	2.2000e-003		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	196.0495	196.0495	0.0548	0.0000	197.1993
Total	**0.0261**	**0.1129**	**1.3104**	**2.2000e-003**	**0.0306**	**5.2000e-004**	**0.0311**	**4.6300e-003**	**5.2000e-004**	**5.1500e-003**	**0.0000**	**196.0495**	**196.0495**	**0.0548**	**0.0000**	**197.1993**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9900e-003	0.0721	0.0636	2.3000e-004	5.3900e-003	1.2500e-003	6.6300e-003	1.4800e-003	1.1500e-003	2.6300e-003	0.0000	20.0584	20.0584	1.5000e-004	0.0000	20.0615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e-003	3.6600e-003	0.0379	1.1000e-004	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.5513	7.5513	3.7000e-004	0.0000	7.5590
Total	**7.4400e-003**	**0.0757**	**0.1015**	**3.4000e-004**	**0.0144**	**1.3200e-003**	**0.0158**	**3.8800e-003**	**1.2200e-003**	**5.1000e-003**	**0.0000**	**27.6097**	**27.6097**	**5.2000e-004**	**0.0000**	**27.6205**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2042	0.0000	0.2042	0.1100	0.0000	0.1100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1614	1.7885	1.3295	2.0400e-003		0.0827	0.0827		0.0761	0.0761	0.0000	182.9549	182.9549	0.0579	0.0000	184.1705
Total	**0.1614**	**1.7885**	**1.3295**	**2.0400e-003**	**0.2042**	**0.0827**	**0.2869**	**0.1100**	**0.0761**	**0.1861**	**0.0000**	**182.9549**	**182.9549**	**0.0579**	**0.0000**	**184.1705**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0677	0.9781	0.8635	3.1200e-003	0.0731	0.0169	0.0900	0.0201	0.0156	0.0356	0.0000	272.2891	272.2891	2.0200e-003	0.0000	272.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	2.9300e-003	0.0303	9.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.0410	6.0410	2.9000e-004	0.0000	6.0472
Total	**0.0697**	**0.9810**	**0.8938**	**3.2100e-003**	**0.0803**	**0.0170**	**0.0973**	**0.0220**	**0.0156**	**0.0376**	**0.0000**	**278.3302**	**278.3302**	**2.3100e-003**	**0.0000**	**278.3788**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0919	0.0000	0.0919	0.0495	0.0000	0.0495	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0250	0.1082	1.1477	2.0400e-003		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	182.9547	182.9547	0.0579	0.0000	184.1703
Total	**0.0250**	**0.1082**	**1.1477**	**2.0400e-003**	**0.0919**	**5.0000e-004**	**0.0924**	**0.0495**	**5.0000e-004**	**0.0500**	**0.0000**	**182.9547**	**182.9547**	**0.0579**	**0.0000**	**184.1703**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0677	0.9781	0.8635	3.1200e-003	0.0731	0.0169	0.0900	0.0201	0.0156	0.0356	0.0000	272.2891	272.2891	2.0200e-003	0.0000	272.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	2.9300e-003	0.0303	9.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.0410	6.0410	2.9000e-004	0.0000	6.0472
Total	**0.0697**	**0.9810**	**0.8938**	**3.2100e-003**	**0.0803**	**0.0170**	**0.0973**	**0.0220**	**0.0156**	**0.0376**	**0.0000**	**278.3302**	**278.3302**	**2.3100e-003**	**0.0000**	**278.3788**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0259	0.2306	0.1883	2.9000e-004		0.0141	0.0141		0.0133	0.0133	0.0000	25.7535	25.7535	6.2700e-003	0.0000	25.8851
Total	**0.0259**	**0.2306**	**0.1883**	**2.9000e-004**		**0.0141**	**0.0141**		**0.0133**	**0.0133**	**0.0000**	**25.7535**	**25.7535**	**6.2700e-003**	**0.0000**	**25.8851**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0279	0.2703	0.3975	8.4000e-004	0.0240	4.4300e-003	0.0284	6.8400e-003	4.0800e-003	0.0109	0.0000	72.7944	72.7944	5.2000e-004	0.0000	72.8054
Worker	0.0373	0.0557	0.5777	1.6900e-003	0.1379	1.0800e-003	0.1390	0.0366	1.0000e-003	0.0376	0.0000	115.0815	115.0815	5.5800e-003	0.0000	115.1987
Total	**0.0652**	**0.3261**	**0.9751**	**2.5300e-003**	**0.1619**	**5.5100e-003**	**0.1674**	**0.0435**	**5.0800e-003**	**0.0486**	**0.0000**	**187.8759**	**187.8759**	**6.1000e-003**	**0.0000**	**188.0041**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.5900e-003	0.0245	0.1915	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.7535	25.7535	6.2700e-003	0.0000	25.8851
Total	**3.5900e-003**	**0.0245**	**0.1915**	**2.9000e-004**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**25.7535**	**25.7535**	**6.2700e-003**	**0.0000**	**25.8851**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0279	0.2703	0.3975	8.4000e-004	0.0240	4.4300e-003	0.0284	6.8400e-003	4.0800e-003	0.0109	0.0000	72.7944	72.7944	5.2000e-004	0.0000	72.8054
Worker	0.0373	0.0557	0.5777	1.6900e-003	0.1379	1.0800e-003	0.1390	0.0366	1.0000e-003	0.0376	0.0000	115.0815	115.0815	5.5800e-003	0.0000	115.1987
Total	**0.0652**	**0.3261**	**0.9751**	**2.5300e-003**	**0.1619**	**5.5100e-003**	**0.1674**	**0.0435**	**5.0800e-003**	**0.0486**	**0.0000**	**187.8759**	**187.8759**	**6.1000e-003**	**0.0000**	**188.0041**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0686	0.6202	0.5463	8.7000e-004		0.0362	0.0362		0.0340	0.0340	0.0000	74.9612	74.9612	0.0183	0.0000	75.3447
Total	**0.0686**	**0.6202**	**0.5463**	**8.7000e-004**		**0.0362**	**0.0362**		**0.0340**	**0.0340**	**0.0000**	**74.9612**	**74.9612**	**0.0183**	**0.0000**	**75.3447**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0782	0.6967	1.1387	2.4800e-003	0.0708	0.0120	0.0828	0.0202	0.0110	0.0313	0.0000	210.2300	210.2300	1.5200e-003	0.0000	210.2618
Worker	0.1033	0.1526	1.5882	4.9900e-003	0.4076	3.1700e-003	0.4107	0.1082	2.9400e-003	0.1112	0.0000	326.2020	326.2020	0.0156	0.0000	326.5299
Total	**0.1815**	**0.8493**	**2.7269**	**7.4700e-003**	**0.4784**	**0.0152**	**0.4936**	**0.1285**	**0.0140**	**0.1424**	**0.0000**	**536.4320**	**536.4320**	**0.0171**	**0.0000**	**536.7918**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.0724	0.5659	8.7000e-004		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	74.9611	74.9611	0.0183	0.0000	75.3447
Total	**0.0106**	**0.0724**	**0.5659**	**8.7000e-004**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**74.9611**	**74.9611**	**0.0183**	**0.0000**	**75.3447**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0782	0.6967	1.1387	2.4800e-003	0.0708	0.0120	0.0828	0.0202	0.0110	0.0313	0.0000	210.2300	210.2300	1.5200e-003	0.0000	210.2618
Worker	0.1033	0.1526	1.5882	4.9900e-003	0.4076	3.1700e-003	0.4107	0.1082	2.9400e-003	0.1112	0.0000	326.2020	326.2020	0.0156	0.0000	326.5299
Total	**0.1815**	**0.8493**	**2.7269**	**7.4700e-003**	**0.4784**	**0.0152**	**0.4936**	**0.1285**	**0.0140**	**0.1424**	**0.0000**	**536.4320**	**536.4320**	**0.0171**	**0.0000**	**536.7918**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1393	0.0000	0.1393	0.0211	0.0000	0.0211	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2013	2.0160	1.9247	2.6000e-003		0.0968	0.0968		0.0901	0.0901	0.0000	227.4441	227.4441	0.0645	0.0000	228.7980
Total	**0.2013**	**2.0160**	**1.9247**	**2.6000e-003**	**0.1393**	**0.0968**	**0.2361**	**0.0211**	**0.0901**	**0.1112**	**0.0000**	**227.4441**	**227.4441**	**0.0645**	**0.0000**	**228.7980**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.1317	0.1287	4.7000e-004	0.0110	2.5300e-003	0.0136	3.0300e-003	2.3300e-003	5.3600e-003	0.0000	40.1810	40.1810	3.1000e-004	0.0000	40.1874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7100e-003	4.0100e-003	0.0417	1.3000e-004	0.0107	8.0000e-005	0.0108	2.8400e-003	8.0000e-005	2.9200e-003	0.0000	8.5617	8.5617	4.1000e-004	0.0000	8.5703
Total	**0.0127**	**0.1357**	**0.1703**	**6.0000e-004**	**0.0217**	**2.6100e-003**	**0.0244**	**5.8700e-003**	**2.4100e-003**	**8.2800e-003**	**0.0000**	**48.7427**	**48.7427**	**7.2000e-004**	**0.0000**	**48.7577**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0627	0.0000	0.0627	9.4900e-003	0.0000	9.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0308	0.1335	1.5487	2.6000e-003		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	227.4439	227.4439	0.0645	0.0000	228.7977
Total	**0.0308**	**0.1335**	**1.5487**	**2.6000e-003**	**0.0627**	**6.2000e-004**	**0.0633**	**9.4900e-003**	**6.2000e-004**	**0.0101**	**0.0000**	**227.4439**	**227.4439**	**0.0645**	**0.0000**	**228.7977**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.1317	0.1287	4.7000e-004	0.0110	2.5300e-003	0.0136	3.0300e-003	2.3300e-003	5.3600e-003	0.0000	40.1810	40.1810	3.1000e-004	0.0000	40.1874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7100e-003	4.0100e-003	0.0417	1.3000e-004	0.0107	8.0000e-005	0.0108	2.8400e-003	8.0000e-005	2.9200e-003	0.0000	8.5617	8.5617	4.1000e-004	0.0000	8.5703
Total	**0.0127**	**0.1357**	**0.1703**	**6.0000e-004**	**0.0217**	**2.6100e-003**	**0.0244**	**5.8700e-003**	**2.4100e-003**	**8.2800e-003**	**0.0000**	**48.7427**	**48.7427**	**7.2000e-004**	**0.0000**	**48.7577**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4761	0.0000	0.4761	0.2567	0.0000	0.2567	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3504	3.8026	2.9588	4.7500e-003		0.1742	0.1742		0.1602	0.1602	0.0000	417.5622	417.5622	0.1351	0.0000	420.3983
Total	**0.3504**	**3.8026**	**2.9588**	**4.7500e-003**	**0.4761**	**0.1742**	**0.6502**	**0.2567**	**0.1602**	**0.4170**	**0.0000**	**417.5622**	**417.5622**	**0.1351**	**0.0000**	**420.3983**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1944	2.5572	2.4990	9.1500e-003	0.2144	0.0492	0.2636	0.0588	0.0453	0.1041	0.0000	780.5158	780.5158	5.9400e-003	0.0000	780.6405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3300e-003	0.0658	2.1000e-004	0.0169	1.3000e-004	0.0170	4.4900e-003	1.2000e-004	4.6100e-003	0.0000	13.5232	13.5232	6.5000e-004	0.0000	13.5367
Total	**0.1987**	**2.5636**	**2.5648**	**9.3600e-003**	**0.2313**	**0.0494**	**0.2807**	**0.0633**	**0.0454**	**0.1087**	**0.0000**	**794.0390**	**794.0390**	**6.5900e-003**	**0.0000**	**794.1773**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2142	0.0000	0.2142	0.1155	0.0000	0.1155	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0582	0.2524	2.6780	4.7500e-003		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	417.5617	417.5617	0.1351	0.0000	420.3978
Total	**0.0582**	**0.2524**	**2.6780**	**4.7500e-003**	**0.2142**	**1.1600e-003**	**0.2154**	**0.1155**	**1.1600e-003**	**0.1167**	**0.0000**	**417.5617**	**417.5617**	**0.1351**	**0.0000**	**420.3978**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1944	2.5572	2.4990	9.1500e-003	0.2144	0.0492	0.2636	0.0588	0.0453	0.1041	0.0000	780.5158	780.5158	5.9400e-003	0.0000	780.6405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3300e-003	0.0658	2.1000e-004	0.0169	1.3000e-004	0.0170	4.4900e-003	1.2000e-004	4.6100e-003	0.0000	13.5232	13.5232	6.5000e-004	0.0000	13.5367
Total	**0.1987**	**2.5636**	**2.5648**	**9.3600e-003**	**0.2313**	**0.0494**	**0.2807**	**0.0633**	**0.0454**	**0.1087**	**0.0000**	**794.0390**	**794.0390**	**6.5900e-003**	**0.0000**	**794.1773**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4199	0.3698	5.9000e-004		0.0245	0.0245		0.0230	0.0230	0.0000	50.7430	50.7430	0.0124	0.0000	51.0026
Total	**0.0465**	**0.4199**	**0.3698**	**5.9000e-004**		**0.0245**	**0.0245**		**0.0230**	**0.0230**	**0.0000**	**50.7430**	**50.7430**	**0.0124**	**0.0000**	**51.0026**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0530	0.4716	0.7708	1.6800e-003	0.0479	8.1200e-003	0.0561	0.0137	7.4700e-003	0.0212	0.0000	142.3095	142.3095	1.0300e-003	0.0000	142.3311
Worker	0.0699	0.1033	1.0751	3.3800e-003	0.2759	2.1500e-003	0.2780	0.0733	1.9900e-003	0.0753	0.0000	220.8137	220.8137	0.0106	0.0000	221.0356
Total	**0.1229**	**0.5749**	**1.8459**	**5.0600e-003**	**0.3238**	**0.0103**	**0.3341**	**0.0870**	**9.4600e-003**	**0.0964**	**0.0000**	**363.1232**	**363.1232**	**0.0116**	**0.0000**	**363.3667**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.1800e-003	0.0490	0.3830	5.9000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	50.7429	50.7429	0.0124	0.0000	51.0025
Total	**7.1800e-003**	**0.0490**	**0.3830**	**5.9000e-004**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**50.7429**	**50.7429**	**0.0124**	**0.0000**	**51.0025**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0530	0.4716	0.7708	1.6800e-003	0.0479	8.1200e-003	0.0561	0.0137	7.4700e-003	0.0212	0.0000	142.3095	142.3095	1.0300e-003	0.0000	142.3311
Worker	0.0699	0.1033	1.0751	3.3800e-003	0.2759	2.1500e-003	0.2780	0.0733	1.9900e-003	0.0753	0.0000	220.8137	220.8137	0.0106	0.0000	221.0356
Total	**0.1229**	**0.5749**	**1.8459**	**5.0600e-003**	**0.3238**	**0.0103**	**0.3341**	**0.0870**	**9.4600e-003**	**0.0964**	**0.0000**	**363.1232**	**363.1232**	**0.0116**	**0.0000**	**363.3667**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3030	2.3748	4.4564	9.9400e-003	0.2844	0.0439	0.3283	0.0812	0.0404	0.1216	0.0000	843.7771	843.7771	6.1500e-003	0.0000	843.9061
Worker	0.3922	0.5730	5.9895	0.0201	1.6365	0.0128	1.6493	0.4346	0.0118	0.4464	0.0000	1,289.4781	1,289.4781	0.0600	0.0000	1,290.7384
Total	**0.6952**	**2.9478**	**10.4459**	**0.0300**	**1.9209**	**0.0566**	**1.9775**	**0.5158**	**0.0522**	**0.5680**	**0.0000**	**2,133.2552**	**2,133.2552**	**0.0662**	**0.0000**	**2,134.6445**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.2909	2.2721	3.5000e-003		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3030	2.3748	4.4564	9.9400e-003	0.2844	0.0439	0.3283	0.0812	0.0404	0.1216	0.0000	843.7771	843.7771	6.1500e-003	0.0000	843.9061
Worker	0.3922	0.5730	5.9895	0.0201	1.6365	0.0128	1.6493	0.4346	0.0118	0.4464	0.0000	1,289.4781	1,289.4781	0.0600	0.0000	1,290.7384
Total	**0.6952**	**2.9478**	**10.4459**	**0.0300**	**1.9209**	**0.0566**	**1.9775**	**0.5158**	**0.0522**	**0.5680**	**0.0000**	**2,133.2552**	**2,133.2552**	**0.0662**	**0.0000**	**2,134.6445**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0348	0.3185	0.3347	5.5000e-004		0.0165	0.0165		0.0155	0.0155	0.0000	47.3068	47.3068	0.0113	0.0000	47.5445
Total	**0.0348**	**0.3185**	**0.3347**	**5.5000e-004**		**0.0165**	**0.0165**		**0.0155**	**0.0155**	**0.0000**	**47.3068**	**47.3068**	**0.0113**	**0.0000**	**47.5445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0465	0.3386	0.6830	1.5600e-003	0.0447	6.8200e-003	0.0515	0.0128	6.2700e-003	0.0190	0.0000	132.4287	132.4287	9.9000e-004	0.0000	132.4494
Worker	0.0583	0.0844	0.8846	3.1500e-003	0.2571	2.0000e-003	0.2591	0.0683	1.8600e-003	0.0701	0.0000	199.1965	199.1965	9.0300e-003	0.0000	199.3861
Total	**0.1048**	**0.4230**	**1.5676**	**4.7100e-003**	**0.3018**	**8.8200e-003**	**0.3106**	**0.0810**	**8.1300e-003**	**0.0892**	**0.0000**	**331.6252**	**331.6252**	**0.0100**	**0.0000**	**331.8355**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.6900e-003	0.0457	0.3569	5.5000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	47.3068	47.3068	0.0113	0.0000	47.5444
Total	**6.6900e-003**	**0.0457**	**0.3569**	**5.5000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**47.3068**	**47.3068**	**0.0113**	**0.0000**	**47.5444**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0465	0.3386	0.6830	1.5600e-003	0.0447	6.8200e-003	0.0515	0.0128	6.2700e-003	0.0190	0.0000	132.4287	132.4287	9.9000e-004	0.0000	132.4494
Worker	0.0583	0.0844	0.8846	3.1500e-003	0.2571	2.0000e-003	0.2591	0.0683	1.8600e-003	0.0701	0.0000	199.1965	199.1965	9.0300e-003	0.0000	199.3861
Total	**0.1048**	**0.4230**	**1.5676**	**4.7100e-003**	**0.3018**	**8.8200e-003**	**0.3106**	**0.0810**	**8.1300e-003**	**0.0892**	**0.0000**	**331.6252**	**331.6252**	**0.0100**	**0.0000**	**331.8355**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.5348					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6300e-003	0.0672	0.0800	1.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	11.2343	11.2343	7.7000e-004	0.0000	11.2505
Total	**2.5444**	**0.0672**	**0.0800**	**1.3000e-004**		**4.1400e-003**	**4.1400e-003**		**4.1400e-003**	**4.1400e-003**	**0.0000**	**11.2343**	**11.2343**	**7.7000e-004**	**0.0000**	**11.2505**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0387	0.4046	1.3600e-003	0.1106	8.6000e-004	0.1114	0.0294	8.0000e-004	0.0302	0.0000	87.1055	87.1055	4.0500e-003	0.0000	87.1906
Total	**0.0265**	**0.0387**	**0.4046**	**1.3600e-003**	**0.1106**	**8.6000e-004**	**0.1114**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**87.1055**	**87.1055**	**4.0500e-003**	**0.0000**	**87.1906**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.5348					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	5.6700e-003	0.0806	1.3000e-004		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	11.2343	11.2343	7.7000e-004	0.0000	11.2505
Total	**2.5361**	**5.6700e-003**	**0.0806**	**1.3000e-004**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**11.2343**	**11.2343**	**7.7000e-004**	**0.0000**	**11.2505**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0387	0.4046	1.3600e-003	0.1106	8.6000e-004	0.1114	0.0294	8.0000e-004	0.0302	0.0000	87.1055	87.1055	4.0500e-003	0.0000	87.1906
Total	**0.0265**	**0.0387**	**0.4046**	**1.3600e-003**	**0.1106**	**8.6000e-004**	**0.1114**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**87.1055**	**87.1055**	**4.0500e-003**	**0.0000**	**87.1906**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3206					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1756
Total	**4.3359**	**0.1056**	**0.1360**	**2.2000e-004**		**6.1300e-003**	**6.1300e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**19.1494**	**19.1494**	**1.2500e-003**	**0.0000**	**19.1756**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0427	0.0619	0.6484	2.3100e-003	0.1884	1.4700e-003	0.1899	0.0500	1.3600e-003	0.0514	0.0000	146.0086	146.0086	6.6200e-003	0.0000	146.1475
Total	**0.0427**	**0.0619**	**0.6484**	**2.3100e-003**	**0.1884**	**1.4700e-003**	**0.1899**	**0.0500**	**1.3600e-003**	**0.0514**	**0.0000**	**146.0086**	**146.0086**	**6.6200e-003**	**0.0000**	**146.1475**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3206					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2300e-003	9.6600e-003	0.1374	2.2000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1756
Total	**4.3228**	**9.6600e-003**	**0.1374**	**2.2000e-004**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**19.1494**	**19.1494**	**1.2500e-003**	**0.0000**	**19.1756**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0427	0.0619	0.6484	2.3100e-003	0.1884	1.4700e-003	0.1899	0.0500	1.3600e-003	0.0514	0.0000	146.0086	146.0086	6.6200e-003	0.0000	146.1475
Total	**0.0427**	**0.0619**	**0.6484**	**2.3100e-003**	**0.1884**	**1.4700e-003**	**0.1899**	**0.0500**	**1.3600e-003**	**0.0514**	**0.0000**	**146.0086**	**146.0086**	**6.6200e-003**	**0.0000**	**146.1475**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4692	0.6141	9.6000e-004		0.0240	0.0240		0.0221	0.0221	0.0000	84.2861	84.2861	0.0273	0.0000	84.8586
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0465**	**0.4692**	**0.6141**	**9.6000e-004**		**0.0240**	**0.0240**		**0.0221**	**0.0221**	**0.0000**	**84.2861**	**84.2861**	**0.0273**	**0.0000**	**84.8586**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	2.3200e-003	0.0244	9.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	5.4833	5.4833	2.5000e-004	0.0000	5.4885
Total	**1.6100e-003**	**2.3200e-003**	**0.0244**	**9.0000e-005**	**7.0800e-003**	**6.0000e-005**	**7.1300e-003**	**1.8800e-003**	**5.0000e-005**	**1.9300e-003**	**0.0000**	**5.4833**	**5.4833**	**2.5000e-004**	**0.0000**	**5.4885**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.0512	0.7279	9.6000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	84.2860	84.2860	0.0273	0.0000	84.8585
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.0512**	**0.7279**	**9.6000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**84.2860**	**84.2860**	**0.0273**	**0.0000**	**84.8585**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	2.3200e-003	0.0244	9.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	5.4833	5.4833	2.5000e-004	0.0000	5.4885
Total	**1.6100e-003**	**2.3200e-003**	**0.0244**	**9.0000e-005**	**7.0800e-003**	**6.0000e-005**	**7.1300e-003**	**1.8800e-003**	**5.0000e-005**	**1.9300e-003**	**0.0000**	**5.4833**	**5.4833**	**2.5000e-004**	**0.0000**	**5.4885**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.3592	14.8803	67.5822	0.1886	12.5192	0.2596	12.7789	3.3506	0.2396	3.5902	0.0000	12,957.7687	12,957.7687	0.4483	0.0000	12,967.1832
Unmitigated	8.1561	20.5618	87.1250	0.2799	18.8700	0.3768	19.2468	5.0503	0.3476	5.3980	0.0000	19,227.3768	19,227.3768	0.6474	0.0000	19,240.9722

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,176.00	1,432.00	1214.00	4,162,091	2,881,466
Condo/Townhouse High Rise	3,410.40	4,152.80	3520.60	12,070,064	8,356,252
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	6,126.41	0.00	0.00	13,513,671	8,716,444
High Turnover (Sit Down Restaurant)	1,017.20	1,266.96	1054.72	1,442,202	950,727
Hotel	1,634.00	1,638.00	1190.00	3,749,016	2,465,413
Library	3,533.72	4,282.60	2345.08	8,762,925	5,655,704
Regional Shopping Center	3,238.08	1,599.04	807.68	5,746,096	3,781,132
Total	20,246.76	14,482.35	10,243.03	49,765,327	33,016,588

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,044.0518	3,044.0518	0.1399	0.0290	3,055.9648
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,790.6450	5,790.6450	0.2662	0.0551	5,813.3068
NaturalGas Mitigated	0.1288	1.1429	0.7796	7.0200e-003		0.0890	0.0890		0.0890	0.0890	0.0000	1,274.4601	1,274.4601	0.0244	0.0234	1,282.2162
NaturalGas Unmitigated	0.1534	1.3613	0.9289	8.3700e-003		0.1060	0.1060		0.1060	0.1060	0.0000	1,517.9297	1,517.9297	0.0291	0.0278	1,527.1676

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.88121e+006	0.0155	0.1328	0.0565	8.5000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	153.7521	153.7521	2.9500e-003	2.8200e-003	154.6878
Condo/Townhouse High Rise	8.3555e+006	0.0451	0.3850	0.1638	2.4600e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.8812	445.8812	8.5500e-003	8.1700e-003	448.5947
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	6.29342e+006	0.0339	0.3085	0.2591	1.8500e-003		0.0235	0.0235		0.0235	0.0235	0.0000	335.8407	335.8407	6.4400e-003	6.1600e-003	337.8846
High Turnover (Sit Down Restaurant)	1.86408e+006	0.0101	0.0914	0.0768	5.5000e-004		6.9400e-003	6.9400e-003		6.9400e-003	6.9400e-003	0.0000	99.4744	99.4744	1.9100e-003	1.8200e-003	100.0798
Hotel	7.26581e+006	0.0392	0.3562	0.2992	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	387.7312	387.7312	7.4300e-003	7.1100e-003	390.0909
Library	1.73052e+006	9.3300e-003	0.0848	0.0713	5.1000e-004		6.4500e-003	6.4500e-003		6.4500e-003	6.4500e-003	0.0000	92.3471	92.3471	1.7700e-003	1.6900e-003	92.9092
Regional Shopping Center	54400	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9030	2.9030	6.0000e-005	5.0000e-005	2.9207
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1534**	**1.3613**	**0.9289**	**8.3800e-003**		**0.1060**	**0.1060**		**0.1060**	**0.1060**	**0.0000**	**1,517.9297**	**1,517.9297**	**0.0291**	**0.0278**	**1,527.1676**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.423e+006	0.0131	0.1117	0.0475	7.1000e-004		9.0300e-003	9.0300e-003		9.0300e-003	9.0300e-003	0.0000	129.3008	129.3008	2.4800e-003	2.3700e-003	130.0877
Condo/Townhouse High Rise	7.02671e+006	0.0379	0.3238	0.1378	2.0700e-003		0.0262	0.0262		0.0262	0.0262	0.0000	374.9722	374.9722	7.1900e-003	6.8700e-003	377.2542
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	5.07965e+006	0.0274	0.2490	0.2092	1.4900e-003		0.0189	0.0189		0.0189	0.0189	0.0000	271.0693	271.0693	5.2000e-003	4.9700e-003	272.7189
High Turnover (Sit Down Restaurant)	1.79171e+006	9.6600e-003	0.0878	0.0738	5.3000e-004		6.6800e-003	6.6800e-003		6.6800e-003	6.6800e-003	0.0000	95.6126	95.6126	1.8300e-003	1.7500e-003	96.1945
Hotel	6.04845e+006	0.0326	0.2965	0.2491	1.7800e-003		0.0225	0.0225		0.0225	0.0225	0.0000	322.7684	322.7684	6.1900e-003	5.9200e-003	324.7327
Library	1.4663e+006	7.9100e-003	0.0719	0.0604	4.3000e-004		5.4600e-003	5.4600e-003		5.4600e-003	5.4600e-003	0.0000	78.2471	78.2471	1.5000e-003	1.4300e-003	78.7233
Regional Shopping Center	46656	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4897	2.4897	5.0000e-005	5.0000e-005	2.5049
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1288**	**1.1429**	**0.7796**	**7.0200e-003**		**0.0890**	**0.0890**		**0.0890**	**0.0890**	**0.0000**	**1,274.4601**	**1,274.4601**	**0.0244**	**0.0234**	**1,282.2162**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	2.55077e+006	729.9460	0.0336	6.9400e-003	732.8027
Condo/Townhouse High Rise	879576	251.7055	0.0116	2.3900e-003	252.6906
Enclosed Parking with Elevator	1.37226e+006	392.6965	0.0181	3.7300e-003	394.2334
Enclosed Parking with Elevator	1.9546e+006	559.3418	0.0257	5.3200e-003	561.5308
Enclosed Parking with Elevator	674000	192.8765	8.8700e-003	1.8300e-003	193.6313
Government (Civic Center)	8.36627e+006	2,394.1501	0.1101	0.0228	2,403.5197
High Turnover (Sit Down Restaurant)	375280	107.3927	4.9400e-003	1.0200e-003	107.8130
Hotel	2.4684e+006	706.3744	0.0325	6.7200e-003	709.1388
Library	1.1086e+006	317.2446	0.0146	3.0200e-003	318.4862
Regional Shopping Center	485440	138.9169	6.3900e-003	1.3200e-003	139.4605
Total		**5,790.6450**	**0.2662**	**0.0551**	**5,813.3068**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	1.563e+006	447.2776	0.0206	4.2500e-003	449.0280
Condo/Townhouse High Rise	538964	154.2336	7.0900e-003	1.4700e-003	154.8372
Enclosed Parking with Elevator	298763	85.4959	3.9300e-003	8.1000e-004	85.8305
Enclosed Parking with Elevator	608280	174.0697	8.0000e-003	1.6600e-003	174.7510
Enclosed Parking with Elevator	866411	247.9382	0.0114	2.3600e-003	248.9085
Government (Civic Center)	4.39985e+006	1,259.0915	0.0579	0.0120	1,264.0189
High Turnover (Sit Down Restaurant)	229788	65.7577	3.0200e-003	6.3000e-004	66.0151
Hotel	1.30865e+006	374.4927	0.0172	3.5600e-003	375.9583
Library	609788	174.5010	8.0200e-003	1.6600e-003	175.1839
Regional Shopping Center	213840	61.1939	2.8100e-003	5.8000e-004	61.4334
Total		**3,044.0518**	**0.1399**	**0.0290**	**3,055.9648**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	11.1155	0.0837	7.1245	3.5000e-004		0.0388	0.0388		0.0388	0.0388	0.0000	11.2127	11.2127	9.8600e-003	0.0000	11.4198
Unmitigated	11.7277	0.0936	8.1014	4.3000e-004		0.0445	0.0445		0.0445	0.0445	0.0000	13.1990	13.1990	0.0130	0.0000	13.4714

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.0302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.4489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2487	0.0936	8.1014	4.3000e-004		0.0445	0.0445		0.0445	0.0445	0.0000	13.1990	13.1990	0.0130	0.0000	13.4714
Total	**11.7277**	**0.0936**	**8.1014**	**4.3000e-004**		**0.0445**	**0.0445**		**0.0445**	**0.0445**	**0.0000**	**13.1990**	**13.1990**	**0.0130**	**0.0000**	**13.4714**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.4768					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.4489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1899	0.0837	7.1245	3.5000e-004		0.0388	0.0388		0.0388	0.0388	0.0000	11.2127	11.2127	9.8600e-003	0.0000	11.4198
Total	**11.1155**	**0.0837**	**7.1245**	**3.5000e-004**		**0.0388**	**0.0388**		**0.0388**	**0.0388**	**0.0000**	**11.2127**	**11.2127**	**9.8600e-003**	**0.0000**	**11.4198**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	911.7910	4.6780	0.1176	1,046.4854
Unmitigated	1,077.5393	5.8457	0.1466	1,245.7540

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.777	12.0083	5.5000e-004	1.1000e-004	12.0553
Condo/Townhouse High Rise	50.8201 / 32.0388	307.3492	1.6694	0.0419	355.3857
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	114.386 / 70.1077	685.4076	3.7571	0.0942	793.5036
High Turnover (Sit Down Restaurant)	2.42827 / 0.154996	10.3113	0.0796	1.9600e-003	12.5895
Hotel	5.07335 / 0.563706	22.3060	0.1663	4.1000e-003	27.0687
Library	2.87858 / 4.50239	25.9539	0.0950	2.4500e-003	28.7082
Regional Shopping Center	2.37032 / 1.45278	14.2031	0.0779	1.9500e-003	16.4430
Total		**1,077.5393**	**5.8457**	**0.1466**	**1,245.7540**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.5466	11.2758	5.2000e-004	1.1000e-004	11.3199
Condo/Townhouse High Rise	40.6561 / 30.0844	260.0381	1.3359	0.0336	298.5022
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	91.509 / 65.8311	579.3084	3.0066	0.0755	665.8601
High Turnover (Sit Down Restaurant)	1.94262 / 0.145541	8.3176	0.0636	1.5700e-003	10.1394
Hotel	4.05868 / 0.52932	18.0939	0.1330	3.2800e-003	21.9030
Library	2.30286 / 4.22775	22.7528	0.0760	1.9800e-003	24.9629
Regional Shopping Center	1.89626 / 1.36416	12.0045	0.0623	1.5700e-003	13.7980
Total		**911.7910**	**4.6780**	**0.1176**	**1,046.4854**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	804.6745	47.5549	0.0000	1,803.3273
Unmitigated	804.6745	47.5549	0.0000	1,803.3273

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse High Rise	358.8	72.8332	4.3043	0.0000	163.2238
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3282	666.2163	39.3723	0.0000	1,493.0338
High Turnover (Sit Down Restaurant)	95.2	19.3247	1.1421	0.0000	43.3080
Hotel	109.5	22.2275	1.3136	0.0000	49.8133
Library	84.72	17.1974	1.0163	0.0000	38.5405
Regional Shopping Center	33.6	6.8205	0.4031	0.0000	15.2852
Total		**804.6745**	**47.5549**	**0.0000**	**1,803.3273**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse High Rise	358.8	72.8332	4.3043	0.0000	163.2238
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3282	666.2163	39.3723	0.0000	1,493.0338
High Turnover (Sit Down Restaurant)	95.2	19.3247	1.1421	0.0000	43.3080
Hotel	109.5	22.2275	1.3136	0.0000	49.8133
Library	84.72	17.1974	1.0163	0.0000	38.5405
Regional Shopping Center	33.6	6.8205	0.4031	0.0000	15.2852
Total		**804.6745**	**47.5549**	**0.0000**	**1,803.3273**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Long Beach Civic Center

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	575.79	1000sqft	3.78	575,793.00	0
Library	92.00	1000sqft	1.73	92,000.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	8.00	1000sqft	0.00	8,000.00	0
Hotel	200.00	Room	0.00	290,400.00	0
Condo/Townhouse High Rise	200.00	Dwelling Unit	0.90	235,000.00	572
Condo/Townhouse High Rise	580.00	Dwelling Unit	6.29	650,000.00	1659
Regional Shopping Center	32.00	1000sqft	0.00	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,594,817.00	1,307,090.00
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tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,594,817.00	930,600.00

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tblConstructionPhase	NumDays	20.00	195.00
tblConstructionPhase	NumDays	20.00	282.00
tblConstructionPhase	PhaseEndDate	1/26/2023	7/29/2022
tblConstructionPhase	PhaseEndDate	7/3/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	3/4/2019	10/31/2019
tblConstructionPhase	PhaseEndDate	4/30/2020	3/31/2020
tblConstructionPhase	PhaseEndDate	4/29/2022	2/28/2022
tblConstructionPhase	PhaseEndDate	11/28/2019	4/30/2019
tblConstructionPhase	PhaseEndDate	9/29/2020	6/30/2020
tblConstructionPhase	PhaseEndDate	5/1/2020	11/29/2019
tblConstructionPhase	PhaseEndDate	2/1/2021	12/31/2020
tblConstructionPhase	PhaseEndDate	6/1/2017	3/31/2017
tblConstructionPhase	PhaseEndDate	3/2/2020	12/31/2019
tblConstructionPhase	PhaseEndDate	11/28/2022	7/29/2022

tblConstructionPhase	PhaseEndDate	1/28/2020	12/29/2017
tblConstructionPhase	PhaseEndDate	11/30/2020	11/29/2019
tblConstructionPhase	PhaseStartDate	3/1/2022	9/1/2021
tblConstructionPhase	PhaseStartDate	12/30/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	7/2/2018
tblConstructionPhase	PhaseStartDate	1/1/2020	12/2/2019
tblConstructionPhase	PhaseStartDate	1/1/2021	11/2/2020
tblConstructionPhase	PhaseStartDate	4/1/2017	9/1/2016
tblConstructionPhase	PhaseStartDate	4/1/2020	1/1/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	7/1/2020	6/1/2020
tblConstructionPhase	PhaseStartDate	4/30/2016	3/1/2016
tblConstructionPhase	PhaseStartDate	11/30/2019	10/1/2019
tblConstructionPhase	PhaseStartDate	7/30/2022	4/1/2022
tblConstructionPhase	PhaseStartDate	5/1/2019	4/3/2017
tblConstructionPhase	PhaseStartDate	11/1/2019	11/1/2018
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	663.00	0.00
tblFireplaces	NumberNoFireplace	78.00	0.00
tblFireplaces	NumberWood	39.00	0.00
tblGrading	AcresOfGrading	385.00	2.00
tblGrading	AcresOfGrading	710.00	4.20
tblGrading	AcresOfGrading	165.00	3.10
tblGrading	MaterialExported	0.00	200,000.00
tblGrading	MaterialExported	0.00	180,000.00
tblGrading	MaterialImported	0.00	68,200.00

tblLandUse	LandUseSquareFeet	575,790.00	575,793.00
tblLandUse	LandUseSquareFeet	200,000.00	235,000.00
tblLandUse	LandUseSquareFeet	580,000.00	650,000.00
tblLandUse	LotAcreage	13.22	3.78
tblLandUse	LotAcreage	2.11	1.73
tblLandUse	LotAcreage	2.25	0.00
tblLandUse	LotAcreage	4.58	0.00
tblLandUse	LotAcreage	6.52	0.00
tblLandUse	LotAcreage	0.18	0.00
tblLandUse	LotAcreage	6.67	0.00
tblLandUse	LotAcreage	3.13	0.90
tblLandUse	LotAcreage	9.06	6.29
tblLandUse	LotAcreage	0.73	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	VendorTripNumber	367.00	354.00
tblTripsAndVMT	VendorTripNumber	367.00	354.00
tblTripsAndVMT	VendorTripNumber	367.00	354.00
tblTripsAndVMT	WorkerTripNumber	1,227.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	1,227.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	245.00	229.00
tblTripsAndVMT	WorkerTripNumber	1,227.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	245.00	229.00
tblTripsAndVMT	WorkerTripNumber	245.00	229.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.16	3.42
tblVehicleEF	HHD	1.68	1.69
tblVehicleEF	HHD	53.80	51.65

tblVehicleEF	HHD	528.22	527.54
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.93	3.33
tblVehicleEF	HHD	4.25	3.36
tblVehicleEF	HHD	3.53	3.38
tblVehicleEF	HHD	9.7330e-003	9.3010e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	8.9550e-003	8.5570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4370e-003	1.3690e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.56	0.61
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.42	1.22
tblVehicleEF	HHD	5.5990e-003	5.5920e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4410e-003	1.3960e-003
tblVehicleEF	HHD	1.4370e-003	1.3690e-003

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.64	0.69
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.52	1.30
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.30	2.49
tblVehicleEF	HHD	1.69	1.70
tblVehicleEF	HHD	43.34	41.60
tblVehicleEF	HHD	559.60	558.89
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	4.06	3.43
tblVehicleEF	HHD	4.01	3.17
tblVehicleEF	HHD	3.38	3.24
tblVehicleEF	HHD	8.2050e-003	7.8410e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	7.5490e-003	7.2140e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004

tblVehicleEF	HHD	2.3200e-003	2.1960e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.53	0.57
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.24	1.06
tblVehicleEF	HHD	5.9320e-003	5.9240e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.2710e-003	1.2330e-003
tblVehicleEF	HHD	2.3200e-003	2.1960e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.60	0.65
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.32	1.14
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	4.35	4.71
tblVehicleEF	HHD	1.68	1.69
tblVehicleEF	HHD	54.58	52.38
tblVehicleEF	HHD	484.88	484.26
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.76	3.18
tblVehicleEF	HHD	4.18	3.31

tblVehicleEF	HHD	3.54	3.40
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.61	0.66
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.44	1.23
tblVehicleEF	HHD	5.1400e-003	5.1330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4540e-003	1.4080e-003
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.69	0.75
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.54	1.31

tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.77	0.71
tblVehicleEF	LDA	1.39	1.21
tblVehicleEF	LDA	248.70	239.34
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5970e-003	3.6040e-003
tblVehicleEF	LDA	7.6100e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003

tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.86	0.79
tblVehicleEF	LDA	1.09	0.95
tblVehicleEF	LDA	261.60	251.82
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	3.7860e-003	3.7940e-003
tblVehicleEF	LDA	7.5600e-004	7.5400e-004
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003

tblVehicleEF	LDA	0.74	0.68
tblVehicleEF	LDA	1.44	1.25
tblVehicleEF	LDA	244.71	235.50
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5390e-003	3.5450e-003
tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76

tblVehicleEF	LDT1	3.77	3.19
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tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52

tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93

tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95
tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28

tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35
tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18

tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10

tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40

tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
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tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.2300e-004	5.1800e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003

tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48

tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004

tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
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tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
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tblVehicleEF	LHD2	0.23	0.21
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tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
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tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30
tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06

tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003

tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
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tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004

tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003
tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
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tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004

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tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
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tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21

tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003

tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
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tblVehicleEF	MHD	11.64	10.06
tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32

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tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10

tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
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tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
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tblVehicleEF	MHD	1.60	1.02
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tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08

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tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
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tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
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tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
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tblVehicleEF	OBUS	1,017.03	1,018.77
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tblVehicleEF	OBUS	9.5470e-003	8.7920e-003
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04

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tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
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tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
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tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
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tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
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tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003

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tblVehicleEF	OBUS	1.25	1.13
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tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	SBUS	0.01	0.01
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tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78
tblVehicleEF	SBUS	0.01	0.01
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tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
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tblVehicleEF	SBUS	0.30	0.29
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24

tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52
tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68

tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88
tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17

tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004

tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	39.00	0.00
tblWoodstoves	NumberNoncatalytic	39.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.0469	161.6853	193.8570	0.3886	23.0128	6.5084	29.5212	7.8547	6.0259	13.8806	0.0000	36,523.5374	36,523.5374	3.4037	0.0000	36,595.0150
2017	37.7084	149.2067	181.1991	0.3884	26.2319	5.9670	32.1989	8.6450	5.5240	14.1690	0.0000	35,641.3255	35,641.3255	3.3332	0.0000	35,711.3231
2018	46.5232	73.8943	139.5446	0.3251	17.7166	3.1280	20.8446	4.7419	2.9204	7.6624	0.0000	27,878.4395	27,878.4395	2.1422	0.0000	27,923.4258
2019	47.5670	135.3750	167.8930	0.4240	23.6533	5.6473	28.4575	8.0279	5.2243	12.4745	0.0000	37,440.6680	37,440.6680	3.9602	0.0000	37,523.8331
2020	14.7810	124.7773	166.2826	0.4481	24.2259	4.4808	28.7067	8.1871	4.1457	12.3327	0.0000	38,685.5928	38,685.5928	3.2268	0.0000	38,753.3562
2021	65.7112	40.9887	105.9604	0.3003	17.5493	1.5015	19.0508	4.6976	1.4091	6.1067	0.0000	23,711.9153	23,711.9153	1.2915	0.0000	23,739.0370
2022	65.2572	37.1682	101.6335	0.3002	17.5493	1.3361	18.8855	4.6976	1.2535	5.9512	0.0000	23,479.9852	23,479.9852	1.2617	0.0000	23,506.4808
Total	**296.5950**	**723.0954**	**1,056.3701**	**2.5746**	**149.9391**	**28.5691**	**177.6652**	**46.8519**	**26.5029**	**72.5770**	**0.0000**	**223,361.4637**	**223,361.4637**	**18.6194**	**0.0000**	**223,752.4709**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	10.2442	63.8720	178.4027	0.3886	19.6526	0.9780	20.6306	6.0272	0.9012	6.9284	0.0000	36,523.5374	36,523.5374	3.4037	0.0000	36,595.0149
2017	32.9970	58.7157	168.4547	0.3884	22.8717	0.8898	23.7616	6.8175	0.8204	7.6379	0.0000	35,641.3255	35,641.3255	3.3332	0.0000	35,711.3231
2018	42.5752	35.0121	141.8344	0.3251	17.7166	0.5567	18.2733	4.7419	0.5137	5.2557	0.0000	27,878.4395	27,878.4395	2.1422	0.0000	27,923.4258
2019	42.0677	61.7436	162.6735	0.4240	20.2495	1.0355	21.2850	6.1946	0.9550	7.1496	0.0000	37,440.6680	37,440.6680	3.9602	0.0000	37,523.8330
2020	9.2025	61.8161	163.2382	0.4481	20.8254	1.1272	21.9526	6.3534	1.0394	7.3928	0.0000	38,685.5928	38,685.5928	3.2268	0.0000	38,753.3562
2021	63.9554	24.4793	106.8486	0.3003	17.5493	0.4592	18.0085	4.6976	0.4238	5.1214	0.0000	23,711.9153	23,711.9153	1.2915	0.0000	23,739.0370
2022	63.7097	22.5810	102.7357	0.3002	17.5493	0.4554	18.0047	4.6976	0.4204	5.1180	0.0000	23,479.9852	23,479.9852	1.2617	0.0000	23,506.4808
Total	**264.7517**	**328.2197**	**1,024.1877**	**2.5746**	**136.4144**	**5.5018**	**141.9162**	**39.5298**	**5.0740**	**44.6038**	**0.0000**	**223,361.4637**	**223,361.4637**	**18.6194**	**0.0000**	**223,752.4708**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.74**	**54.61**	**3.05**	**0.00**	**9.02**	**80.74**	**20.12**	**15.63**	**80.86**	**38.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972
Energy	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869
Mobile	56.7725	130.9294	588.9178	1.9863	131.0810	2.5686	133.6496	35.0295	2.3696	37.3992		150,048.0055	150,048.0055	4.8680		150,150.2342
Total	**122.5008**	**139.1376**	**658.8187**	**2.0355**	**131.0810**	**3.5051**	**134.5862**	**35.0295**	**3.3062**	**38.3357**	**0.0000**	**159,332.7901**	**159,332.7901**	**5.1582**	**0.1681**	**159,493.2183**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	61.3857	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Energy	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
Mobile	51.1777	95.0051	443.2513	1.3360	86.8310	1.7660	88.5969	23.2043	1.6294	24.8338		100,938.6637	100,938.6637	3.3649		101,009.3270
Total	**113.2690**	**101.9374**	**504.5187**	**1.3773**	**86.8310**	**2.5636**	**89.3946**	**23.2043**	**2.4271**	**25.6314**	**0.0000**	**108,735.3607**	**108,735.3607**	**3.5994**	**0.1411**	**108,854.6975**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	7.54	26.74	23.42	32.34	33.76	26.86	33.58	33.76	26.59	33.14	0.00	31.76	31.76	30.22	16.04	31.75

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 475,875; Residential Outdoor: 158,625; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38
Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29
Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7615	0.0000	4.7615	0.7209	0.0000	0.7209			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**4.7615**	**2.2921**	**7.0537**	**0.7209**	**2.1365**	**2.8575**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3763	6.0306	4.2655	0.0162	0.3833	0.0957	0.4791	0.1050	0.0881	0.1930		1,634.9338	1,634.9338	0.0116		1,635.1778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.4390**	**6.1089**	**5.2405**	**0.0183**	**0.5510**	**0.0971**	**0.6481**	**0.1494**	**0.0894**	**0.2388**		**1,813.3526**	**1,813.3526**	**0.0208**		**1,813.7888**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1427	0.0000	2.1427	0.3244	0.0000	0.3244			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**2.1427**	**9.4800e-003**	**2.1522**	**0.3244**	**9.4800e-003**	**0.3339**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3763	6.0306	4.2655	0.0162	0.3833	0.0957	0.4791	0.1050	0.0881	0.1930		1,634.9338	1,634.9338	0.0116		1,635.1778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.4390**	**6.1089**	**5.2405**	**0.0183**	**0.5510**	**0.0971**	**0.6481**	**0.1494**	**0.0894**	**0.2388**		**1,813.3526**	**1,813.3526**	**0.0208**		**1,813.7888**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.1095**	**3.5842**	**9.6937**	**3.3228**	**3.2975**	**6.6203**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3551	21.7171	15.3606	0.0584	1.6913	0.3448	2.0361	0.4543	0.3171	0.7714		5,887.6458	5,887.6458	0.0418		5,888.5244
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**1.4387**	**21.8215**	**16.6606**	**0.0612**	**1.9149**	**0.3466**	**2.2615**	**0.5136**	**0.3188**	**0.8324**		**6,125.5375**	**6,125.5375**	**0.0541**		**6,126.6724**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3551	21.7171	15.3606	0.0584	1.6913	0.3448	2.0361	0.4543	0.3171	0.7714		5,887.6458	5,887.6458	0.0418		5,888.5244
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**1.4387**	**21.8215**	**16.6606**	**0.0612**	**1.9149**	**0.3466**	**2.2615**	**0.5136**	**0.3188**	**0.8324**		**6,125.5375**	**6,125.5375**	**0.0541**		**6,126.6724**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.1095**	**3.3172**	**9.4266**	**3.3228**	**3.0518**	**6.3746**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2803	19.9056	14.7308	0.0584	4.9098	0.3151	5.2248	1.2443	0.2899	1.5342		5,790.9948	5,790.9948	0.0410		5,791.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0751	0.0943	1.1759	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.7867	228.7867	0.0113		229.0232
Total	**1.3554**	**19.9999**	**15.9068**	**0.0612**	**5.1333**	**0.3169**	**5.4502**	**1.3036**	**0.2915**	**1.5951**		**6,019.7815**	**6,019.7815**	**0.0522**		**6,020.8782**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2803	19.9056	14.7308	0.0584	4.9098	0.3151	5.2248	1.2443	0.2899	1.5342		5,790.9948	5,790.9948	0.0410		5,791.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0751	0.0943	1.1759	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.7867	228.7867	0.0113		229.0232
Total	**1.3554**	**19.9999**	**15.9068**	**0.0612**	**5.1333**	**0.3169**	**5.4502**	**1.3036**	**0.2915**	**1.5951**		**6,019.7815**	**6,019.7815**	**0.0522**		**6,020.8782**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9475	30.5740	35.2552	0.0770	2.2124	0.5034	2.7159	0.6301	0.4629	1.0930		7,718.2237	7,718.2237	0.0551		7,719.3805
Worker	4.7752	5.9697	74.2972	0.1619	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		13,595.5091	13,595.5091	0.6976		13,610.1576
Total	**7.7226**	**36.5437**	**109.5523**	**0.2389**	**14.9885**	**0.6102**	**15.5987**	**4.0183**	**0.5611**	**4.5794**		**21,313.7328**	**21,313.7328**	**0.7526**		**21,329.5381**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9475	30.5740	35.2552	0.0770	2.2124	0.5034	2.7159	0.6301	0.4629	1.0930		7,718.2237	7,718.2237	0.0551		7,719.3805
Worker	4.7752	5.9697	74.2972	0.1619	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		13,595.5091	13,595.5091	0.6976		13,610.1576
Total	**7.7226**	**36.5437**	**109.5523**	**0.2389**	**14.9885**	**0.6102**	**15.5987**	**4.0183**	**0.5611**	**4.5794**		**21,313.7328**	**21,313.7328**	**0.7526**		**21,329.5381**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7008	27.8195	33.1546	0.0769	2.2131	0.4490	2.6621	0.6304	0.4129	1.0433		7,593.2098	7,593.2098	0.0532		7,594.3279
Worker	4.2907	5.3896	67.2036	0.1618	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		13,075.1599	13,075.1599	0.6437		13,088.6766
Total	**6.9915**	**33.2091**	**100.3582**	**0.2387**	**14.9892**	**0.5517**	**15.5409**	**4.0186**	**0.5077**	**4.5263**		**20,668.3697**	**20,668.3697**	**0.6969**		**20,683.0044**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7008	27.8195	33.1546	0.0769	2.2131	0.4490	2.6621	0.6304	0.4129	1.0433		7,593.2098	7,593.2098	0.0532		7,594.3279
Worker	4.2907	5.3896	67.2036	0.1618	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		13,075.1599	13,075.1599	0.6437		13,088.6766
Total	**6.9915**	**33.2091**	**100.3582**	**0.2387**	**14.9892**	**0.5517**	**15.5409**	**4.0186**	**0.5077**	**4.5263**		**20,668.3697**	**20,668.3697**	**0.6969**		**20,683.0044**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.5327	25.5324	31.5858	0.0768	2.2132	0.4232	2.6364	0.6304	0.3893	1.0196		7,465.7922	7,465.7922	0.0529		7,466.9030
Worker	3.8677	4.8889	61.0458	0.1617	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		12,588.6496	12,588.6496	0.5974		12,601.1941
Total	**6.4004**	**30.4212**	**92.6317**	**0.2385**	**14.9892**	**0.5232**	**15.5124**	**4.0186**	**0.4818**	**4.5004**		**20,054.4418**	**20,054.4418**	**0.6503**		**20,068.0971**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.5327	25.5324	31.5858	0.0768	2.2132	0.4232	2.6364	0.6304	0.3893	1.0196		7,465.7922	7,465.7922	0.0529		7,466.9030
Worker	3.8677	4.8889	61.0458	0.1617	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		12,588.6496	12,588.6496	0.5974		12,601.1941
Total	**6.4004**	**30.4212**	**92.6317**	**0.2385**	**14.9892**	**0.5232**	**15.5124**	**4.0186**	**0.4818**	**4.5004**		**20,054.4418**	**20,054.4418**	**0.6503**		**20,068.0971**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**24.7912**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8596	1.0798	13.4643	0.0324	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,619.6077	2,619.6077	0.1290		2,622.3158
Total	**0.8596**	**1.0798**	**13.4643**	**0.0324**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,619.6077**	**2,619.6077**	**0.1290**		**2,622.3158**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**24.4886**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8596	1.0798	13.4643	0.0324	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,619.6077	2,619.6077	0.1290		2,622.3158
Total	**0.8596**	**1.0798**	**13.4643**	**0.0324**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,619.6077**	**2,619.6077**	**0.1290**		**2,622.3158**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**35.0170**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7749	0.9795	12.2305	0.0324	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,522.1354	2,522.1354	0.1197		2,524.6487
Total	**0.7749**	**0.9795**	**12.2305**	**0.0324**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,522.1354**	**2,522.1354**	**0.1197**		**2,524.6487**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7749	0.9795	12.2305	0.0324	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,522.1354	2,522.1354	0.1197		2,524.6487
Total	**0.7749**	**0.9795**	**12.2305**	**0.0324**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,522.1354**	**2,522.1354**	**0.1197**		**2,524.6487**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**34.9849**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7133	0.8984	11.2408	0.0323	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,426.5195	2,426.5195	0.1120		2,428.8722
Total	**0.7133**	**0.8984**	**11.2408**	**0.0323**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,426.5195**	**2,426.5195**	**0.1120**		**2,428.8722**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7133	0.8984	11.2408	0.0323	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,426.5195	2,426.5195	0.1120		2,428.8722
Total	**0.7133**	**0.8984**	**11.2408**	**0.0323**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,426.5195**	**2,426.5195**	**0.1120**		**2,428.8722**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0642	0.8011	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2054	165.2054	7.8400e-003		165.3700
Total	**0.0508**	**0.0642**	**0.8011**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2054**	**165.2054**	**7.8400e-003**		**165.3700**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0642	0.8011	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2054	165.2054	7.8400e-003		165.3700
Total	**0.0508**	**0.0642**	**0.8011**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2054**	**165.2054**	**7.8400e-003**		**165.3700**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**		**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.0467**	**0.0589**	**0.7363**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**158.9423**	**158.9423**	**7.3400e-003**		**159.0964**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.0467**	**0.0589**	**0.7363**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**158.9423**	**158.9423**	**7.3400e-003**		**159.0964**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2349	0.0000	1.2349	0.1870	0.0000	0.1870			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316		3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**1.2349**	**1.6448**	**2.8797**	**0.1870**	**1.5316**	**1.7185**		**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0878	1.2432	1.0165	4.1900e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0481		402.4140	402.4140	2.9700e-003		402.4764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.1345**	**1.3021**	**1.7528**	**6.3100e-003**	**0.2672**	**0.0240**	**0.2911**	**0.0717**	**0.0220**	**0.0938**		**561.3563**	**561.3563**	**0.0103**		**561.5728**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5557	0.0000	0.5557	0.0841	0.0000	0.0841			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**0.5557**	**9.4800e-003**	**0.5652**	**0.0841**	**9.4800e-003**	**0.0936**	**0.0000**	**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0878	1.2432	1.0165	4.1900e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0481		402.4140	402.4140	2.9700e-003		402.4764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.1345**	**1.3021**	**1.7528**	**6.3100e-003**	**0.2672**	**0.0240**	**0.2911**	**0.0717**	**0.0220**	**0.0938**		**561.3563**	**561.3563**	**0.0103**		**561.5728**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1888	0.0000	6.1888	3.3333	0.0000	3.3333			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1888**	**2.5049**	**8.6937**	**3.3333**	**2.3045**	**5.6378**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9860	28.1274	22.9975	0.0947	2.2516	0.5128	2.7643	0.6166	0.4717	1.0884		9,104.5102	9,104.5102	0.0672		9,105.9211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0785	0.9817	2.8200e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		211.9231	211.9231	9.7800e-003		212.1286
Total	**2.0483**	**28.2059**	**23.9792**	**0.0975**	**2.4751**	**0.5145**	**2.9896**	**0.6759**	**0.4733**	**1.1492**		**9,316.4333**	**9,316.4333**	**0.0770**		**9,318.0497**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7849	0.0000	2.7849	1.5000	0.0000	1.5000			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7849**	**0.0151**	**2.8001**	**1.5000**	**0.0151**	**1.5151**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9860	28.1274	22.9975	0.0947	2.2516	0.5128	2.7643	0.6166	0.4717	1.0884		9,104.5102	9,104.5102	0.0672		9,105.9211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0785	0.9817	2.8200e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		211.9231	211.9231	9.7800e-003		212.1286
Total	**2.0483**	**28.2059**	**23.9792**	**0.0975**	**2.4751**	**0.5145**	**2.9896**	**0.6759**	**0.4733**	**1.1492**		**9,316.4333**	**9,316.4333**	**0.0770**		**9,318.0497**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1429	0.0000	2.1429	0.3245	0.0000	0.3245			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865		3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**2.1429**	**1.4899**	**3.6327**	**0.3245**	**1.3865**	**1.7110**		**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1493	1.9225	1.7365	7.2500e-003	0.1726	0.0390	0.2116	0.0473	0.0359	0.0831		682.0991	682.0991	5.1500e-003		682.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0546	0.6862	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		152.5097	152.5097	6.9500e-003		152.6556
Total	**0.1931**	**1.9770**	**2.4227**	**9.3700e-003**	**0.3403**	**0.0403**	**0.3805**	**0.0917**	**0.0370**	**0.1288**		**834.6088**	**834.6088**	**0.0121**		**834.8629**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9643	0.0000	0.9643	0.1460	0.0000	0.1460			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0400		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**0.4739**	**2.0535**	**23.8257**	**0.0400**	**0.9643**	**9.4800e-003**	**0.9738**	**0.1460**	**9.4800e-003**	**0.1555**	**0.0000**	**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1493	1.9225	1.7365	7.2500e-003	0.1726	0.0390	0.2116	0.0473	0.0359	0.0831		682.0991	682.0991	5.1500e-003		682.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0546	0.6862	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		152.5097	152.5097	6.9500e-003		152.6556
Total	**0.1931**	**1.9770**	**2.4227**	**9.3700e-003**	**0.3403**	**0.0403**	**0.3805**	**0.0917**	**0.0370**	**0.1288**		**834.6088**	**834.6088**	**0.0121**		**834.8629**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1827	0.0000	6.1827	3.3340	0.0000	3.3340			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810		5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**6.1827**	**2.2619**	**8.4447**	**3.3340**	**2.0810**	**5.4149**		**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4476	31.5239	28.4747	0.1189	2.8300	0.6390	3.4690	0.7751	0.5878	1.3629		11,184.8862	11,184.8862	0.0845		11,186.6603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0727	0.9149	2.8200e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		203.3463	203.3463	9.2700e-003		203.5409
Total	**2.5059**	**31.5967**	**29.3897**	**0.1217**	**3.0536**	**0.6407**	**3.6942**	**0.8344**	**0.5894**	**1.4238**		**11,388.2325**	**11,388.2325**	**0.0938**		**11,390.2011**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7822	0.0000	2.7822	1.5003	0.0000	1.5003			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7822**	**0.0151**	**2.7974**	**1.5003**	**0.0151**	**1.5154**	**0.0000**	**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4476	31.5239	28.4747	0.1189	2.8300	0.6390	3.4690	0.7751	0.5878	1.3629		11,184.8862	11,184.8862	0.0845		11,186.6603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0727	0.9149	2.8200e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		203.3463	203.3463	9.2700e-003		203.5409
Total	**2.5059**	**31.5967**	**29.3897**	**0.1217**	**3.0536**	**0.6407**	**3.6942**	**0.8344**	**0.5894**	**1.4238**		**11,388.2325**	**11,388.2325**	**0.0938**		**11,390.2011**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2014	17.4549	28.5687	0.0764	2.2136	0.3352	2.5488	0.6305	0.3084	0.9389		7,152.7514	7,152.7514	0.0511		7,153.8249
Worker	3.1574	3.8878	49.1827	0.1617	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		11,442.4415	11,442.4415	0.5069		11,453.0868
Total	**5.3588**	**21.3427**	**77.7514**	**0.2381**	**14.9896**	**0.4329**	**15.4225**	**4.0188**	**0.3990**	**4.4178**		**18,595.1929**	**18,595.1929**	**0.5580**		**18,606.9117**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2014	17.4549	28.5687	0.0764	2.2136	0.3352	2.5488	0.6305	0.3084	0.9389		7,152.7514	7,152.7514	0.0511		7,153.8249
Worker	3.1574	3.8878	49.1827	0.1617	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		11,442.4415	11,442.4415	0.5069		11,453.0868
Total	**5.3588**	**21.3427**	**77.7514**	**0.2381**	**14.9896**	**0.4329**	**15.4225**	**4.0188**	**0.3990**	**4.4178**		**18,595.1929**	**18,595.1929**	**0.5580**		**18,606.9117**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1568	15.8452	27.9077	0.0763	2.2136	0.3315	2.5451	0.6305	0.3050	0.9355		7,146.3541	7,146.3541	0.0522		7,147.4509
Worker	2.9898	3.6473	46.3070	0.1617	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		11,253.7458	11,253.7458	0.4854		11,263.9388
Total	**5.1466**	**19.4926**	**74.2147**	**0.2380**	**14.9897**	**0.4291**	**15.4188**	**4.0188**	**0.3956**	**4.4143**		**18,400.1000**	**18,400.1000**	**0.5376**		**18,411.3897**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1568	15.8452	27.9077	0.0763	2.2136	0.3315	2.5451	0.6305	0.3050	0.9355		7,146.3541	7,146.3541	0.0522		7,147.4509
Worker	2.9898	3.6473	46.3070	0.1617	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		11,253.7458	11,253.7458	0.4854		11,263.9388
Total	**5.1466**	**19.4926**	**74.2147**	**0.2380**	**14.9897**	**0.4291**	**15.4188**	**4.0188**	**0.3956**	**4.4143**		**18,400.1000**	**18,400.1000**	**0.5376**		**18,411.3897**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**57.8268**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6326	0.7789	9.8538	0.0324	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,292.4927	2,292.4927	0.1016		2,294.6254
Total	**0.6326**	**0.7789**	**9.8538**	**0.0324**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,292.4927**	**2,292.4927**	**0.1016**		**2,294.6254**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6326	0.7789	9.8538	0.0324	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,292.4927	2,292.4927	0.1016		2,294.6254
Total	**0.6326**	**0.7789**	**9.8538**	**0.0324**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,292.4927**	**2,292.4927**	**0.1016**		**2,294.6254**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**57.8124**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5990	0.7307	9.2776	0.0324	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,254.6875	2,254.6875	0.0973		2,256.7297
Total	**0.5990**	**0.7307**	**9.2776**	**0.0324**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,254.6875**	**2,254.6875**	**0.0973**		**2,256.7297**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5990	0.7307	9.2776	0.0324	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,254.6875	2,254.6875	0.0973		2,256.7297
Total	**0.5990**	**0.7307**	**9.2776**	**0.0324**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,254.6875**	**2,254.6875**	**0.0973**		**2,256.7297**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131		2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**		**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0479	0.6077	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		147.6870	147.6870	6.3700e-003		147.8207
Total	**0.0392**	**0.0479**	**0.6077**	**2.1200e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**147.6870**	**147.6870**	**6.3700e-003**		**147.8207**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0479	0.6077	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		147.6870	147.6870	6.3700e-003		147.8207
Total	**0.0392**	**0.0479**	**0.6077**	**2.1200e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**147.6870**	**147.6870**	**6.3700e-003**		**147.8207**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	51.1777	95.0051	443.2513	1.3360	86.8310	1.7660	88.5969	23.2043	1.6294	24.8338		100,938.6637	100,938.6637	3.3649		101,009.3270
Unmitigated	56.7725	130.9294	588.9178	1.9863	131.0810	2.5686	133.6496	35.0295	2.3696	37.3992		150,048.0055	150,048.0055	4.8680		150,150.2342

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,176.00	1,432.00	1214.00	4,162,091	2,881,466
Condo/Townhouse High Rise	3,410.40	4,152.80	3520.60	12,070,064	8,356,252
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	6,126.41	0.00	0.00	13,513,671	8,716,444
High Turnover (Sit Down Restaurant)	1,017.20	1,266.96	1054.72	1,442,202	950,727
Hotel	1,634.00	1,638.00	1190.00	3,749,016	2,465,413
Library	3,533.72	4,282.60	2345.08	8,762,925	5,655,704
Regional Shopping Center	3,238.08	1,599.04	807.68	5,746,096	3,781,132
Total	20,246.76	14,482.35	10,243.03	49,765,327	33,016,588

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
NaturalGas Unmitigated	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	22891.8	0.2469	2.1096	0.8977	0.0135		0.1706	0.1706		0.1706	0.1706		2,693.1499	2,693.1499	0.0516	0.0494	2,709.5399
Condo/Townhouse High Rise	7893.72	0.0851	0.7275	0.3096	4.6400e-003		0.0588	0.0588		0.0588	0.0588		928.6724	928.6724	0.0178	0.0170	934.3241
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	17242.2	0.1860	1.6904	1.4200	0.0101		0.1285	0.1285		0.1285	0.1285		2,028.4988	2,028.4988	0.0389	0.0372	2,040.8439
High Turnover (Sit Down Restaurant)	5107.07	0.0551	0.5007	0.4206	3.0000e-003		0.0381	0.0381		0.0381	0.0381		600.8316	600.8316	0.0115	0.0110	604.4882
Hotel	19906.3	0.2147	1.9516	1.6393	0.0117		0.1483	0.1483		0.1483	0.1483		2,341.9204	2,341.9204	0.0449	0.0429	2,356.1729
Library	4741.15	0.0511	0.4648	0.3905	2.7900e-003		0.0353	0.0353		0.0353	0.0353		557.7824	557.7824	0.0107	0.0102	561.1770
Regional Shopping Center	149.041	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5343	17.5343	3.4000e-004	3.2000e-004	17.6410
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.8405**	**7.4592**	**5.0899**	**0.0458**		**0.5807**	**0.5807**		**0.5807**	**0.5807**		**9,168.3897**	**9,168.3897**	**0.1757**	**0.1681**	**9,224.1869**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	6.63837	0.0716	0.6118	0.2603	3.9000e-003		0.0495	0.0495		0.0495	0.0495		780.9846	780.9846	0.0150	0.0143	785.7376
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	13.9168	0.1501	1.3644	1.1461	8.1900e-003		0.1037	0.1037		0.1037	0.1037		1,637.2751	1,637.2751	0.0314	0.0300	1,647.2392
High Turnover (Sit Down Restaurant)	4.9088	0.0529	0.4813	0.4043	2.8900e-003		0.0366	0.0366		0.0366	0.0366		577.5059	577.5059	0.0111	0.0106	581.0205
Hotel	16.5711	0.1787	1.6246	1.3647	9.7500e-003		0.1235	0.1235		0.1235	0.1235		1,949.5411	1,949.5411	0.0374	0.0357	1,961.4057
Library	4.01725	0.0433	0.3939	0.3308	2.3600e-003		0.0299	0.0299		0.0299	0.0299		472.6176	472.6176	9.0600e-003	8.6600e-003	475.4938
Regional Shopping Center	0.127825	1.3800e-003	0.0125	0.0105	8.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		15.0382	15.0382	2.9000e-004	2.8000e-004	15.1297
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	19.2513	0.2076	1.7741	0.7550	0.0113		0.1434	0.1434		0.1434	0.1434		2,264.8554	2,264.8554	0.0434	0.0415	2,278.6390
Total		**0.7056**	**6.2626**	**4.2717**	**0.0385**		**0.4875**	**0.4875**		**0.4875**	**0.4875**		**7,697.8178**	**7,697.8178**	**0.1476**	**0.1411**	**7,744.6655**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	61.3857	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Unmitigated	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9892	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559		116.3950	116.3950	0.1144		118.7972
Total	**64.8879**	**0.7490**	**64.8110**	**3.4200e-003**		**0.3559**	**0.3559**		**0.3559**	**0.3559**	**0.0000**	**116.3950**	**116.3950**	**0.1144**	**0.0000**	**118.7972**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5190	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101		98.8792	98.8792	0.0869		100.7050
Total	**61.3857**	**0.6697**	**56.9957**	**2.8200e-003**		**0.3101**	**0.3101**		**0.3101**	**0.3101**	**0.0000**	**98.8792**	**98.8792**	**0.0869**	**0.0000**	**100.7050**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Long Beach Civic Center

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	575.79	1000sqft	3.78	575,793.00	0
Library	92.00	1000sqft	1.73	92,000.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	8.00	1000sqft	0.00	8,000.00	0
Hotel	200.00	Room	0.00	290,400.00	0
Condo/Townhouse High Rise	200.00	Dwelling Unit	0.90	235,000.00	572
Condo/Townhouse High Rise	580.00	Dwelling Unit	6.29	650,000.00	1659
Regional Shopping Center	32.00	1000sqft	0.00	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

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tblVehicleEF	HHD	54.58	52.38
tblVehicleEF	HHD	484.88	484.26
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.76	3.18
tblVehicleEF	HHD	4.18	3.31

tblVehicleEF	HHD	3.54	3.40
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.61	0.66
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.44	1.23
tblVehicleEF	HHD	5.1400e-003	5.1330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4540e-003	1.4080e-003
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.69	0.75
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.54	1.31

tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.77	0.71
tblVehicleEF	LDA	1.39	1.21
tblVehicleEF	LDA	248.70	239.34
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5970e-003	3.6040e-003
tblVehicleEF	LDA	7.6100e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003

tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.86	0.79
tblVehicleEF	LDA	1.09	0.95
tblVehicleEF	LDA	261.60	251.82
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	3.7860e-003	3.7940e-003
tblVehicleEF	LDA	7.5600e-004	7.5400e-004
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003

tblVehicleEF	LDA	0.74	0.68
tblVehicleEF	LDA	1.44	1.25
tblVehicleEF	LDA	244.71	235.50
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5390e-003	3.5450e-003
tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76

tblVehicleEF	LDT1	3.77	3.19
tblVehicleEF	LDT1	303.51	294.33
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52

tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93

tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95
tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28

tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35
tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18

tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10

tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40

tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.2300e-004	5.1800e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003

tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48

tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004

tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
tblVehicleEF	LHD2	0.82	0.77
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30
tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06

tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003

tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004

tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003
tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004

tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21

tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35

tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003

tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06
tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10

tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.78	12.76
tblVehicleEF	MHD	525.09	525.15
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.48	3.27
tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08

tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.88	0.74
tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.1000e-004	7.7100e-004
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.94	0.79
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	2.74	3.30
tblVehicleEF	OBUS	0.97	0.86
tblVehicleEF	OBUS	8.80	7.92
tblVehicleEF	OBUS	534.88	533.47
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.65	3.20
tblVehicleEF	OBUS	2.28	1.27
tblVehicleEF	OBUS	1.24	1.12
tblVehicleEF	OBUS	9.5470e-003	8.7920e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04

tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	8.7830e-003	8.0890e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.54	0.48
tblVehicleEF	OBUS	5.6700e-003	5.6550e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.1900e-004	5.0200e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.53	0.64
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.58	0.51
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	1.99	2.40
tblVehicleEF	OBUS	0.98	0.86
tblVehicleEF	OBUS	7.12	6.40

tblVehicleEF	OBUS	566.66	565.16
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.79	3.30
tblVehicleEF	OBUS	2.14	1.19
tblVehicleEF	OBUS	1.19	1.08
tblVehicleEF	OBUS	8.0480e-003	7.4120e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	7.4040e-003	6.8190e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.48	0.42
tblVehicleEF	OBUS	6.0070e-003	5.9910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.51	0.45
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	3.78	4.55
tblVehicleEF	OBUS	0.97	0.85
tblVehicleEF	OBUS	8.99	8.09
tblVehicleEF	OBUS	491.00	489.70
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.44	3.06
tblVehicleEF	OBUS	2.24	1.25
tblVehicleEF	OBUS	1.25	1.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	0.01	9.8420e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004

tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.55	0.49
tblVehicleEF	OBUS	5.2050e-003	5.1910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.2200e-004	5.0500e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.57	0.69
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.58	0.52
tblVehicleEF	SBUS	4.4530e-003	4.6460e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.05	1.12
tblVehicleEF	SBUS	2.96	2.66
tblVehicleEF	SBUS	27.16	24.72
tblVehicleEF	SBUS	547.00	552.46
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.58	7.35
tblVehicleEF	SBUS	7.03	6.65
tblVehicleEF	SBUS	2.02	1.89
tblVehicleEF	SBUS	0.01	0.01

tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.30	0.28
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.66	1.48
tblVehicleEF	SBUS	5.7980e-003	5.8560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7600e-003	1.7140e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.77	1.59
tblVehicleEF	SBUS	4.1970e-003	4.3790e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003

tblVehicleEF	SBUS	0.76	0.82
tblVehicleEF	SBUS	3.03	2.73
tblVehicleEF	SBUS	23.01	20.96
tblVehicleEF	SBUS	579.49	585.28
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	9.4430e-003
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.29
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24

tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52
tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68

tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88
tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17

tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004

tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	39.00	0.00
tblWoodstoves	NumberNoncatalytic	39.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.5093	163.8386	197.2309	0.3777	23.0128	6.5144	29.5272	7.8547	6.0314	13.8861	0.0000	35,587.1767	35,587.1767	3.4059	0.0000	35,658.7005
2017	38.0558	151.1470	184.8872	0.3774	26.2319	5.9721	32.2040	8.6450	5.5287	14.1737	0.0000	34,737.1330	34,737.1330	3.3355	0.0000	34,807.1777
2018	46.8248	75.0855	140.1807	0.3122	17.7166	3.1320	20.8486	4.7419	2.9241	7.6660	0.0000	26,864.4925	26,864.4925	2.1439	0.0000	26,909.5148
2019	47.6767	136.5386	173.4646	0.4129	23.6533	5.6484	28.4622	8.0279	5.2254	12.4788	0.0000	36,587.8535	36,587.8535	3.9613	0.0000	36,671.0401
2020	15.1353	126.7817	173.0115	0.4369	24.2259	4.4851	28.7110	8.1871	4.1497	12.3367	0.0000	37,858.2649	37,858.2649	3.2299	0.0000	37,926.0928
2021	65.9505	41.8321	107.3338	0.2874	17.5493	1.5040	19.0533	4.6976	1.4115	6.1091	0.0000	22,789.5839	22,789.5839	1.2934	0.0000	22,816.7449
2022	65.4848	37.9452	103.0679	0.2873	17.5493	1.3387	18.8880	4.6976	1.2559	5.9535	0.0000	22,570.1567	22,570.1567	1.2636	0.0000	22,596.6932
Total	**298.6370**	**733.1687**	**1,079.1766**	**2.4917**	**149.9391**	**28.5946**	**177.6943**	**46.8519**	**26.5264**	**72.6038**	**0.0000**	**216,994.6612**	**216,994.6612**	**18.6335**	**0.0000**	**217,385.9640**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	10.7065	66.0252	181.7766	0.3777	19.6526	0.9840	20.6366	6.0272	0.9066	6.9338	0.0000	35,587.1767	35,587.1767	3.4059	0.0000	35,658.7005
2017	33.3444	60.6560	172.1428	0.3774	22.8717	0.8949	23.7666	6.8175	0.8251	7.6426	0.0000	34,737.1330	34,737.1330	3.3355	0.0000	34,807.1777
2018	42.8767	36.2033	142.4705	0.3122	17.7166	0.5607	18.2773	4.7419	0.5174	5.2593	0.0000	26,864.4925	26,864.4925	2.1439	0.0000	26,909.5147
2019	42.3419	63.7517	168.2452	0.4129	20.2495	1.0402	21.2897	6.1946	0.9593	7.1539	0.0000	36,587.8534	36,587.8534	3.9613	0.0000	36,671.0401
2020	9.5568	63.8205	169.9671	0.4369	20.8254	1.1315	21.9570	6.3534	1.0434	7.3968	0.0000	37,858.2649	37,858.2649	3.2299	0.0000	37,926.0928
2021	64.1947	25.3226	108.2220	0.2874	17.5493	0.4617	18.0110	4.6976	0.4262	5.1238	0.0000	22,789.5839	22,789.5839	1.2934	0.0000	22,816.7449
2022	63.9373	23.3580	104.1702	0.2873	17.5493	0.4579	18.0073	4.6976	0.4227	5.1203	0.0000	22,570.1567	22,570.1567	1.2636	0.0000	22,596.6932
Total	**266.9583**	**339.1374**	**1,046.9943**	**2.4917**	**136.4144**	**5.5309**	**141.9454**	**39.5298**	**5.1008**	**44.6306**	**0.0000**	**216,994.6611**	**216,994.6611**	**18.6335**	**0.0000**	**217,385.9639**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.61**	**53.74**	**2.98**	**0.00**	**9.02**	**80.66**	**20.12**	**15.63**	**80.77**	**38.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972
Energy	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869
Mobile	58.5172	137.4439	589.8664	1.8868	131.0810	2.5774	133.6584	35.0295	2.3777	37.4072		143,001.9016	143,001.9016	4.8759		143,104.2958
Total	**124.2455**	**145.6522**	**659.7673**	**1.9361**	**131.0810**	**3.5139**	**134.5949**	**35.0295**	**3.3143**	**38.3438**	**0.0000**	**152,286.6863**	**152,286.6863**	**5.1660**	**0.1681**	**152,447.2799**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	61.3857	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Energy	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
Mobile	53.1204	99.4005	459.8599	1.2697	86.8310	1.7747	88.6057	23.2043	1.6375	24.8418		96,203.0437	96,203.0437	3.3728		96,273.8724
Total	**115.2117**	**106.3328**	**521.1272**	**1.3110**	**86.8310**	**2.5724**	**89.4033**	**23.2043**	**2.4351**	**25.6395**	**0.0000**	**103,999.7407**	**103,999.7407**	**3.6073**	**0.1411**	**104,119.2428**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	7.27	27.00	21.01	32.29	33.76	26.79	33.58	33.76	26.53	33.13	0.00	31.71	31.71	30.17	16.04	31.70

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 475,875; Residential Outdoor: 158,625; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38
Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29
Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7615	0.0000	4.7615	0.7209	0.0000	0.7209			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**4.7615**	**2.2921**	**7.0537**	**0.7209**	**2.1365**	**2.8575**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3976	6.2495	4.8898	0.0162	0.3833	0.0960	0.4793	0.1050	0.0883	0.1932		1,631.0464	1,631.0464	0.0118		1,631.2936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.4616**	**6.3355**	**5.7881**	**0.0182**	**0.5510**	**0.0974**	**0.6484**	**0.1494**	**0.0896**	**0.2390**		**1,798.4037**	**1,798.4037**	**0.0209**		**1,798.8432**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1427	0.0000	2.1427	0.3244	0.0000	0.3244			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**2.1427**	**9.4800e-003**	**2.1522**	**0.3244**	**9.4800e-003**	**0.3339**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3976	6.2495	4.8898	0.0162	0.3833	0.0960	0.4793	0.1050	0.0883	0.1932		1,631.0464	1,631.0464	0.0118		1,631.2936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.4616**	**6.3355**	**5.7881**	**0.0182**	**0.5510**	**0.0974**	**0.6484**	**0.1494**	**0.0896**	**0.2390**		**1,798.4037**	**1,798.4037**	**0.0209**		**1,798.8432**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.1095**	**3.5842**	**9.6937**	**3.3228**	**3.2975**	**6.6203**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4317	22.5054	17.6088	0.0583	1.6913	0.3456	2.0369	0.4543	0.3179	0.7722		5,873.6466	5,873.6466	0.0424		5,874.5369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**1.5170**	**22.6200**	**18.8066**	**0.0610**	**1.9149**	**0.3474**	**2.2623**	**0.5136**	**0.3196**	**0.8332**		**6,096.7896**	**6,096.7896**	**0.0546**		**6,097.9363**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4317	22.5054	17.6088	0.0583	1.6913	0.3456	2.0369	0.4543	0.3179	0.7722		5,873.6466	5,873.6466	0.0424		5,874.5369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**1.5170**	**22.6200**	**18.8066**	**0.0610**	**1.9149**	**0.3474**	**2.2623**	**0.5136**	**0.3196**	**0.8332**		**6,096.7896**	**6,096.7896**	**0.0546**		**6,097.9363**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.1095**	**3.3172**	**9.4266**	**3.3228**	**3.0518**	**6.3746**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3474	20.6264	16.9960	0.0582	4.9098	0.3158	5.2255	1.2443	0.2905	1.5348		5,777.2137	5,777.2137	0.0415		5,778.0859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**1.4239**	**20.7299**	**18.0756**	**0.0609**	**5.1333**	**0.3176**	**5.4509**	**1.3036**	**0.2921**	**1.5958**		**5,991.7859**	**5,991.7859**	**0.0528**		**5,992.8946**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3474	20.6264	16.9960	0.0582	4.9098	0.3158	5.2255	1.2443	0.2905	1.5348		5,777.2137	5,777.2137	0.0415		5,778.0859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**1.4239**	**20.7299**	**18.0756**	**0.0609**	**5.1333**	**0.3176**	**5.4509**	**1.3036**	**0.2921**	**1.5958**		**5,991.7859**	**5,991.7859**	**0.0528**		**5,992.8946**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2313	31.3458	42.3245	0.0764	2.2124	0.5086	2.7210	0.6301	0.4677	1.0978		7,653.4946	7,653.4946	0.0567		7,654.6859
Worker	4.8753	6.5528	68.4557	0.1517	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		12,752.6253	12,752.6253	0.6976		12,767.2738
Total	**8.1066**	**37.8985**	**110.7802**	**0.2282**	**14.9885**	**0.6153**	**15.6038**	**4.0183**	**0.5658**	**4.5842**		**20,406.1199**	**20,406.1199**	**0.7543**		**20,421.9598**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2313	31.3458	42.3245	0.0764	2.2124	0.5086	2.7210	0.6301	0.4677	1.0978		7,653.4946	7,653.4946	0.0567		7,654.6859
Worker	4.8753	6.5528	68.4557	0.1517	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		12,752.6253	12,752.6253	0.6976		12,767.2738
Total	**8.1066**	**37.8985**	**110.7802**	**0.2282**	**14.9885**	**0.6153**	**15.6038**	**4.0183**	**0.5658**	**4.5842**		**20,406.1199**	**20,406.1199**	**0.7543**		**20,421.9598**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9506	28.5049	40.1784	0.0764	2.2131	0.4534	2.6665	0.6304	0.4170	1.0473		7,529.3734	7,529.3734	0.0549		7,530.5264
Worker	4.3711	5.9145	61.6991	0.1516	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		12,262.7995	12,262.7995	0.6437		12,276.3161
Total	**7.3218**	**34.4194**	**101.8775**	**0.2280**	**14.9892**	**0.5561**	**15.5453**	**4.0186**	**0.5117**	**4.5303**		**19,792.1728**	**19,792.1728**	**0.6986**		**19,806.8426**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9506	28.5049	40.1784	0.0764	2.2131	0.4534	2.6665	0.6304	0.4170	1.0473		7,529.3734	7,529.3734	0.0549		7,530.5264
Worker	4.3711	5.9145	61.6991	0.1516	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		12,262.7995	12,262.7995	0.6437		12,276.3161
Total	**7.3218**	**34.4194**	**101.8775**	**0.2280**	**14.9892**	**0.5561**	**15.5453**	**4.0186**	**0.5117**	**4.5303**		**19,792.1728**	**19,792.1728**	**0.6986**		**19,806.8426**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7576	26.1476	38.5536	0.0762	2.2132	0.4272	2.6404	0.6304	0.3929	1.0233		7,402.8932	7,402.8932	0.0546		7,404.0400
Worker	3.9309	5.3636	55.8281	0.1515	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		11,804.9092	11,804.9092	0.5974		11,817.4538
Total	**6.6885**	**31.5112**	**94.3816**	**0.2278**	**14.9892**	**0.5272**	**15.5164**	**4.0186**	**0.4855**	**4.5041**		**19,207.8024**	**19,207.8024**	**0.6520**		**19,221.4937**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7576	26.1476	38.5536	0.0762	2.2132	0.4272	2.6404	0.6304	0.3929	1.0233		7,402.8932	7,402.8932	0.0546		7,404.0400
Worker	3.9309	5.3636	55.8281	0.1515	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		11,804.9092	11,804.9092	0.5974		11,817.4538
Total	**6.6885**	**31.5112**	**94.3816**	**0.2278**	**14.9892**	**0.5272**	**15.5164**	**4.0186**	**0.4855**	**4.5041**		**19,207.8024**	**19,207.8024**	**0.6520**		**19,221.4937**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**24.7912**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8758	1.1850	12.3614	0.0304	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,456.8513	2,456.8513	0.1290		2,459.5594
Total	**0.8758**	**1.1850**	**12.3614**	**0.0304**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,456.8513**	**2,456.8513**	**0.1290**		**2,459.5594**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**24.4886**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8758	1.1850	12.3614	0.0304	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,456.8513	2,456.8513	0.1290		2,459.5594
Total	**0.8758**	**1.1850**	**12.3614**	**0.0304**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,456.8513**	**2,456.8513**	**0.1290**		**2,459.5594**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**35.0170**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7876	1.0746	11.1852	0.0304	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,365.1131	2,365.1131	0.1197		2,367.6264
Total	**0.7876**	**1.0746**	**11.1852**	**0.0304**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,365.1131**	**2,365.1131**	**0.1197**		**2,367.6264**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7876	1.0746	11.1852	0.0304	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,365.1131	2,365.1131	0.1197		2,367.6264
Total	**0.7876**	**1.0746**	**11.1852**	**0.0304**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,365.1131**	**2,365.1131**	**0.1197**		**2,367.6264**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**34.9849**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7242	0.9854	10.2515	0.0303	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,275.0788	2,275.0788	0.1120		2,277.4314
Total	**0.7242**	**0.9854**	**10.2515**	**0.0303**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,275.0788**	**2,275.0788**	**0.1120**		**2,277.4314**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7242	0.9854	10.2515	0.0303	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,275.0788	2,275.0788	0.1120		2,277.4314
Total	**0.7242**	**0.9854**	**10.2515**	**0.0303**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,275.0788**	**2,275.0788**	**0.1120**		**2,277.4314**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**		**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2349	0.0000	1.2349	0.1870	0.0000	0.1870			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316		3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**1.2349**	**1.6448**	**2.8797**	**0.1870**	**1.5316**	**1.7185**		**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0919	1.2880	1.1804	4.1800e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0482		401.4527	401.4527	3.0100e-003		401.5160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.1393**	**1.3525**	**1.8519**	**6.1600e-003**	**0.2672**	**0.0240**	**0.2912**	**0.0717**	**0.0221**	**0.0938**		**550.4753**	**550.4753**	**0.0104**		**550.6927**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5557	0.0000	0.5557	0.0841	0.0000	0.0841			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**0.5557**	**9.4800e-003**	**0.5652**	**0.0841**	**9.4800e-003**	**0.0936**	**0.0000**	**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0919	1.2880	1.1804	4.1800e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0482		401.4527	401.4527	3.0100e-003		401.5160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.1393**	**1.3525**	**1.8519**	**6.1600e-003**	**0.2672**	**0.0240**	**0.2912**	**0.0717**	**0.0221**	**0.0938**		**550.4753**	**550.4753**	**0.0104**		**550.6927**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1888	0.0000	6.1888	3.3333	0.0000	3.3333			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1888**	**2.5049**	**8.6937**	**3.3333**	**2.3045**	**5.6378**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0782	29.1403	26.7055	0.0945	2.2516	0.5138	2.7654	0.6166	0.4727	1.0893		9,082.7608	9,082.7608	0.0682		9,084.1924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**2.1415**	**29.2264**	**27.6008**	**0.0972**	**2.4751**	**0.5156**	**2.9907**	**0.6759**	**0.4743**	**1.1502**		**9,281.4576**	**9,281.4576**	**0.0780**		**9,283.0947**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7849	0.0000	2.7849	1.5000	0.0000	1.5000			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7849**	**0.0151**	**2.8001**	**1.5000**	**0.0151**	**1.5151**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0782	29.1403	26.7055	0.0945	2.2516	0.5138	2.7654	0.6166	0.4727	1.0893		9,082.7608	9,082.7608	0.0682		9,084.1924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**2.1415**	**29.2264**	**27.6008**	**0.0972**	**2.4751**	**0.5156**	**2.9907**	**0.6759**	**0.4743**	**1.1502**		**9,281.4576**	**9,281.4576**	**0.0780**		**9,283.0947**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1429	0.0000	2.1429	0.3245	0.0000	0.3245			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865		3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**2.1429**	**1.4899**	**3.6327**	**0.3245**	**1.3865**	**1.7110**		**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1559	1.9913	2.0213	7.2400e-003	0.1726	0.0391	0.2116	0.0473	0.0359	0.0832		680.4683	680.4683	5.2300e-003		680.5781
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.2004**	**2.0511**	**2.6459**	**9.2200e-003**	**0.3403**	**0.0403**	**0.3806**	**0.0917**	**0.0371**	**0.1288**		**823.4356**	**823.4356**	**0.0122**		**823.6914**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9643	0.0000	0.9643	0.1460	0.0000	0.1460			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0400		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**0.4739**	**2.0535**	**23.8257**	**0.0400**	**0.9643**	**9.4800e-003**	**0.9738**	**0.1460**	**9.4800e-003**	**0.1555**	**0.0000**	**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1559	1.9913	2.0213	7.2400e-003	0.1726	0.0391	0.2116	0.0473	0.0359	0.0832		680.4683	680.4683	5.2300e-003		680.5781
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.2004**	**2.0511**	**2.6459**	**9.2200e-003**	**0.3403**	**0.0403**	**0.3806**	**0.0917**	**0.0371**	**0.1288**		**823.4356**	**823.4356**	**0.0122**		**823.6914**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1827	0.0000	6.1827	3.3340	0.0000	3.3340			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810		5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**6.1827**	**2.2619**	**8.4447**	**3.3340**	**2.0810**	**5.4149**		**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5564	32.6529	33.1448	0.1187	2.8300	0.6403	3.4703	0.7751	0.5890	1.3641		11,158.1446	11,158.1446	0.0858		11,159.9455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**2.6157**	**32.7327**	**33.9776**	**0.1213**	**3.0536**	**0.6420**	**3.6955**	**0.8344**	**0.5906**	**1.4250**		**11,348.7676**	**11,348.7676**	**0.0950**		**11,350.7631**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7822	0.0000	2.7822	1.5003	0.0000	1.5003			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7822**	**0.0151**	**2.7974**	**1.5003**	**0.0151**	**1.5154**	**0.0000**	**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5564	32.6529	33.1448	0.1187	2.8300	0.6403	3.4703	0.7751	0.5890	1.3641		11,158.1446	11,158.1446	0.0858		11,159.9455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**2.6157**	**32.7327**	**33.9776**	**0.1213**	**3.0536**	**0.6420**	**3.6955**	**0.8344**	**0.5906**	**1.4250**		**11,348.7676**	**11,348.7676**	**0.0950**		**11,350.7631**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3842	17.8517	35.3378	0.0758	2.2136	0.3377	2.5513	0.6305	0.3107	0.9412		7,092.0130	7,092.0130	0.0530		7,093.1258
Worker	3.2044	4.2598	44.6876	0.1515	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		10,724.6567	10,724.6567	0.5069		10,735.3020
Total	**5.5886**	**22.1115**	**80.0254**	**0.2273**	**14.9896**	**0.4355**	**15.4251**	**4.0188**	**0.4014**	**4.4201**		**17,816.6696**	**17,816.6696**	**0.5599**		**17,828.4278**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3842	17.8517	35.3378	0.0758	2.2136	0.3377	2.5513	0.6305	0.3107	0.9412		7,092.0130	7,092.0130	0.0530		7,093.1258
Worker	3.2044	4.2598	44.6876	0.1515	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		10,724.6567	10,724.6567	0.5069		10,735.3020
Total	**5.5886**	**22.1115**	**80.0254**	**0.2273**	**14.9896**	**0.4355**	**15.4251**	**4.0188**	**0.4014**	**4.4201**		**17,816.6696**	**17,816.6696**	**0.5599**		**17,828.4278**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3306	16.2058	34.5106	0.0757	2.2136	0.3340	2.5476	0.6305	0.3073	0.9378		7,085.6561	7,085.6561	0.0542		7,086.7937
Worker	3.0346	3.9943	42.0012	0.1514	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		10,546.3434	10,546.3434	0.4854		10,556.5364
Total	**5.3652**	**20.2001**	**76.5118**	**0.2272**	**14.9897**	**0.4317**	**15.4213**	**4.0188**	**0.3979**	**4.4166**		**17,631.9996**	**17,631.9996**	**0.5396**		**17,643.3301**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3306	16.2058	34.5106	0.0757	2.2136	0.3340	2.5476	0.6305	0.3073	0.9378		7,085.6561	7,085.6561	0.0542		7,086.7937
Worker	3.0346	3.9943	42.0012	0.1514	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		10,546.3434	10,546.3434	0.4854		10,556.5364
Total	**5.3652**	**20.2001**	**76.5118**	**0.2272**	**14.9897**	**0.4317**	**15.4213**	**4.0188**	**0.3979**	**4.4166**		**17,631.9996**	**17,631.9996**	**0.5396**		**17,643.3301**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**57.8268**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6420	0.8535	8.9532	0.0303	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,148.6845	2,148.6845	0.1016		2,150.8173
Total	**0.6420**	**0.8535**	**8.9532**	**0.0303**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,148.6845**	**2,148.6845**	**0.1016**		**2,150.8173**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6420	0.8535	8.9532	0.0303	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,148.6845	2,148.6845	0.1016		2,150.8173
Total	**0.6420**	**0.8535**	**8.9532**	**0.0303**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,148.6845**	**2,148.6845**	**0.1016**		**2,150.8173**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**57.8124**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6080	0.8003	8.4149	0.0303	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,112.9595	2,112.9595	0.0973		2,115.0016
Total	**0.6080**	**0.8003**	**8.4149**	**0.0303**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,112.9595**	**2,112.9595**	**0.0973**		**2,115.0016**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6080	0.8003	8.4149	0.0303	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,112.9595	2,112.9595	0.0973		2,115.0016
Total	**0.6080**	**0.8003**	**8.4149**	**0.0303**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,112.9595**	**2,112.9595**	**0.0973**		**2,115.0016**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131		2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**		**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0398	0.0524	0.5512	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		138.4035	138.4035	6.3700e-003		138.5372
Total	**0.0398**	**0.0524**	**0.5512**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**138.4035**	**138.4035**	**6.3700e-003**		**138.5372**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0398	0.0524	0.5512	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		138.4035	138.4035	6.3700e-003		138.5372
Total	**0.0398**	**0.0524**	**0.5512**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**138.4035**	**138.4035**	**6.3700e-003**		**138.5372**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	53.1204	99.4005	459.8599	1.2697	86.8310	1.7747	88.6057	23.2043	1.6375	24.8418		96,203.0437	96,203.0437	3.3728		96,273.8724
Unmitigated	58.5172	137.4439	589.8664	1.8868	131.0810	2.5774	133.6584	35.0295	2.3777	37.4072		143,001.9016	143,001.9016	4.8759		143,104.2958

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,176.00	1,432.00	1214.00	4,162,091	2,881,466
Condo/Townhouse High Rise	3,410.40	4,152.80	3520.60	12,070,064	8,356,252
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	6,126.41	0.00	0.00	13,513,671	8,716,444
High Turnover (Sit Down Restaurant)	1,017.20	1,266.96	1054.72	1,442,202	950,727
Hotel	1,634.00	1,638.00	1190.00	3,749,016	2,465,413
Library	3,533.72	4,282.60	2345.08	8,762,925	5,655,704
Regional Shopping Center	3,238.08	1,599.04	807.68	5,746,096	3,781,132
Total	20,246.76	14,482.35	10,243.03	49,765,327	33,016,588

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
NaturalGas Unmitigated	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	22891.8	0.2469	2.1096	0.8977	0.0135		0.1706	0.1706		0.1706	0.1706		2,693.1499	2,693.1499	0.0516	0.0494	2,709.5399
Condo/Townhouse High Rise	7893.72	0.0851	0.7275	0.3096	4.6400e-003		0.0588	0.0588		0.0588	0.0588		928.6724	928.6724	0.0178	0.0170	934.3241
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	17242.2	0.1860	1.6904	1.4200	0.0101		0.1285	0.1285		0.1285	0.1285		2,028.4988	2,028.4988	0.0389	0.0372	2,040.8439
High Turnover (Sit Down Restaurant)	5107.07	0.0551	0.5007	0.4206	3.0000e-003		0.0381	0.0381		0.0381	0.0381		600.8316	600.8316	0.0115	0.0110	604.4882
Hotel	19906.3	0.2147	1.9516	1.6393	0.0117		0.1483	0.1483		0.1483	0.1483		2,341.9204	2,341.9204	0.0449	0.0429	2,356.1729
Library	4741.15	0.0511	0.4648	0.3905	2.7900e-003		0.0353	0.0353		0.0353	0.0353		557.7824	557.7824	0.0107	0.0102	561.1770
Regional Shopping Center	149.041	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5343	17.5343	3.4000e-004	3.2000e-004	17.6410
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.8405**	**7.4592**	**5.0899**	**0.0458**		**0.5807**	**0.5807**		**0.5807**	**0.5807**		**9,168.3897**	**9,168.3897**	**0.1757**	**0.1681**	**9,224.1869**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	19.2513	0.2076	1.7741	0.7550	0.0113		0.1434	0.1434		0.1434	0.1434		2,264.8554	2,264.8554	0.0434	0.0415	2,278.6390
Condo/Townhouse High Rise	6.63837	0.0716	0.6118	0.2603	3.9000e-003		0.0495	0.0495		0.0495	0.0495		780.9846	780.9846	0.0150	0.0143	785.7376
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	13.9168	0.1501	1.3644	1.1461	8.1900e-003		0.1037	0.1037		0.1037	0.1037		1,637.2751	1,637.2751	0.0314	0.0300	1,647.2392
High Turnover (Sit Down Restaurant)	4.9088	0.0529	0.4813	0.4043	2.8900e-003		0.0366	0.0366		0.0366	0.0366		577.5059	577.5059	0.0111	0.0106	581.0205
Hotel	16.5711	0.1787	1.6246	1.3647	9.7500e-003		0.1235	0.1235		0.1235	0.1235		1,949.5411	1,949.5411	0.0374	0.0357	1,961.4057
Library	4.01725	0.0433	0.3939	0.3308	2.3600e-003		0.0299	0.0299		0.0299	0.0299		472.6176	472.6176	9.0600e-003	8.6600e-003	475.4938
Regional Shopping Center	0.127825	1.3800e-003	0.0125	0.0105	8.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		15.0382	15.0382	2.9000e-004	2.8000e-004	15.1297
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.7056**	**6.2626**	**4.2717**	**0.0385**		**0.4875**	**0.4875**		**0.4875**	**0.4875**		**7,697.8178**	**7,697.8178**	**0.1476**	**0.1411**	**7,744.6655**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	61.3857	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Unmitigated	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9892	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559		116.3950	116.3950	0.1144		118.7972
Total	**64.8879**	**0.7490**	**64.8110**	**3.4200e-003**		**0.3559**	**0.3559**		**0.3559**	**0.3559**	**0.0000**	**116.3950**	**116.3950**	**0.1144**	**0.0000**	**118.7972**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5190	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101		98.8792	98.8792	0.0869		100.7050
Total	**61.3857**	**0.6697**	**56.9957**	**2.8200e-003**		**0.3101**	**0.3101**		**0.3101**	**0.3101**	**0.0000**	**98.8792**	**98.8792**	**0.0869**	**0.0000**	**100.7050**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Long Beach Civic Center - Existing

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	283.00	1000sqft	3.40	283,000.00	0
Library	138.00	1000sqft	2.10	138,000.00	0
City Park	2.60	Acre	2.60	113,256.00	0
Enclosed Parking with Elevator	3.25	Acre	3.25	141,570.00	0
Parking Lot	0.83	Acre	0.83	36,154.80	0
Parking Lot	1.80	Acre	1.80	78,408.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2015
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated from Google Earth. Old Courthouse not included as it is non-operational.

Vehicle Trips - From Traffic Study, LLG 2015.

Mobile Land Use Mitigation -

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblLandUse	LotAcreage	6.50	3.40
tblLandUse	LotAcreage	3.17	2.10
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	27.92	10.23
tblVehicleTrips	WD_TR	56.24	33.87

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.7487	6.0800	6.5811	0.0112	0.6419	0.3107	0.9526	0.2171	0.2900	0.5071	0.0000	963.2863	963.2863	0.1214	0.0000	965.8361
2017	8.1594	2.1445	2.6478	5.1000e-003	0.2130	0.1109	0.3240	0.0574	0.1039	0.1612	0.0000	422.8125	422.8125	0.0448	0.0000	423.7523
Total	**8.9081**	**8.2245**	**9.2289**	**0.0163**	**0.8550**	**0.4216**	**1.2766**	**0.2745**	**0.3938**	**0.6683**	**0.0000**	**1,386.0988**	**1,386.0988**	**0.1662**	**0.0000**	**1,389.5884**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.7487	6.0800	6.5811	0.0112	0.6419	0.3107	0.9526	0.2171	0.2900	0.5071	0.0000	963.2858	963.2858	0.1214	0.0000	965.8357
2017	8.1594	2.1445	2.6478	5.1000e-003	0.2130	0.1109	0.3239	0.0574	0.1039	0.1612	0.0000	422.8123	422.8123	0.0448	0.0000	423.7521
Total	**8.9081**	**8.2245**	**9.2289**	**0.0163**	**0.8550**	**0.4216**	**1.2765**	**0.2745**	**0.3938**	**0.6683**	**0.0000**	**1,386.0981**	**1,386.0981**	**0.1662**	**0.0000**	**1,389.5877**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.6437	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0113
Energy	0.0307	0.2789	0.2343	1.6700e-003		0.0212	0.0212		0.0212	0.0212	0.0000	2,258.0727	2,258.0727	0.0957	0.0242	2,267.5691
Mobile	4.7634	13.3691	52.1107	0.1037	7.0692	0.1826	7.2518	1.8914	0.1678	2.0592	0.0000	8,498.2566	8,498.2566	0.3737	0.0000	8,506.1044
Waste						0.0000	0.0000		0.0000	0.0000	353.2875	0.0000	353.2875	20.8787	0.0000	791.7401
Water						0.0000	0.0000		0.0000	0.0000	19.2061	366.4507	385.6568	1.9895	0.0501	442.9559
Total	**8.4378**	**13.6480**	**52.3506**	**0.1054**	**7.0692**	**0.2038**	**7.2730**	**1.8914**	**0.1890**	**2.0804**	**372.4936**	**11,122.7906**	**11,495.2842**	**23.3376**	**0.0742**	**12,008.3808**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3289	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0113
Energy	0.0307	0.2789	0.2343	1.6700e-003		0.0212	0.0212		0.0212	0.0212	0.0000	2,258.0727	2,258.0727	0.0957	0.0242	2,267.5691
Mobile	4.4118	10.6999	43.5045	0.0800	5.4020	0.1423	5.5443	1.4453	0.1307	1.5760	0.0000	6,555.9007	6,555.9007	0.2948	0.0000	6,562.0915
Waste						0.0000	0.0000		0.0000	0.0000	353.2875	0.0000	353.2875	20.8787	0.0000	791.7401
Water						0.0000	0.0000		0.0000	0.0000	19.2061	366.4507	385.6568	1.9891	0.0500	442.9252
Total	**7.7714**	**10.9788**	**43.7445**	**0.0817**	**5.4020**	**0.1635**	**5.5655**	**1.4453**	**0.1519**	**1.5972**	**372.4936**	**9,180.4347**	**9,552.9283**	**23.2583**	**0.0741**	**10,064.3372**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.90**	**19.56**	**16.44**	**22.46**	**23.58**	**19.79**	**23.48**	**23.58**	**19.61**	**23.22**	**0.00**	**17.46**	**16.90**	**0.34**	**0.09**	**16.19**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
3	Grading	Grading	2/12/2016	3/24/2016	5	30	
4	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
5	Paving	Paving	5/19/2017	6/15/2017	5	20	
6	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,018,894; Non-Residential Outdoor: 339,631 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	304.00	130.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	61.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0429	0.4566	0.3503	4.0000e-004		0.0229	0.0229		0.0214	0.0214	0.0000	37.0974	37.0974	0.0101	0.0000	37.3092
Total	**0.0429**	**0.4566**	**0.3503**	**4.0000e-004**		**0.0229**	**0.0229**		**0.0214**	**0.0214**	**0.0000**	**37.0974**	**37.0974**	**0.0101**	**0.0000**	**37.3092**

3.2 Demolition - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	8.9000e-004	9.2000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5418	1.5418	8.0000e-005	0.0000	1.5436
Total	**6.0000e-004**	**8.9000e-004**	**9.2000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5418**	**1.5418**	**8.0000e-005**	**0.0000**	**1.5436**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0429	0.4566	0.3503	4.0000e-004		0.0229	0.0229		0.0214	0.0214	0.0000	37.0973	37.0973	0.0101	0.0000	37.3092
Total	**0.0429**	**0.4566**	**0.3503**	**4.0000e-004**		**0.0229**	**0.0229**		**0.0214**	**0.0214**	**0.0000**	**37.0973**	**37.0973**	**0.0101**	**0.0000**	**37.3092**

3.2 Demolition - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	8.9000e-004	9.2000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5418	1.5418	8.0000e-005	0.0000	1.5436
Total	**6.0000e-004**	**8.9000e-004**	**9.2000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5418**	**1.5418**	**8.0000e-005**	**0.0000**	**1.5436**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2732	0.2055	2.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	18.4386	18.4386	5.5600e-003	0.0000	18.5554
Total	**0.0254**	**0.2732**	**0.2055**	**2.0000e-004**	**0.0903**	**0.0147**	**0.1050**	**0.0497**	**0.0135**	**0.0632**	**0.0000**	**18.4386**	**18.4386**	**5.5600e-003**	**0.0000**	**18.5554**

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.3000e-004	5.5200e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9251	0.9251	5.0000e-005	0.0000	0.9261
Total	**3.6000e-004**	**5.3000e-004**	**5.5200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9251**	**0.9251**	**5.0000e-005**	**0.0000**	**0.9261**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2732	0.2055	2.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	18.4385	18.4385	5.5600e-003	0.0000	18.5553
Total	**0.0254**	**0.2732**	**0.2055**	**2.0000e-004**	**0.0903**	**0.0147**	**0.1050**	**0.0497**	**0.0135**	**0.0632**	**0.0000**	**18.4385**	**18.4385**	**5.5600e-003**	**0.0000**	**18.5553**

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.3000e-004	5.5200e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9251	0.9251	5.0000e-005	0.0000	0.9261
Total	**3.6000e-004**	**5.3000e-004**	**5.5200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9251**	**0.9251**	**5.0000e-005**	**0.0000**	**0.9261**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2936	87.2936	0.0263	0.0000	87.8465
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.1301**	**0.0538**	**0.1839**	**0.0540**	**0.0495**	**0.1034**	**0.0000**	**87.2936**	**87.2936**	**0.0263**	**0.0000**	**87.8465**

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.7700e-003	0.0184	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.0836	3.0836	1.7000e-004	0.0000	3.0871
Total	**1.2100e-003**	**1.7700e-003**	**0.0184**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**3.0000e-005**	**9.0000e-004**	**0.0000**	**3.0836**	**3.0836**	**1.7000e-004**	**0.0000**	**3.0871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2935	87.2935	0.0263	0.0000	87.8464
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.1301**	**0.0538**	**0.1839**	**0.0540**	**0.0495**	**0.1034**	**0.0000**	**87.2935**	**87.2935**	**0.0263**	**0.0000**	**87.8464**

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.7700e-003	0.0184	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.0836	3.0836	1.7000e-004	0.0000	3.0871
Total	**1.2100e-003**	**1.7700e-003**	**0.0184**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**3.0000e-005**	**9.0000e-004**	**0.0000**	**3.0836**	**3.0836**	**1.7000e-004**	**0.0000**	**3.0871**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3644	243.3644	0.0604	0.0000	244.6319
Total	**0.3423**	**2.8649**	**1.8599**	**2.6900e-003**		**0.1977**	**0.1977**		**0.1858**	**0.1858**	**0.0000**	**243.3644**	**243.3644**	**0.0604**	**0.0000**	**244.6319**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1159	1.1796	1.5206	2.8300e-003	0.0804	0.0187	0.0991	0.0229	0.0172	0.0401	0.0000	257.5057	257.5057	1.8700e-003	0.0000	257.5449
Worker	0.1228	0.1804	1.8747	4.1200e-003	0.3352	2.8500e-003	0.3381	0.0890	2.6200e-003	0.0916	0.0000	314.0362	314.0362	0.0169	0.0000	314.3914
Total	**0.2387**	**1.3600**	**3.3952**	**6.9500e-003**	**0.4156**	**0.0215**	**0.4371**	**0.1120**	**0.0198**	**0.1317**	**0.0000**	**571.5419**	**571.5419**	**0.0188**	**0.0000**	**571.9363**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3641	243.3641	0.0604	0.0000	244.6316
Total	**0.3423**	**2.8649**	**1.8599**	**2.6900e-003**		**0.1977**	**0.1977**		**0.1858**	**0.1858**	**0.0000**	**243.3641**	**243.3641**	**0.0604**	**0.0000**	**244.6316**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1159	1.1796	1.5206	2.8300e-003	0.0804	0.0187	0.0991	0.0229	0.0172	0.0401	0.0000	257.5057	257.5057	1.8700e-003	0.0000	257.5449
Worker	0.1228	0.1804	1.8747	4.1200e-003	0.3352	2.8500e-003	0.3381	0.0890	2.6200e-003	0.0916	0.0000	314.0362	314.0362	0.0169	0.0000	314.3914
Total	**0.2387**	**1.3600**	**3.3952**	**6.9500e-003**	**0.4156**	**0.0215**	**0.4371**	**0.1120**	**0.0198**	**0.1317**	**0.0000**	**571.5419**	**571.5419**	**0.0188**	**0.0000**	**571.9363**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5422	118.5422	0.0292	0.0000	119.1548
Total	**0.1536**	**1.3071**	**0.8974**	**1.3300e-003**		**0.0882**	**0.0882**		**0.0828**	**0.0828**	**0.0000**	**118.5422**	**118.5422**	**0.0292**	**0.0000**	**119.1548**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0522	0.5284	0.7097	1.3900e-003	0.0396	8.2000e-003	0.0478	0.0113	7.5400e-003	0.0188	0.0000	124.7758	124.7758	8.9000e-004	0.0000	124.7944
Worker	0.0542	0.0802	0.8327	2.0300e-003	0.1651	1.3500e-003	0.1665	0.0439	1.2500e-003	0.0451	0.0000	148.7360	148.7360	7.6900e-003	0.0000	148.8974
Total	**0.1063**	**0.6086**	**1.5424**	**3.4200e-003**	**0.2047**	**9.5500e-003**	**0.2143**	**0.0552**	**8.7900e-003**	**0.0639**	**0.0000**	**273.5117**	**273.5117**	**8.5800e-003**	**0.0000**	**273.6919**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5420	118.5420	0.0292	0.0000	119.1547
Total	**0.1536**	**1.3071**	**0.8974**	**1.3300e-003**		**0.0882**	**0.0882**		**0.0828**	**0.0828**	**0.0000**	**118.5420**	**118.5420**	**0.0292**	**0.0000**	**119.1547**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0522	0.5284	0.7097	1.3900e-003	0.0396	8.2000e-003	0.0478	0.0113	7.5400e-003	0.0188	0.0000	124.7758	124.7758	8.9000e-004	0.0000	124.7944
Worker	0.0542	0.0802	0.8327	2.0300e-003	0.1651	1.3500e-003	0.1665	0.0439	1.2500e-003	0.0451	0.0000	148.7360	148.7360	7.6900e-003	0.0000	148.8974
Total	**0.1063**	**0.6086**	**1.5424**	**3.4200e-003**	**0.2047**	**9.5500e-003**	**0.2143**	**0.0552**	**8.7900e-003**	**0.0639**	**0.0000**	**273.5117**	**273.5117**	**8.5800e-003**	**0.0000**	**273.6919**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8266
Paving	3.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0225**	**0.2030**	**0.1473**	**2.2000e-004**		**0.0114**	**0.0114**		**0.0105**	**0.0105**	**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8266**

3.6 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	8.3000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4826	1.4826	8.0000e-005	0.0000	1.4842
Total	**5.4000e-004**	**8.0000e-004**	**8.3000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4826**	**1.4826**	**8.0000e-005**	**0.0000**	**1.4842**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8265
Paving	3.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0225**	**0.2030**	**0.1473**	**2.2000e-004**		**0.0114**	**0.0114**		**0.0105**	**0.0105**	**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8265**

3.6 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	8.3000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4826	1.4826	8.0000e-005	0.0000	1.4842
Total	**5.4000e-004**	**8.0000e-004**	**8.3000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4826**	**1.4826**	**8.0000e-005**	**0.0000**	**1.4842**

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.8710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**7.8743**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

3.7 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-003	3.2500e-003	0.0338	8.0000e-005	6.6900e-003	5.0000e-005	6.7500e-003	1.7800e-003	5.0000e-005	1.8300e-003	0.0000	6.0293	6.0293	3.1000e-004	0.0000	6.0359
Total	**2.2000e-003**	**3.2500e-003**	**0.0338**	**8.0000e-005**	**6.6900e-003**	**5.0000e-005**	**6.7500e-003**	**1.7800e-003**	**5.0000e-005**	**1.8300e-003**	**0.0000**	**6.0293**	**6.0293**	**3.1000e-004**	**0.0000**	**6.0359**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.8710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**7.8743**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

3.7 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-003	3.2500e-003	0.0338	8.0000e-005	6.6900e-003	5.0000e-005	6.7500e-003	1.7800e-003	5.0000e-005	1.8300e-003	0.0000	6.0293	6.0293	3.1000e-004	0.0000	6.0359
Total	**2.2000e-003**	**3.2500e-003**	**0.0338**	**8.0000e-005**	**6.6900e-003**	**5.0000e-005**	**6.7500e-003**	**1.7800e-003**	**5.0000e-005**	**1.8300e-003**	**0.0000**	**6.0293**	**6.0293**	**3.1000e-004**	**0.0000**	**6.0359**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.4118	10.6999	43.5045	0.0800	5.4020	0.1423	5.5443	1.4453	0.1307	1.5760	0.0000	6,555.9007	6,555.9007	0.2948	0.0000	6,562.0915
Unmitigated	4.7634	13.3691	52.1107	0.1037	7.0692	0.1826	7.2518	1.8914	0.1678	2.0592	0.0000	8,498.2566	8,498.2566	0.3737	0.0000	8,506.1044

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	91.00	91.00	91.00	261,856	200,100
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	2,895.09	0.00	0.00	6,386,011	4,879,934
Library	4,674.06	6,423.90	3517.62	12,014,554	9,181,042
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	7,660.15	6,514.90	3,608.62	18,662,422	14,261,076

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514499	0.060499	0.179997	0.139763	0.042095	0.006675	0.015446	0.029572	0.001914	0.002508	0.004341	0.000594	0.002098

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,954.4875	1,954.4875	0.0898	0.0186	1,962.1365
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,954.4875	1,954.4875	0.0898	0.0186	1,962.1365
NaturalGas Mitigated	0.0307	0.2789	0.2343	1.6700e-003		0.0212	0.0212		0.0212	0.0212	0.0000	303.5851	303.5851	5.8200e-003	5.5700e-003	305.4327
NaturalGas Unmitigated	0.0307	0.2789	0.2343	1.6700e-003		0.0212	0.0212		0.0212	0.0212	0.0000	303.5851	303.5851	5.8200e-003	5.5700e-003	305.4327

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3.09319e+006	0.0167	0.1516	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	165.0644	165.0644	3.1600e-003	3.0300e-003	166.0690
Library	2.59578e+006	0.0140	0.1272	0.1069	7.6000e-004		9.6700e-003	9.6700e-003		9.6700e-003	9.6700e-003	0.0000	138.5207	138.5207	2.6500e-003	2.5400e-003	139.3637
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0307**	**0.2789**	**0.2343**	**1.6700e-003**		**0.0212**	**0.0212**		**0.0212**	**0.0212**	**0.0000**	**303.5851**	**303.5851**	**5.8100e-003**	**5.5700e-003**	**305.4327**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3.09319e+006	0.0167	0.1516	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	165.0644	165.0644	3.1600e-003	3.0300e-003	166.0690
Library	2.59578e+006	0.0140	0.1272	0.1069	7.6000e-004		9.6700e-003	9.6700e-003		9.6700e-003	9.6700e-003	0.0000	138.5207	138.5207	2.6500e-003	2.5400e-003	139.3637
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0307**	**0.2789**	**0.2343**	**1.6700e-003**		**0.0212**	**0.0212**		**0.0212**	**0.0212**	**0.0000**	**303.5851**	**303.5851**	**5.8100e-003**	**5.5700e-003**	**305.4327**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	954182	273.0552	0.0126	2.6000e-003	274.1239
Government (Civic Center)	4.11199e+006	1,176.7154	0.0541	0.0112	1,181.3205
Library	1.6629e+006	475.8669	0.0219	4.5300e-003	477.7292
Parking Lot	31816.2	9.1048	4.2000e-004	9.0000e-005	9.1404
Parking Lot	68999	19.7452	9.1000e-004	1.9000e-004	19.8225
Total		**1,954.4875**	**0.0898**	**0.0186**	**1,962.1365**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	954182	273.0552	0.0126	2.6000e-003	274.1239
Government (Civic Center)	4.11199e+006	1,176.7154	0.0541	0.0112	1,181.3205
Library	1.6629e+006	475.8669	0.0219	4.5300e-003	477.7292
Parking Lot	31816.2	9.1048	4.2000e-004	9.0000e-005	9.1404
Parking Lot	68999	19.7452	9.1000e-004	1.9000e-004	19.8225
Total		**1,954.4875**	**0.0898**	**0.0186**	**1,962.1365**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3289	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0113
Unmitigated	3.6437	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0113

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7871					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8561					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.6000e-004	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0113
Total	**3.6437**	**5.0000e-005**	**5.6700e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0107**	**0.0107**	**3.0000e-005**	**0.0000**	**0.0113**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4723					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8561					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.6000e-004	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0107	0.0107	3.0000e-005	0.0000	0.0113
Total	**3.3289**	**5.0000e-005**	**5.6700e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0107**	**0.0107**	**3.0000e-005**	**0.0000**	**0.0113**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	385.6568	1.9891	0.0500	442.9252
Unmitigated	385.6568	1.9895	0.0501	442.9559

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.09785	9.8490	4.5000e-004	9.0000e-005	9.8876
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	56.2207 / 34.4578	336.8769	1.8466	0.0463	390.0059
Library	4.31787 / 6.75359	38.9308	0.1424	3.6800e-003	43.0623
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**385.6567**	**1.9895**	**0.0501**	**442.9559**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.09785	9.8490	4.5000e-004	9.0000e-005	9.8876
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	56.2207 / 34.4578	336.8769	1.8463	0.0462	389.9775
Library	4.31787 / 6.75359	38.9308	0.1424	3.6700e-003	43.0601
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**385.6567**	**1.9891**	**0.0500**	**442.9252**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	353.2875	20.8787	0.0000	791.7401
Unmitigated	353.2875	20.8787	0.0000	791.7401

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.22	0.0447	2.6400e-003	0.0000	0.1001
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	1613.1	327.4447	19.3514	0.0000	733.8247
Library	127.09	25.7981	1.5246	0.0000	57.8153
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**353.2875**	**20.8787**	**0.0000**	**791.7401**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.22	0.0447	2.6400e-003	0.0000	0.1001
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	1613.1	327.4447	19.3514	0.0000	733.8247
Library	127.09	25.7981	1.5246	0.0000	57.8153
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**353.2875**	**20.8787**	**0.0000**	**791.7401**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Long Beach Civic Center - Existing

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	283.00	1000sqft	3.40	283,000.00	0
Library	138.00	1000sqft	2.10	138,000.00	0
City Park	2.60	Acre	2.60	113,256.00	0
Enclosed Parking with Elevator	3.25	Acre	3.25	141,570.00	0
Parking Lot	0.83	Acre	0.83	36,154.80	0
Parking Lot	1.80	Acre	1.80	78,408.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2015
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated from Google Earth. Old Courthouse not included as it is non-operational.

Vehicle Trips - From Traffic Study, LLG 2015.

Mobile Land Use Mitigation -

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblLandUse	LotAcreage	6.50	3.40
tblLandUse	LotAcreage	3.17	2.10
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	27.92	10.23
tblVehicleTrips	WD_TR	56.24	33.87

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5630	74.9182	51.2140	0.0981	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	9,119.6158	9,119.6158	1.9472	0.0000	9,160.5068
2017	787.6567	38.0553	48.1785	0.0981	4.2107	1.9734	6.1842	1.1327	1.8498	2.9825	0.0000	8,905.8300	8,905.8300	0.8404	0.0000	8,923.4793
Total	**794.2197**	**112.9735**	**99.3925**	**0.1962**	**22.4782**	**5.5595**	**27.3920**	**11.1167**	**5.1490**	**15.6716**	**0.0000**	**18,025.4458**	**18,025.4458**	**2.7876**	**0.0000**	**18,083.9861**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5630	74.9182	51.2140	0.0981	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	9,119.6158	9,119.6158	1.9472	0.0000	9,160.5068
2017	787.6567	38.0553	48.1785	0.0981	4.2107	1.9734	6.1842	1.1327	1.8498	2.9825	0.0000	8,905.8300	8,905.8300	0.8404	0.0000	8,923.4793
Total	**794.2197**	**112.9735**	**99.3925**	**0.1962**	**22.4782**	**5.5595**	**27.3920**	**11.1167**	**5.1490**	**15.6716**	**0.0000**	**18,025.4458**	**18,025.4458**	**2.7876**	**0.0000**	**18,083.9861**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.9670	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Energy	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323
Mobile	36.1839	93.3193	389.4490	0.8074	53.8875	1.3646	55.2521	14.3961	1.2537	15.6498		72,881.2073	72,881.2073	3.0852		72,945.9969
Total	**56.3190**	**94.8478**	**390.7780**	**0.8166**	**53.8875**	**1.4809**	**55.3684**	**14.3961**	**1.3700**	**15.7661**		**74,714.9741**	**74,714.9741**	**3.1206**	**0.0336**	**74,790.9289**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.2419	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Energy	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323
Mobile	33.5050	74.8504	319.9385	0.6229	41.1787	1.0623	42.2410	11.0010	0.9758	11.9768		56,211.3264	56,211.3264	2.4335		56,262.4294
Total	**51.9150**	**76.3789**	**321.2674**	**0.6321**	**41.1787**	**1.1786**	**42.3573**	**11.0010**	**1.0921**	**12.0931**		**58,045.0932**	**58,045.0932**	**2.4689**	**0.0336**	**58,107.3614**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.82**	**19.47**	**17.79**	**22.59**	**23.58**	**20.41**	**23.50**	**23.58**	**20.28**	**23.30**	**0.00**	**22.31**	**22.31**	**20.88**	**0.00**	**22.31**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
3	Grading	Grading	2/12/2016	3/24/2016	5	30	
4	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
5	Paving	Paving	5/19/2017	6/15/2017	5	20	
6	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,018,894; Non-Residential Outdoor: 339,631 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	304.00	130.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	61.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

3.2 Demolition - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.0627**	**0.0783**	**0.9750**	**2.1200e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**178.4188**	**178.4188**	**9.1500e-003**		**178.6110**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

3.2 Demolition - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.0627**	**0.0783**	**0.9750**	**2.1200e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**178.4188**	**178.4188**	**9.1500e-003**		**178.6110**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0752	0.0940	1.1700	2.5500e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		214.1025	214.1025	0.0110		214.3332
Total	**0.0752**	**0.0940**	**1.1700**	**2.5500e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**214.1025**	**214.1025**	**0.0110**		**214.3332**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0752	0.0940	1.1700	2.5500e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		214.1025	214.1025	0.0110		214.3332
Total	**0.0752**	**0.0940**	**1.1700**	**2.5500e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**214.1025**	**214.1025**	**0.0110**		**214.3332**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**0.0836**	**0.1045**	**1.3000**	**2.8300e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**237.8917**	**237.8917**	**0.0122**		**238.1480**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**0.0836**	**0.1045**	**1.3000**	**2.8300e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**237.8917**	**237.8917**	**0.0122**		**238.1480**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0824	11.2278	12.9468	0.0283	0.8125	0.1849	0.9974	0.2314	0.1700	0.4014		2,834.3759	2,834.3759	0.0202		2,834.8008
Worker	1.2700	1.5878	19.7606	0.0431	3.3980	0.0284	3.4264	0.9012	0.0261	0.9273		3,615.9534	3,615.9534	0.1855		3,619.8494
Total	**2.3524**	**12.8155**	**32.7074**	**0.0713**	**4.2105**	**0.2133**	**4.4238**	**1.1326**	**0.1961**	**1.3287**		**6,450.3294**	**6,450.3294**	**0.2058**		**6,454.6502**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0824	11.2278	12.9468	0.0283	0.8125	0.1849	0.9974	0.2314	0.1700	0.4014		2,834.3759	2,834.3759	0.0202		2,834.8008
Worker	1.2700	1.5878	19.7606	0.0431	3.3980	0.0284	3.4264	0.9012	0.0261	0.9273		3,615.9534	3,615.9534	0.1855		3,619.8494
Total	**2.3524**	**12.8155**	**32.7074**	**0.0713**	**4.2105**	**0.2133**	**4.4238**	**1.1326**	**0.1961**	**1.3287**		**6,450.3294**	**6,450.3294**	**0.2058**		**6,454.6502**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9918	10.2162	12.1754	0.0282	0.8127	0.1649	0.9776	0.2315	0.1516	0.3831		2,788.4669	2,788.4669	0.0196		2,788.8775
Worker	1.1412	1.4335	17.8739	0.0430	3.3980	0.0273	3.4253	0.9012	0.0252	0.9264		3,477.5578	3,477.5578	0.1712		3,481.1528
Total	**2.1330**	**11.6497**	**30.0493**	**0.0713**	**4.2107**	**0.1922**	**4.4029**	**1.1327**	**0.1768**	**1.3095**		**6,266.0247**	**6,266.0247**	**0.1907**		**6,270.0303**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9918	10.2162	12.1754	0.0282	0.8127	0.1649	0.9776	0.2315	0.1516	0.3831		2,788.4669	2,788.4669	0.0196		2,788.8775
Worker	1.1412	1.4335	17.8739	0.0430	3.3980	0.0273	3.4253	0.9012	0.0252	0.9264		3,477.5578	3,477.5578	0.1712		3,481.1528
Total	**2.1330**	**11.6497**	**30.0493**	**0.0713**	**4.2107**	**0.1922**	**4.4029**	**1.1327**	**0.1768**	**1.3095**		**6,266.0247**	**6,266.0247**	**0.1907**		**6,270.0303**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2519**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

3.6 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2519**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

3.6 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	787.0954					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**787.4277**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.7 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2290	0.2876	3.5866	8.6400e-003	0.6818	5.4800e-003	0.6873	0.1808	5.0600e-003	0.1859		697.7994	697.7994	0.0344		698.5208
Total	**0.2290**	**0.2876**	**3.5866**	**8.6400e-003**	**0.6818**	**5.4800e-003**	**0.6873**	**0.1808**	**5.0600e-003**	**0.1859**		**697.7994**	**697.7994**	**0.0344**		**698.5208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	787.0954					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**787.4277**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.7 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2290	0.2876	3.5866	8.6400e-003	0.6818	5.4800e-003	0.6873	0.1808	5.0600e-003	0.1859		697.7994	697.7994	0.0344		698.5208
Total	**0.2290**	**0.2876**	**3.5866**	**8.6400e-003**	**0.6818**	**5.4800e-003**	**0.6873**	**0.1808**	**5.0600e-003**	**0.1859**		**697.7994**	**697.7994**	**0.0344**		**698.5208**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	33.5050	74.8504	319.9385	0.6229	41.1787	1.0623	42.2410	11.0010	0.9758	11.9768		56,211.3264	56,211.3264	2.4335		56,262.4294
Unmitigated	36.1839	93.3193	389.4490	0.8074	53.8875	1.3646	55.2521	14.3961	1.2537	15.6498		72,881.2073	72,881.2073	3.0852		72,945.9969

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	91.00	91.00	91.00	261,856	200,100
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	2,895.09	0.00	0.00	6,386,011	4,879,934
Library	4,674.06	6,423.90	3517.62	12,014,554	9,181,042
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	7,660.15	6,514.90	3,608.62	18,662,422	14,261,076

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514499	0.060499	0.179997	0.139763	0.042095	0.006675	0.015446	0.029572	0.001914	0.002508	0.004341	0.000594	0.002098

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323
NaturalGas Unmitigated	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	8474.49	0.0914	0.8308	0.6979	4.9800e-003		0.0631	0.0631		0.0631	0.0631		996.9992	996.9992	0.0191	0.0183	1,003.0668
Library	7111.73	0.0767	0.6972	0.5857	4.1800e-003		0.0530	0.0530		0.0530	0.0530		836.6737	836.6737	0.0160	0.0153	841.7655
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1681**	**1.5281**	**1.2836**	**9.1600e-003**		**0.1161**	**0.1161**		**0.1161**	**0.1161**		**1,833.6728**	**1,833.6728**	**0.0352**	**0.0336**	**1,844.8323**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	8.47449	0.0914	0.8308	0.6979	4.9800e-003		0.0631	0.0631		0.0631	0.0631		996.9992	996.9992	0.0191	0.0183	1,003.0668
Library	7.11173	0.0767	0.6972	0.5857	4.1800e-003		0.0530	0.0530		0.0530	0.0530		836.6737	836.6737	0.0160	0.0153	841.7655
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1681**	**1.5281**	**1.2836**	**9.1600e-003**		**0.1161**	**0.1161**		**0.1161**	**0.1161**		**1,833.6728**	**1,833.6728**	**0.0352**	**0.0336**	**1,844.8323**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.2419	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Unmitigated	19.9670	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.6497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Total	**19.9670**	**4.4000e-004**	**0.0454**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0940**	**0.0940**	**2.7000e-004**		**0.0997**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5877					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.6497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Total	**18.2419**	**4.4000e-004**	**0.0454**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0940**	**0.0940**	**2.7000e-004**		**0.0997**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Long Beach Civic Center - Existing

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	283.00	1000sqft	3.40	283,000.00	0
Library	138.00	1000sqft	2.10	138,000.00	0
City Park	2.60	Acre	2.60	113,256.00	0
Enclosed Parking with Elevator	3.25	Acre	3.25	141,570.00	0
Parking Lot	0.83	Acre	0.83	36,154.80	0
Parking Lot	1.80	Acre	1.80	78,408.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2015
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated from Google Earth. Old Courthouse not included as it is non-operational.

Vehicle Trips - From Traffic Study, LLG 2015.

Mobile Land Use Mitigation -

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblLandUse	LotAcreage	6.50	3.40
tblLandUse	LotAcreage	3.17	2.10
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	27.92	10.23
tblVehicleTrips	WD_TR	56.24	33.87

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5648	74.9284	52.2565	0.0952	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	8,871.6661	8,871.6661	1.9472	0.0000	8,912.5571
2017	787.6610	38.4466	49.2938	0.0952	4.2107	1.9750	6.1858	1.1327	1.8513	2.9840	0.0000	8,666.3264	8,666.3264	0.8411	0.0000	8,683.9885
Total	**794.2258**	**113.3750**	**101.5503**	**0.1904**	**22.4782**	**5.5611**	**27.3936**	**11.1167**	**5.1505**	**15.6731**	**0.0000**	**17,537.9925**	**17,537.9925**	**2.7882**	**0.0000**	**17,596.5457**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5648	74.9284	52.2565	0.0952	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	8,871.6661	8,871.6661	1.9472	0.0000	8,912.5571
2017	787.6610	38.4466	49.2938	0.0952	4.2107	1.9750	6.1858	1.1327	1.8513	2.9840	0.0000	8,666.3264	8,666.3264	0.8411	0.0000	8,683.9885
Total	**794.2258**	**113.3750**	**101.5503**	**0.1904**	**22.4782**	**5.5611**	**27.3936**	**11.1167**	**5.1505**	**15.6731**	**0.0000**	**17,537.9925**	**17,537.9925**	**2.7882**	**0.0000**	**17,596.5457**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.9670	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Energy	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323
Mobile	37.6133	98.1068	386.4701	0.7670	53.8875	1.3736	55.2611	14.3961	1.2619	15.6580		69,328.9544	69,328.9544	3.0877		69,393.7967
Total	**57.7484**	**99.6353**	**387.7990**	**0.7762**	**53.8875**	**1.4898**	**55.3774**	**14.3961**	**1.3782**	**15.7743**		**71,162.7213**	**71,162.7213**	**3.1232**	**0.0336**	**71,238.7287**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.2419	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Energy	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323
Mobile	35.0077	78.5474	323.7247	0.5919	41.1787	1.0713	42.2500	11.0010	0.9841	11.9850		53,477.6343	53,477.6343	2.4360		53,528.7900
Total	**53.4176**	**80.0759**	**325.0536**	**0.6011**	**41.1787**	**1.1876**	**42.3662**	**11.0010**	**1.1004**	**12.1013**		**55,311.4012**	**55,311.4012**	**2.4714**	**0.0336**	**55,373.7220**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.50**	**19.63**	**16.18**	**22.55**	**23.58**	**20.29**	**23.50**	**23.58**	**20.16**	**23.28**	**0.00**	**22.27**	**22.27**	**20.87**	**0.00**	**22.27**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
3	Grading	Grading	2/12/2016	3/24/2016	5	30	
4	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
5	Paving	Paving	5/19/2017	6/15/2017	5	20	
6	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,018,894; Non-Residential Outdoor: 339,631 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	304.00	130.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	61.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

3.2 Demolition - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.0640**	**0.0860**	**0.8984**	**1.9900e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**167.3573**	**167.3573**	**9.1500e-003**		**167.5495**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

3.2 Demolition - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.0640**	**0.0860**	**0.8984**	**1.9900e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**167.3573**	**167.3573**	**9.1500e-003**		**167.5495**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**0.0853**	**0.1147**	**1.1978**	**2.6500e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**223.1431**	**223.1431**	**0.0122**		**223.3994**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**0.0853**	**0.1147**	**1.1978**	**2.6500e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**223.1431**	**223.1431**	**0.0122**		**223.3994**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1867	11.5112	15.5429	0.0281	0.8125	0.1868	0.9992	0.2314	0.1718	0.4031		2,810.6054	2,810.6054	0.0208		2,811.0429
Worker	1.2967	1.7428	18.2070	0.0404	3.3980	0.0284	3.4264	0.9012	0.0261	0.9273		3,391.7744	3,391.7744	0.1855		3,395.6704
Total	**2.4833**	**13.2540**	**33.7498**	**0.0684**	**4.2105**	**0.2152**	**4.4256**	**1.1326**	**0.1979**	**1.3304**		**6,202.3797**	**6,202.3797**	**0.2064**		**6,206.7132**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1867	11.5112	15.5429	0.0281	0.8125	0.1868	0.9992	0.2314	0.1718	0.4031		2,810.6054	2,810.6054	0.0208		2,811.0429
Worker	1.2967	1.7428	18.2070	0.0404	3.3980	0.0284	3.4264	0.9012	0.0261	0.9273		3,391.7744	3,391.7744	0.1855		3,395.6704
Total	**2.4833**	**13.2540**	**33.7498**	**0.0684**	**4.2105**	**0.2152**	**4.4256**	**1.1326**	**0.1979**	**1.3304**		**6,202.3797**	**6,202.3797**	**0.2064**		**6,206.7132**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0836	10.4679	14.7548	0.0280	0.8127	0.1665	0.9792	0.2315	0.1531	0.3846		2,765.0241	2,765.0241	0.0202		2,765.4476
Worker	1.1626	1.5731	16.4099	0.0403	3.3980	0.0273	3.4253	0.9012	0.0252	0.9264		3,261.4970	3,261.4970	0.1712		3,265.0920
Total	**2.2461**	**12.0410**	**31.1647**	**0.0684**	**4.2107**	**0.1938**	**4.4046**	**1.1327**	**0.1783**	**1.3110**		**6,026.5211**	**6,026.5211**	**0.1914**		**6,030.5395**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0836	10.4679	14.7548	0.0280	0.8127	0.1665	0.9792	0.2315	0.1531	0.3846		2,765.0241	2,765.0241	0.0202		2,765.4476
Worker	1.1626	1.5731	16.4099	0.0403	3.3980	0.0273	3.4253	0.9012	0.0252	0.9264		3,261.4970	3,261.4970	0.1712		3,265.0920
Total	**2.2461**	**12.0410**	**31.1647**	**0.0684**	**4.2107**	**0.1938**	**4.4046**	**1.1327**	**0.1783**	**1.3110**		**6,026.5211**	**6,026.5211**	**0.1914**		**6,030.5395**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2519**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

3.6 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2519**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

3.6 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	787.0954					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**787.4277**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.7 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2333	0.3157	3.2928	8.0900e-003	0.6818	5.4800e-003	0.6873	0.1808	5.0600e-003	0.1859		654.4451	654.4451	0.0344		655.1665
Total	**0.2333**	**0.3157**	**3.2928**	**8.0900e-003**	**0.6818**	**5.4800e-003**	**0.6873**	**0.1808**	**5.0600e-003**	**0.1859**		**654.4451**	**654.4451**	**0.0344**		**655.1665**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	787.0954					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**787.4277**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.7 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2333	0.3157	3.2928	8.0900e-003	0.6818	5.4800e-003	0.6873	0.1808	5.0600e-003	0.1859		654.4451	654.4451	0.0344		655.1665
Total	**0.2333**	**0.3157**	**3.2928**	**8.0900e-003**	**0.6818**	**5.4800e-003**	**0.6873**	**0.1808**	**5.0600e-003**	**0.1859**		**654.4451**	**654.4451**	**0.0344**		**655.1665**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	35.0077	78.5474	323.7247	0.5919	41.1787	1.0713	42.2500	11.0010	0.9841	11.9850		53,477.6343	53,477.6343	2.4360		53,528.7900
Unmitigated	37.6133	98.1068	386.4701	0.7670	53.8875	1.3736	55.2611	14.3961	1.2619	15.6580		69,328.9544	69,328.9544	3.0877		69,393.7967

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	91.00	91.00	91.00	261,856	200,100
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	2,895.09	0.00	0.00	6,386,011	4,879,934
Library	4,674.06	6,423.90	3517.62	12,014,554	9,181,042
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	7,660.15	6,514.90	3,608.62	18,662,422	14,261,076

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514499	0.060499	0.179997	0.139763	0.042095	0.006675	0.015446	0.029572	0.001914	0.002508	0.004341	0.000594	0.002098

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323
NaturalGas Unmitigated	0.1681	1.5281	1.2836	9.1700e-003		0.1161	0.1161		0.1161	0.1161		1,833.6728	1,833.6728	0.0352	0.0336	1,844.8323

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	8474.49	0.0914	0.8308	0.6979	4.9800e-003		0.0631	0.0631		0.0631	0.0631		996.9992	996.9992	0.0191	0.0183	1,003.0668
Library	7111.73	0.0767	0.6972	0.5857	4.1800e-003		0.0530	0.0530		0.0530	0.0530		836.6737	836.6737	0.0160	0.0153	841.7655
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1681**	**1.5281**	**1.2836**	**9.1600e-003**		**0.1161**	**0.1161**		**0.1161**	**0.1161**		**1,833.6728**	**1,833.6728**	**0.0352**	**0.0336**	**1,844.8323**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	8.47449	0.0914	0.8308	0.6979	4.9800e-003		0.0631	0.0631		0.0631	0.0631		996.9992	996.9992	0.0191	0.0183	1,003.0668
Library	7.11173	0.0767	0.6972	0.5857	4.1800e-003		0.0530	0.0530		0.0530	0.0530		836.6737	836.6737	0.0160	0.0153	841.7655
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1681**	**1.5281**	**1.2836**	**9.1600e-003**		**0.1161**	**0.1161**		**0.1161**	**0.1161**		**1,833.6728**	**1,833.6728**	**0.0352**	**0.0336**	**1,844.8323**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.2419	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Unmitigated	19.9670	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.6497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Total	**19.9670**	**4.4000e-004**	**0.0454**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0940**	**0.0940**	**2.7000e-004**		**0.0997**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5877					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.6497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0454	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0940	0.0940	2.7000e-004		0.0997
Total	**18.2419**	**4.4000e-004**	**0.0454**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0940**	**0.0940**	**2.7000e-004**		**0.0997**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Project with Mitigation Measure AQ-3

Long Beach Civic Center

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	575.79	1000sqft	3.78	575,793.00	0
Library	92.00	1000sqft	1.73	92,000.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	8.00	1000sqft	0.00	8,000.00	0
Hotel	200.00	Room	0.00	290,400.00	0
Condo/Townhouse High Rise	200.00	Dwelling Unit	0.90	235,000.00	572
Condo/Townhouse High Rise	580.00	Dwelling Unit	6.29	650,000.00	1659
Regional Shopping Center	32.00	1000sqft	0.00	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113. Assumed compliance with MM AQ-3.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	864,939.00	435,697.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	864,939.00	50,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	864,939.00	310,200.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,594,817.00	1,307,090.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,594,817.00	150,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,594,817.00	930,600.00

tblArchitecturalCoating	ConstArea_Residential_Exterior	597,375.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	597,375.00	158,625.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	597,375.00	438,750.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,792,125.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,792,125.00	475,875.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,792,125.00	1,316,250.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_Nonresidential_Interior	2594817	2387690
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	50
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	238.00
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tblConstructionPhase	NumDays	300.00	346.00
tblConstructionPhase	NumDays	300.00	694.00
tblConstructionPhase	NumDays	20.00	86.00
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	30.00	154.00
tblConstructionPhase	NumDays	30.00	284.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	86.00
tblConstructionPhase	NumDays	20.00	195.00
tblConstructionPhase	NumDays	20.00	282.00
tblConstructionPhase	PhaseEndDate	1/26/2023	7/29/2022
tblConstructionPhase	PhaseEndDate	7/3/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	3/4/2019	10/31/2019
tblConstructionPhase	PhaseEndDate	4/30/2020	3/31/2020
tblConstructionPhase	PhaseEndDate	4/29/2022	2/28/2022
tblConstructionPhase	PhaseEndDate	11/28/2019	4/30/2019
tblConstructionPhase	PhaseEndDate	9/29/2020	6/30/2020
tblConstructionPhase	PhaseEndDate	5/1/2020	11/29/2019
tblConstructionPhase	PhaseEndDate	2/1/2021	12/31/2020

tblConstructionPhase	PhaseEndDate	6/1/2017	3/31/2017
tblConstructionPhase	PhaseEndDate	3/2/2020	12/31/2019
tblConstructionPhase	PhaseEndDate	11/28/2022	7/29/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	12/29/2017
tblConstructionPhase	PhaseEndDate	11/30/2020	11/29/2019
tblConstructionPhase	PhaseStartDate	3/1/2022	9/1/2021
tblConstructionPhase	PhaseStartDate	12/30/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	7/2/2018
tblConstructionPhase	PhaseStartDate	1/1/2020	12/2/2019
tblConstructionPhase	PhaseStartDate	1/1/2021	11/2/2020
tblConstructionPhase	PhaseStartDate	4/1/2017	9/1/2016
tblConstructionPhase	PhaseStartDate	4/1/2020	1/1/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	7/1/2020	6/1/2020
tblConstructionPhase	PhaseStartDate	4/30/2016	3/1/2016
tblConstructionPhase	PhaseStartDate	11/30/2019	10/1/2019
tblConstructionPhase	PhaseStartDate	7/30/2022	4/1/2022
tblConstructionPhase	PhaseStartDate	5/1/2019	4/3/2017
tblConstructionPhase	PhaseStartDate	11/1/2019	11/1/2018
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	663.00	0.00
tblFireplaces	NumberNoFireplace	78.00	0.00
tblFireplaces	NumberWood	39.00	0.00
tblGrading	AcresOfGrading	385.00	2.00
tblGrading	AcresOfGrading	710.00	4.20
tblGrading	AcresOfGrading	165.00	3.10

tblGrading	MaterialExported	0.00	200,000.00
tblGrading	MaterialExported	0.00	180,000.00
tblGrading	MaterialImported	0.00	68,200.00
tblLandUse	LandUseSquareFeet	575,790.00	575,793.00
tblLandUse	LandUseSquareFeet	200,000.00	235,000.00
tblLandUse	LandUseSquareFeet	580,000.00	650,000.00
tblLandUse	LotAcreage	13.22	3.78
tblLandUse	LotAcreage	2.11	1.73
tblLandUse	LotAcreage	2.25	0.00
tblLandUse	LotAcreage	4.58	0.00
tblLandUse	LotAcreage	6.52	0.00
tblLandUse	LotAcreage	0.18	0.00
tblLandUse	LotAcreage	6.67	0.00
tblLandUse	LotAcreage	3.13	0.90
tblLandUse	LotAcreage	9.06	6.29
tblLandUse	LotAcreage	0.73	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	VendorTripNumber	367.00	354.00
tblTripsAndVMT	VendorTripNumber	367.00	354.00
tblTripsAndVMT	VendorTripNumber	367.00	354.00
tblTripsAndVMT	WorkerTripNumber	1,227.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	1,227.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	245.00	229.00
tblTripsAndVMT	WorkerTripNumber	1,227.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	245.00	229.00
tblTripsAndVMT	WorkerTripNumber	245.00	229.00
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tblVehicleEF	HHD	0.01	0.01

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tblVehicleEF	HHD	1.68	1.69
tblVehicleEF	HHD	53.80	51.65
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tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.93	3.33
tblVehicleEF	HHD	4.25	3.36
tblVehicleEF	HHD	3.53	3.38
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	8.9550e-003	8.5570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4370e-003	1.3690e-003
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tblVehicleEF	HHD	0.56	0.61
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
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tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.42	1.22
tblVehicleEF	HHD	5.5990e-003	5.5920e-003

tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4410e-003	1.3960e-003
tblVehicleEF	HHD	1.4370e-003	1.3690e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.64	0.69
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.52	1.30
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.30	2.49
tblVehicleEF	HHD	1.69	1.70
tblVehicleEF	HHD	43.34	41.60
tblVehicleEF	HHD	559.60	558.89
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	4.06	3.43
tblVehicleEF	HHD	4.01	3.17
tblVehicleEF	HHD	3.38	3.24
tblVehicleEF	HHD	8.2050e-003	7.8410e-003
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
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tblVehicleEF	HHD	7.5490e-003	7.2140e-003
tblVehicleEF	HHD	0.03	0.03

tblVehicleEF	HHD	8.7160e-003	8.7220e-003
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tblVehicleEF	HHD	2.3200e-003	2.1960e-003
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tblVehicleEF	HHD	0.53	0.57
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
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tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.24	1.06
tblVehicleEF	HHD	5.9320e-003	5.9240e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.2710e-003	1.2330e-003
tblVehicleEF	HHD	2.3200e-003	2.1960e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.60	0.65
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.32	1.14
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.01
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tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
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tblVehicleEF	HHD	0.61	0.66
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
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tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.44	1.23
tblVehicleEF	HHD	5.1400e-003	5.1330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4540e-003	1.4080e-003
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
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tblVehicleEF	HHD	0.69	0.75
tblVehicleEF	HHD	1.0540e-003	1.0120e-003

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tblVehicleEF	LDA	5.4270e-003	4.6120e-003
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tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
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tblVehicleEF	LDA	3.1270e-003	3.4870e-003
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tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
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tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
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tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
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tblVehicleEF	LDA	0.08	0.07
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tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
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tblVehicleEF	LDA	7.5600e-004	7.5400e-004
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tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19

tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
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tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
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tblVehicleEF	LDA	3.1270e-003	3.4870e-003
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tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
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tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09

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tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76
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tblVehicleEF	LDT1	303.51	294.33
tblVehicleEF	LDT1	63.81	61.80
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tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
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tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02

tblVehicleEF	LDT1	0.02	0.01
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tblVehicleEF	LDT1	2.97	2.52
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tblVehicleEF	LDT1	63.81	61.80
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tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01

tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95

tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35

tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11

tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65

tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03

tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07

tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
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tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004

tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
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tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
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tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15

tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
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tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004

tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30

tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06

tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003

tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003
tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004

tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003

tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003

tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003

tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
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tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
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tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11

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tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
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tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
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tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06

tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08

tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.78	12.76
tblVehicleEF	MHD	525.09	525.15
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
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tblVehicleEF	MHD	4.48	3.27
tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09

tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.88	0.74
tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.1000e-004	7.7100e-004
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.94	0.79
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tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
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tblVehicleEF	OBUS	0.97	0.86
tblVehicleEF	OBUS	8.80	7.92
tblVehicleEF	OBUS	534.88	533.47
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.65	3.20
tblVehicleEF	OBUS	2.28	1.27
tblVehicleEF	OBUS	1.24	1.12
tblVehicleEF	OBUS	9.5470e-003	8.7920e-003

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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	8.7830e-003	8.0890e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.54	0.48
tblVehicleEF	OBUS	5.6700e-003	5.6550e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.1900e-004	5.0200e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.53	0.64
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.58	0.51
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003

tblVehicleEF	OBUS	1.99	2.40
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tblVehicleEF	OBUS	1,017.03	1,018.77
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tblVehicleEF	OBUS	2.14	1.19
tblVehicleEF	OBUS	1.19	1.08
tblVehicleEF	OBUS	8.0480e-003	7.4120e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
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tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.48	0.42
tblVehicleEF	OBUS	6.0070e-003	5.9910e-003

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tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
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tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
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tblVehicleEF	OBUS	491.00	489.70
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.44	3.06
tblVehicleEF	OBUS	2.24	1.25
tblVehicleEF	OBUS	1.25	1.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	0.01	9.8420e-003
tblVehicleEF	OBUS	0.04	0.04

tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.55	0.49
tblVehicleEF	OBUS	5.2050e-003	5.1910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.2200e-004	5.0500e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.57	0.69
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.58	0.52
tblVehicleEF	SBUS	4.4530e-003	4.6460e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.05	1.12
tblVehicleEF	SBUS	2.96	2.66
tblVehicleEF	SBUS	27.16	24.72
tblVehicleEF	SBUS	547.00	552.46
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.58	7.35

tblVehicleEF	SBUS	7.03	6.65
tblVehicleEF	SBUS	2.02	1.89
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.30	0.28
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.66	1.48
tblVehicleEF	SBUS	5.7980e-003	5.8560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7600e-003	1.7140e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	1.95	1.92

tblVehicleEF	SBUS	1.77	1.59
tblVehicleEF	SBUS	4.1970e-003	4.3790e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	0.76	0.82
tblVehicleEF	SBUS	3.03	2.73
tblVehicleEF	SBUS	23.01	20.96
tblVehicleEF	SBUS	579.49	585.28
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	9.4430e-003
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.29

tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04

tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52
tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003

tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88

tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15

tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	39.00	0.00

tblWoodstoves	NumberNoncatalytic	39.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.5611	15.8757	14.8099	0.0272	1.9419	0.6454	2.5873	0.7364	0.5966	1.3331	0.0000	2,393.7998	2,393.7998	0.2977	0.0000	2,400.0506
2017	3.4369	13.1616	20.2302	0.0421	3.1264	0.5456	3.6720	1.0755	0.5073	1.5828	0.0000	3,417.9267	3,417.9267	0.2895	0.0000	3,424.0070
2018	3.5586	7.8104	15.8436	0.0363	2.0890	0.2949	2.3838	0.5604	0.2761	0.8365	0.0000	2,815.3216	2,815.3216	0.1752	0.0000	2,819.0002
2019	4.9317	9.5482	12.8772	0.0282	1.4553	0.4010	1.8563	0.4375	0.3725	0.8100	0.0000	2,245.8493	2,245.8493	0.2662	0.0000	2,251.4394
2020	1.1824	10.9821	13.1074	0.0313	1.6706	0.4091	2.0797	0.5624	0.3787	0.9411	0.0000	2,513.0474	2,513.0474	0.2662	0.0000	2,518.6371
2021	3.5131	5.3166	13.0886	0.0350	2.0314	0.1863	2.2177	0.5452	0.1743	0.7195	0.0000	2,532.6288	2,532.6288	0.1435	0.0000	2,535.6425
2022	4.5664	1.3805	3.3252	8.8400e-003	0.4973	0.0570	0.5542	0.1330	0.0533	0.1862	0.0000	633.8594	633.8594	0.0567	0.0000	635.0502
Total	**22.7502**	**64.0752**	**93.2821**	**0.2089**	**12.8119**	**2.5391**	**15.3510**	**4.0504**	**2.3587**	**6.4091**	**0.0000**	**16,552.4331**	**16,552.4331**	**1.4949**	**0.0000**	**16,583.8267**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6365	5.0246	12.7082	0.0272	1.3521	0.0711	1.4233	0.4599	0.0656	0.5255	0.0000	2,393.7988	2,393.7988	0.2977	0.0000	2,400.0495
2017	2.7232	5.8648	19.9582	0.0421	2.6493	0.0856	2.7349	0.8160	0.0789	0.8949	0.0000	3,417.9258	3,417.9258	0.2895	0.0000	3,424.0061
2018	3.2066	4.5994	15.8786	0.0363	2.0890	0.0708	2.1597	0.5604	0.0653	0.6257	0.0000	2,815.3212	2,815.3212	0.1752	0.0000	2,818.9997
2019	4.3658	3.2736	12.6325	0.0282	1.3056	0.0498	1.3554	0.3714	0.0460	0.4174	0.0000	2,245.8484	2,245.8484	0.2662	0.0000	2,251.4384
2020	0.6225	4.6308	12.4834	0.0313	1.3322	0.0795	1.4117	0.4096	0.0734	0.4830	0.0000	2,513.0465	2,513.0465	0.2662	0.0000	2,518.6362
2021	3.3003	3.2830	13.2033	0.0350	2.0314	0.0583	2.0898	0.5452	0.0538	0.5990	0.0000	2,532.6285	2,532.6285	0.1435	0.0000	2,535.6421
2022	4.4905	0.5937	3.4626	8.8400e-003	0.4973	0.0108	0.5080	0.1330	9.9500e-003	0.1429	0.0000	633.8593	633.8593	0.0567	0.0000	635.0500
Total	**19.3455**	**27.2699**	**90.3267**	**0.2089**	**11.2568**	**0.4259**	**11.6827**	**3.2953**	**0.3930**	**3.6883**	**0.0000**	**16,552.4283**	**16,552.4283**	**1.4949**	**0.0000**	**16,583.8220**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**14.97**	**57.44**	**3.17**	**0.00**	**12.14**	**83.23**	**23.90**	**18.64**	**83.34**	**42.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.7277	0.0936	8.1014	4.3000e-004		0.0445	0.0445		0.0445	0.0445	0.0000	13.1990	13.1990	0.0130	0.0000	13.4714
Energy	0.1534	1.3613	0.9289	8.3700e-003		0.1060	0.1060		0.1060	0.1060	0.0000	7,308.5748	7,308.5748	0.2953	0.0829	7,340.4744
Mobile	8.1561	20.5618	87.1250	0.2799	18.8700	0.3768	19.2468	5.0503	0.3476	5.3980	0.0000	19,227.3768	19,227.3768	0.6474	0.0000	19,240.9722
Waste						0.0000	0.0000		0.0000	0.0000	804.6745	0.0000	804.6745	47.5549	0.0000	1,803.3273
Water						0.0000	0.0000		0.0000	0.0000	56.4575	1,021.0818	1,077.5393	5.8457	0.1466	1,245.7540
Total	**20.0372**	**22.0168**	**96.1553**	**0.2887**	**18.8700**	**0.5273**	**19.3973**	**5.0503**	**0.4981**	**5.5484**	**861.1320**	**27,570.2323**	**28,431.3642**	**54.3562**	**0.2295**	**29,643.9992**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	10.2925	0.0837	7.1245	3.5000e-004		0.0388	0.0388		0.0388	0.0388	0.0000	11.2127	11.2127	9.8600e-003	0.0000	11.4198
Energy	0.1288	1.1429	0.7796	7.0200e-003		0.0890	0.0890		0.0890	0.0890	0.0000	4,318.5119	4,318.5119	0.1644	0.0523	4,338.1810
Mobile	7.3592	14.8803	67.5822	0.1886	12.5192	0.2596	12.7789	3.3506	0.2396	3.5902	0.0000	12,957.7687	12,957.7687	0.4483	0.0000	12,967.1832
Waste						0.0000	0.0000		0.0000	0.0000	804.6745	0.0000	804.6745	47.5549	0.0000	1,803.3273
Water						0.0000	0.0000		0.0000	0.0000	45.1660	866.6250	911.7910	4.6780	0.1176	1,046.4854
Total	**17.7805**	**16.1070**	**75.4862**	**0.1960**	**12.5192**	**0.3874**	**12.9066**	**3.3506**	**0.3673**	**3.7179**	**849.8405**	**18,154.1182**	**19,003.9587**	**52.8554**	**0.1699**	**20,166.5966**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**11.26**	**26.84**	**21.50**	**32.10**	**33.66**	**26.53**	**33.46**	**33.66**	**26.26**	**32.99**	**1.31**	**34.15**	**33.16**	**2.76**	**25.97**	**31.97**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 475,875; Residential Outdoor: 158,625; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38

Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29

Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2048	0.0000	0.2048	0.0310	0.0000	0.0310	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1844	1.9632	1.5063	1.7200e-003		0.0986	0.0986		0.0919	0.0919	0.0000	159.5187	159.5187	0.0434	0.0000	160.4296
Total	**0.1844**	**1.9632**	**1.5063**	**1.7200e-003**	**0.2048**	**0.0986**	**0.3033**	**0.0310**	**0.0919**	**0.1229**	**0.0000**	**159.5187**	**159.5187**	**0.0434**	**0.0000**	**160.4296**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0168	0.2733	0.2066	7.0000e-004	0.0162	4.1200e-003	0.0203	4.4500e-003	3.7900e-003	8.2400e-003	0.0000	63.7134	63.7134	4.6000e-004	0.0000	63.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	3.8100e-003	0.0396	9.0000e-005	7.0800e-003	6.0000e-005	7.1400e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.6298	6.6298	3.6000e-004	0.0000	6.6373
Total	**0.0194**	**0.2771**	**0.2462**	**7.9000e-004**	**0.0233**	**4.1800e-003**	**0.0275**	**6.3300e-003**	**3.8500e-003**	**0.0102**	**0.0000**	**70.3431**	**70.3431**	**8.2000e-004**	**0.0000**	**70.3602**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0921	0.0000	0.0921	0.0140	0.0000	0.0140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.0883	1.0245	1.7200e-003		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	159.5185	159.5185	0.0434	0.0000	160.4295
Total	**0.0204**	**0.0883**	**1.0245**	**1.7200e-003**	**0.0921**	**4.1000e-004**	**0.0926**	**0.0140**	**4.1000e-004**	**0.0144**	**0.0000**	**159.5185**	**159.5185**	**0.0434**	**0.0000**	**160.4295**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0168	0.2733	0.2066	7.0000e-004	0.0162	4.1200e-003	0.0203	4.4500e-003	3.7900e-003	8.2400e-003	0.0000	63.7134	63.7134	4.6000e-004	0.0000	63.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	3.8100e-003	0.0396	9.0000e-005	7.0800e-003	6.0000e-005	7.1400e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.6298	6.6298	3.6000e-004	0.0000	6.6373
Total	**0.0194**	**0.2771**	**0.2462**	**7.9000e-004**	**0.0233**	**4.1800e-003**	**0.0275**	**6.3300e-003**	**3.8500e-003**	**0.0102**	**0.0000**	**70.3431**	**70.3431**	**8.2000e-004**	**0.0000**	**70.3602**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8675	0.0000	0.8675	0.4718	0.0000	0.4718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7095	8.1921	5.3806	6.7600e-003		0.3925	0.3925		0.3611	0.3611	0.0000	637.2432	637.2432	0.1922	0.0000	641.2797
Total	**0.7095**	**8.1921**	**5.3806**	**6.7600e-003**	**0.8675**	**0.3925**	**1.2600**	**0.4718**	**0.3611**	**0.8329**	**0.0000**	**637.2432**	**637.2432**	**0.1922**	**0.0000**	**641.2797**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1544	2.5065	1.8945	6.3900e-003	0.1820	0.0378	0.2198	0.0490	0.0348	0.0837	0.0000	584.2754	584.2754	4.1800e-003	0.0000	584.3632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8000e-003	0.0129	0.1344	3.0000e-004	0.0240	2.0000e-004	0.0242	6.3800e-003	1.9000e-004	6.5700e-003	0.0000	22.5105	22.5105	1.2100e-003	0.0000	22.5359
Total	**0.1632**	**2.5194**	**2.0289**	**6.6900e-003**	**0.2061**	**0.0380**	**0.2441**	**0.0554**	**0.0350**	**0.0903**	**0.0000**	**606.7859**	**606.7859**	**5.3900e-003**	**0.0000**	**606.8991**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3904	0.0000	0.3904	0.2123	0.0000	0.2123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0828	0.3589	3.8083	6.7600e-003		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	637.2424	637.2424	0.1922	0.0000	641.2790
Total	**0.0828**	**0.3589**	**3.8083**	**6.7600e-003**	**0.3904**	**1.6600e-003**	**0.3921**	**0.2123**	**1.6600e-003**	**0.2140**	**0.0000**	**637.2424**	**637.2424**	**0.1922**	**0.0000**	**641.2790**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1544	2.5065	1.8945	6.3900e-003	0.1820	0.0378	0.2198	0.0490	0.0348	0.0837	0.0000	584.2754	584.2754	4.1800e-003	0.0000	584.3632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8000e-003	0.0129	0.1344	3.0000e-004	0.0240	2.0000e-004	0.0242	6.3800e-003	1.9000e-004	6.5700e-003	0.0000	22.5105	22.5105	1.2100e-003	0.0000	22.5359
Total	**0.1632**	**2.5194**	**2.0289**	**6.6900e-003**	**0.2061**	**0.0380**	**0.2441**	**0.0554**	**0.0350**	**0.0903**	**0.0000**	**606.7859**	**606.7859**	**5.3900e-003**	**0.0000**	**606.8991**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8675	0.0000	0.8675	0.4718	0.0000	0.4718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1982	2.2617	1.5212	2.0100e-003		0.1078	0.1078		0.0992	0.0992	0.0000	186.1402	186.1402	0.0570	0.0000	187.3379
Total	**0.1982**	**2.2617**	**1.5212**	**2.0100e-003**	**0.8675**	**0.1078**	**0.9754**	**0.4718**	**0.0992**	**0.5710**	**0.0000**	**186.1402**	**186.1402**	**0.0570**	**0.0000**	**187.3379**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0432	0.6818	0.5421	1.9000e-003	0.1564	0.0103	0.1667	0.0397	9.4300e-003	0.0491	0.0000	170.5682	170.5682	1.2100e-003	0.0000	170.5937
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	3.4600e-003	0.0360	9.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.4247	6.4247	3.3000e-004	0.0000	6.4316
Total	**0.0455**	**0.6853**	**0.5781**	**1.9900e-003**	**0.1635**	**0.0103**	**0.1739**	**0.0416**	**9.4800e-003**	**0.0510**	**0.0000**	**176.9928**	**176.9928**	**1.5400e-003**	**0.0000**	**177.0253**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3904	0.0000	0.3904	0.2123	0.0000	0.2123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0246	0.1065	1.1303	2.0100e-003		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	186.1400	186.1400	0.0570	0.0000	187.3377
Total	**0.0246**	**0.1065**	**1.1303**	**2.0100e-003**	**0.3904**	**4.9000e-004**	**0.3909**	**0.2123**	**4.9000e-004**	**0.2128**	**0.0000**	**186.1400**	**186.1400**	**0.0570**	**0.0000**	**187.3377**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0432	0.6818	0.5421	1.9000e-003	0.1564	0.0103	0.1667	0.0397	9.4300e-003	0.0491	0.0000	170.5682	170.5682	1.2100e-003	0.0000	170.5937
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	3.4600e-003	0.0360	9.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.4247	6.4247	3.3000e-004	0.0000	6.4316
Total	**0.0455**	**0.6853**	**0.5781**	**1.9900e-003**	**0.1635**	**0.0103**	**0.1739**	**0.0416**	**9.4800e-003**	**0.0510**	**0.0000**	**176.9928**	**176.9928**	**1.5400e-003**	**0.0000**	**177.0253**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1482	1.2400	0.8050	1.1700e-003		0.0856	0.0856		0.0804	0.0804	0.0000	105.3368	105.3368	0.0261	0.0000	105.8854
Total	**0.1482**	**1.2400**	**0.8050**	**1.1700e-003**		**0.0856**	**0.0856**		**0.0804**	**0.0804**	**0.0000**	**105.3368**	**105.3368**	**0.0261**	**0.0000**	**105.8854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	1.3903	1.7922	3.3400e-003	0.0948	0.0220	0.1167	0.0270	0.0202	0.0473	0.0000	303.5079	303.5079	2.2000e-003	0.0000	303.5541
Worker	0.1999	0.2936	3.0508	6.7000e-003	0.5455	4.6400e-003	0.5501	0.1449	4.2700e-003	0.1491	0.0000	511.0643	511.0643	0.0275	0.0000	511.6424
Total	**0.3365**	**1.6839**	**4.8430**	**0.0100**	**0.6403**	**0.0266**	**0.6669**	**0.1719**	**0.0245**	**0.1964**	**0.0000**	**814.5722**	**814.5722**	**0.0297**	**0.0000**	**815.1965**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0142	0.0970	0.7574	1.1700e-003		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	105.3367	105.3367	0.0261	0.0000	105.8853
Total	**0.0142**	**0.0970**	**0.7574**	**1.1700e-003**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**	**0.0000**	**105.3367**	**105.3367**	**0.0261**	**0.0000**	**105.8853**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	1.3903	1.7922	3.3400e-003	0.0948	0.0220	0.1167	0.0270	0.0202	0.0473	0.0000	303.5079	303.5079	2.2000e-003	0.0000	303.5541
Worker	0.1999	0.2936	3.0508	6.7000e-003	0.5455	4.6400e-003	0.5501	0.1449	4.2700e-003	0.1491	0.0000	511.0643	511.0643	0.0275	0.0000	511.6424
Total	**0.3365**	**1.6839**	**4.8430**	**0.0100**	**0.6403**	**0.0266**	**0.6669**	**0.1719**	**0.0245**	**0.1964**	**0.0000**	**814.5722**	**814.5722**	**0.0297**	**0.0000**	**815.1965**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4033	3.4327	2.3568	3.4900e-003		0.2316	0.2316		0.2175	0.2175	0.0000	311.3228	311.3228	0.0766	0.0000	312.9319
Total	**0.4033**	**3.4327**	**2.3568**	**3.4900e-003**		**0.2316**	**0.2316**		**0.2175**	**0.2175**	**0.0000**	**311.3228**	**311.3228**	**0.0766**	**0.0000**	**312.9319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3732	3.7785	5.0754	9.9700e-003	0.2833	0.0586	0.3419	0.0809	0.0539	0.1348	0.0000	892.3358	892.3358	6.3600e-003	0.0000	892.4694
Worker	0.5348	0.7920	8.2224	0.0200	1.6302	0.0134	1.6436	0.4330	0.0123	0.4453	0.0000	1,468.6789	1,468.6789	0.0759	0.0000	1,470.2729
Total	**0.9080**	**4.5704**	**13.2978**	**0.0300**	**1.9135**	**0.0720**	**1.9854**	**0.5138**	**0.0662**	**0.5800**	**0.0000**	**2,361.0146**	**2,361.0146**	**0.0823**	**0.0000**	**2,362.7423**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0424	0.2898	2.2634	3.4900e-003		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	311.3225	311.3225	0.0766	0.0000	312.9315
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**311.3225**	**311.3225**	**0.0766**	**0.0000**	**312.9315**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3732	3.7785	5.0754	9.9700e-003	0.2833	0.0586	0.3419	0.0809	0.0539	0.1348	0.0000	892.3358	892.3358	6.3600e-003	0.0000	892.4694
Worker	0.5348	0.7920	8.2224	0.0200	1.6302	0.0134	1.6436	0.4330	0.0123	0.4453	0.0000	1,468.6789	1,468.6789	0.0759	0.0000	1,470.2729
Total	**0.9080**	**4.5704**	**13.2978**	**0.0300**	**1.9135**	**0.0720**	**1.9854**	**0.5138**	**0.0662**	**0.5800**	**0.0000**	**2,361.0146**	**2,361.0146**	**0.0823**	**0.0000**	**2,362.7423**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9844**	**308.9844**	**0.0756**	**0.0000**	**310.5723**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3504	3.4794	4.8810	0.0100	0.2844	0.0554	0.3398	0.0812	0.0510	0.1322	0.0000	880.7298	880.7298	6.3500e-003	0.0000	880.8631
Worker	0.4821	0.7211	7.4737	0.0201	1.6365	0.0131	1.6496	0.4346	0.0121	0.4467	0.0000	1,419.2991	1,419.2991	0.0707	0.0000	1,420.7842
Total	**0.8325**	**4.2004**	**12.3548**	**0.0301**	**1.9209**	**0.0685**	**1.9893**	**0.5158**	**0.0631**	**0.5789**	**0.0000**	**2,300.0289**	**2,300.0289**	**0.0771**	**0.0000**	**2,301.6473**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.2909	2.2721	3.5000e-003		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**308.9841**	**308.9841**	**0.0756**	**0.0000**	**310.5720**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3504	3.4794	4.8810	0.0100	0.2844	0.0554	0.3398	0.0812	0.0510	0.1322	0.0000	880.7298	880.7298	6.3500e-003	0.0000	880.8631
Worker	0.4821	0.7211	7.4737	0.0201	1.6365	0.0131	1.6496	0.4346	0.0121	0.4467	0.0000	1,419.2991	1,419.2991	0.0707	0.0000	1,420.7842
Total	**0.8325**	**4.2004**	**12.3548**	**0.0301**	**1.9209**	**0.0685**	**1.9893**	**0.5158**	**0.0631**	**0.5789**	**0.0000**	**2,300.0289**	**2,300.0289**	**0.0771**	**0.0000**	**2,301.6473**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1011	0.9015	0.7362	1.1500e-003		0.0553	0.0553		0.0520	0.0520	0.0000	100.6728	100.6728	0.0245	0.0000	101.1872
Total	**0.1011**	**0.9015**	**0.7362**	**1.1500e-003**		**0.0553**	**0.0553**		**0.0520**	**0.0520**	**0.0000**	**100.6728**	**100.6728**	**0.0245**	**0.0000**	**101.1872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1092	1.0567	1.5537	3.2800e-003	0.0937	0.0173	0.1110	0.0268	0.0160	0.0427	0.0000	284.5598	284.5598	2.0500e-003	0.0000	284.6029
Worker	0.1459	0.2179	2.2582	6.6000e-003	0.5392	4.2200e-003	0.5435	0.1432	3.9200e-003	0.1471	0.0000	449.8642	449.8642	0.0218	0.0000	450.3222
Total	**0.2551**	**1.2746**	**3.8119**	**9.8800e-003**	**0.6329**	**0.0216**	**0.6545**	**0.1700**	**0.0199**	**0.1898**	**0.0000**	**734.4240**	**734.4240**	**0.0239**	**0.0000**	**734.9252**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.0958	0.7487	1.1500e-003		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	100.6727	100.6727	0.0245	0.0000	101.1871
Total	**0.0140**	**0.0958**	**0.7487**	**1.1500e-003**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**	**0.0000**	**100.6727**	**100.6727**	**0.0245**	**0.0000**	**101.1871**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1092	1.0567	1.5537	3.2800e-003	0.0937	0.0173	0.1110	0.0268	0.0160	0.0427	0.0000	284.5598	284.5598	2.0500e-003	0.0000	284.6029
Worker	0.1459	0.2179	2.2582	6.6000e-003	0.5392	4.2200e-003	0.5435	0.1432	3.9200e-003	0.1471	0.0000	449.8642	449.8642	0.0218	0.0000	450.3222
Total	**0.2551**	**1.2746**	**3.8119**	**9.8800e-003**	**0.6329**	**0.0216**	**0.6545**	**0.1700**	**0.0199**	**0.1898**	**0.0000**	**734.4240**	**734.4240**	**0.0239**	**0.0000**	**734.9252**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.9789	1.4359	2.1700e-003		0.1110	0.1110		0.1021	0.1021	0.0000	201.7608	201.7608	0.0618	0.0000	203.0590
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1860**	**1.9789**	**1.4359**	**2.1700e-003**		**0.1110**	**0.1110**		**0.1021**	**0.1021**	**0.0000**	**201.7608**	**201.7608**	**0.0618**	**0.0000**	**203.0590**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	7.7900e-003	0.0809	2.0000e-004	0.0161	1.3000e-004	0.0162	4.2600e-003	1.2000e-004	4.3800e-003	0.0000	14.4555	14.4555	7.5000e-004	0.0000	14.4712
Total	**5.2600e-003**	**7.7900e-003**	**0.0809**	**2.0000e-004**	**0.0161**	**1.3000e-004**	**0.0162**	**4.2600e-003**	**1.2000e-004**	**4.3800e-003**	**0.0000**	**14.4555**	**14.4555**	**7.5000e-004**	**0.0000**	**14.4712**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0268	0.1160	1.6504	2.1700e-003		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	201.7606	201.7606	0.0618	0.0000	203.0588
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0268**	**0.1160**	**1.6504**	**2.1700e-003**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**201.7606**	**201.7606**	**0.0618**	**0.0000**	**203.0588**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	7.7900e-003	0.0809	2.0000e-004	0.0161	1.3000e-004	0.0162	4.2600e-003	1.2000e-004	4.3800e-003	0.0000	14.4555	14.4555	7.5000e-004	0.0000	14.4712
Total	**5.2600e-003**	**7.7900e-003**	**0.0809**	**2.0000e-004**	**0.0161**	**1.3000e-004**	**0.0162**	**4.2600e-003**	**1.2000e-004**	**4.3800e-003**	**0.0000**	**14.4555**	**14.4555**	**7.5000e-004**	**0.0000**	**14.4712**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1442	0.1233	2.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	16.8515	16.8515	1.7800e-003	0.0000	16.8888
Total	**1.6362**	**0.1442**	**0.1233**	**2.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**16.8515**	**16.8515**	**1.7800e-003**	**0.0000**	**16.8888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0806	0.8364	2.0400e-003	0.1658	1.3600e-003	0.1672	0.0440	1.2500e-003	0.0453	0.0000	149.3883	149.3883	7.7200e-003	0.0000	149.5505
Total	**0.0544**	**0.0806**	**0.8364**	**2.0400e-003**	**0.1658**	**1.3600e-003**	**0.1672**	**0.0440**	**1.2500e-003**	**0.0453**	**0.0000**	**149.3883**	**149.3883**	**7.7200e-003**	**0.0000**	**149.5505**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	8.5000e-003	0.1209	2.0000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	16.8515	16.8515	1.7800e-003	0.0000	16.8888
Total	**1.6162**	**8.5000e-003**	**0.1209**	**2.0000e-004**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**16.8515**	**16.8515**	**1.7800e-003**	**0.0000**	**16.8888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0806	0.8364	2.0400e-003	0.1658	1.3600e-003	0.1672	0.0440	1.2500e-003	0.0453	0.0000	149.3883	149.3883	7.7200e-003	0.0000	149.5505
Total	**0.0544**	**0.0806**	**0.8364**	**2.0400e-003**	**0.1658**	**1.3600e-003**	**0.1672**	**0.0440**	**1.2500e-003**	**0.0453**	**0.0000**	**149.3883**	**149.3883**	**7.7200e-003**	**0.0000**	**149.5505**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2741					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0196	0.1314	0.1215	1.9000e-004		9.8600e-003	9.8600e-003		9.8600e-003	9.8600e-003	0.0000	16.7238	16.7238	1.5900e-003	0.0000	16.7572
Total	**2.2936**	**0.1314**	**0.1215**	**1.9000e-004**		**9.8600e-003**	**9.8600e-003**		**9.8600e-003**	**9.8600e-003**	**0.0000**	**16.7238**	**16.7238**	**1.5900e-003**	**0.0000**	**16.7572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0485	0.0725	0.7516	2.0200e-003	0.1646	1.3100e-003	0.1659	0.0437	1.2100e-003	0.0449	0.0000	142.7230	142.7230	7.1100e-003	0.0000	142.8723
Total	**0.0485**	**0.0725**	**0.7516**	**2.0200e-003**	**0.1646**	**1.3100e-003**	**0.1659**	**0.0437**	**1.2100e-003**	**0.0449**	**0.0000**	**142.7230**	**142.7230**	**7.1100e-003**	**0.0000**	**142.8723**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2741					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	8.4300e-003	0.1200	1.9000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	16.7238	16.7238	1.5900e-003	0.0000	16.7572
Total	**2.2760**	**8.4300e-003**	**0.1200**	**1.9000e-004**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**16.7238**	**16.7238**	**1.5900e-003**	**0.0000**	**16.7572**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0485	0.0725	0.7516	2.0200e-003	0.1646	1.3100e-003	0.1659	0.0437	1.2100e-003	0.0449	0.0000	142.7230	142.7230	7.1100e-003	0.0000	142.8723
Total	**0.0485**	**0.0725**	**0.7516**	**2.0200e-003**	**0.1646**	**1.3100e-003**	**0.1659**	**0.0437**	**1.2100e-003**	**0.0449**	**0.0000**	**142.7230**	**142.7230**	**7.1100e-003**	**0.0000**	**142.8723**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8305	27.8305	2.3500e-003	0.0000	27.8798
Total	**3.8134**	**0.2001**	**0.2007**	**3.2000e-004**		**0.0140**	**0.0140**		**0.0140**	**0.0140**	**0.0000**	**27.8305**	**27.8305**	**2.3500e-003**	**0.0000**	**27.8798**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.1107	1.1469	3.3500e-003	0.2739	2.1500e-003	0.2760	0.0727	1.9900e-003	0.0747	0.0000	228.4697	228.4697	0.0111	0.0000	228.7024
Total	**0.0741**	**0.1107**	**1.1469**	**3.3500e-003**	**0.2739**	**2.1500e-003**	**0.2760**	**0.0727**	**1.9900e-003**	**0.0747**	**0.0000**	**228.4697**	**228.4697**	**0.0111**	**0.0000**	**228.7024**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2400e-003	0.0140	0.1997	3.2000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	27.8304	27.8304	2.3500e-003	0.0000	27.8798
Total	**3.7876**	**0.0140**	**0.1997**	**3.2000e-004**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**27.8304**	**27.8304**	**2.3500e-003**	**0.0000**	**27.8798**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.1107	1.1469	3.3500e-003	0.2739	2.1500e-003	0.2760	0.0727	1.9900e-003	0.0747	0.0000	228.4697	228.4697	0.0111	0.0000	228.7024
Total	**0.0741**	**0.1107**	**1.1469**	**3.3500e-003**	**0.2739**	**2.1500e-003**	**0.2760**	**0.0727**	**1.9900e-003**	**0.0747**	**0.0000**	**228.4697**	**228.4697**	**0.0111**	**0.0000**	**228.7024**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0347	0.3690	0.3116	4.8000e-004		0.0202	0.0202		0.0186	0.0186	0.0000	43.7928	43.7928	0.0136	0.0000	44.0791
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0347**	**0.3690**	**0.3116**	**4.8000e-004**		**0.0202**	**0.0202**		**0.0186**	**0.0186**	**0.0000**	**43.7928**	**43.7928**	**0.0136**	**0.0000**	**44.0791**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5600e-003	0.0162	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.0687	3.0687	1.5000e-004	0.0000	3.0719
Total	**1.0400e-003**	**1.5600e-003**	**0.0162**	**4.0000e-005**	**3.5400e-003**	**3.0000e-005**	**3.5700e-003**	**9.4000e-004**	**3.0000e-005**	**9.7000e-004**	**0.0000**	**3.0687**	**3.0687**	**1.5000e-004**	**0.0000**	**3.0719**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9000e-003	0.0256	0.3639	4.8000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	43.7927	43.7927	0.0136	0.0000	44.0790
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.9000e-003**	**0.0256**	**0.3639**	**4.8000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**43.7927**	**43.7927**	**0.0136**	**0.0000**	**44.0790**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5600e-003	0.0162	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.0687	3.0687	1.5000e-004	0.0000	3.0719
Total	**1.0400e-003**	**1.5600e-003**	**0.0162**	**4.0000e-005**	**3.5400e-003**	**3.0000e-005**	**3.5700e-003**	**9.4000e-004**	**3.0000e-005**	**9.7000e-004**	**0.0000**	**3.0687**	**3.0687**	**1.5000e-004**	**0.0000**	**3.0719**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1704	1.7848	1.7166	2.6700e-003		0.0967	0.0967		0.0890	0.0890	0.0000	239.4716	239.4716	0.0758	0.0000	241.0627
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1704**	**1.7848**	**1.7166**	**2.6700e-003**		**0.0967**	**0.0967**		**0.0890**	**0.0890**	**0.0000**	**239.4716**	**239.4716**	**0.0758**	**0.0000**	**241.0627**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3200e-003	7.9500e-003	0.0824	2.4000e-004	0.0197	1.5000e-004	0.0198	5.2200e-003	1.4000e-004	5.3700e-003	0.0000	16.4069	16.4069	8.0000e-004	0.0000	16.4236
Total	**5.3200e-003**	**7.9500e-003**	**0.0824**	**2.4000e-004**	**0.0197**	**1.5000e-004**	**0.0198**	**5.2200e-003**	**1.4000e-004**	**5.3700e-003**	**0.0000**	**16.4069**	**16.4069**	**8.0000e-004**	**0.0000**	**16.4236**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0328	0.1422	2.0229	2.6700e-003		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	239.4714	239.4714	0.0758	0.0000	241.0624
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0328**	**0.1422**	**2.0229**	**2.6700e-003**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**239.4714**	**239.4714**	**0.0758**	**0.0000**	**241.0624**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3200e-003	7.9500e-003	0.0824	2.4000e-004	0.0197	1.5000e-004	0.0198	5.2200e-003	1.4000e-004	5.3700e-003	0.0000	16.4069	16.4069	8.0000e-004	0.0000	16.4236
Total	**5.3200e-003**	**7.9500e-003**	**0.0824**	**2.4000e-004**	**0.0197**	**1.5000e-004**	**0.0198**	**5.2200e-003**	**1.4000e-004**	**5.3700e-003**	**0.0000**	**16.4069**	**16.4069**	**8.0000e-004**	**0.0000**	**16.4236**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0679	0.0000	0.0679	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.8668	1.6943	2.2000e-003		0.0905	0.0905		0.0842	0.0842	0.0000	196.0497	196.0497	0.0548	0.0000	197.1995
Total	**0.1827**	**1.8668**	**1.6943**	**2.2000e-003**	**0.0679**	**0.0905**	**0.1584**	**0.0103**	**0.0842**	**0.0945**	**0.0000**	**196.0497**	**196.0497**	**0.0548**	**0.0000**	**197.1995**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9900e-003	0.0721	0.0636	2.3000e-004	5.3900e-003	1.2500e-003	6.6300e-003	1.4800e-003	1.1500e-003	2.6300e-003	0.0000	20.0584	20.0584	1.5000e-004	0.0000	20.0615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e-003	3.6600e-003	0.0379	1.1000e-004	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.5513	7.5513	3.7000e-004	0.0000	7.5590
Total	**7.4400e-003**	**0.0757**	**0.1015**	**3.4000e-004**	**0.0144**	**1.3200e-003**	**0.0158**	**3.8800e-003**	**1.2200e-003**	**5.1000e-003**	**0.0000**	**27.6097**	**27.6097**	**5.2000e-004**	**0.0000**	**27.6205**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0306	0.0000	0.0306	4.6300e-003	0.0000	4.6300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0261	0.1129	1.3104	2.2000e-003		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	196.0495	196.0495	0.0548	0.0000	197.1993
Total	**0.0261**	**0.1129**	**1.3104**	**2.2000e-003**	**0.0306**	**5.2000e-004**	**0.0311**	**4.6300e-003**	**5.2000e-004**	**5.1500e-003**	**0.0000**	**196.0495**	**196.0495**	**0.0548**	**0.0000**	**197.1993**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9900e-003	0.0721	0.0636	2.3000e-004	5.3900e-003	1.2500e-003	6.6300e-003	1.4800e-003	1.1500e-003	2.6300e-003	0.0000	20.0584	20.0584	1.5000e-004	0.0000	20.0615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e-003	3.6600e-003	0.0379	1.1000e-004	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.5513	7.5513	3.7000e-004	0.0000	7.5590
Total	**7.4400e-003**	**0.0757**	**0.1015**	**3.4000e-004**	**0.0144**	**1.3200e-003**	**0.0158**	**3.8800e-003**	**1.2200e-003**	**5.1000e-003**	**0.0000**	**27.6097**	**27.6097**	**5.2000e-004**	**0.0000**	**27.6205**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2042	0.0000	0.2042	0.1100	0.0000	0.1100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1614	1.7885	1.3295	2.0400e-003		0.0827	0.0827		0.0761	0.0761	0.0000	182.9549	182.9549	0.0579	0.0000	184.1705
Total	**0.1614**	**1.7885**	**1.3295**	**2.0400e-003**	**0.2042**	**0.0827**	**0.2869**	**0.1100**	**0.0761**	**0.1861**	**0.0000**	**182.9549**	**182.9549**	**0.0579**	**0.0000**	**184.1705**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0677	0.9781	0.8635	3.1200e-003	0.0731	0.0169	0.0900	0.0201	0.0156	0.0356	0.0000	272.2891	272.2891	2.0200e-003	0.0000	272.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	2.9300e-003	0.0303	9.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.0410	6.0410	2.9000e-004	0.0000	6.0472
Total	**0.0697**	**0.9810**	**0.8938**	**3.2100e-003**	**0.0803**	**0.0170**	**0.0973**	**0.0220**	**0.0156**	**0.0376**	**0.0000**	**278.3302**	**278.3302**	**2.3100e-003**	**0.0000**	**278.3788**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0919	0.0000	0.0919	0.0495	0.0000	0.0495	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0250	0.1082	1.1477	2.0400e-003		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	182.9547	182.9547	0.0579	0.0000	184.1703
Total	**0.0250**	**0.1082**	**1.1477**	**2.0400e-003**	**0.0919**	**5.0000e-004**	**0.0924**	**0.0495**	**5.0000e-004**	**0.0500**	**0.0000**	**182.9547**	**182.9547**	**0.0579**	**0.0000**	**184.1703**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0677	0.9781	0.8635	3.1200e-003	0.0731	0.0169	0.0900	0.0201	0.0156	0.0356	0.0000	272.2891	272.2891	2.0200e-003	0.0000	272.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	2.9300e-003	0.0303	9.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.0410	6.0410	2.9000e-004	0.0000	6.0472
Total	**0.0697**	**0.9810**	**0.8938**	**3.2100e-003**	**0.0803**	**0.0170**	**0.0973**	**0.0220**	**0.0156**	**0.0376**	**0.0000**	**278.3302**	**278.3302**	**2.3100e-003**	**0.0000**	**278.3788**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0259	0.2306	0.1883	2.9000e-004		0.0141	0.0141		0.0133	0.0133	0.0000	25.7535	25.7535	6.2700e-003	0.0000	25.8851
Total	**0.0259**	**0.2306**	**0.1883**	**2.9000e-004**		**0.0141**	**0.0141**		**0.0133**	**0.0133**	**0.0000**	**25.7535**	**25.7535**	**6.2700e-003**	**0.0000**	**25.8851**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0279	0.2703	0.3975	8.4000e-004	0.0240	4.4300e-003	0.0284	6.8400e-003	4.0800e-003	0.0109	0.0000	72.7944	72.7944	5.2000e-004	0.0000	72.8054
Worker	0.0373	0.0557	0.5777	1.6900e-003	0.1379	1.0800e-003	0.1390	0.0366	1.0000e-003	0.0376	0.0000	115.0815	115.0815	5.5800e-003	0.0000	115.1987
Total	**0.0652**	**0.3261**	**0.9751**	**2.5300e-003**	**0.1619**	**5.5100e-003**	**0.1674**	**0.0435**	**5.0800e-003**	**0.0486**	**0.0000**	**187.8759**	**187.8759**	**6.1000e-003**	**0.0000**	**188.0041**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.5900e-003	0.0245	0.1915	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.7535	25.7535	6.2700e-003	0.0000	25.8851
Total	**3.5900e-003**	**0.0245**	**0.1915**	**2.9000e-004**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**25.7535**	**25.7535**	**6.2700e-003**	**0.0000**	**25.8851**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0279	0.2703	0.3975	8.4000e-004	0.0240	4.4300e-003	0.0284	6.8400e-003	4.0800e-003	0.0109	0.0000	72.7944	72.7944	5.2000e-004	0.0000	72.8054
Worker	0.0373	0.0557	0.5777	1.6900e-003	0.1379	1.0800e-003	0.1390	0.0366	1.0000e-003	0.0376	0.0000	115.0815	115.0815	5.5800e-003	0.0000	115.1987
Total	**0.0652**	**0.3261**	**0.9751**	**2.5300e-003**	**0.1619**	**5.5100e-003**	**0.1674**	**0.0435**	**5.0800e-003**	**0.0486**	**0.0000**	**187.8759**	**187.8759**	**6.1000e-003**	**0.0000**	**188.0041**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0686	0.6202	0.5463	8.7000e-004		0.0362	0.0362		0.0340	0.0340	0.0000	74.9612	74.9612	0.0183	0.0000	75.3447
Total	**0.0686**	**0.6202**	**0.5463**	**8.7000e-004**		**0.0362**	**0.0362**		**0.0340**	**0.0340**	**0.0000**	**74.9612**	**74.9612**	**0.0183**	**0.0000**	**75.3447**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0782	0.6967	1.1387	2.4800e-003	0.0708	0.0120	0.0828	0.0202	0.0110	0.0313	0.0000	210.2300	210.2300	1.5200e-003	0.0000	210.2618
Worker	0.1033	0.1526	1.5882	4.9900e-003	0.4076	3.1700e-003	0.4107	0.1082	2.9400e-003	0.1112	0.0000	326.2020	326.2020	0.0156	0.0000	326.5299
Total	**0.1815**	**0.8493**	**2.7269**	**7.4700e-003**	**0.4784**	**0.0152**	**0.4936**	**0.1285**	**0.0140**	**0.1424**	**0.0000**	**536.4320**	**536.4320**	**0.0171**	**0.0000**	**536.7918**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.0724	0.5659	8.7000e-004		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	74.9611	74.9611	0.0183	0.0000	75.3447
Total	**0.0106**	**0.0724**	**0.5659**	**8.7000e-004**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**74.9611**	**74.9611**	**0.0183**	**0.0000**	**75.3447**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0782	0.6967	1.1387	2.4800e-003	0.0708	0.0120	0.0828	0.0202	0.0110	0.0313	0.0000	210.2300	210.2300	1.5200e-003	0.0000	210.2618
Worker	0.1033	0.1526	1.5882	4.9900e-003	0.4076	3.1700e-003	0.4107	0.1082	2.9400e-003	0.1112	0.0000	326.2020	326.2020	0.0156	0.0000	326.5299
Total	**0.1815**	**0.8493**	**2.7269**	**7.4700e-003**	**0.4784**	**0.0152**	**0.4936**	**0.1285**	**0.0140**	**0.1424**	**0.0000**	**536.4320**	**536.4320**	**0.0171**	**0.0000**	**536.7918**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1393	0.0000	0.1393	0.0211	0.0000	0.0211	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2013	2.0160	1.9247	2.6000e-003		0.0968	0.0968		0.0901	0.0901	0.0000	227.4441	227.4441	0.0645	0.0000	228.7980
Total	**0.2013**	**2.0160**	**1.9247**	**2.6000e-003**	**0.1393**	**0.0968**	**0.2361**	**0.0211**	**0.0901**	**0.1112**	**0.0000**	**227.4441**	**227.4441**	**0.0645**	**0.0000**	**228.7980**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.1317	0.1287	4.7000e-004	0.0110	2.5300e-003	0.0136	3.0300e-003	2.3300e-003	5.3600e-003	0.0000	40.1810	40.1810	3.1000e-004	0.0000	40.1874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7100e-003	4.0100e-003	0.0417	1.3000e-004	0.0107	8.0000e-005	0.0108	2.8400e-003	8.0000e-005	2.9200e-003	0.0000	8.5617	8.5617	4.1000e-004	0.0000	8.5703
Total	**0.0127**	**0.1357**	**0.1703**	**6.0000e-004**	**0.0217**	**2.6100e-003**	**0.0244**	**5.8700e-003**	**2.4100e-003**	**8.2800e-003**	**0.0000**	**48.7427**	**48.7427**	**7.2000e-004**	**0.0000**	**48.7577**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0627	0.0000	0.0627	9.4900e-003	0.0000	9.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0308	0.1335	1.5487	2.6000e-003		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	227.4439	227.4439	0.0645	0.0000	228.7977
Total	**0.0308**	**0.1335**	**1.5487**	**2.6000e-003**	**0.0627**	**6.2000e-004**	**0.0633**	**9.4900e-003**	**6.2000e-004**	**0.0101**	**0.0000**	**227.4439**	**227.4439**	**0.0645**	**0.0000**	**228.7977**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.1317	0.1287	4.7000e-004	0.0110	2.5300e-003	0.0136	3.0300e-003	2.3300e-003	5.3600e-003	0.0000	40.1810	40.1810	3.1000e-004	0.0000	40.1874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7100e-003	4.0100e-003	0.0417	1.3000e-004	0.0107	8.0000e-005	0.0108	2.8400e-003	8.0000e-005	2.9200e-003	0.0000	8.5617	8.5617	4.1000e-004	0.0000	8.5703
Total	**0.0127**	**0.1357**	**0.1703**	**6.0000e-004**	**0.0217**	**2.6100e-003**	**0.0244**	**5.8700e-003**	**2.4100e-003**	**8.2800e-003**	**0.0000**	**48.7427**	**48.7427**	**7.2000e-004**	**0.0000**	**48.7577**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4761	0.0000	0.4761	0.2567	0.0000	0.2567	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3504	3.8026	2.9588	4.7500e-003		0.1742	0.1742		0.1602	0.1602	0.0000	417.5622	417.5622	0.1351	0.0000	420.3983
Total	**0.3504**	**3.8026**	**2.9588**	**4.7500e-003**	**0.4761**	**0.1742**	**0.6502**	**0.2567**	**0.1602**	**0.4170**	**0.0000**	**417.5622**	**417.5622**	**0.1351**	**0.0000**	**420.3983**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1944	2.5572	2.4990	9.1500e-003	0.2144	0.0492	0.2636	0.0588	0.0453	0.1041	0.0000	780.5158	780.5158	5.9400e-003	0.0000	780.6405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3300e-003	0.0658	2.1000e-004	0.0169	1.3000e-004	0.0170	4.4900e-003	1.2000e-004	4.6100e-003	0.0000	13.5232	13.5232	6.5000e-004	0.0000	13.5367
Total	**0.1987**	**2.5636**	**2.5648**	**9.3600e-003**	**0.2313**	**0.0494**	**0.2807**	**0.0633**	**0.0454**	**0.1087**	**0.0000**	**794.0390**	**794.0390**	**6.5900e-003**	**0.0000**	**794.1773**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2142	0.0000	0.2142	0.1155	0.0000	0.1155	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0582	0.2524	2.6780	4.7500e-003		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	417.5617	417.5617	0.1351	0.0000	420.3978
Total	**0.0582**	**0.2524**	**2.6780**	**4.7500e-003**	**0.2142**	**1.1600e-003**	**0.2154**	**0.1155**	**1.1600e-003**	**0.1167**	**0.0000**	**417.5617**	**417.5617**	**0.1351**	**0.0000**	**420.3978**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1944	2.5572	2.4990	9.1500e-003	0.2144	0.0492	0.2636	0.0588	0.0453	0.1041	0.0000	780.5158	780.5158	5.9400e-003	0.0000	780.6405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3300e-003	0.0658	2.1000e-004	0.0169	1.3000e-004	0.0170	4.4900e-003	1.2000e-004	4.6100e-003	0.0000	13.5232	13.5232	6.5000e-004	0.0000	13.5367
Total	**0.1987**	**2.5636**	**2.5648**	**9.3600e-003**	**0.2313**	**0.0494**	**0.2807**	**0.0633**	**0.0454**	**0.1087**	**0.0000**	**794.0390**	**794.0390**	**6.5900e-003**	**0.0000**	**794.1773**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4199	0.3698	5.9000e-004		0.0245	0.0245		0.0230	0.0230	0.0000	50.7430	50.7430	0.0124	0.0000	51.0026
Total	**0.0465**	**0.4199**	**0.3698**	**5.9000e-004**		**0.0245**	**0.0245**		**0.0230**	**0.0230**	**0.0000**	**50.7430**	**50.7430**	**0.0124**	**0.0000**	**51.0026**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0530	0.4716	0.7708	1.6800e-003	0.0479	8.1200e-003	0.0561	0.0137	7.4700e-003	0.0212	0.0000	142.3095	142.3095	1.0300e-003	0.0000	142.3311
Worker	0.0699	0.1033	1.0751	3.3800e-003	0.2759	2.1500e-003	0.2780	0.0733	1.9900e-003	0.0753	0.0000	220.8137	220.8137	0.0106	0.0000	221.0356
Total	**0.1229**	**0.5749**	**1.8459**	**5.0600e-003**	**0.3238**	**0.0103**	**0.3341**	**0.0870**	**9.4600e-003**	**0.0964**	**0.0000**	**363.1232**	**363.1232**	**0.0116**	**0.0000**	**363.3667**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.1800e-003	0.0490	0.3830	5.9000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	50.7429	50.7429	0.0124	0.0000	51.0025
Total	**7.1800e-003**	**0.0490**	**0.3830**	**5.9000e-004**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**50.7429**	**50.7429**	**0.0124**	**0.0000**	**51.0025**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0530	0.4716	0.7708	1.6800e-003	0.0479	8.1200e-003	0.0561	0.0137	7.4700e-003	0.0212	0.0000	142.3095	142.3095	1.0300e-003	0.0000	142.3311
Worker	0.0699	0.1033	1.0751	3.3800e-003	0.2759	2.1500e-003	0.2780	0.0733	1.9900e-003	0.0753	0.0000	220.8137	220.8137	0.0106	0.0000	221.0356
Total	**0.1229**	**0.5749**	**1.8459**	**5.0600e-003**	**0.3238**	**0.0103**	**0.3341**	**0.0870**	**9.4600e-003**	**0.0964**	**0.0000**	**363.1232**	**363.1232**	**0.0116**	**0.0000**	**363.3667**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3030	2.3748	4.4564	9.9400e-003	0.2844	0.0439	0.3283	0.0812	0.0404	0.1216	0.0000	843.7771	843.7771	6.1500e-003	0.0000	843.9061
Worker	0.3922	0.5730	5.9895	0.0201	1.6365	0.0128	1.6493	0.4346	0.0118	0.4464	0.0000	1,289.4781	1,289.4781	0.0600	0.0000	1,290.7384
Total	**0.6952**	**2.9478**	**10.4459**	**0.0300**	**1.9209**	**0.0566**	**1.9775**	**0.5158**	**0.0522**	**0.5680**	**0.0000**	**2,133.2552**	**2,133.2552**	**0.0662**	**0.0000**	**2,134.6445**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.2909	2.2721	3.5000e-003		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3030	2.3748	4.4564	9.9400e-003	0.2844	0.0439	0.3283	0.0812	0.0404	0.1216	0.0000	843.7771	843.7771	6.1500e-003	0.0000	843.9061
Worker	0.3922	0.5730	5.9895	0.0201	1.6365	0.0128	1.6493	0.4346	0.0118	0.4464	0.0000	1,289.4781	1,289.4781	0.0600	0.0000	1,290.7384
Total	**0.6952**	**2.9478**	**10.4459**	**0.0300**	**1.9209**	**0.0566**	**1.9775**	**0.5158**	**0.0522**	**0.5680**	**0.0000**	**2,133.2552**	**2,133.2552**	**0.0662**	**0.0000**	**2,134.6445**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0348	0.3185	0.3347	5.5000e-004		0.0165	0.0165		0.0155	0.0155	0.0000	47.3068	47.3068	0.0113	0.0000	47.5445
Total	**0.0348**	**0.3185**	**0.3347**	**5.5000e-004**		**0.0165**	**0.0165**		**0.0155**	**0.0155**	**0.0000**	**47.3068**	**47.3068**	**0.0113**	**0.0000**	**47.5445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0465	0.3386	0.6830	1.5600e-003	0.0447	6.8200e-003	0.0515	0.0128	6.2700e-003	0.0190	0.0000	132.4287	132.4287	9.9000e-004	0.0000	132.4494
Worker	0.0583	0.0844	0.8846	3.1500e-003	0.2571	2.0000e-003	0.2591	0.0683	1.8600e-003	0.0701	0.0000	199.1965	199.1965	9.0300e-003	0.0000	199.3861
Total	**0.1048**	**0.4230**	**1.5676**	**4.7100e-003**	**0.3018**	**8.8200e-003**	**0.3106**	**0.0810**	**8.1300e-003**	**0.0892**	**0.0000**	**331.6252**	**331.6252**	**0.0100**	**0.0000**	**331.8355**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.6900e-003	0.0457	0.3569	5.5000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	47.3068	47.3068	0.0113	0.0000	47.5444
Total	**6.6900e-003**	**0.0457**	**0.3569**	**5.5000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**47.3068**	**47.3068**	**0.0113**	**0.0000**	**47.5444**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0465	0.3386	0.6830	1.5600e-003	0.0447	6.8200e-003	0.0515	0.0128	6.2700e-003	0.0190	0.0000	132.4287	132.4287	9.9000e-004	0.0000	132.4494
Worker	0.0583	0.0844	0.8846	3.1500e-003	0.2571	2.0000e-003	0.2591	0.0683	1.8600e-003	0.0701	0.0000	199.1965	199.1965	9.0300e-003	0.0000	199.3861
Total	**0.1048**	**0.4230**	**1.5676**	**4.7100e-003**	**0.3018**	**8.8200e-003**	**0.3106**	**0.0810**	**8.1300e-003**	**0.0892**	**0.0000**	**331.6252**	**331.6252**	**0.0100**	**0.0000**	**331.8355**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.5348					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6300e-003	0.0672	0.0800	1.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	11.2343	11.2343	7.7000e-004	0.0000	11.2505
Total	**2.5444**	**0.0672**	**0.0800**	**1.3000e-004**		**4.1400e-003**	**4.1400e-003**		**4.1400e-003**	**4.1400e-003**	**0.0000**	**11.2343**	**11.2343**	**7.7000e-004**	**0.0000**	**11.2505**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0387	0.4046	1.3600e-003	0.1106	8.6000e-004	0.1114	0.0294	8.0000e-004	0.0302	0.0000	87.1055	87.1055	4.0500e-003	0.0000	87.1906
Total	**0.0265**	**0.0387**	**0.4046**	**1.3600e-003**	**0.1106**	**8.6000e-004**	**0.1114**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**87.1055**	**87.1055**	**4.0500e-003**	**0.0000**	**87.1906**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.5348					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	5.6700e-003	0.0806	1.3000e-004		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	11.2343	11.2343	7.7000e-004	0.0000	11.2505
Total	**2.5361**	**5.6700e-003**	**0.0806**	**1.3000e-004**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**11.2343**	**11.2343**	**7.7000e-004**	**0.0000**	**11.2505**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0387	0.4046	1.3600e-003	0.1106	8.6000e-004	0.1114	0.0294	8.0000e-004	0.0302	0.0000	87.1055	87.1055	4.0500e-003	0.0000	87.1906
Total	**0.0265**	**0.0387**	**0.4046**	**1.3600e-003**	**0.1106**	**8.6000e-004**	**0.1114**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**87.1055**	**87.1055**	**4.0500e-003**	**0.0000**	**87.1906**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3206					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1756
Total	**4.3359**	**0.1056**	**0.1360**	**2.2000e-004**		**6.1300e-003**	**6.1300e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**19.1494**	**19.1494**	**1.2500e-003**	**0.0000**	**19.1756**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0427	0.0619	0.6484	2.3100e-003	0.1884	1.4700e-003	0.1899	0.0500	1.3600e-003	0.0514	0.0000	146.0086	146.0086	6.6200e-003	0.0000	146.1475
Total	**0.0427**	**0.0619**	**0.6484**	**2.3100e-003**	**0.1884**	**1.4700e-003**	**0.1899**	**0.0500**	**1.3600e-003**	**0.0514**	**0.0000**	**146.0086**	**146.0086**	**6.6200e-003**	**0.0000**	**146.1475**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3206					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2300e-003	9.6600e-003	0.1374	2.2000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1756
Total	**4.3228**	**9.6600e-003**	**0.1374**	**2.2000e-004**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**19.1494**	**19.1494**	**1.2500e-003**	**0.0000**	**19.1756**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0427	0.0619	0.6484	2.3100e-003	0.1884	1.4700e-003	0.1899	0.0500	1.3600e-003	0.0514	0.0000	146.0086	146.0086	6.6200e-003	0.0000	146.1475
Total	**0.0427**	**0.0619**	**0.6484**	**2.3100e-003**	**0.1884**	**1.4700e-003**	**0.1899**	**0.0500**	**1.3600e-003**	**0.0514**	**0.0000**	**146.0086**	**146.0086**	**6.6200e-003**	**0.0000**	**146.1475**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4692	0.6141	9.6000e-004		0.0240	0.0240		0.0221	0.0221	0.0000	84.2861	84.2861	0.0273	0.0000	84.8586
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0465**	**0.4692**	**0.6141**	**9.6000e-004**		**0.0240**	**0.0240**		**0.0221**	**0.0221**	**0.0000**	**84.2861**	**84.2861**	**0.0273**	**0.0000**	**84.8586**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	2.3200e-003	0.0244	9.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	5.4833	5.4833	2.5000e-004	0.0000	5.4885
Total	**1.6100e-003**	**2.3200e-003**	**0.0244**	**9.0000e-005**	**7.0800e-003**	**6.0000e-005**	**7.1300e-003**	**1.8800e-003**	**5.0000e-005**	**1.9300e-003**	**0.0000**	**5.4833**	**5.4833**	**2.5000e-004**	**0.0000**	**5.4885**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.0512	0.7279	9.6000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	84.2860	84.2860	0.0273	0.0000	84.8585
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.0512**	**0.7279**	**9.6000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**84.2860**	**84.2860**	**0.0273**	**0.0000**	**84.8585**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	2.3200e-003	0.0244	9.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	5.4833	5.4833	2.5000e-004	0.0000	5.4885
Total	**1.6100e-003**	**2.3200e-003**	**0.0244**	**9.0000e-005**	**7.0800e-003**	**6.0000e-005**	**7.1300e-003**	**1.8800e-003**	**5.0000e-005**	**1.9300e-003**	**0.0000**	**5.4833**	**5.4833**	**2.5000e-004**	**0.0000**	**5.4885**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.3592	14.8803	67.5822	0.1886	12.5192	0.2596	12.7789	3.3506	0.2396	3.5902	0.0000	12,957.7687	12,957.7687	0.4483	0.0000	12,967.1832
Unmitigated	8.1561	20.5618	87.1250	0.2799	18.8700	0.3768	19.2468	5.0503	0.3476	5.3980	0.0000	19,227.3768	19,227.3768	0.6474	0.0000	19,240.9722

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,176.00	1,432.00	1214.00	4,162,091	2,881,466
Condo/Townhouse High Rise	3,410.40	4,152.80	3520.60	12,070,064	8,356,252
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	6,126.41	0.00	0.00	13,513,671	8,716,444
High Turnover (Sit Down Restaurant)	1,017.20	1,266.96	1054.72	1,442,202	950,727
Hotel	1,634.00	1,638.00	1190.00	3,749,016	2,465,413
Library	3,533.72	4,282.60	2345.08	8,762,925	5,655,704
Regional Shopping Center	3,238.08	1,599.04	807.68	5,746,096	3,781,132
Total	20,246.76	14,482.35	10,243.03	49,765,327	33,016,588

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,044.0518	3,044.0518	0.1399	0.0290	3,055.9648
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,790.6450	5,790.6450	0.2662	0.0551	5,813.3068
NaturalGas Mitigated	0.1288	1.1429	0.7796	7.0200e-003		0.0890	0.0890		0.0890	0.0890	0.0000	1,274.4601	1,274.4601	0.0244	0.0234	1,282.2162
NaturalGas Unmitigated	0.1534	1.3613	0.9289	8.3700e-003		0.1060	0.1060		0.1060	0.1060	0.0000	1,517.9297	1,517.9297	0.0291	0.0278	1,527.1676

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.88121e+006	0.0155	0.1328	0.0565	8.5000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	153.7521	153.7521	2.9500e-003	2.8200e-003	154.6878
Condo/Townhouse High Rise	8.3555e+006	0.0451	0.3850	0.1638	2.4600e-003		0.0311	0.0311		0.0311	0.0311	0.0000	445.8812	445.8812	8.5500e-003	8.1700e-003	448.5947
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	6.29342e+006	0.0339	0.3085	0.2591	1.8500e-003		0.0235	0.0235		0.0235	0.0235	0.0000	335.8407	335.8407	6.4400e-003	6.1600e-003	337.8846
High Turnover (Sit Down Restaurant)	1.86408e+006	0.0101	0.0914	0.0768	5.5000e-004		6.9400e-003	6.9400e-003		6.9400e-003	6.9400e-003	0.0000	99.4744	99.4744	1.9100e-003	1.8200e-003	100.0798
Hotel	7.26581e+006	0.0392	0.3562	0.2992	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	387.7312	387.7312	7.4300e-003	7.1100e-003	390.0909
Library	1.73052e+006	9.3300e-003	0.0848	0.0713	5.1000e-004		6.4500e-003	6.4500e-003		6.4500e-003	6.4500e-003	0.0000	92.3471	92.3471	1.7700e-003	1.6900e-003	92.9092
Regional Shopping Center	54400	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9030	2.9030	6.0000e-005	5.0000e-005	2.9207
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1534**	**1.3613**	**0.9289**	**8.3800e-003**		**0.1060**	**0.1060**		**0.1060**	**0.1060**	**0.0000**	**1,517.9297**	**1,517.9297**	**0.0291**	**0.0278**	**1,527.1676**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.423e+006	0.0131	0.1117	0.0475	7.1000e-004		9.0300e-003	9.0300e-003		9.0300e-003	9.0300e-003	0.0000	129.3008	129.3008	2.4800e-003	2.3700e-003	130.0877
Condo/Townhouse High Rise	7.02671e+006	0.0379	0.3238	0.1378	2.0700e-003		0.0262	0.0262		0.0262	0.0262	0.0000	374.9722	374.9722	7.1900e-003	6.8700e-003	377.2542
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	5.07965e+006	0.0274	0.2490	0.2092	1.4900e-003		0.0189	0.0189		0.0189	0.0189	0.0000	271.0693	271.0693	5.2000e-003	4.9700e-003	272.7189
High Turnover (Sit Down Restaurant)	1.79171e+006	9.6600e-003	0.0878	0.0738	5.3000e-004		6.6800e-003	6.6800e-003		6.6800e-003	6.6800e-003	0.0000	95.6126	95.6126	1.8300e-003	1.7500e-003	96.1945
Hotel	6.04845e+006	0.0326	0.2965	0.2491	1.7800e-003		0.0225	0.0225		0.0225	0.0225	0.0000	322.7684	322.7684	6.1900e-003	5.9200e-003	324.7327
Library	1.4663e+006	7.9100e-003	0.0719	0.0604	4.3000e-004		5.4600e-003	5.4600e-003		5.4600e-003	5.4600e-003	0.0000	78.2471	78.2471	1.5000e-003	1.4300e-003	78.7233
Regional Shopping Center	46656	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4897	2.4897	5.0000e-005	5.0000e-005	2.5049
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1288**	**1.1429**	**0.7796**	**7.0200e-003**		**0.0890**	**0.0890**		**0.0890**	**0.0890**	**0.0000**	**1,274.4601**	**1,274.4601**	**0.0244**	**0.0234**	**1,282.2162**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	2.55077e+006	729.9460	0.0336	6.9400e-003	732.8027
Condo/Townhouse High Rise	879576	251.7055	0.0116	2.3900e-003	252.6906
Enclosed Parking with Elevator	1.37226e+006	392.6965	0.0181	3.7300e-003	394.2334
Enclosed Parking with Elevator	1.9546e+006	559.3418	0.0257	5.3200e-003	561.5308
Enclosed Parking with Elevator	674000	192.8765	8.8700e-003	1.8300e-003	193.6313
Government (Civic Center)	8.36627e+006	2,394.1501	0.1101	0.0228	2,403.5197
High Turnover (Sit Down Restaurant)	375280	107.3927	4.9400e-003	1.0200e-003	107.8130
Hotel	2.4684e+006	706.3744	0.0325	6.7200e-003	709.1388
Library	1.1086e+006	317.2446	0.0146	3.0200e-003	318.4862
Regional Shopping Center	485440	138.9169	6.3900e-003	1.3200e-003	139.4605
Total		**5,790.6450**	**0.2662**	**0.0551**	**5,813.3068**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	1.563e+006	447.2776	0.0206	4.2500e-003	449.0280
Condo/Townhouse High Rise	538964	154.2336	7.0900e-003	1.4700e-003	154.8372
Enclosed Parking with Elevator	298763	85.4959	3.9300e-003	8.1000e-004	85.8305
Enclosed Parking with Elevator	608280	174.0697	8.0000e-003	1.6600e-003	174.7510
Enclosed Parking with Elevator	866411	247.9382	0.0114	2.3600e-003	248.9085
Government (Civic Center)	4.39985e+006	1,259.0915	0.0579	0.0120	1,264.0189
High Turnover (Sit Down Restaurant)	229788	65.7577	3.0200e-003	6.3000e-004	66.0151
Hotel	1.30865e+006	374.4927	0.0172	3.5600e-003	375.9583
Library	609788	174.5010	8.0200e-003	1.6600e-003	175.1839
Regional Shopping Center	213840	61.1939	2.8100e-003	5.8000e-004	61.4334
Total		**3,044.0518**	**0.1399**	**0.0290**	**3,055.9648**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	10.2925	0.0837	7.1245	3.5000e-004		0.0388	0.0388		0.0388	0.0388	0.0000	11.2127	11.2127	9.8600e-003	0.0000	11.4198
Unmitigated	11.7277	0.0936	8.1014	4.3000e-004		0.0445	0.0445		0.0445	0.0445	0.0000	13.1990	13.1990	0.0130	0.0000	13.4714

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.0302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.4489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2487	0.0936	8.1014	4.3000e-004		0.0445	0.0445		0.0445	0.0445	0.0000	13.1990	13.1990	0.0130	0.0000	13.4714
Total	**11.7277**	**0.0936**	**8.1014**	**4.3000e-004**		**0.0445**	**0.0445**		**0.0445**	**0.0445**	**0.0000**	**13.1990**	**13.1990**	**0.0130**	**0.0000**	**13.4714**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6538					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.4489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1899	0.0837	7.1245	3.5000e-004		0.0388	0.0388		0.0388	0.0388	0.0000	11.2127	11.2127	9.8600e-003	0.0000	11.4198
Total	**10.2925**	**0.0837**	**7.1245**	**3.5000e-004**		**0.0388**	**0.0388**		**0.0388**	**0.0388**	**0.0000**	**11.2127**	**11.2127**	**9.8600e-003**	**0.0000**	**11.4198**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	911.7910	4.6780	0.1176	1,046.4854
Unmitigated	1,077.5393	5.8457	0.1466	1,245.7540

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.777	12.0083	5.5000e-004	1.1000e-004	12.0553
Condo/Townhouse High Rise	50.8201 / 32.0388	307.3492	1.6694	0.0419	355.3857
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	114.386 / 70.1077	685.4076	3.7571	0.0942	793.5036
High Turnover (Sit Down Restaurant)	2.42827 / 0.154996	10.3113	0.0796	1.9600e-003	12.5895
Hotel	5.07335 / 0.563706	22.3060	0.1663	4.1000e-003	27.0687
Library	2.87858 / 4.50239	25.9539	0.0950	2.4500e-003	28.7082
Regional Shopping Center	2.37032 / 1.45278	14.2031	0.0779	1.9500e-003	16.4430
Total		**1,077.5393**	**5.8457**	**0.1466**	**1,245.7540**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.5466	11.2758	5.2000e-004	1.1000e-004	11.3199
Condo/Townhouse High Rise	40.6561 / 30.0844	260.0381	1.3359	0.0336	298.5022
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	91.509 / 65.8311	579.3084	3.0066	0.0755	665.8601
High Turnover (Sit Down Restaurant)	1.94262 / 0.145541	8.3176	0.0636	1.5700e-003	10.1394
Hotel	4.05868 / 0.52932	18.0939	0.1330	3.2800e-003	21.9030
Library	2.30286 / 4.22775	22.7528	0.0760	1.9800e-003	24.9629
Regional Shopping Center	1.89626 / 1.36416	12.0045	0.0623	1.5700e-003	13.7980
Total		**911.7910**	**4.6780**	**0.1176**	**1,046.4854**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	804.6745	47.5549	0.0000	1,803.3273
Unmitigated	804.6745	47.5549	0.0000	1,803.3273

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse High Rise	358.8	72.8332	4.3043	0.0000	163.2238
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3282	666.2163	39.3723	0.0000	1,493.0338
High Turnover (Sit Down Restaurant)	95.2	19.3247	1.1421	0.0000	43.3080
Hotel	109.5	22.2275	1.3136	0.0000	49.8133
Library	84.72	17.1974	1.0163	0.0000	38.5405
Regional Shopping Center	33.6	6.8205	0.4031	0.0000	15.2852
Total		**804.6745**	**47.5549**	**0.0000**	**1,803.3273**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse High Rise	358.8	72.8332	4.3043	0.0000	163.2238
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3282	666.2163	39.3723	0.0000	1,493.0338
High Turnover (Sit Down Restaurant)	95.2	19.3247	1.1421	0.0000	43.3080
Hotel	109.5	22.2275	1.3136	0.0000	49.8133
Library	84.72	17.1974	1.0163	0.0000	38.5405
Regional Shopping Center	33.6	6.8205	0.4031	0.0000	15.2852
Total		**804.6745**	**47.5549**	**0.0000**	**1,803.3273**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Project with Mitigation Measure AQ-3

Long Beach Civic Center

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	575.79	1000sqft	3.78	575,793.00	0
Library	92.00	1000sqft	1.73	92,000.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	8.00	1000sqft	0.00	8,000.00	0
Hotel	200.00	Room	0.00	290,400.00	0
Condo/Townhouse High Rise	200.00	Dwelling Unit	0.90	235,000.00	572
Condo/Townhouse High Rise	580.00	Dwelling Unit	6.29	650,000.00	1659
Regional Shopping Center	32.00	1000sqft	0.00	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113. Assumed compliance with MM AQ-3.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

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tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.76	3.18
tblVehicleEF	HHD	4.18	3.31
tblVehicleEF	HHD	3.54	3.40
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.61	0.66
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.44	1.23
tblVehicleEF	HHD	5.1400e-003	5.1330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4540e-003	1.4080e-003
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.69	0.75
tblVehicleEF	HHD	1.0540e-003	1.0120e-003

tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.54	1.31
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.77	0.71
tblVehicleEF	LDA	1.39	1.21
tblVehicleEF	LDA	248.70	239.34
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5970e-003	3.6040e-003
tblVehicleEF	LDA	7.6100e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02

tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.86	0.79
tblVehicleEF	LDA	1.09	0.95
tblVehicleEF	LDA	261.60	251.82
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	3.7860e-003	3.7940e-003
tblVehicleEF	LDA	7.5600e-004	7.5400e-004
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19

tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.74	0.68
tblVehicleEF	LDA	1.44	1.25
tblVehicleEF	LDA	244.71	235.50
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5390e-003	3.5450e-003
tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09

tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76
tblVehicleEF	LDT1	3.77	3.19
tblVehicleEF	LDT1	303.51	294.33
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02

tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52
tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01

tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95

tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35

tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11

tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65

tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03

tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07

tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.2300e-004	5.1800e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004

tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15

tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
tblVehicleEF	LHD2	0.82	0.77
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004

tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30

tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06

tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003

tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003
tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004

tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003

tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
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tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003

tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003

tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
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tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
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tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11

tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
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tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06

tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08

tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.78	12.76
tblVehicleEF	MHD	525.09	525.15
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.48	3.27
tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09

tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.88	0.74
tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.1000e-004	7.7100e-004
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.94	0.79
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	2.74	3.30
tblVehicleEF	OBUS	0.97	0.86
tblVehicleEF	OBUS	8.80	7.92
tblVehicleEF	OBUS	534.88	533.47
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.65	3.20
tblVehicleEF	OBUS	2.28	1.27
tblVehicleEF	OBUS	1.24	1.12
tblVehicleEF	OBUS	9.5470e-003	8.7920e-003

tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	8.7830e-003	8.0890e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.54	0.48
tblVehicleEF	OBUS	5.6700e-003	5.6550e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.1900e-004	5.0200e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.53	0.64
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.58	0.51
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003

tblVehicleEF	OBUS	1.99	2.40
tblVehicleEF	OBUS	0.98	0.86
tblVehicleEF	OBUS	7.12	6.40
tblVehicleEF	OBUS	566.66	565.16
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.79	3.30
tblVehicleEF	OBUS	2.14	1.19
tblVehicleEF	OBUS	1.19	1.08
tblVehicleEF	OBUS	8.0480e-003	7.4120e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	7.4040e-003	6.8190e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.48	0.42
tblVehicleEF	OBUS	6.0070e-003	5.9910e-003

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.51	0.45
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	3.78	4.55
tblVehicleEF	OBUS	0.97	0.85
tblVehicleEF	OBUS	8.99	8.09
tblVehicleEF	OBUS	491.00	489.70
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.44	3.06
tblVehicleEF	OBUS	2.24	1.25
tblVehicleEF	OBUS	1.25	1.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	0.01	9.8420e-003
tblVehicleEF	OBUS	0.04	0.04

tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.55	0.49
tblVehicleEF	OBUS	5.2050e-003	5.1910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.2200e-004	5.0500e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.57	0.69
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.58	0.52
tblVehicleEF	SBUS	4.4530e-003	4.6460e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.05	1.12
tblVehicleEF	SBUS	2.96	2.66
tblVehicleEF	SBUS	27.16	24.72
tblVehicleEF	SBUS	547.00	552.46
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.58	7.35

tblVehicleEF	SBUS	7.03	6.65
tblVehicleEF	SBUS	2.02	1.89
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.30	0.28
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.66	1.48
tblVehicleEF	SBUS	5.7980e-003	5.8560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7600e-003	1.7140e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	1.95	1.92

tblVehicleEF	SBUS	1.77	1.59
tblVehicleEF	SBUS	4.1970e-003	4.3790e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	0.76	0.82
tblVehicleEF	SBUS	3.03	2.73
tblVehicleEF	SBUS	23.01	20.96
tblVehicleEF	SBUS	579.49	585.28
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	9.4430e-003
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.29

tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04

tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52
tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003

tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88

tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15

tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	39.00	0.00

tblWoodstoves	NumberNoncatalytic	39.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.0469	161.6853	193.8570	0.3886	23.0128	6.5084	29.5212	7.8547	6.0259	13.8806	0.0000	36,523.5374	36,523.5374	3.4037	0.0000	36,595.0150
2017	37.7084	149.2067	181.1991	0.3884	26.2319	5.9670	32.1989	8.6450	5.5240	14.1690	0.0000	35,641.3255	35,641.3255	3.3332	0.0000	35,711.3231
2018	46.5232	73.8943	139.5446	0.3251	17.7166	3.1280	20.8446	4.7419	2.9204	7.6624	0.0000	27,878.4395	27,878.4395	2.1422	0.0000	27,923.4258
2019	47.5670	135.3750	167.8930	0.4240	23.6533	5.6473	28.4575	8.0279	5.2243	12.4745	0.0000	37,440.6680	37,440.6680	3.9602	0.0000	37,523.8331
2020	14.7810	124.7773	166.2826	0.4481	24.2259	4.4808	28.7067	8.1871	4.1457	12.3327	0.0000	38,685.5928	38,685.5928	3.2268	0.0000	38,753.3562
2021	65.7112	40.9887	105.9604	0.3003	17.5493	1.5015	19.0508	4.6976	1.4091	6.1067	0.0000	23,711.9153	23,711.9153	1.2915	0.0000	23,739.0370
2022	65.2572	37.1682	101.6335	0.3002	17.5493	1.3361	18.8855	4.6976	1.2535	5.9512	0.0000	23,479.9852	23,479.9852	1.2617	0.0000	23,506.4808
Total	**296.5950**	**723.0954**	**1,056.3701**	**2.5746**	**149.9391**	**28.5691**	**177.6652**	**46.8519**	**26.5029**	**72.5770**	**0.0000**	**223,361.4637**	**223,361.4637**	**18.6194**	**0.0000**	**223,752.4709**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	10.2442	63.8720	178.4027	0.3886	19.6526	0.9780	20.6306	6.0272	0.9012	6.9284	0.0000	36,523.5374	36,523.5374	3.4037	0.0000	36,595.0149
2017	32.9970	58.7157	168.4547	0.3884	22.8717	0.8898	23.7616	6.8175	0.8204	7.6379	0.0000	35,641.3255	35,641.3255	3.3332	0.0000	35,711.3231
2018	42.5752	35.0121	141.8344	0.3251	17.7166	0.5567	18.2733	4.7419	0.5137	5.2557	0.0000	27,878.4395	27,878.4395	2.1422	0.0000	27,923.4258
2019	42.0677	61.7436	162.6735	0.4240	20.2495	1.0355	21.2850	6.1946	0.9550	7.1496	0.0000	37,440.6680	37,440.6680	3.9602	0.0000	37,523.8330
2020	9.2025	61.8161	163.2382	0.4481	20.8254	1.1272	21.9526	6.3534	1.0394	7.3928	0.0000	38,685.5928	38,685.5928	3.2268	0.0000	38,753.3562
2021	63.9554	24.4793	106.8486	0.3003	17.5493	0.4592	18.0085	4.6976	0.4238	5.1214	0.0000	23,711.9153	23,711.9153	1.2915	0.0000	23,739.0370
2022	63.7097	22.5810	102.7357	0.3002	17.5493	0.4554	18.0047	4.6976	0.4204	5.1180	0.0000	23,479.9852	23,479.9852	1.2617	0.0000	23,506.4808
Total	**264.7517**	**328.2197**	**1,024.1877**	**2.5746**	**136.4144**	**5.5018**	**141.9162**	**39.5298**	**5.0740**	**44.6038**	**0.0000**	**223,361.4637**	**223,361.4637**	**18.6194**	**0.0000**	**223,752.4708**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.74**	**54.61**	**3.05**	**0.00**	**9.02**	**80.74**	**20.12**	**15.63**	**80.86**	**38.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972
Energy	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869
Mobile	56.7725	130.9294	588.9178	1.9863	131.0810	2.5686	133.6496	35.0295	2.3696	37.3992		150,048.0055	150,048.0055	4.8680		150,150.2342
Total	**122.5008**	**139.1376**	**658.8187**	**2.0355**	**131.0810**	**3.5051**	**134.5862**	**35.0295**	**3.3062**	**38.3357**	**0.0000**	**159,332.7901**	**159,332.7901**	**5.1582**	**0.1681**	**159,493.2183**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	56.8760	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Energy	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
Mobile	51.1777	95.0051	443.2513	1.3360	86.8310	1.7660	88.5969	23.2043	1.6294	24.8338		100,938.6637	100,938.6637	3.3649		101,009.3270
Total	**108.7593**	**101.9374**	**504.5187**	**1.3773**	**86.8310**	**2.5636**	**89.3946**	**23.2043**	**2.4271**	**25.6314**	**0.0000**	**108,735.3607**	**108,735.3607**	**3.5994**	**0.1411**	**108,854.6975**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	11.22	26.74	23.42	32.34	33.76	26.86	33.58	33.76	26.59	33.14	0.00	31.76	31.76	30.22	16.04	31.75

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 475,875; Residential Outdoor: 158,625; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38
Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29
Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7615	0.0000	4.7615	0.7209	0.0000	0.7209			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**4.7615**	**2.2921**	**7.0537**	**0.7209**	**2.1365**	**2.8575**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3763	6.0306	4.2655	0.0162	0.3833	0.0957	0.4791	0.1050	0.0881	0.1930		1,634.9338	1,634.9338	0.0116		1,635.1778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.4390**	**6.1089**	**5.2405**	**0.0183**	**0.5510**	**0.0971**	**0.6481**	**0.1494**	**0.0894**	**0.2388**		**1,813.3526**	**1,813.3526**	**0.0208**		**1,813.7888**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1427	0.0000	2.1427	0.3244	0.0000	0.3244			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**2.1427**	**9.4800e-003**	**2.1522**	**0.3244**	**9.4800e-003**	**0.3339**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3763	6.0306	4.2655	0.0162	0.3833	0.0957	0.4791	0.1050	0.0881	0.1930		1,634.9338	1,634.9338	0.0116		1,635.1778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.4390**	**6.1089**	**5.2405**	**0.0183**	**0.5510**	**0.0971**	**0.6481**	**0.1494**	**0.0894**	**0.2388**		**1,813.3526**	**1,813.3526**	**0.0208**		**1,813.7888**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.1095**	**3.5842**	**9.6937**	**3.3228**	**3.2975**	**6.6203**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3551	21.7171	15.3606	0.0584	1.6913	0.3448	2.0361	0.4543	0.3171	0.7714		5,887.6458	5,887.6458	0.0418		5,888.5244
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**1.4387**	**21.8215**	**16.6606**	**0.0612**	**1.9149**	**0.3466**	**2.2615**	**0.5136**	**0.3188**	**0.8324**		**6,125.5375**	**6,125.5375**	**0.0541**		**6,126.6724**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3551	21.7171	15.3606	0.0584	1.6913	0.3448	2.0361	0.4543	0.3171	0.7714		5,887.6458	5,887.6458	0.0418		5,888.5244
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**1.4387**	**21.8215**	**16.6606**	**0.0612**	**1.9149**	**0.3466**	**2.2615**	**0.5136**	**0.3188**	**0.8324**		**6,125.5375**	**6,125.5375**	**0.0541**		**6,126.6724**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.1095**	**3.3172**	**9.4266**	**3.3228**	**3.0518**	**6.3746**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2803	19.9056	14.7308	0.0584	4.9098	0.3151	5.2248	1.2443	0.2899	1.5342		5,790.9948	5,790.9948	0.0410		5,791.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0751	0.0943	1.1759	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.7867	228.7867	0.0113		229.0232
Total	**1.3554**	**19.9999**	**15.9068**	**0.0612**	**5.1333**	**0.3169**	**5.4502**	**1.3036**	**0.2915**	**1.5951**		**6,019.7815**	**6,019.7815**	**0.0522**		**6,020.8782**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2803	19.9056	14.7308	0.0584	4.9098	0.3151	5.2248	1.2443	0.2899	1.5342		5,790.9948	5,790.9948	0.0410		5,791.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0751	0.0943	1.1759	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.7867	228.7867	0.0113		229.0232
Total	**1.3554**	**19.9999**	**15.9068**	**0.0612**	**5.1333**	**0.3169**	**5.4502**	**1.3036**	**0.2915**	**1.5951**		**6,019.7815**	**6,019.7815**	**0.0522**		**6,020.8782**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9475	30.5740	35.2552	0.0770	2.2124	0.5034	2.7159	0.6301	0.4629	1.0930		7,718.2237	7,718.2237	0.0551		7,719.3805
Worker	4.7752	5.9697	74.2972	0.1619	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		13,595.5091	13,595.5091	0.6976		13,610.1576
Total	**7.7226**	**36.5437**	**109.5523**	**0.2389**	**14.9885**	**0.6102**	**15.5987**	**4.0183**	**0.5611**	**4.5794**		**21,313.7328**	**21,313.7328**	**0.7526**		**21,329.5381**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9475	30.5740	35.2552	0.0770	2.2124	0.5034	2.7159	0.6301	0.4629	1.0930		7,718.2237	7,718.2237	0.0551		7,719.3805
Worker	4.7752	5.9697	74.2972	0.1619	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		13,595.5091	13,595.5091	0.6976		13,610.1576
Total	**7.7226**	**36.5437**	**109.5523**	**0.2389**	**14.9885**	**0.6102**	**15.5987**	**4.0183**	**0.5611**	**4.5794**		**21,313.7328**	**21,313.7328**	**0.7526**		**21,329.5381**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7008	27.8195	33.1546	0.0769	2.2131	0.4490	2.6621	0.6304	0.4129	1.0433		7,593.2098	7,593.2098	0.0532		7,594.3279
Worker	4.2907	5.3896	67.2036	0.1618	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		13,075.1599	13,075.1599	0.6437		13,088.6766
Total	**6.9915**	**33.2091**	**100.3582**	**0.2387**	**14.9892**	**0.5517**	**15.5409**	**4.0186**	**0.5077**	**4.5263**		**20,668.3697**	**20,668.3697**	**0.6969**		**20,683.0044**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7008	27.8195	33.1546	0.0769	2.2131	0.4490	2.6621	0.6304	0.4129	1.0433		7,593.2098	7,593.2098	0.0532		7,594.3279
Worker	4.2907	5.3896	67.2036	0.1618	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		13,075.1599	13,075.1599	0.6437		13,088.6766
Total	**6.9915**	**33.2091**	**100.3582**	**0.2387**	**14.9892**	**0.5517**	**15.5409**	**4.0186**	**0.5077**	**4.5263**		**20,668.3697**	**20,668.3697**	**0.6969**		**20,683.0044**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.5327	25.5324	31.5858	0.0768	2.2132	0.4232	2.6364	0.6304	0.3893	1.0196		7,465.7922	7,465.7922	0.0529		7,466.9030
Worker	3.8677	4.8889	61.0458	0.1617	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		12,588.6496	12,588.6496	0.5974		12,601.1941
Total	**6.4004**	**30.4212**	**92.6317**	**0.2385**	**14.9892**	**0.5232**	**15.5124**	**4.0186**	**0.4818**	**4.5004**		**20,054.4418**	**20,054.4418**	**0.6503**		**20,068.0971**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.5327	25.5324	31.5858	0.0768	2.2132	0.4232	2.6364	0.6304	0.3893	1.0196		7,465.7922	7,465.7922	0.0529		7,466.9030
Worker	3.8677	4.8889	61.0458	0.1617	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		12,588.6496	12,588.6496	0.5974		12,601.1941
Total	**6.4004**	**30.4212**	**92.6317**	**0.2385**	**14.9892**	**0.5232**	**15.5124**	**4.0186**	**0.4818**	**4.5004**		**20,054.4418**	**20,054.4418**	**0.6503**		**20,068.0971**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**24.7912**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8596	1.0798	13.4643	0.0324	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,619.6077	2,619.6077	0.1290		2,622.3158
Total	**0.8596**	**1.0798**	**13.4643**	**0.0324**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,619.6077**	**2,619.6077**	**0.1290**		**2,622.3158**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**24.4886**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8596	1.0798	13.4643	0.0324	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,619.6077	2,619.6077	0.1290		2,622.3158
Total	**0.8596**	**1.0798**	**13.4643**	**0.0324**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,619.6077**	**2,619.6077**	**0.1290**		**2,622.3158**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**35.0170**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7749	0.9795	12.2305	0.0324	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,522.1354	2,522.1354	0.1197		2,524.6487
Total	**0.7749**	**0.9795**	**12.2305**	**0.0324**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,522.1354**	**2,522.1354**	**0.1197**		**2,524.6487**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7749	0.9795	12.2305	0.0324	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,522.1354	2,522.1354	0.1197		2,524.6487
Total	**0.7749**	**0.9795**	**12.2305**	**0.0324**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,522.1354**	**2,522.1354**	**0.1197**		**2,524.6487**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**34.9849**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7133	0.8984	11.2408	0.0323	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,426.5195	2,426.5195	0.1120		2,428.8722
Total	**0.7133**	**0.8984**	**11.2408**	**0.0323**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,426.5195**	**2,426.5195**	**0.1120**		**2,428.8722**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7133	0.8984	11.2408	0.0323	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,426.5195	2,426.5195	0.1120		2,428.8722
Total	**0.7133**	**0.8984**	**11.2408**	**0.0323**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,426.5195**	**2,426.5195**	**0.1120**		**2,428.8722**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0642	0.8011	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2054	165.2054	7.8400e-003		165.3700
Total	**0.0508**	**0.0642**	**0.8011**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2054**	**165.2054**	**7.8400e-003**		**165.3700**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0642	0.8011	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2054	165.2054	7.8400e-003		165.3700
Total	**0.0508**	**0.0642**	**0.8011**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2054**	**165.2054**	**7.8400e-003**		**165.3700**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**		**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.0467**	**0.0589**	**0.7363**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**158.9423**	**158.9423**	**7.3400e-003**		**159.0964**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.0467**	**0.0589**	**0.7363**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**158.9423**	**158.9423**	**7.3400e-003**		**159.0964**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2349	0.0000	1.2349	0.1870	0.0000	0.1870			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316		3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**1.2349**	**1.6448**	**2.8797**	**0.1870**	**1.5316**	**1.7185**		**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0878	1.2432	1.0165	4.1900e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0481		402.4140	402.4140	2.9700e-003		402.4764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.1345**	**1.3021**	**1.7528**	**6.3100e-003**	**0.2672**	**0.0240**	**0.2911**	**0.0717**	**0.0220**	**0.0938**		**561.3563**	**561.3563**	**0.0103**		**561.5728**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5557	0.0000	0.5557	0.0841	0.0000	0.0841			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**0.5557**	**9.4800e-003**	**0.5652**	**0.0841**	**9.4800e-003**	**0.0936**	**0.0000**	**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0878	1.2432	1.0165	4.1900e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0481		402.4140	402.4140	2.9700e-003		402.4764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.1345**	**1.3021**	**1.7528**	**6.3100e-003**	**0.2672**	**0.0240**	**0.2911**	**0.0717**	**0.0220**	**0.0938**		**561.3563**	**561.3563**	**0.0103**		**561.5728**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1888	0.0000	6.1888	3.3333	0.0000	3.3333			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1888**	**2.5049**	**8.6937**	**3.3333**	**2.3045**	**5.6378**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9860	28.1274	22.9975	0.0947	2.2516	0.5128	2.7643	0.6166	0.4717	1.0884		9,104.5102	9,104.5102	0.0672		9,105.9211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0785	0.9817	2.8200e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		211.9231	211.9231	9.7800e-003		212.1286
Total	**2.0483**	**28.2059**	**23.9792**	**0.0975**	**2.4751**	**0.5145**	**2.9896**	**0.6759**	**0.4733**	**1.1492**		**9,316.4333**	**9,316.4333**	**0.0770**		**9,318.0497**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7849	0.0000	2.7849	1.5000	0.0000	1.5000			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7849**	**0.0151**	**2.8001**	**1.5000**	**0.0151**	**1.5151**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9860	28.1274	22.9975	0.0947	2.2516	0.5128	2.7643	0.6166	0.4717	1.0884		9,104.5102	9,104.5102	0.0672		9,105.9211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0785	0.9817	2.8200e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		211.9231	211.9231	9.7800e-003		212.1286
Total	**2.0483**	**28.2059**	**23.9792**	**0.0975**	**2.4751**	**0.5145**	**2.9896**	**0.6759**	**0.4733**	**1.1492**		**9,316.4333**	**9,316.4333**	**0.0770**		**9,318.0497**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1429	0.0000	2.1429	0.3245	0.0000	0.3245			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865		3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**2.1429**	**1.4899**	**3.6327**	**0.3245**	**1.3865**	**1.7110**		**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1493	1.9225	1.7365	7.2500e-003	0.1726	0.0390	0.2116	0.0473	0.0359	0.0831		682.0991	682.0991	5.1500e-003		682.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0546	0.6862	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		152.5097	152.5097	6.9500e-003		152.6556
Total	**0.1931**	**1.9770**	**2.4227**	**9.3700e-003**	**0.3403**	**0.0403**	**0.3805**	**0.0917**	**0.0370**	**0.1288**		**834.6088**	**834.6088**	**0.0121**		**834.8629**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9643	0.0000	0.9643	0.1460	0.0000	0.1460			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0400		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**0.4739**	**2.0535**	**23.8257**	**0.0400**	**0.9643**	**9.4800e-003**	**0.9738**	**0.1460**	**9.4800e-003**	**0.1555**	**0.0000**	**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1493	1.9225	1.7365	7.2500e-003	0.1726	0.0390	0.2116	0.0473	0.0359	0.0831		682.0991	682.0991	5.1500e-003		682.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0546	0.6862	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		152.5097	152.5097	6.9500e-003		152.6556
Total	**0.1931**	**1.9770**	**2.4227**	**9.3700e-003**	**0.3403**	**0.0403**	**0.3805**	**0.0917**	**0.0370**	**0.1288**		**834.6088**	**834.6088**	**0.0121**		**834.8629**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1827	0.0000	6.1827	3.3340	0.0000	3.3340			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810		5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**6.1827**	**2.2619**	**8.4447**	**3.3340**	**2.0810**	**5.4149**		**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4476	31.5239	28.4747	0.1189	2.8300	0.6390	3.4690	0.7751	0.5878	1.3629		11,184.8862	11,184.8862	0.0845		11,186.6603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0727	0.9149	2.8200e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		203.3463	203.3463	9.2700e-003		203.5409
Total	**2.5059**	**31.5967**	**29.3897**	**0.1217**	**3.0536**	**0.6407**	**3.6942**	**0.8344**	**0.5894**	**1.4238**		**11,388.2325**	**11,388.2325**	**0.0938**		**11,390.2011**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7822	0.0000	2.7822	1.5003	0.0000	1.5003			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7822**	**0.0151**	**2.7974**	**1.5003**	**0.0151**	**1.5154**	**0.0000**	**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4476	31.5239	28.4747	0.1189	2.8300	0.6390	3.4690	0.7751	0.5878	1.3629		11,184.8862	11,184.8862	0.0845		11,186.6603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0727	0.9149	2.8200e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		203.3463	203.3463	9.2700e-003		203.5409
Total	**2.5059**	**31.5967**	**29.3897**	**0.1217**	**3.0536**	**0.6407**	**3.6942**	**0.8344**	**0.5894**	**1.4238**		**11,388.2325**	**11,388.2325**	**0.0938**		**11,390.2011**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2014	17.4549	28.5687	0.0764	2.2136	0.3352	2.5488	0.6305	0.3084	0.9389		7,152.7514	7,152.7514	0.0511		7,153.8249
Worker	3.1574	3.8878	49.1827	0.1617	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		11,442.4415	11,442.4415	0.5069		11,453.0868
Total	**5.3588**	**21.3427**	**77.7514**	**0.2381**	**14.9896**	**0.4329**	**15.4225**	**4.0188**	**0.3990**	**4.4178**		**18,595.1929**	**18,595.1929**	**0.5580**		**18,606.9117**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2014	17.4549	28.5687	0.0764	2.2136	0.3352	2.5488	0.6305	0.3084	0.9389		7,152.7514	7,152.7514	0.0511		7,153.8249
Worker	3.1574	3.8878	49.1827	0.1617	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		11,442.4415	11,442.4415	0.5069		11,453.0868
Total	**5.3588**	**21.3427**	**77.7514**	**0.2381**	**14.9896**	**0.4329**	**15.4225**	**4.0188**	**0.3990**	**4.4178**		**18,595.1929**	**18,595.1929**	**0.5580**		**18,606.9117**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1568	15.8452	27.9077	0.0763	2.2136	0.3315	2.5451	0.6305	0.3050	0.9355		7,146.3541	7,146.3541	0.0522		7,147.4509
Worker	2.9898	3.6473	46.3070	0.1617	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		11,253.7458	11,253.7458	0.4854		11,263.9388
Total	**5.1466**	**19.4926**	**74.2147**	**0.2380**	**14.9897**	**0.4291**	**15.4188**	**4.0188**	**0.3956**	**4.4143**		**18,400.1000**	**18,400.1000**	**0.5376**		**18,411.3897**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1568	15.8452	27.9077	0.0763	2.2136	0.3315	2.5451	0.6305	0.3050	0.9355		7,146.3541	7,146.3541	0.0522		7,147.4509
Worker	2.9898	3.6473	46.3070	0.1617	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		11,253.7458	11,253.7458	0.4854		11,263.9388
Total	**5.1466**	**19.4926**	**74.2147**	**0.2380**	**14.9897**	**0.4291**	**15.4188**	**4.0188**	**0.3956**	**4.4143**		**18,400.1000**	**18,400.1000**	**0.5376**		**18,411.3897**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**57.8268**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6326	0.7789	9.8538	0.0324	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,292.4927	2,292.4927	0.1016		2,294.6254
Total	**0.6326**	**0.7789**	**9.8538**	**0.0324**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,292.4927**	**2,292.4927**	**0.1016**		**2,294.6254**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6326	0.7789	9.8538	0.0324	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,292.4927	2,292.4927	0.1016		2,294.6254
Total	**0.6326**	**0.7789**	**9.8538**	**0.0324**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,292.4927**	**2,292.4927**	**0.1016**		**2,294.6254**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**57.8124**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5990	0.7307	9.2776	0.0324	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,254.6875	2,254.6875	0.0973		2,256.7297
Total	**0.5990**	**0.7307**	**9.2776**	**0.0324**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,254.6875**	**2,254.6875**	**0.0973**		**2,256.7297**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5990	0.7307	9.2776	0.0324	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,254.6875	2,254.6875	0.0973		2,256.7297
Total	**0.5990**	**0.7307**	**9.2776**	**0.0324**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,254.6875**	**2,254.6875**	**0.0973**		**2,256.7297**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131		2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**		**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0479	0.6077	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		147.6870	147.6870	6.3700e-003		147.8207
Total	**0.0392**	**0.0479**	**0.6077**	**2.1200e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**147.6870**	**147.6870**	**6.3700e-003**		**147.8207**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0479	0.6077	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		147.6870	147.6870	6.3700e-003		147.8207
Total	**0.0392**	**0.0479**	**0.6077**	**2.1200e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**147.6870**	**147.6870**	**6.3700e-003**		**147.8207**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	51.1777	95.0051	443.2513	1.3360	86.8310	1.7660	88.5969	23.2043	1.6294	24.8338		100,938.6637	100,938.6637	3.3649		101,009.3270
Unmitigated	56.7725	130.9294	588.9178	1.9863	131.0810	2.5686	133.6496	35.0295	2.3696	37.3992		150,048.0055	150,048.0055	4.8680		150,150.2342

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,176.00	1,432.00	1214.00	4,162,091	2,881,466
Condo/Townhouse High Rise	3,410.40	4,152.80	3520.60	12,070,064	8,356,252
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	6,126.41	0.00	0.00	13,513,671	8,716,444
High Turnover (Sit Down Restaurant)	1,017.20	1,266.96	1054.72	1,442,202	950,727
Hotel	1,634.00	1,638.00	1190.00	3,749,016	2,465,413
Library	3,533.72	4,282.60	2345.08	8,762,925	5,655,704
Regional Shopping Center	3,238.08	1,599.04	807.68	5,746,096	3,781,132
Total	20,246.76	14,482.35	10,243.03	49,765,327	33,016,588

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
NaturalGas Unmitigated	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	22891.8	0.2469	2.1096	0.8977	0.0135		0.1706	0.1706		0.1706	0.1706		2,693.1499	2,693.1499	0.0516	0.0494	2,709.5399
Condo/Townhouse High Rise	7893.72	0.0851	0.7275	0.3096	4.6400e-003		0.0588	0.0588		0.0588	0.0588		928.6724	928.6724	0.0178	0.0170	934.3241
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	17242.2	0.1860	1.6904	1.4200	0.0101		0.1285	0.1285		0.1285	0.1285		2,028.4988	2,028.4988	0.0389	0.0372	2,040.8439
High Turnover (Sit Down Restaurant)	5107.07	0.0551	0.5007	0.4206	3.0000e-003		0.0381	0.0381		0.0381	0.0381		600.8316	600.8316	0.0115	0.0110	604.4882
Hotel	19906.3	0.2147	1.9516	1.6393	0.0117		0.1483	0.1483		0.1483	0.1483		2,341.9204	2,341.9204	0.0449	0.0429	2,356.1729
Library	4741.15	0.0511	0.4648	0.3905	2.7900e-003		0.0353	0.0353		0.0353	0.0353		557.7824	557.7824	0.0107	0.0102	561.1770
Regional Shopping Center	149.041	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5343	17.5343	3.4000e-004	3.2000e-004	17.6410
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.8405**	**7.4592**	**5.0899**	**0.0458**		**0.5807**	**0.5807**		**0.5807**	**0.5807**		**9,168.3897**	**9,168.3897**	**0.1757**	**0.1681**	**9,224.1869**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	6.63837	0.0716	0.6118	0.2603	3.9000e-003		0.0495	0.0495		0.0495	0.0495		780.9846	780.9846	0.0150	0.0143	785.7376
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	13.9168	0.1501	1.3644	1.1461	8.1900e-003		0.1037	0.1037		0.1037	0.1037		1,637.2751	1,637.2751	0.0314	0.0300	1,647.2392
High Turnover (Sit Down Restaurant)	4.9088	0.0529	0.4813	0.4043	2.8900e-003		0.0366	0.0366		0.0366	0.0366		577.5059	577.5059	0.0111	0.0106	581.0205
Hotel	16.5711	0.1787	1.6246	1.3647	9.7500e-003		0.1235	0.1235		0.1235	0.1235		1,949.5411	1,949.5411	0.0374	0.0357	1,961.4057
Library	4.01725	0.0433	0.3939	0.3308	2.3600e-003		0.0299	0.0299		0.0299	0.0299		472.6176	472.6176	9.0600e-003	8.6600e-003	475.4938
Regional Shopping Center	0.127825	1.3800e-003	0.0125	0.0105	8.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		15.0382	15.0382	2.9000e-004	2.8000e-004	15.1297
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	19.2513	0.2076	1.7741	0.7550	0.0113		0.1434	0.1434		0.1434	0.1434		2,264.8554	2,264.8554	0.0434	0.0415	2,278.6390
Total		**0.7056**	**6.2626**	**4.2717**	**0.0385**		**0.4875**	**0.4875**		**0.4875**	**0.4875**		**7,697.8178**	**7,697.8178**	**0.1476**	**0.1411**	**7,744.6655**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	56.8760	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Unmitigated	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9892	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559		116.3950	116.3950	0.1144		118.7972
Total	**64.8879**	**0.7490**	**64.8110**	**3.4200e-003**		**0.3559**	**0.3559**		**0.3559**	**0.3559**	**0.0000**	**116.3950**	**116.3950**	**0.1144**	**0.0000**	**118.7972**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.5824					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5190	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101		98.8792	98.8792	0.0869		100.7050
Total	**56.8760**	**0.6697**	**56.9957**	**2.8200e-003**		**0.3101**	**0.3101**		**0.3101**	**0.3101**	**0.0000**	**98.8792**	**98.8792**	**0.0869**	**0.0000**	**100.7050**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Project with Mitigation Measure AQ-3

Long Beach Civic Center

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	575.79	1000sqft	3.78	575,793.00	0
Library	92.00	1000sqft	1.73	92,000.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	8.00	1000sqft	0.00	8,000.00	0
Hotel	200.00	Room	0.00	290,400.00	0
Condo/Townhouse High Rise	200.00	Dwelling Unit	0.90	235,000.00	572
Condo/Townhouse High Rise	580.00	Dwelling Unit	6.29	650,000.00	1659
Regional Shopping Center	32.00	1000sqft	0.00	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113. Assumed compliance with MM AQ-3.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
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tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02

tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52
tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01

tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95

tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35

tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11

tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65

tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03

tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07

tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
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tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004

tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15

tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
tblVehicleEF	LHD2	0.82	0.77
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004

tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30

tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06

tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003

tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003
tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004

tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003

tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003

tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003

tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
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tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004

tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11

tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06

tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08

tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.78	12.76
tblVehicleEF	MHD	525.09	525.15
tblVehicleEF	MHD	914.53	913.05
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tblVehicleEF	MHD	4.48	3.27
tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09

tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.88	0.74
tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.1000e-004	7.7100e-004
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.94	0.79
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tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	2.74	3.30
tblVehicleEF	OBUS	0.97	0.86
tblVehicleEF	OBUS	8.80	7.92
tblVehicleEF	OBUS	534.88	533.47
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.65	3.20
tblVehicleEF	OBUS	2.28	1.27
tblVehicleEF	OBUS	1.24	1.12
tblVehicleEF	OBUS	9.5470e-003	8.7920e-003

tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	8.7830e-003	8.0890e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.54	0.48
tblVehicleEF	OBUS	5.6700e-003	5.6550e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.1900e-004	5.0200e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.53	0.64
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.58	0.51
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003

tblVehicleEF	OBUS	1.99	2.40
tblVehicleEF	OBUS	0.98	0.86
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tblVehicleEF	OBUS	566.66	565.16
tblVehicleEF	OBUS	1,017.03	1,018.77
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tblVehicleEF	OBUS	2.14	1.19
tblVehicleEF	OBUS	1.19	1.08
tblVehicleEF	OBUS	8.0480e-003	7.4120e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	7.4040e-003	6.8190e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.48	0.42
tblVehicleEF	OBUS	6.0070e-003	5.9910e-003

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.51	0.45
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	3.78	4.55
tblVehicleEF	OBUS	0.97	0.85
tblVehicleEF	OBUS	8.99	8.09
tblVehicleEF	OBUS	491.00	489.70
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.44	3.06
tblVehicleEF	OBUS	2.24	1.25
tblVehicleEF	OBUS	1.25	1.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	0.01	9.8420e-003
tblVehicleEF	OBUS	0.04	0.04

tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.55	0.49
tblVehicleEF	OBUS	5.2050e-003	5.1910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.2200e-004	5.0500e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.57	0.69
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.58	0.52
tblVehicleEF	SBUS	4.4530e-003	4.6460e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.05	1.12
tblVehicleEF	SBUS	2.96	2.66
tblVehicleEF	SBUS	27.16	24.72
tblVehicleEF	SBUS	547.00	552.46
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.58	7.35

tblVehicleEF	SBUS	7.03	6.65
tblVehicleEF	SBUS	2.02	1.89
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.30	0.28
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.66	1.48
tblVehicleEF	SBUS	5.7980e-003	5.8560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7600e-003	1.7140e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	1.95	1.92

tblVehicleEF	SBUS	1.77	1.59
tblVehicleEF	SBUS	4.1970e-003	4.3790e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	0.76	0.82
tblVehicleEF	SBUS	3.03	2.73
tblVehicleEF	SBUS	23.01	20.96
tblVehicleEF	SBUS	579.49	585.28
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	9.4430e-003
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.29

tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04

tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52
tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003

tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88

tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15

tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	39.00	0.00

tblWoodstoves	NumberNoncatalytic	39.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.5093	163.8386	197.2309	0.3777	23.0128	6.5144	29.5272	7.8547	6.0314	13.8861	0.0000	35,587.1767	35,587.1767	3.4059	0.0000	35,658.7005
2017	38.0558	151.1470	184.8872	0.3774	26.2319	5.9721	32.2040	8.6450	5.5287	14.1737	0.0000	34,737.1330	34,737.1330	3.3355	0.0000	34,807.1777
2018	46.8248	75.0855	140.1807	0.3122	17.7166	3.1320	20.8486	4.7419	2.9241	7.6660	0.0000	26,864.4925	26,864.4925	2.1439	0.0000	26,909.5148
2019	47.6767	136.5386	173.4646	0.4129	23.6533	5.6484	28.4622	8.0279	5.2254	12.4788	0.0000	36,587.8535	36,587.8535	3.9613	0.0000	36,671.0401
2020	15.1353	126.7817	173.0115	0.4369	24.2259	4.4851	28.7110	8.1871	4.1497	12.3367	0.0000	37,858.2649	37,858.2649	3.2299	0.0000	37,926.0928
2021	65.9505	41.8321	107.3338	0.2874	17.5493	1.5040	19.0533	4.6976	1.4115	6.1091	0.0000	22,789.5839	22,789.5839	1.2934	0.0000	22,816.7449
2022	65.4848	37.9452	103.0679	0.2873	17.5493	1.3387	18.8880	4.6976	1.2559	5.9535	0.0000	22,570.1567	22,570.1567	1.2636	0.0000	22,596.6932
Total	**298.6370**	**733.1687**	**1,079.1766**	**2.4917**	**149.9391**	**28.5946**	**177.6943**	**46.8519**	**26.5264**	**72.6038**	**0.0000**	**216,994.6612**	**216,994.6612**	**18.6335**	**0.0000**	**217,385.9640**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	10.7065	66.0252	181.7766	0.3777	19.6526	0.9840	20.6366	6.0272	0.9066	6.9338	0.0000	35,587.1767	35,587.1767	3.4059	0.0000	35,658.7005
2017	33.3444	60.6560	172.1428	0.3774	22.8717	0.8949	23.7666	6.8175	0.8251	7.6426	0.0000	34,737.1330	34,737.1330	3.3355	0.0000	34,807.1777
2018	42.8767	36.2033	142.4705	0.3122	17.7166	0.5607	18.2773	4.7419	0.5174	5.2593	0.0000	26,864.4925	26,864.4925	2.1439	0.0000	26,909.5147
2019	42.3419	63.7517	168.2452	0.4129	20.2495	1.0402	21.2897	6.1946	0.9593	7.1539	0.0000	36,587.8534	36,587.8534	3.9613	0.0000	36,671.0401
2020	9.5568	63.8205	169.9671	0.4369	20.8254	1.1315	21.9570	6.3534	1.0434	7.3968	0.0000	37,858.2649	37,858.2649	3.2299	0.0000	37,926.0928
2021	64.1947	25.3226	108.2220	0.2874	17.5493	0.4617	18.0110	4.6976	0.4262	5.1238	0.0000	22,789.5839	22,789.5839	1.2934	0.0000	22,816.7449
2022	63.9373	23.3580	104.1702	0.2873	17.5493	0.4579	18.0073	4.6976	0.4227	5.1203	0.0000	22,570.1567	22,570.1567	1.2636	0.0000	22,596.6932
Total	**266.9583**	**339.1374**	**1,046.9943**	**2.4917**	**136.4144**	**5.5309**	**141.9454**	**39.5298**	**5.1008**	**44.6306**	**0.0000**	**216,994.6611**	**216,994.6611**	**18.6335**	**0.0000**	**217,385.9639**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.61**	**53.74**	**2.98**	**0.00**	**9.02**	**80.66**	**20.12**	**15.63**	**80.77**	**38.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972
Energy	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869
Mobile	58.5172	137.4439	589.8664	1.8868	131.0810	2.5774	133.6584	35.0295	2.3777	37.4072		143,001.9016	143,001.9016	4.8759		143,104.2958
Total	**124.2455**	**145.6522**	**659.7673**	**1.9361**	**131.0810**	**3.5139**	**134.5949**	**35.0295**	**3.3143**	**38.3438**	**0.0000**	**152,286.6863**	**152,286.6863**	**5.1660**	**0.1681**	**152,447.2799**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	56.8760	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Energy	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
Mobile	53.1204	99.4005	459.8599	1.2697	86.8310	1.7747	88.6057	23.2043	1.6375	24.8418		96,203.0437	96,203.0437	3.3728		96,273.8724
Total	**110.7020**	**106.3328**	**521.1272**	**1.3110**	**86.8310**	**2.5724**	**89.4033**	**23.2043**	**2.4351**	**25.6395**	**0.0000**	**103,999.7407**	**103,999.7407**	**3.6073**	**0.1411**	**104,119.2428**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	10.90	27.00	21.01	32.29	33.76	26.79	33.58	33.76	26.53	33.13	0.00	31.71	31.71	30.17	16.04	31.70

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 475,875; Residential Outdoor: 158,625; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38
Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29
Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7615	0.0000	4.7615	0.7209	0.0000	0.7209			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**4.7615**	**2.2921**	**7.0537**	**0.7209**	**2.1365**	**2.8575**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3976	6.2495	4.8898	0.0162	0.3833	0.0960	0.4793	0.1050	0.0883	0.1932		1,631.0464	1,631.0464	0.0118		1,631.2936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.4616**	**6.3355**	**5.7881**	**0.0182**	**0.5510**	**0.0974**	**0.6484**	**0.1494**	**0.0896**	**0.2390**		**1,798.4037**	**1,798.4037**	**0.0209**		**1,798.8432**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1427	0.0000	2.1427	0.3244	0.0000	0.3244			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**2.1427**	**9.4800e-003**	**2.1522**	**0.3244**	**9.4800e-003**	**0.3339**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3976	6.2495	4.8898	0.0162	0.3833	0.0960	0.4793	0.1050	0.0883	0.1932		1,631.0464	1,631.0464	0.0118		1,631.2936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.4616**	**6.3355**	**5.7881**	**0.0182**	**0.5510**	**0.0974**	**0.6484**	**0.1494**	**0.0896**	**0.2390**		**1,798.4037**	**1,798.4037**	**0.0209**		**1,798.8432**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.1095**	**3.5842**	**9.6937**	**3.3228**	**3.2975**	**6.6203**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4317	22.5054	17.6088	0.0583	1.6913	0.3456	2.0369	0.4543	0.3179	0.7722		5,873.6466	5,873.6466	0.0424		5,874.5369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**1.5170**	**22.6200**	**18.8066**	**0.0610**	**1.9149**	**0.3474**	**2.2623**	**0.5136**	**0.3196**	**0.8332**		**6,096.7896**	**6,096.7896**	**0.0546**		**6,097.9363**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4317	22.5054	17.6088	0.0583	1.6913	0.3456	2.0369	0.4543	0.3179	0.7722		5,873.6466	5,873.6466	0.0424		5,874.5369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**1.5170**	**22.6200**	**18.8066**	**0.0610**	**1.9149**	**0.3474**	**2.2623**	**0.5136**	**0.3196**	**0.8332**		**6,096.7896**	**6,096.7896**	**0.0546**		**6,097.9363**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.1095**	**3.3172**	**9.4266**	**3.3228**	**3.0518**	**6.3746**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3474	20.6264	16.9960	0.0582	4.9098	0.3158	5.2255	1.2443	0.2905	1.5348		5,777.2137	5,777.2137	0.0415		5,778.0859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**1.4239**	**20.7299**	**18.0756**	**0.0609**	**5.1333**	**0.3176**	**5.4509**	**1.3036**	**0.2921**	**1.5958**		**5,991.7859**	**5,991.7859**	**0.0528**		**5,992.8946**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7493**	**0.0151**	**2.7644**	**1.4953**	**0.0151**	**1.5104**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3474	20.6264	16.9960	0.0582	4.9098	0.3158	5.2255	1.2443	0.2905	1.5348		5,777.2137	5,777.2137	0.0415		5,778.0859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**1.4239**	**20.7299**	**18.0756**	**0.0609**	**5.1333**	**0.3176**	**5.4509**	**1.3036**	**0.2921**	**1.5958**		**5,991.7859**	**5,991.7859**	**0.0528**		**5,992.8946**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2313	31.3458	42.3245	0.0764	2.2124	0.5086	2.7210	0.6301	0.4677	1.0978		7,653.4946	7,653.4946	0.0567		7,654.6859
Worker	4.8753	6.5528	68.4557	0.1517	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		12,752.6253	12,752.6253	0.6976		12,767.2738
Total	**8.1066**	**37.8985**	**110.7802**	**0.2282**	**14.9885**	**0.6153**	**15.6038**	**4.0183**	**0.5658**	**4.5842**		**20,406.1199**	**20,406.1199**	**0.7543**		**20,421.9598**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2313	31.3458	42.3245	0.0764	2.2124	0.5086	2.7210	0.6301	0.4677	1.0978		7,653.4946	7,653.4946	0.0567		7,654.6859
Worker	4.8753	6.5528	68.4557	0.1517	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		12,752.6253	12,752.6253	0.6976		12,767.2738
Total	**8.1066**	**37.8985**	**110.7802**	**0.2282**	**14.9885**	**0.6153**	**15.6038**	**4.0183**	**0.5658**	**4.5842**		**20,406.1199**	**20,406.1199**	**0.7543**		**20,421.9598**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9506	28.5049	40.1784	0.0764	2.2131	0.4534	2.6665	0.6304	0.4170	1.0473		7,529.3734	7,529.3734	0.0549		7,530.5264
Worker	4.3711	5.9145	61.6991	0.1516	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		12,262.7995	12,262.7995	0.6437		12,276.3161
Total	**7.3218**	**34.4194**	**101.8775**	**0.2280**	**14.9892**	**0.5561**	**15.5453**	**4.0186**	**0.5117**	**4.5303**		**19,792.1728**	**19,792.1728**	**0.6986**		**19,806.8426**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9506	28.5049	40.1784	0.0764	2.2131	0.4534	2.6665	0.6304	0.4170	1.0473		7,529.3734	7,529.3734	0.0549		7,530.5264
Worker	4.3711	5.9145	61.6991	0.1516	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		12,262.7995	12,262.7995	0.6437		12,276.3161
Total	**7.3218**	**34.4194**	**101.8775**	**0.2280**	**14.9892**	**0.5561**	**15.5453**	**4.0186**	**0.5117**	**4.5303**		**19,792.1728**	**19,792.1728**	**0.6986**		**19,806.8426**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7576	26.1476	38.5536	0.0762	2.2132	0.4272	2.6404	0.6304	0.3929	1.0233		7,402.8932	7,402.8932	0.0546		7,404.0400
Worker	3.9309	5.3636	55.8281	0.1515	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		11,804.9092	11,804.9092	0.5974		11,817.4538
Total	**6.6885**	**31.5112**	**94.3816**	**0.2278**	**14.9892**	**0.5272**	**15.5164**	**4.0186**	**0.4855**	**4.5041**		**19,207.8024**	**19,207.8024**	**0.6520**		**19,221.4937**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7576	26.1476	38.5536	0.0762	2.2132	0.4272	2.6404	0.6304	0.3929	1.0233		7,402.8932	7,402.8932	0.0546		7,404.0400
Worker	3.9309	5.3636	55.8281	0.1515	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		11,804.9092	11,804.9092	0.5974		11,817.4538
Total	**6.6885**	**31.5112**	**94.3816**	**0.2278**	**14.9892**	**0.5272**	**15.5164**	**4.0186**	**0.4855**	**4.5041**		**19,207.8024**	**19,207.8024**	**0.6520**		**19,221.4937**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**24.7912**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8758	1.1850	12.3614	0.0304	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,456.8513	2,456.8513	0.1290		2,459.5594
Total	**0.8758**	**1.1850**	**12.3614**	**0.0304**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,456.8513**	**2,456.8513**	**0.1290**		**2,459.5594**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.4588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**24.4886**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8758	1.1850	12.3614	0.0304	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,456.8513	2,456.8513	0.1290		2,459.5594
Total	**0.8758**	**1.1850**	**12.3614**	**0.0304**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,456.8513**	**2,456.8513**	**0.1290**		**2,459.5594**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**35.0170**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7876	1.0746	11.1852	0.0304	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,365.1131	2,365.1131	0.1197		2,367.6264
Total	**0.7876**	**1.0746**	**11.1852**	**0.0304**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,365.1131**	**2,365.1131**	**0.1197**		**2,367.6264**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7876	1.0746	11.1852	0.0304	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,365.1131	2,365.1131	0.1197		2,367.6264
Total	**0.7876**	**1.0746**	**11.1852**	**0.0304**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,365.1131**	**2,365.1131**	**0.1197**		**2,367.6264**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**34.9849**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7242	0.9854	10.2515	0.0303	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,275.0788	2,275.0788	0.1120		2,277.4314
Total	**0.7242**	**0.9854**	**10.2515**	**0.0303**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,275.0788**	**2,275.0788**	**0.1120**		**2,277.4314**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.7184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**34.7481**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7242	0.9854	10.2515	0.0303	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,275.0788	2,275.0788	0.1120		2,277.4314
Total	**0.7242**	**0.9854**	**10.2515**	**0.0303**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,275.0788**	**2,275.0788**	**0.1120**		**2,277.4314**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**		**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2349	0.0000	1.2349	0.1870	0.0000	0.1870			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316		3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**1.2349**	**1.6448**	**2.8797**	**0.1870**	**1.5316**	**1.7185**		**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0919	1.2880	1.1804	4.1800e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0482		401.4527	401.4527	3.0100e-003		401.5160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.1393**	**1.3525**	**1.8519**	**6.1600e-003**	**0.2672**	**0.0240**	**0.2912**	**0.0717**	**0.0221**	**0.0938**		**550.4753**	**550.4753**	**0.0104**		**550.6927**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5557	0.0000	0.5557	0.0841	0.0000	0.0841			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0399		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**0.4739**	**2.0535**	**23.8257**	**0.0399**	**0.5557**	**9.4800e-003**	**0.5652**	**0.0841**	**9.4800e-003**	**0.0936**	**0.0000**	**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0919	1.2880	1.1804	4.1800e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0482		401.4527	401.4527	3.0100e-003		401.5160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.1393**	**1.3525**	**1.8519**	**6.1600e-003**	**0.2672**	**0.0240**	**0.2912**	**0.0717**	**0.0221**	**0.0938**		**550.4753**	**550.4753**	**0.0104**		**550.6927**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1888	0.0000	6.1888	3.3333	0.0000	3.3333			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1888**	**2.5049**	**8.6937**	**3.3333**	**2.3045**	**5.6378**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0782	29.1403	26.7055	0.0945	2.2516	0.5138	2.7654	0.6166	0.4727	1.0893		9,082.7608	9,082.7608	0.0682		9,084.1924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**2.1415**	**29.2264**	**27.6008**	**0.0972**	**2.4751**	**0.5156**	**2.9907**	**0.6759**	**0.4743**	**1.1502**		**9,281.4576**	**9,281.4576**	**0.0780**		**9,283.0947**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7849	0.0000	2.7849	1.5000	0.0000	1.5000			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7849**	**0.0151**	**2.8001**	**1.5000**	**0.0151**	**1.5151**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0782	29.1403	26.7055	0.0945	2.2516	0.5138	2.7654	0.6166	0.4727	1.0893		9,082.7608	9,082.7608	0.0682		9,084.1924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**2.1415**	**29.2264**	**27.6008**	**0.0972**	**2.4751**	**0.5156**	**2.9907**	**0.6759**	**0.4743**	**1.1502**		**9,281.4576**	**9,281.4576**	**0.0780**		**9,283.0947**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1429	0.0000	2.1429	0.3245	0.0000	0.3245			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865		3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**2.1429**	**1.4899**	**3.6327**	**0.3245**	**1.3865**	**1.7110**		**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1559	1.9913	2.0213	7.2400e-003	0.1726	0.0391	0.2116	0.0473	0.0359	0.0832		680.4683	680.4683	5.2300e-003		680.5781
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.2004**	**2.0511**	**2.6459**	**9.2200e-003**	**0.3403**	**0.0403**	**0.3806**	**0.0917**	**0.0371**	**0.1288**		**823.4356**	**823.4356**	**0.0122**		**823.6914**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9643	0.0000	0.9643	0.1460	0.0000	0.1460			0.0000			0.0000
Off-Road	0.4739	2.0535	23.8257	0.0400		9.4800e-003	9.4800e-003		9.4800e-003	9.4800e-003	0.0000	3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**0.4739**	**2.0535**	**23.8257**	**0.0400**	**0.9643**	**9.4800e-003**	**0.9738**	**0.1460**	**9.4800e-003**	**0.1555**	**0.0000**	**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1559	1.9913	2.0213	7.2400e-003	0.1726	0.0391	0.2116	0.0473	0.0359	0.0832		680.4683	680.4683	5.2300e-003		680.5781
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.2004**	**2.0511**	**2.6459**	**9.2200e-003**	**0.3403**	**0.0403**	**0.3806**	**0.0917**	**0.0371**	**0.1288**		**823.4356**	**823.4356**	**0.0122**		**823.6914**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1827	0.0000	6.1827	3.3340	0.0000	3.3340			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810		5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**6.1827**	**2.2619**	**8.4447**	**3.3340**	**2.0810**	**5.4149**		**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5564	32.6529	33.1448	0.1187	2.8300	0.6403	3.4703	0.7751	0.5890	1.3641		11,158.1446	11,158.1446	0.0858		11,159.9455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**2.6157**	**32.7327**	**33.9776**	**0.1213**	**3.0536**	**0.6420**	**3.6955**	**0.8344**	**0.5906**	**1.4250**		**11,348.7676**	**11,348.7676**	**0.0950**		**11,350.7631**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7822	0.0000	2.7822	1.5003	0.0000	1.5003			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.0151	0.0151		0.0151	0.0151	0.0000	5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**2.7822**	**0.0151**	**2.7974**	**1.5003**	**0.0151**	**1.5154**	**0.0000**	**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5564	32.6529	33.1448	0.1187	2.8300	0.6403	3.4703	0.7751	0.5890	1.3641		11,158.1446	11,158.1446	0.0858		11,159.9455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**2.6157**	**32.7327**	**33.9776**	**0.1213**	**3.0536**	**0.6420**	**3.6955**	**0.8344**	**0.5906**	**1.4250**		**11,348.7676**	**11,348.7676**	**0.0950**		**11,350.7631**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3842	17.8517	35.3378	0.0758	2.2136	0.3377	2.5513	0.6305	0.3107	0.9412		7,092.0130	7,092.0130	0.0530		7,093.1258
Worker	3.2044	4.2598	44.6876	0.1515	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		10,724.6567	10,724.6567	0.5069		10,735.3020
Total	**5.5886**	**22.1115**	**80.0254**	**0.2273**	**14.9896**	**0.4355**	**15.4251**	**4.0188**	**0.4014**	**4.4201**		**17,816.6696**	**17,816.6696**	**0.5599**		**17,828.4278**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3842	17.8517	35.3378	0.0758	2.2136	0.3377	2.5513	0.6305	0.3107	0.9412		7,092.0130	7,092.0130	0.0530		7,093.1258
Worker	3.2044	4.2598	44.6876	0.1515	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		10,724.6567	10,724.6567	0.5069		10,735.3020
Total	**5.5886**	**22.1115**	**80.0254**	**0.2273**	**14.9896**	**0.4355**	**15.4251**	**4.0188**	**0.4014**	**4.4201**		**17,816.6696**	**17,816.6696**	**0.5599**		**17,828.4278**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3306	16.2058	34.5106	0.0757	2.2136	0.3340	2.5476	0.6305	0.3073	0.9378		7,085.6561	7,085.6561	0.0542		7,086.7937
Worker	3.0346	3.9943	42.0012	0.1514	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		10,546.3434	10,546.3434	0.4854		10,556.5364
Total	**5.3652**	**20.2001**	**76.5118**	**0.2272**	**14.9897**	**0.4317**	**15.4213**	**4.0188**	**0.3979**	**4.4166**		**17,631.9996**	**17,631.9996**	**0.5396**		**17,643.3301**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3306	16.2058	34.5106	0.0757	2.2136	0.3340	2.5476	0.6305	0.3073	0.9378		7,085.6561	7,085.6561	0.0542		7,086.7937
Worker	3.0346	3.9943	42.0012	0.1514	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		10,546.3434	10,546.3434	0.4854		10,556.5364
Total	**5.3652**	**20.2001**	**76.5118**	**0.2272**	**14.9897**	**0.4317**	**15.4213**	**4.0188**	**0.3979**	**4.4166**		**17,631.9996**	**17,631.9996**	**0.5396**		**17,643.3301**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**57.8268**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6420	0.8535	8.9532	0.0303	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,148.6845	2,148.6845	0.1016		2,150.8173
Total	**0.6420**	**0.8535**	**8.9532**	**0.0303**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,148.6845**	**2,148.6845**	**0.1016**		**2,150.8173**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6420	0.8535	8.9532	0.0303	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,148.6845	2,148.6845	0.1016		2,150.8173
Total	**0.6420**	**0.8535**	**8.9532**	**0.0303**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,148.6845**	**2,148.6845**	**0.1016**		**2,150.8173**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**57.8124**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6080	0.8003	8.4149	0.0303	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,112.9595	2,112.9595	0.0973		2,115.0016
Total	**0.6080**	**0.8003**	**8.4149**	**0.0303**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,112.9595**	**2,112.9595**	**0.0973**		**2,115.0016**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.6079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**57.6376**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6080	0.8003	8.4149	0.0303	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,112.9595	2,112.9595	0.0973		2,115.0016
Total	**0.6080**	**0.8003**	**8.4149**	**0.0303**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,112.9595**	**2,112.9595**	**0.0973**		**2,115.0016**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131		2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**		**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0398	0.0524	0.5512	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		138.4035	138.4035	6.3700e-003		138.5372
Total	**0.0398**	**0.0524**	**0.5512**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**138.4035**	**138.4035**	**6.3700e-003**		**138.5372**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0223**		**5.4900e-003**	**5.4900e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0398	0.0524	0.5512	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		138.4035	138.4035	6.3700e-003		138.5372
Total	**0.0398**	**0.0524**	**0.5512**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**138.4035**	**138.4035**	**6.3700e-003**		**138.5372**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	53.1204	99.4005	459.8599	1.2697	86.8310	1.7747	88.6057	23.2043	1.6375	24.8418		96,203.0437	96,203.0437	3.3728		96,273.8724
Unmitigated	58.5172	137.4439	589.8664	1.8868	131.0810	2.5774	133.6584	35.0295	2.3777	37.4072		143,001.9016	143,001.9016	4.8759		143,104.2958

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,176.00	1,432.00	1214.00	4,162,091	2,881,466
Condo/Townhouse High Rise	3,410.40	4,152.80	3520.60	12,070,064	8,356,252
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	6,126.41	0.00	0.00	13,513,671	8,716,444
High Turnover (Sit Down Restaurant)	1,017.20	1,266.96	1054.72	1,442,202	950,727
Hotel	1,634.00	1,638.00	1190.00	3,749,016	2,465,413
Library	3,533.72	4,282.60	2345.08	8,762,925	5,655,704
Regional Shopping Center	3,238.08	1,599.04	807.68	5,746,096	3,781,132
Total	20,246.76	14,482.35	10,243.03	49,765,327	33,016,588

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7056	6.2626	4.2717	0.0385		0.4875	0.4875		0.4875	0.4875		7,697.8178	7,697.8178	0.1475	0.1411	7,744.6655
NaturalGas Unmitigated	0.8404	7.4592	5.0899	0.0458		0.5807	0.5807		0.5807	0.5807		9,168.3897	9,168.3897	0.1757	0.1681	9,224.1869

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	22891.8	0.2469	2.1096	0.8977	0.0135		0.1706	0.1706		0.1706	0.1706		2,693.1499	2,693.1499	0.0516	0.0494	2,709.5399
Condo/Townhouse High Rise	7893.72	0.0851	0.7275	0.3096	4.6400e-003		0.0588	0.0588		0.0588	0.0588		928.6724	928.6724	0.0178	0.0170	934.3241
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	17242.2	0.1860	1.6904	1.4200	0.0101		0.1285	0.1285		0.1285	0.1285		2,028.4988	2,028.4988	0.0389	0.0372	2,040.8439
High Turnover (Sit Down Restaurant)	5107.07	0.0551	0.5007	0.4206	3.0000e-003		0.0381	0.0381		0.0381	0.0381		600.8316	600.8316	0.0115	0.0110	604.4882
Hotel	19906.3	0.2147	1.9516	1.6393	0.0117		0.1483	0.1483		0.1483	0.1483		2,341.9204	2,341.9204	0.0449	0.0429	2,356.1729
Library	4741.15	0.0511	0.4648	0.3905	2.7900e-003		0.0353	0.0353		0.0353	0.0353		557.7824	557.7824	0.0107	0.0102	561.1770
Regional Shopping Center	149.041	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5343	17.5343	3.4000e-004	3.2000e-004	17.6410
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.8405**	**7.4592**	**5.0899**	**0.0458**		**0.5807**	**0.5807**		**0.5807**	**0.5807**		**9,168.3897**	**9,168.3897**	**0.1757**	**0.1681**	**9,224.1869**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	19.2513	0.2076	1.7741	0.7550	0.0113		0.1434	0.1434		0.1434	0.1434		2,264.8554	2,264.8554	0.0434	0.0415	2,278.6390
Condo/Townhouse High Rise	6.63837	0.0716	0.6118	0.2603	3.9000e-003		0.0495	0.0495		0.0495	0.0495		780.9846	780.9846	0.0150	0.0143	785.7376
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	13.9168	0.1501	1.3644	1.1461	8.1900e-003		0.1037	0.1037		0.1037	0.1037		1,637.2751	1,637.2751	0.0314	0.0300	1,647.2392
High Turnover (Sit Down Restaurant)	4.9088	0.0529	0.4813	0.4043	2.8900e-003		0.0366	0.0366		0.0366	0.0366		577.5059	577.5059	0.0111	0.0106	581.0205
Hotel	16.5711	0.1787	1.6246	1.3647	9.7500e-003		0.1235	0.1235		0.1235	0.1235		1,949.5411	1,949.5411	0.0374	0.0357	1,961.4057
Library	4.01725	0.0433	0.3939	0.3308	2.3600e-003		0.0299	0.0299		0.0299	0.0299		472.6176	472.6176	9.0600e-003	8.6600e-003	475.4938
Regional Shopping Center	0.127825	1.3800e-003	0.0125	0.0105	8.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		15.0382	15.0382	2.9000e-004	2.8000e-004	15.1297
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.7056**	**6.2626**	**4.2717**	**0.0385**		**0.4875**	**0.4875**		**0.4875**	**0.4875**		**7,697.8178**	**7,697.8178**	**0.1476**	**0.1411**	**7,744.6655**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	56.8760	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101	0.0000	98.8792	98.8792	0.0869	0.0000	100.7050
Unmitigated	64.8879	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559	0.0000	116.3950	116.3950	0.1144	0.0000	118.7972

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9892	0.7490	64.8110	3.4200e-003		0.3559	0.3559		0.3559	0.3559		116.3950	116.3950	0.1144		118.7972
Total	**64.8879**	**0.7490**	**64.8110**	**3.4200e-003**		**0.3559**	**0.3559**		**0.3559**	**0.3559**	**0.0000**	**116.3950**	**116.3950**	**0.1144**	**0.0000**	**118.7972**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.5824					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.7746					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5190	0.6697	56.9957	2.8200e-003		0.3101	0.3101		0.3101	0.3101		98.8792	98.8792	0.0869		100.7050
Total	**56.8760**	**0.6697**	**56.9957**	**2.8200e-003**		**0.3101**	**0.3101**		**0.3101**	**0.3101**	**0.0000**	**98.8792**	**98.8792**	**0.0869**	**0.0000**	**100.7050**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Reduced Density Alternative
Long Beach Civic Center
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	547.00	1000sqft	3.78	547,003.00	0
Library	87.40	1000sqft	1.73	87,400.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	7.60	1000sqft	0.00	7,600.00	0
Hotel	190.00	Room	0.00	275,880.00	0
Condo/Townhouse High Rise	190.00	Dwelling Unit	0.90	223,250.00	543
Condo/Townhouse High Rise	551.00	Dwelling Unit	6.29	617,500.00	1576
Regional Shopping Center	30.40	1000sqft	0.00	30,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD. Reduced by 5%.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing. Reduced by 5% for Alt.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113. Assumed compliance with MM AQ-3.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	839,984.00	413,911.70
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	839,984.00	47,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	839,984.00	294,690.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,519,952.00	1,241,735.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,519,952.00	142,500.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,519,952.00	884,070.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	567,506.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	567,506.00	150,693.80
tblArchitecturalCoating	ConstArea_Residential_Exterior	567,506.00	416,812.50
tblArchitecturalCoating	ConstArea_Residential_Interior	1,702,519.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,702,519.00	452,081.30
tblArchitecturalCoating	ConstArea_Residential_Interior	1,702,519.00	1,250,438.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_Nonresidential_Interior	2519952	2268305
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	50
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tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	20.00	110.00

tblConstructionPhase	NumDays	30.00	154.00
tblConstructionPhase	NumDays	30.00	284.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	86.00
tblConstructionPhase	NumDays	20.00	195.00
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tblConstructionPhase	PhaseEndDate	7/3/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	3/4/2019	10/31/2019
tblConstructionPhase	PhaseEndDate	4/30/2020	3/31/2020
tblConstructionPhase	PhaseEndDate	4/29/2022	2/28/2022
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tblConstructionPhase	PhaseEndDate	9/29/2020	6/30/2020
tblConstructionPhase	PhaseEndDate	5/1/2020	11/29/2019
tblConstructionPhase	PhaseEndDate	2/1/2021	12/31/2020
tblConstructionPhase	PhaseEndDate	6/1/2017	3/31/2017
tblConstructionPhase	PhaseEndDate	3/2/2020	12/31/2019
tblConstructionPhase	PhaseEndDate	11/28/2022	7/29/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	12/29/2017
tblConstructionPhase	PhaseEndDate	11/30/2020	11/29/2019
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tblConstructionPhase	PhaseStartDate	11/1/2017	7/2/2018
tblConstructionPhase	PhaseStartDate	1/1/2020	12/2/2019
tblConstructionPhase	PhaseStartDate	1/1/2021	11/2/2020
tblConstructionPhase	PhaseStartDate	4/1/2017	9/1/2016
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tblConstructionPhase	PhaseStartDate	11/30/2019	7/1/2019

tblConstructionPhase	PhaseStartDate	7/1/2020	6/1/2020
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tblConstructionPhase	PhaseStartDate	11/30/2019	10/1/2019
tblConstructionPhase	PhaseStartDate	7/30/2022	4/1/2022
tblConstructionPhase	PhaseStartDate	5/1/2019	4/3/2017
tblConstructionPhase	PhaseStartDate	11/1/2019	11/1/2018
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	629.85	0.00
tblFireplaces	NumberNoFireplace	74.10	0.00
tblFireplaces	NumberWood	37.05	0.00
tblGrading	AcresOfGrading	385.00	2.00
tblGrading	AcresOfGrading	710.00	4.20
tblGrading	AcresOfGrading	165.00	3.10
tblGrading	MaterialExported	0.00	200,000.00
tblGrading	MaterialExported	0.00	180,000.00
tblGrading	MaterialImported	0.00	68,200.00
tblLandUse	LandUseSquareFeet	547,000.00	547,003.00
tblLandUse	LandUseSquareFeet	190,000.00	223,250.00
tblLandUse	LandUseSquareFeet	551,000.00	617,500.00
tblLandUse	LotAcreage	12.56	3.78
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tblLandUse	LotAcreage	4.58	0.00
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tblLandUse	LotAcreage	0.17	0.00
tblLandUse	LotAcreage	6.33	0.00

tblLandUse	LotAcreage	2.97	0.90
tblLandUse	LotAcreage	8.61	6.29
tblLandUse	LotAcreage	0.70	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
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tblTripsAndVMT	WorkerTripNumber	1,181.00	1,143.00
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tblTripsAndVMT	WorkerTripNumber	1,181.00	1,143.00
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tblTripsAndVMT	WorkerTripNumber	236.00	229.00
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tblVehicleEF	HHD	3.16	3.42
tblVehicleEF	HHD	1.68	1.69
tblVehicleEF	HHD	53.80	51.65
tblVehicleEF	HHD	528.22	527.54
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.93	3.33
tblVehicleEF	HHD	4.25	3.36
tblVehicleEF	HHD	3.53	3.38
tblVehicleEF	HHD	9.7330e-003	9.3010e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03

tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	8.9550e-003	8.5570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4370e-003	1.3690e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.56	0.61
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.42	1.22
tblVehicleEF	HHD	5.5990e-003	5.5920e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4410e-003	1.3960e-003
tblVehicleEF	HHD	1.4370e-003	1.3690e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.64	0.69
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.52	1.30
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.30	2.49
tblVehicleEF	HHD	1.69	1.70

tblVehicleEF	HHD	43.34	41.60
tblVehicleEF	HHD	559.60	558.89
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	4.06	3.43
tblVehicleEF	HHD	4.01	3.17
tblVehicleEF	HHD	3.38	3.24
tblVehicleEF	HHD	8.2050e-003	7.8410e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	7.5490e-003	7.2140e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	2.3200e-003	2.1960e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.53	0.57
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.24	1.06
tblVehicleEF	HHD	5.9320e-003	5.9240e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.2710e-003	1.2330e-003

tblVehicleEF	HHD	2.3200e-003	2.1960e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.60	0.65
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.32	1.14
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	4.35	4.71
tblVehicleEF	HHD	1.68	1.69
tblVehicleEF	HHD	54.58	52.38
tblVehicleEF	HHD	484.88	484.26
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.76	3.18
tblVehicleEF	HHD	4.18	3.31
tblVehicleEF	HHD	3.54	3.40
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08

tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.61	0.66
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.44	1.23
tblVehicleEF	HHD	5.1400e-003	5.1330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4540e-003	1.4080e-003
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.69	0.75
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.54	1.31
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.77	0.71
tblVehicleEF	LDA	1.39	1.21
tblVehicleEF	LDA	248.70	239.34
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003

tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5970e-003	3.6040e-003
tblVehicleEF	LDA	7.6100e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.86	0.79
tblVehicleEF	LDA	1.09	0.95
tblVehicleEF	LDA	261.60	251.82
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003

tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	3.7860e-003	3.7940e-003
tblVehicleEF	LDA	7.5600e-004	7.5400e-004
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.74	0.68
tblVehicleEF	LDA	1.44	1.25
tblVehicleEF	LDA	244.71	235.50
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003

tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5390e-003	3.5450e-003
tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76
tblVehicleEF	LDT1	3.77	3.19
tblVehicleEF	LDT1	303.51	294.33
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003

tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52
tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23

tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29

tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95
tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
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tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45

tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.2300e-004	5.1800e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39

tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48

tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
tblVehicleEF	LHD2	0.82	0.77
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003

tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30
tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37

tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003

tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
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tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54

tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06

tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68

tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32

tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29

tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40

tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40

tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06
tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003

tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.78	12.76
tblVehicleEF	MHD	525.09	525.15
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.48	3.27
tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.88	0.74
tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.1000e-004	7.7100e-004
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.11	0.10

tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.94	0.79
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	2.74	3.30
tblVehicleEF	OBUS	0.97	0.86
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tblVehicleEF	OBUS	534.88	533.47
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.65	3.20
tblVehicleEF	OBUS	2.28	1.27
tblVehicleEF	OBUS	1.24	1.12
tblVehicleEF	OBUS	9.5470e-003	8.7920e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	8.7830e-003	8.0890e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004

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tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.54	0.48
tblVehicleEF	OBUS	5.6700e-003	5.6550e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.1900e-004	5.0200e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.53	0.64
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.58	0.51
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	1.99	2.40
tblVehicleEF	OBUS	0.98	0.86
tblVehicleEF	OBUS	7.12	6.40
tblVehicleEF	OBUS	566.66	565.16
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.79	3.30
tblVehicleEF	OBUS	2.14	1.19
tblVehicleEF	OBUS	1.19	1.08
tblVehicleEF	OBUS	8.0480e-003	7.4120e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01

tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	7.4040e-003	6.8190e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
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tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
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tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.48	0.42
tblVehicleEF	OBUS	6.0070e-003	5.9910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
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tblVehicleEF	OBUS	0.50	0.60
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tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.32	0.32
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tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	3.78	4.55
tblVehicleEF	OBUS	0.97	0.85

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tblVehicleEF	OBUS	491.00	489.70
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
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tblVehicleEF	OBUS	4.44	3.06
tblVehicleEF	OBUS	2.24	1.25
tblVehicleEF	OBUS	1.25	1.13
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tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	0.01	9.8420e-003
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tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
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tblVehicleEF	OBUS	0.55	0.49
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.2200e-004	5.0500e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004

tblVehicleEF	OBUS	0.03	0.03
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tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.58	0.52
tblVehicleEF	SBUS	4.4530e-003	4.6460e-003
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tblVehicleEF	SBUS	2.96	2.66
tblVehicleEF	SBUS	27.16	24.72
tblVehicleEF	SBUS	547.00	552.46
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.58	7.35
tblVehicleEF	SBUS	7.03	6.65
tblVehicleEF	SBUS	2.02	1.89
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.03	0.03

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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	1.95	1.92
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tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
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tblVehicleEF	SBUS	579.49	585.28
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
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tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78

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tblVehicleEF	SBUS	0.01	0.01
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tblVehicleEF	SBUS	4.8080e-003	5.0160e-003

tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
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tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
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tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52

tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
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tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83

tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88
tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64

tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02

tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	37.05	0.00
tblWoodstoves	NumberNoncatalytic	37.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.5611	15.8757	14.8099	0.0272	1.9419	0.6454	2.5873	0.7364	0.5966	1.3331	0.0000	2,393.7998	2,393.7998	0.2977	0.0000	2,400.0506
2017	3.3562	13.1616	20.2302	0.0421	3.1264	0.5456	3.6720	1.0755	0.5073	1.5828	0.0000	3,417.9267	3,417.9267	0.2895	0.0000	3,424.0070
2018	3.4449	7.8104	15.8436	0.0363	2.0890	0.2949	2.3838	0.5604	0.2761	0.8365	0.0000	2,815.3216	2,815.3216	0.1752	0.0000	2,819.0002
2019	4.7425	9.5482	12.8772	0.0282	1.4553	0.4010	1.8563	0.4375	0.3725	0.8100	0.0000	2,245.8493	2,245.8493	0.2662	0.0000	2,251.4394
2020	1.1824	10.9821	13.1074	0.0313	1.6706	0.4091	2.0797	0.5624	0.3787	0.9411	0.0000	2,513.0474	2,513.0474	0.2662	0.0000	2,518.6371
2021	3.3864	5.3166	13.0886	0.0350	2.0314	0.1863	2.2177	0.5452	0.1743	0.7195	0.0000	2,532.6288	2,532.6288	0.1435	0.0000	2,535.6425
2022	4.3504	1.3805	3.3252	8.8400e-003	0.4973	0.0570	0.5542	0.1330	0.0533	0.1862	0.0000	633.8594	633.8594	0.0567	0.0000	635.0502
Total	**22.0238**	**64.0752**	**93.2821**	**0.2089**	**12.8119**	**2.5391**	**15.3510**	**4.0504**	**2.3587**	**6.4091**	**0.0000**	**16,552.4331**	**16,552.4331**	**1.4949**	**0.0000**	**16,583.8267**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.5611	15.8757	14.8099	0.0272	1.3521	0.6454	1.9976	0.4599	0.5966	1.0565	0.0000	2,393.7988	2,393.7988	0.2977	0.0000	2,400.0495
2017	3.3562	13.1616	20.2302	0.0421	2.6493	0.5456	3.1948	0.8160	0.5073	1.3233	0.0000	3,417.9258	3,417.9258	0.2895	0.0000	3,424.0061
2018	3.4449	7.8104	15.8436	0.0363	2.0890	0.2949	2.3838	0.5604	0.2761	0.8365	0.0000	2,815.3212	2,815.3212	0.1752	0.0000	2,818.9997
2019	4.7425	9.5482	12.8772	0.0282	1.3056	0.4010	1.7066	0.3714	0.3725	0.7438	0.0000	2,245.8484	2,245.8484	0.2662	0.0000	2,251.4384
2020	1.1824	10.9821	13.1074	0.0313	1.3322	0.4091	1.7412	0.4096	0.3787	0.7883	0.0000	2,513.0465	2,513.0465	0.2662	0.0000	2,518.6362
2021	3.3864	5.3166	13.0886	0.0350	2.0314	0.1863	2.2177	0.5452	0.1743	0.7195	0.0000	2,532.6285	2,532.6285	0.1435	0.0000	2,535.6421
2022	4.3504	1.3805	3.3252	8.8400e-003	0.4973	0.0570	0.5542	0.1330	0.0533	0.1862	0.0000	633.8593	633.8593	0.0567	0.0000	635.0500
Total	**22.0238**	**64.0751**	**93.2821**	**0.2089**	**11.2568**	**2.5391**	**13.7960**	**3.2953**	**2.3587**	**5.6541**	**0.0000**	**16,552.4283**	**16,552.4283**	**1.4949**	**0.0000**	**16,583.8220**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**12.14**	**0.00**	**10.13**	**18.64**	**0.00**	**11.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.2799	0.0890	7.6973	4.1000e-004		0.0423	0.0423		0.0423	0.0423	0.0000	12.5409	12.5409	0.0123	0.0000	12.7998
Energy	0.1457	1.2932	0.8825	7.9500e-003		0.1007	0.1007		0.1007	0.1007	0.0000	7,000.3901	7,000.3901	0.2831	0.0793	7,030.9188
Mobile	7.7509	19.5403	82.7963	0.2660	17.9326	0.3581	18.2906	4.7995	0.3304	5.1298	0.0000	18,272.1635	18,272.1635	0.6152	0.0000	18,285.0834
Waste						0.0000	0.0000		0.0000	0.0000	764.4437	0.0000	764.4437	45.1773	0.0000	1,713.1675
Water						0.0000	0.0000		0.0000	0.0000	53.6346	970.6275	1,024.2621	5.5534	0.1393	1,184.0684
Total	**19.1765**	**20.9225**	**91.3760**	**0.2743**	**17.9326**	**0.5010**	**18.4336**	**4.7995**	**0.4733**	**5.2727**	**818.0783**	**26,255.7220**	**27,073.8002**	**51.6415**	**0.2186**	**28,226.0379**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.9123	0.0795	6.7690	3.3000e-004		0.0368	0.0368		0.0368	0.0368	0.0000	10.6535	10.6535	9.3700e-003	0.0000	10.8503
Energy	0.1223	1.0858	0.7406	6.6700e-003		0.0845	0.0845		0.0845	0.0845	0.0000	4,127.9606	4,127.9606	0.1573	0.0499	4,146.7455
Mobile	6.9935	14.1410	64.2242	0.1793	11.8972	0.2467	12.1440	3.1842	0.2277	3.4118	0.0000	12,313.9820	12,313.9820	0.4260	0.0000	12,322.9288
Waste						0.0000	0.0000		0.0000	0.0000	764.4437	0.0000	764.4437	45.1773	0.0000	1,713.1675
Water						0.0000	0.0000		0.0000	0.0000	42.9077	823.8570	866.7647	4.4441	0.1117	994.7266
Total	**17.0281**	**15.3063**	**71.7338**	**0.1863**	**11.8972**	**0.3681**	**12.2653**	**3.1842**	**0.3490**	**3.5332**	**807.3514**	**17,276.4531**	**18,083.8045**	**50.2141**	**0.1617**	**19,188.4186**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**11.20**	**26.84**	**21.50**	**32.10**	**33.66**	**26.53**	**33.46**	**33.66**	**26.26**	**32.99**	**1.31**	**34.20**	**33.21**	**2.76**	**26.05**	**32.02**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 452,081; Residential Outdoor: 150,694; Non-Residential Indoor: 142,500; Non-Residential Outdoor: 47,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38

Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29

Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2048	0.0000	0.2048	0.0310	0.0000	0.0310	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1844	1.9632	1.5063	1.7200e-003		0.0986	0.0986		0.0919	0.0919	0.0000	159.5187	159.5187	0.0434	0.0000	160.4296
Total	**0.1844**	**1.9632**	**1.5063**	**1.7200e-003**	**0.2048**	**0.0986**	**0.3033**	**0.0310**	**0.0919**	**0.1229**	**0.0000**	**159.5187**	**159.5187**	**0.0434**	**0.0000**	**160.4296**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0168	0.2733	0.2066	7.0000e-004	0.0162	4.1200e-003	0.0203	4.4500e-003	3.7900e-003	8.2400e-003	0.0000	63.7134	63.7134	4.6000e-004	0.0000	63.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	3.8100e-003	0.0396	9.0000e-005	7.0800e-003	6.0000e-005	7.1400e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.6298	6.6298	3.6000e-004	0.0000	6.6373
Total	**0.0194**	**0.2771**	**0.2462**	**7.9000e-004**	**0.0233**	**4.1800e-003**	**0.0275**	**6.3300e-003**	**3.8500e-003**	**0.0102**	**0.0000**	**70.3431**	**70.3431**	**8.2000e-004**	**0.0000**	**70.3602**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0921	0.0000	0.0921	0.0140	0.0000	0.0140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1844	1.9632	1.5063	1.7200e-003		0.0986	0.0986		0.0919	0.0919	0.0000	159.5185	159.5185	0.0434	0.0000	160.4295
Total	**0.1844**	**1.9632**	**1.5063**	**1.7200e-003**	**0.0921**	**0.0986**	**0.1907**	**0.0140**	**0.0919**	**0.1058**	**0.0000**	**159.5185**	**159.5185**	**0.0434**	**0.0000**	**160.4295**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0168	0.2733	0.2066	7.0000e-004	0.0162	4.1200e-003	0.0203	4.4500e-003	3.7900e-003	8.2400e-003	0.0000	63.7134	63.7134	4.6000e-004	0.0000	63.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	3.8100e-003	0.0396	9.0000e-005	7.0800e-003	6.0000e-005	7.1400e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.6298	6.6298	3.6000e-004	0.0000	6.6373
Total	**0.0194**	**0.2771**	**0.2462**	**7.9000e-004**	**0.0233**	**4.1800e-003**	**0.0275**	**6.3300e-003**	**3.8500e-003**	**0.0102**	**0.0000**	**70.3431**	**70.3431**	**8.2000e-004**	**0.0000**	**70.3602**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8675	0.0000	0.8675	0.4718	0.0000	0.4718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7095	8.1921	5.3806	6.7600e-003		0.3925	0.3925		0.3611	0.3611	0.0000	637.2432	637.2432	0.1922	0.0000	641.2797
Total	**0.7095**	**8.1921**	**5.3806**	**6.7600e-003**	**0.8675**	**0.3925**	**1.2600**	**0.4718**	**0.3611**	**0.8329**	**0.0000**	**637.2432**	**637.2432**	**0.1922**	**0.0000**	**641.2797**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1544	2.5065	1.8945	6.3900e-003	0.1820	0.0378	0.2198	0.0490	0.0348	0.0837	0.0000	584.2754	584.2754	4.1800e-003	0.0000	584.3632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8000e-003	0.0129	0.1344	3.0000e-004	0.0240	2.0000e-004	0.0242	6.3800e-003	1.9000e-004	6.5700e-003	0.0000	22.5105	22.5105	1.2100e-003	0.0000	22.5359
Total	**0.1632**	**2.5194**	**2.0289**	**6.6900e-003**	**0.2061**	**0.0380**	**0.2441**	**0.0554**	**0.0350**	**0.0903**	**0.0000**	**606.7859**	**606.7859**	**5.3900e-003**	**0.0000**	**606.8991**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3904	0.0000	0.3904	0.2123	0.0000	0.2123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7095	8.1921	5.3805	6.7600e-003		0.3925	0.3925		0.3611	0.3611	0.0000	637.2424	637.2424	0.1922	0.0000	641.2790
Total	**0.7095**	**8.1921**	**5.3805**	**6.7600e-003**	**0.3904**	**0.3925**	**0.7829**	**0.2123**	**0.3611**	**0.5734**	**0.0000**	**637.2424**	**637.2424**	**0.1922**	**0.0000**	**641.2790**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1544	2.5065	1.8945	6.3900e-003	0.1820	0.0378	0.2198	0.0490	0.0348	0.0837	0.0000	584.2754	584.2754	4.1800e-003	0.0000	584.3632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8000e-003	0.0129	0.1344	3.0000e-004	0.0240	2.0000e-004	0.0242	6.3800e-003	1.9000e-004	6.5700e-003	0.0000	22.5105	22.5105	1.2100e-003	0.0000	22.5359
Total	**0.1632**	**2.5194**	**2.0289**	**6.6900e-003**	**0.2061**	**0.0380**	**0.2441**	**0.0554**	**0.0350**	**0.0903**	**0.0000**	**606.7859**	**606.7859**	**5.3900e-003**	**0.0000**	**606.8991**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8675	0.0000	0.8675	0.4718	0.0000	0.4718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1982	2.2617	1.5212	2.0100e-003		0.1078	0.1078		0.0992	0.0992	0.0000	186.1402	186.1402	0.0570	0.0000	187.3379
Total	**0.1982**	**2.2617**	**1.5212**	**2.0100e-003**	**0.8675**	**0.1078**	**0.9754**	**0.4718**	**0.0992**	**0.5710**	**0.0000**	**186.1402**	**186.1402**	**0.0570**	**0.0000**	**187.3379**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0432	0.6818	0.5421	1.9000e-003	0.1564	0.0103	0.1667	0.0397	9.4300e-003	0.0491	0.0000	170.5682	170.5682	1.2100e-003	0.0000	170.5937
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	3.4600e-003	0.0360	9.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.4247	6.4247	3.3000e-004	0.0000	6.4316
Total	**0.0455**	**0.6853**	**0.5781**	**1.9900e-003**	**0.1635**	**0.0103**	**0.1739**	**0.0416**	**9.4800e-003**	**0.0510**	**0.0000**	**176.9928**	**176.9928**	**1.5400e-003**	**0.0000**	**177.0253**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3904	0.0000	0.3904	0.2123	0.0000	0.2123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1982	2.2617	1.5212	2.0100e-003		0.1078	0.1078		0.0992	0.0992	0.0000	186.1400	186.1400	0.0570	0.0000	187.3377
Total	**0.1982**	**2.2617**	**1.5212**	**2.0100e-003**	**0.3904**	**0.1078**	**0.4982**	**0.2123**	**0.0992**	**0.3115**	**0.0000**	**186.1400**	**186.1400**	**0.0570**	**0.0000**	**187.3377**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0432	0.6818	0.5421	1.9000e-003	0.1564	0.0103	0.1667	0.0397	9.4300e-003	0.0491	0.0000	170.5682	170.5682	1.2100e-003	0.0000	170.5937
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	3.4600e-003	0.0360	9.0000e-005	7.1300e-003	6.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9500e-003	0.0000	6.4247	6.4247	3.3000e-004	0.0000	6.4316
Total	**0.0455**	**0.6853**	**0.5781**	**1.9900e-003**	**0.1635**	**0.0103**	**0.1739**	**0.0416**	**9.4800e-003**	**0.0510**	**0.0000**	**176.9928**	**176.9928**	**1.5400e-003**	**0.0000**	**177.0253**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1482	1.2400	0.8050	1.1700e-003		0.0856	0.0856		0.0804	0.0804	0.0000	105.3368	105.3368	0.0261	0.0000	105.8854
Total	**0.1482**	**1.2400**	**0.8050**	**1.1700e-003**		**0.0856**	**0.0856**		**0.0804**	**0.0804**	**0.0000**	**105.3368**	**105.3368**	**0.0261**	**0.0000**	**105.8854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	1.3903	1.7922	3.3400e-003	0.0948	0.0220	0.1167	0.0270	0.0202	0.0473	0.0000	303.5079	303.5079	2.2000e-003	0.0000	303.5541
Worker	0.1999	0.2936	3.0508	6.7000e-003	0.5455	4.6400e-003	0.5501	0.1449	4.2700e-003	0.1491	0.0000	511.0643	511.0643	0.0275	0.0000	511.6424
Total	**0.3365**	**1.6839**	**4.8430**	**0.0100**	**0.6403**	**0.0266**	**0.6669**	**0.1719**	**0.0245**	**0.1964**	**0.0000**	**814.5722**	**814.5722**	**0.0297**	**0.0000**	**815.1965**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1482	1.2400	0.8050	1.1700e-003		0.0856	0.0856		0.0804	0.0804	0.0000	105.3367	105.3367	0.0261	0.0000	105.8853
Total	**0.1482**	**1.2400**	**0.8050**	**1.1700e-003**		**0.0856**	**0.0856**		**0.0804**	**0.0804**	**0.0000**	**105.3367**	**105.3367**	**0.0261**	**0.0000**	**105.8853**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	1.3903	1.7922	3.3400e-003	0.0948	0.0220	0.1167	0.0270	0.0202	0.0473	0.0000	303.5079	303.5079	2.2000e-003	0.0000	303.5541
Worker	0.1999	0.2936	3.0508	6.7000e-003	0.5455	4.6400e-003	0.5501	0.1449	4.2700e-003	0.1491	0.0000	511.0643	511.0643	0.0275	0.0000	511.6424
Total	**0.3365**	**1.6839**	**4.8430**	**0.0100**	**0.6403**	**0.0266**	**0.6669**	**0.1719**	**0.0245**	**0.1964**	**0.0000**	**814.5722**	**814.5722**	**0.0297**	**0.0000**	**815.1965**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4033	3.4327	2.3568	3.4900e-003		0.2316	0.2316		0.2175	0.2175	0.0000	311.3228	311.3228	0.0766	0.0000	312.9319
Total	**0.4033**	**3.4327**	**2.3568**	**3.4900e-003**		**0.2316**	**0.2316**		**0.2175**	**0.2175**	**0.0000**	**311.3228**	**311.3228**	**0.0766**	**0.0000**	**312.9319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3732	3.7785	5.0754	9.9700e-003	0.2833	0.0586	0.3419	0.0809	0.0539	0.1348	0.0000	892.3358	892.3358	6.3600e-003	0.0000	892.4694
Worker	0.5348	0.7920	8.2224	0.0200	1.6302	0.0134	1.6436	0.4330	0.0123	0.4453	0.0000	1,468.6789	1,468.6789	0.0759	0.0000	1,470.2729
Total	**0.9080**	**4.5704**	**13.2978**	**0.0300**	**1.9135**	**0.0720**	**1.9854**	**0.5138**	**0.0662**	**0.5800**	**0.0000**	**2,361.0146**	**2,361.0146**	**0.0823**	**0.0000**	**2,362.7423**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4033	3.4327	2.3568	3.4900e-003		0.2316	0.2316		0.2175	0.2175	0.0000	311.3225	311.3225	0.0766	0.0000	312.9315
Total	**0.4033**	**3.4327**	**2.3568**	**3.4900e-003**		**0.2316**	**0.2316**		**0.2175**	**0.2175**	**0.0000**	**311.3225**	**311.3225**	**0.0766**	**0.0000**	**312.9315**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3732	3.7785	5.0754	9.9700e-003	0.2833	0.0586	0.3419	0.0809	0.0539	0.1348	0.0000	892.3358	892.3358	6.3600e-003	0.0000	892.4694
Worker	0.5348	0.7920	8.2224	0.0200	1.6302	0.0134	1.6436	0.4330	0.0123	0.4453	0.0000	1,468.6789	1,468.6789	0.0759	0.0000	1,470.2729
Total	**0.9080**	**4.5704**	**13.2978**	**0.0300**	**1.9135**	**0.0720**	**1.9854**	**0.5138**	**0.0662**	**0.5800**	**0.0000**	**2,361.0146**	**2,361.0146**	**0.0823**	**0.0000**	**2,362.7423**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9844**	**308.9844**	**0.0756**	**0.0000**	**310.5723**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3504	3.4794	4.8810	0.0100	0.2844	0.0554	0.3398	0.0812	0.0510	0.1322	0.0000	880.7298	880.7298	6.3500e-003	0.0000	880.8631
Worker	0.4821	0.7211	7.4737	0.0201	1.6365	0.0131	1.6496	0.4346	0.0121	0.4467	0.0000	1,419.2991	1,419.2991	0.0707	0.0000	1,420.7842
Total	**0.8325**	**4.2004**	**12.3548**	**0.0301**	**1.9209**	**0.0685**	**1.9893**	**0.5158**	**0.0631**	**0.5789**	**0.0000**	**2,300.0289**	**2,300.0289**	**0.0771**	**0.0000**	**2,301.6473**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9841**	**308.9841**	**0.0756**	**0.0000**	**310.5720**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3504	3.4794	4.8810	0.0100	0.2844	0.0554	0.3398	0.0812	0.0510	0.1322	0.0000	880.7298	880.7298	6.3500e-003	0.0000	880.8631
Worker	0.4821	0.7211	7.4737	0.0201	1.6365	0.0131	1.6496	0.4346	0.0121	0.4467	0.0000	1,419.2991	1,419.2991	0.0707	0.0000	1,420.7842
Total	**0.8325**	**4.2004**	**12.3548**	**0.0301**	**1.9209**	**0.0685**	**1.9893**	**0.5158**	**0.0631**	**0.5789**	**0.0000**	**2,300.0289**	**2,300.0289**	**0.0771**	**0.0000**	**2,301.6473**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1011	0.9015	0.7362	1.1500e-003		0.0553	0.0553		0.0520	0.0520	0.0000	100.6728	100.6728	0.0245	0.0000	101.1872
Total	**0.1011**	**0.9015**	**0.7362**	**1.1500e-003**		**0.0553**	**0.0553**		**0.0520**	**0.0520**	**0.0000**	**100.6728**	**100.6728**	**0.0245**	**0.0000**	**101.1872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1092	1.0567	1.5537	3.2800e-003	0.0937	0.0173	0.1110	0.0268	0.0160	0.0427	0.0000	284.5598	284.5598	2.0500e-003	0.0000	284.6029
Worker	0.1459	0.2179	2.2582	6.6000e-003	0.5392	4.2200e-003	0.5435	0.1432	3.9200e-003	0.1471	0.0000	449.8642	449.8642	0.0218	0.0000	450.3222
Total	**0.2551**	**1.2746**	**3.8119**	**9.8800e-003**	**0.6329**	**0.0216**	**0.6545**	**0.1700**	**0.0199**	**0.1898**	**0.0000**	**734.4240**	**734.4240**	**0.0239**	**0.0000**	**734.9252**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1011	0.9015	0.7362	1.1500e-003		0.0553	0.0553		0.0520	0.0520	0.0000	100.6727	100.6727	0.0245	0.0000	101.1871
Total	**0.1011**	**0.9015**	**0.7362**	**1.1500e-003**		**0.0553**	**0.0553**		**0.0520**	**0.0520**	**0.0000**	**100.6727**	**100.6727**	**0.0245**	**0.0000**	**101.1871**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1092	1.0567	1.5537	3.2800e-003	0.0937	0.0173	0.1110	0.0268	0.0160	0.0427	0.0000	284.5598	284.5598	2.0500e-003	0.0000	284.6029
Worker	0.1459	0.2179	2.2582	6.6000e-003	0.5392	4.2200e-003	0.5435	0.1432	3.9200e-003	0.1471	0.0000	449.8642	449.8642	0.0218	0.0000	450.3222
Total	**0.2551**	**1.2746**	**3.8119**	**9.8800e-003**	**0.6329**	**0.0216**	**0.6545**	**0.1700**	**0.0199**	**0.1898**	**0.0000**	**734.4240**	**734.4240**	**0.0239**	**0.0000**	**734.9252**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.9789	1.4359	2.1700e-003		0.1110	0.1110		0.1021	0.1021	0.0000	201.7608	201.7608	0.0618	0.0000	203.0590
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1860**	**1.9789**	**1.4359**	**2.1700e-003**		**0.1110**	**0.1110**		**0.1021**	**0.1021**	**0.0000**	**201.7608**	**201.7608**	**0.0618**	**0.0000**	**203.0590**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	7.7900e-003	0.0809	2.0000e-004	0.0161	1.3000e-004	0.0162	4.2600e-003	1.2000e-004	4.3800e-003	0.0000	14.4555	14.4555	7.5000e-004	0.0000	14.4712
Total	**5.2600e-003**	**7.7900e-003**	**0.0809**	**2.0000e-004**	**0.0161**	**1.3000e-004**	**0.0162**	**4.2600e-003**	**1.2000e-004**	**4.3800e-003**	**0.0000**	**14.4555**	**14.4555**	**7.5000e-004**	**0.0000**	**14.4712**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.9789	1.4359	2.1700e-003		0.1110	0.1110		0.1021	0.1021	0.0000	201.7606	201.7606	0.0618	0.0000	203.0588
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1860**	**1.9789**	**1.4359**	**2.1700e-003**		**0.1110**	**0.1110**		**0.1021**	**0.1021**	**0.0000**	**201.7606**	**201.7606**	**0.0618**	**0.0000**	**203.0588**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	7.7900e-003	0.0809	2.0000e-004	0.0161	1.3000e-004	0.0162	4.2600e-003	1.2000e-004	4.3800e-003	0.0000	14.4555	14.4555	7.5000e-004	0.0000	14.4712
Total	**5.2600e-003**	**7.7900e-003**	**0.0809**	**2.0000e-004**	**0.0161**	**1.3000e-004**	**0.0162**	**4.2600e-003**	**1.2000e-004**	**4.3800e-003**	**0.0000**	**14.4555**	**14.4555**	**7.5000e-004**	**0.0000**	**14.4712**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.5336					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1442	0.1233	2.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	16.8515	16.8515	1.7800e-003	0.0000	16.8888
Total	**1.5555**	**0.1442**	**0.1233**	**2.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**16.8515**	**16.8515**	**1.7800e-003**	**0.0000**	**16.8888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0806	0.8364	2.0400e-003	0.1658	1.3600e-003	0.1672	0.0440	1.2500e-003	0.0453	0.0000	149.3883	149.3883	7.7200e-003	0.0000	149.5505
Total	**0.0544**	**0.0806**	**0.8364**	**2.0400e-003**	**0.1658**	**1.3600e-003**	**0.1672**	**0.0440**	**1.2500e-003**	**0.0453**	**0.0000**	**149.3883**	**149.3883**	**7.7200e-003**	**0.0000**	**149.5505**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.5336					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1442	0.1233	2.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	16.8515	16.8515	1.7800e-003	0.0000	16.8888
Total	**1.5555**	**0.1442**	**0.1233**	**2.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**16.8515**	**16.8515**	**1.7800e-003**	**0.0000**	**16.8888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0806	0.8364	2.0400e-003	0.1658	1.3600e-003	0.1672	0.0440	1.2500e-003	0.0453	0.0000	149.3883	149.3883	7.7200e-003	0.0000	149.5505
Total	**0.0544**	**0.0806**	**0.8364**	**2.0400e-003**	**0.1658**	**1.3600e-003**	**0.1672**	**0.0440**	**1.2500e-003**	**0.0453**	**0.0000**	**149.3883**	**149.3883**	**7.7200e-003**	**0.0000**	**149.5505**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.1604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0196	0.1314	0.1215	1.9000e-004		9.8600e-003	9.8600e-003		9.8600e-003	9.8600e-003	0.0000	16.7238	16.7238	1.5900e-003	0.0000	16.7572
Total	**2.1799**	**0.1314**	**0.1215**	**1.9000e-004**		**9.8600e-003**	**9.8600e-003**		**9.8600e-003**	**9.8600e-003**	**0.0000**	**16.7238**	**16.7238**	**1.5900e-003**	**0.0000**	**16.7572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0485	0.0725	0.7516	2.0200e-003	0.1646	1.3100e-003	0.1659	0.0437	1.2100e-003	0.0449	0.0000	142.7230	142.7230	7.1100e-003	0.0000	142.8723
Total	**0.0485**	**0.0725**	**0.7516**	**2.0200e-003**	**0.1646**	**1.3100e-003**	**0.1659**	**0.0437**	**1.2100e-003**	**0.0449**	**0.0000**	**142.7230**	**142.7230**	**7.1100e-003**	**0.0000**	**142.8723**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.1604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0196	0.1314	0.1215	1.9000e-004		9.8600e-003	9.8600e-003		9.8600e-003	9.8600e-003	0.0000	16.7238	16.7238	1.5900e-003	0.0000	16.7572
Total	**2.1799**	**0.1314**	**0.1215**	**1.9000e-004**		**9.8600e-003**	**9.8600e-003**		**9.8600e-003**	**9.8600e-003**	**0.0000**	**16.7238**	**16.7238**	**1.5900e-003**	**0.0000**	**16.7572**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0485	0.0725	0.7516	2.0200e-003	0.1646	1.3100e-003	0.1659	0.0437	1.2100e-003	0.0449	0.0000	142.7230	142.7230	7.1100e-003	0.0000	142.8723
Total	**0.0485**	**0.0725**	**0.7516**	**2.0200e-003**	**0.1646**	**1.3100e-003**	**0.1659**	**0.0437**	**1.2100e-003**	**0.0449**	**0.0000**	**142.7230**	**142.7230**	**7.1100e-003**	**0.0000**	**142.8723**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.5951					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8305	27.8305	2.3500e-003	0.0000	27.8798
Total	**3.6241**	**0.2001**	**0.2007**	**3.2000e-004**		**0.0140**	**0.0140**		**0.0140**	**0.0140**	**0.0000**	**27.8305**	**27.8305**	**2.3500e-003**	**0.0000**	**27.8798**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.1107	1.1469	3.3500e-003	0.2739	2.1500e-003	0.2760	0.0727	1.9900e-003	0.0747	0.0000	228.4697	228.4697	0.0111	0.0000	228.7024
Total	**0.0741**	**0.1107**	**1.1469**	**3.3500e-003**	**0.2739**	**2.1500e-003**	**0.2760**	**0.0727**	**1.9900e-003**	**0.0747**	**0.0000**	**228.4697**	**228.4697**	**0.0111**	**0.0000**	**228.7024**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.5951					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.2001	0.2007	3.2000e-004		0.0140	0.0140		0.0140	0.0140	0.0000	27.8304	27.8304	2.3500e-003	0.0000	27.8798
Total	**3.6241**	**0.2001**	**0.2007**	**3.2000e-004**		**0.0140**	**0.0140**		**0.0140**	**0.0140**	**0.0000**	**27.8304**	**27.8304**	**2.3500e-003**	**0.0000**	**27.8798**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.1107	1.1469	3.3500e-003	0.2739	2.1500e-003	0.2760	0.0727	1.9900e-003	0.0747	0.0000	228.4697	228.4697	0.0111	0.0000	228.7024
Total	**0.0741**	**0.1107**	**1.1469**	**3.3500e-003**	**0.2739**	**2.1500e-003**	**0.2760**	**0.0727**	**1.9900e-003**	**0.0747**	**0.0000**	**228.4697**	**228.4697**	**0.0111**	**0.0000**	**228.7024**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0347	0.3690	0.3116	4.8000e-004		0.0202	0.0202		0.0186	0.0186	0.0000	43.7928	43.7928	0.0136	0.0000	44.0791
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0347**	**0.3690**	**0.3116**	**4.8000e-004**		**0.0202**	**0.0202**		**0.0186**	**0.0186**	**0.0000**	**43.7928**	**43.7928**	**0.0136**	**0.0000**	**44.0791**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5600e-003	0.0162	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.0687	3.0687	1.5000e-004	0.0000	3.0719
Total	**1.0400e-003**	**1.5600e-003**	**0.0162**	**4.0000e-005**	**3.5400e-003**	**3.0000e-005**	**3.5700e-003**	**9.4000e-004**	**3.0000e-005**	**9.7000e-004**	**0.0000**	**3.0687**	**3.0687**	**1.5000e-004**	**0.0000**	**3.0719**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0347	0.3690	0.3116	4.8000e-004		0.0202	0.0202		0.0186	0.0186	0.0000	43.7927	43.7927	0.0136	0.0000	44.0790
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0347**	**0.3690**	**0.3116**	**4.8000e-004**		**0.0202**	**0.0202**		**0.0186**	**0.0186**	**0.0000**	**43.7927**	**43.7927**	**0.0136**	**0.0000**	**44.0790**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5600e-003	0.0162	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.0687	3.0687	1.5000e-004	0.0000	3.0719
Total	**1.0400e-003**	**1.5600e-003**	**0.0162**	**4.0000e-005**	**3.5400e-003**	**3.0000e-005**	**3.5700e-003**	**9.4000e-004**	**3.0000e-005**	**9.7000e-004**	**0.0000**	**3.0687**	**3.0687**	**1.5000e-004**	**0.0000**	**3.0719**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1704	1.7848	1.7166	2.6700e-003		0.0967	0.0967		0.0890	0.0890	0.0000	239.4716	239.4716	0.0758	0.0000	241.0627
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1704**	**1.7848**	**1.7166**	**2.6700e-003**		**0.0967**	**0.0967**		**0.0890**	**0.0890**	**0.0000**	**239.4716**	**239.4716**	**0.0758**	**0.0000**	**241.0627**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3200e-003	7.9500e-003	0.0824	2.4000e-004	0.0197	1.5000e-004	0.0198	5.2200e-003	1.4000e-004	5.3700e-003	0.0000	16.4069	16.4069	8.0000e-004	0.0000	16.4236
Total	**5.3200e-003**	**7.9500e-003**	**0.0824**	**2.4000e-004**	**0.0197**	**1.5000e-004**	**0.0198**	**5.2200e-003**	**1.4000e-004**	**5.3700e-003**	**0.0000**	**16.4069**	**16.4069**	**8.0000e-004**	**0.0000**	**16.4236**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1704	1.7848	1.7166	2.6700e-003		0.0967	0.0967		0.0890	0.0890	0.0000	239.4714	239.4714	0.0758	0.0000	241.0624
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1704**	**1.7848**	**1.7166**	**2.6700e-003**		**0.0967**	**0.0967**		**0.0890**	**0.0890**	**0.0000**	**239.4714**	**239.4714**	**0.0758**	**0.0000**	**241.0624**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3200e-003	7.9500e-003	0.0824	2.4000e-004	0.0197	1.5000e-004	0.0198	5.2200e-003	1.4000e-004	5.3700e-003	0.0000	16.4069	16.4069	8.0000e-004	0.0000	16.4236
Total	**5.3200e-003**	**7.9500e-003**	**0.0824**	**2.4000e-004**	**0.0197**	**1.5000e-004**	**0.0198**	**5.2200e-003**	**1.4000e-004**	**5.3700e-003**	**0.0000**	**16.4069**	**16.4069**	**8.0000e-004**	**0.0000**	**16.4236**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0679	0.0000	0.0679	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.8668	1.6943	2.2000e-003		0.0905	0.0905		0.0842	0.0842	0.0000	196.0497	196.0497	0.0548	0.0000	197.1995
Total	**0.1827**	**1.8668**	**1.6943**	**2.2000e-003**	**0.0679**	**0.0905**	**0.1584**	**0.0103**	**0.0842**	**0.0945**	**0.0000**	**196.0497**	**196.0497**	**0.0548**	**0.0000**	**197.1995**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9900e-003	0.0721	0.0636	2.3000e-004	5.3900e-003	1.2500e-003	6.6300e-003	1.4800e-003	1.1500e-003	2.6300e-003	0.0000	20.0584	20.0584	1.5000e-004	0.0000	20.0615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e-003	3.6600e-003	0.0379	1.1000e-004	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.5513	7.5513	3.7000e-004	0.0000	7.5590
Total	**7.4400e-003**	**0.0757**	**0.1015**	**3.4000e-004**	**0.0144**	**1.3200e-003**	**0.0158**	**3.8800e-003**	**1.2200e-003**	**5.1000e-003**	**0.0000**	**27.6097**	**27.6097**	**5.2000e-004**	**0.0000**	**27.6205**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0306	0.0000	0.0306	4.6300e-003	0.0000	4.6300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.8668	1.6943	2.2000e-003		0.0905	0.0905		0.0842	0.0842	0.0000	196.0495	196.0495	0.0548	0.0000	197.1993
Total	**0.1827**	**1.8668**	**1.6943**	**2.2000e-003**	**0.0306**	**0.0905**	**0.1210**	**4.6300e-003**	**0.0842**	**0.0889**	**0.0000**	**196.0495**	**196.0495**	**0.0548**	**0.0000**	**197.1993**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9900e-003	0.0721	0.0636	2.3000e-004	5.3900e-003	1.2500e-003	6.6300e-003	1.4800e-003	1.1500e-003	2.6300e-003	0.0000	20.0584	20.0584	1.5000e-004	0.0000	20.0615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e-003	3.6600e-003	0.0379	1.1000e-004	9.0500e-003	7.0000e-005	9.1200e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.5513	7.5513	3.7000e-004	0.0000	7.5590
Total	**7.4400e-003**	**0.0757**	**0.1015**	**3.4000e-004**	**0.0144**	**1.3200e-003**	**0.0158**	**3.8800e-003**	**1.2200e-003**	**5.1000e-003**	**0.0000**	**27.6097**	**27.6097**	**5.2000e-004**	**0.0000**	**27.6205**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2042	0.0000	0.2042	0.1100	0.0000	0.1100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1614	1.7885	1.3295	2.0400e-003		0.0827	0.0827		0.0761	0.0761	0.0000	182.9549	182.9549	0.0579	0.0000	184.1705
Total	**0.1614**	**1.7885**	**1.3295**	**2.0400e-003**	**0.2042**	**0.0827**	**0.2869**	**0.1100**	**0.0761**	**0.1861**	**0.0000**	**182.9549**	**182.9549**	**0.0579**	**0.0000**	**184.1705**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0677	0.9781	0.8635	3.1200e-003	0.0731	0.0169	0.0900	0.0201	0.0156	0.0356	0.0000	272.2891	272.2891	2.0200e-003	0.0000	272.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	2.9300e-003	0.0303	9.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.0410	6.0410	2.9000e-004	0.0000	6.0472
Total	**0.0697**	**0.9810**	**0.8938**	**3.2100e-003**	**0.0803**	**0.0170**	**0.0973**	**0.0220**	**0.0156**	**0.0376**	**0.0000**	**278.3302**	**278.3302**	**2.3100e-003**	**0.0000**	**278.3788**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0919	0.0000	0.0919	0.0495	0.0000	0.0495	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1614	1.7885	1.3295	2.0400e-003		0.0827	0.0827		0.0761	0.0761	0.0000	182.9547	182.9547	0.0579	0.0000	184.1703
Total	**0.1614**	**1.7885**	**1.3295**	**2.0400e-003**	**0.0919**	**0.0827**	**0.1746**	**0.0495**	**0.0761**	**0.1256**	**0.0000**	**182.9547**	**182.9547**	**0.0579**	**0.0000**	**184.1703**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0677	0.9781	0.8635	3.1200e-003	0.0731	0.0169	0.0900	0.0201	0.0156	0.0356	0.0000	272.2891	272.2891	2.0200e-003	0.0000	272.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	2.9300e-003	0.0303	9.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.0410	6.0410	2.9000e-004	0.0000	6.0472
Total	**0.0697**	**0.9810**	**0.8938**	**3.2100e-003**	**0.0803**	**0.0170**	**0.0973**	**0.0220**	**0.0156**	**0.0376**	**0.0000**	**278.3302**	**278.3302**	**2.3100e-003**	**0.0000**	**278.3788**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0259	0.2306	0.1883	2.9000e-004		0.0141	0.0141		0.0133	0.0133	0.0000	25.7535	25.7535	6.2700e-003	0.0000	25.8851
Total	**0.0259**	**0.2306**	**0.1883**	**2.9000e-004**		**0.0141**	**0.0141**		**0.0133**	**0.0133**	**0.0000**	**25.7535**	**25.7535**	**6.2700e-003**	**0.0000**	**25.8851**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0279	0.2703	0.3975	8.4000e-004	0.0240	4.4300e-003	0.0284	6.8400e-003	4.0800e-003	0.0109	0.0000	72.7944	72.7944	5.2000e-004	0.0000	72.8054
Worker	0.0373	0.0557	0.5777	1.6900e-003	0.1379	1.0800e-003	0.1390	0.0366	1.0000e-003	0.0376	0.0000	115.0815	115.0815	5.5800e-003	0.0000	115.1987
Total	**0.0652**	**0.3261**	**0.9751**	**2.5300e-003**	**0.1619**	**5.5100e-003**	**0.1674**	**0.0435**	**5.0800e-003**	**0.0486**	**0.0000**	**187.8759**	**187.8759**	**6.1000e-003**	**0.0000**	**188.0041**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0259	0.2306	0.1883	2.9000e-004		0.0141	0.0141		0.0133	0.0133	0.0000	25.7535	25.7535	6.2700e-003	0.0000	25.8851
Total	**0.0259**	**0.2306**	**0.1883**	**2.9000e-004**		**0.0141**	**0.0141**		**0.0133**	**0.0133**	**0.0000**	**25.7535**	**25.7535**	**6.2700e-003**	**0.0000**	**25.8851**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0279	0.2703	0.3975	8.4000e-004	0.0240	4.4300e-003	0.0284	6.8400e-003	4.0800e-003	0.0109	0.0000	72.7944	72.7944	5.2000e-004	0.0000	72.8054
Worker	0.0373	0.0557	0.5777	1.6900e-003	0.1379	1.0800e-003	0.1390	0.0366	1.0000e-003	0.0376	0.0000	115.0815	115.0815	5.5800e-003	0.0000	115.1987
Total	**0.0652**	**0.3261**	**0.9751**	**2.5300e-003**	**0.1619**	**5.5100e-003**	**0.1674**	**0.0435**	**5.0800e-003**	**0.0486**	**0.0000**	**187.8759**	**187.8759**	**6.1000e-003**	**0.0000**	**188.0041**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0686	0.6202	0.5463	8.7000e-004		0.0362	0.0362		0.0340	0.0340	0.0000	74.9612	74.9612	0.0183	0.0000	75.3447
Total	**0.0686**	**0.6202**	**0.5463**	**8.7000e-004**		**0.0362**	**0.0362**		**0.0340**	**0.0340**	**0.0000**	**74.9612**	**74.9612**	**0.0183**	**0.0000**	**75.3447**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0782	0.6967	1.1387	2.4800e-003	0.0708	0.0120	0.0828	0.0202	0.0110	0.0313	0.0000	210.2300	210.2300	1.5200e-003	0.0000	210.2618
Worker	0.1033	0.1526	1.5882	4.9900e-003	0.4076	3.1700e-003	0.4107	0.1082	2.9400e-003	0.1112	0.0000	326.2020	326.2020	0.0156	0.0000	326.5299
Total	**0.1815**	**0.8493**	**2.7269**	**7.4700e-003**	**0.4784**	**0.0152**	**0.4936**	**0.1285**	**0.0140**	**0.1424**	**0.0000**	**536.4320**	**536.4320**	**0.0171**	**0.0000**	**536.7918**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0686	0.6202	0.5463	8.7000e-004		0.0362	0.0362		0.0340	0.0340	0.0000	74.9611	74.9611	0.0183	0.0000	75.3447
Total	**0.0686**	**0.6202**	**0.5463**	**8.7000e-004**		**0.0362**	**0.0362**		**0.0340**	**0.0340**	**0.0000**	**74.9611**	**74.9611**	**0.0183**	**0.0000**	**75.3447**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0782	0.6967	1.1387	2.4800e-003	0.0708	0.0120	0.0828	0.0202	0.0110	0.0313	0.0000	210.2300	210.2300	1.5200e-003	0.0000	210.2618
Worker	0.1033	0.1526	1.5882	4.9900e-003	0.4076	3.1700e-003	0.4107	0.1082	2.9400e-003	0.1112	0.0000	326.2020	326.2020	0.0156	0.0000	326.5299
Total	**0.1815**	**0.8493**	**2.7269**	**7.4700e-003**	**0.4784**	**0.0152**	**0.4936**	**0.1285**	**0.0140**	**0.1424**	**0.0000**	**536.4320**	**536.4320**	**0.0171**	**0.0000**	**536.7918**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1393	0.0000	0.1393	0.0211	0.0000	0.0211	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2013	2.0160	1.9247	2.6000e-003		0.0968	0.0968		0.0901	0.0901	0.0000	227.4441	227.4441	0.0645	0.0000	228.7980
Total	**0.2013**	**2.0160**	**1.9247**	**2.6000e-003**	**0.1393**	**0.0968**	**0.2361**	**0.0211**	**0.0901**	**0.1112**	**0.0000**	**227.4441**	**227.4441**	**0.0645**	**0.0000**	**228.7980**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.1317	0.1287	4.7000e-004	0.0110	2.5300e-003	0.0136	3.0300e-003	2.3300e-003	5.3600e-003	0.0000	40.1810	40.1810	3.1000e-004	0.0000	40.1874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7100e-003	4.0100e-003	0.0417	1.3000e-004	0.0107	8.0000e-005	0.0108	2.8400e-003	8.0000e-005	2.9200e-003	0.0000	8.5617	8.5617	4.1000e-004	0.0000	8.5703
Total	**0.0127**	**0.1357**	**0.1703**	**6.0000e-004**	**0.0217**	**2.6100e-003**	**0.0244**	**5.8700e-003**	**2.4100e-003**	**8.2800e-003**	**0.0000**	**48.7427**	**48.7427**	**7.2000e-004**	**0.0000**	**48.7577**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0627	0.0000	0.0627	9.4900e-003	0.0000	9.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2013	2.0160	1.9246	2.6000e-003		0.0968	0.0968		0.0901	0.0901	0.0000	227.4439	227.4439	0.0645	0.0000	228.7977
Total	**0.2013**	**2.0160**	**1.9246**	**2.6000e-003**	**0.0627**	**0.0968**	**0.1595**	**9.4900e-003**	**0.0901**	**0.0996**	**0.0000**	**227.4439**	**227.4439**	**0.0645**	**0.0000**	**228.7977**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.1317	0.1287	4.7000e-004	0.0110	2.5300e-003	0.0136	3.0300e-003	2.3300e-003	5.3600e-003	0.0000	40.1810	40.1810	3.1000e-004	0.0000	40.1874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7100e-003	4.0100e-003	0.0417	1.3000e-004	0.0107	8.0000e-005	0.0108	2.8400e-003	8.0000e-005	2.9200e-003	0.0000	8.5617	8.5617	4.1000e-004	0.0000	8.5703
Total	**0.0127**	**0.1357**	**0.1703**	**6.0000e-004**	**0.0217**	**2.6100e-003**	**0.0244**	**5.8700e-003**	**2.4100e-003**	**8.2800e-003**	**0.0000**	**48.7427**	**48.7427**	**7.2000e-004**	**0.0000**	**48.7577**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4761	0.0000	0.4761	0.2567	0.0000	0.2567	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3504	3.8026	2.9588	4.7500e-003		0.1742	0.1742		0.1602	0.1602	0.0000	417.5622	417.5622	0.1351	0.0000	420.3983
Total	**0.3504**	**3.8026**	**2.9588**	**4.7500e-003**	**0.4761**	**0.1742**	**0.6502**	**0.2567**	**0.1602**	**0.4170**	**0.0000**	**417.5622**	**417.5622**	**0.1351**	**0.0000**	**420.3983**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1944	2.5572	2.4990	9.1500e-003	0.2144	0.0492	0.2636	0.0588	0.0453	0.1041	0.0000	780.5158	780.5158	5.9400e-003	0.0000	780.6405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3300e-003	0.0658	2.1000e-004	0.0169	1.3000e-004	0.0170	4.4900e-003	1.2000e-004	4.6100e-003	0.0000	13.5232	13.5232	6.5000e-004	0.0000	13.5367
Total	**0.1987**	**2.5636**	**2.5648**	**9.3600e-003**	**0.2313**	**0.0494**	**0.2807**	**0.0633**	**0.0454**	**0.1087**	**0.0000**	**794.0390**	**794.0390**	**6.5900e-003**	**0.0000**	**794.1773**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2142	0.0000	0.2142	0.1155	0.0000	0.1155	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3504	3.8026	2.9588	4.7500e-003		0.1742	0.1742		0.1602	0.1602	0.0000	417.5617	417.5617	0.1351	0.0000	420.3978
Total	**0.3504**	**3.8026**	**2.9588**	**4.7500e-003**	**0.2142**	**0.1742**	**0.3884**	**0.1155**	**0.1602**	**0.2758**	**0.0000**	**417.5617**	**417.5617**	**0.1351**	**0.0000**	**420.3978**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1944	2.5572	2.4990	9.1500e-003	0.2144	0.0492	0.2636	0.0588	0.0453	0.1041	0.0000	780.5158	780.5158	5.9400e-003	0.0000	780.6405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3300e-003	0.0658	2.1000e-004	0.0169	1.3000e-004	0.0170	4.4900e-003	1.2000e-004	4.6100e-003	0.0000	13.5232	13.5232	6.5000e-004	0.0000	13.5367
Total	**0.1987**	**2.5636**	**2.5648**	**9.3600e-003**	**0.2313**	**0.0494**	**0.2807**	**0.0633**	**0.0454**	**0.1087**	**0.0000**	**794.0390**	**794.0390**	**6.5900e-003**	**0.0000**	**794.1773**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4199	0.3698	5.9000e-004		0.0245	0.0245		0.0230	0.0230	0.0000	50.7430	50.7430	0.0124	0.0000	51.0026
Total	**0.0465**	**0.4199**	**0.3698**	**5.9000e-004**		**0.0245**	**0.0245**		**0.0230**	**0.0230**	**0.0000**	**50.7430**	**50.7430**	**0.0124**	**0.0000**	**51.0026**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0530	0.4716	0.7708	1.6800e-003	0.0479	8.1200e-003	0.0561	0.0137	7.4700e-003	0.0212	0.0000	142.3095	142.3095	1.0300e-003	0.0000	142.3311
Worker	0.0699	0.1033	1.0751	3.3800e-003	0.2759	2.1500e-003	0.2780	0.0733	1.9900e-003	0.0753	0.0000	220.8137	220.8137	0.0106	0.0000	221.0356
Total	**0.1229**	**0.5749**	**1.8459**	**5.0600e-003**	**0.3238**	**0.0103**	**0.3341**	**0.0870**	**9.4600e-003**	**0.0964**	**0.0000**	**363.1232**	**363.1232**	**0.0116**	**0.0000**	**363.3667**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4199	0.3698	5.9000e-004		0.0245	0.0245		0.0230	0.0230	0.0000	50.7429	50.7429	0.0124	0.0000	51.0025
Total	**0.0465**	**0.4199**	**0.3698**	**5.9000e-004**		**0.0245**	**0.0245**		**0.0230**	**0.0230**	**0.0000**	**50.7429**	**50.7429**	**0.0124**	**0.0000**	**51.0025**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0530	0.4716	0.7708	1.6800e-003	0.0479	8.1200e-003	0.0561	0.0137	7.4700e-003	0.0212	0.0000	142.3095	142.3095	1.0300e-003	0.0000	142.3311
Worker	0.0699	0.1033	1.0751	3.3800e-003	0.2759	2.1500e-003	0.2780	0.0733	1.9900e-003	0.0753	0.0000	220.8137	220.8137	0.0106	0.0000	221.0356
Total	**0.1229**	**0.5749**	**1.8459**	**5.0600e-003**	**0.3238**	**0.0103**	**0.3341**	**0.0870**	**9.4600e-003**	**0.0964**	**0.0000**	**363.1232**	**363.1232**	**0.0116**	**0.0000**	**363.3667**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3030	2.3748	4.4564	9.9400e-003	0.2844	0.0439	0.3283	0.0812	0.0404	0.1216	0.0000	843.7771	843.7771	6.1500e-003	0.0000	843.9061
Worker	0.3922	0.5730	5.9895	0.0201	1.6365	0.0128	1.6493	0.4346	0.0118	0.4464	0.0000	1,289.4781	1,289.4781	0.0600	0.0000	1,290.7384
Total	**0.6952**	**2.9478**	**10.4459**	**0.0300**	**1.9209**	**0.0566**	**1.9775**	**0.5158**	**0.0522**	**0.5680**	**0.0000**	**2,133.2552**	**2,133.2552**	**0.0662**	**0.0000**	**2,134.6445**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3030	2.3748	4.4564	9.9400e-003	0.2844	0.0439	0.3283	0.0812	0.0404	0.1216	0.0000	843.7771	843.7771	6.1500e-003	0.0000	843.9061
Worker	0.3922	0.5730	5.9895	0.0201	1.6365	0.0128	1.6493	0.4346	0.0118	0.4464	0.0000	1,289.4781	1,289.4781	0.0600	0.0000	1,290.7384
Total	**0.6952**	**2.9478**	**10.4459**	**0.0300**	**1.9209**	**0.0566**	**1.9775**	**0.5158**	**0.0522**	**0.5680**	**0.0000**	**2,133.2552**	**2,133.2552**	**0.0662**	**0.0000**	**2,134.6445**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0348	0.3185	0.3347	5.5000e-004		0.0165	0.0165		0.0155	0.0155	0.0000	47.3068	47.3068	0.0113	0.0000	47.5445
Total	**0.0348**	**0.3185**	**0.3347**	**5.5000e-004**		**0.0165**	**0.0165**		**0.0155**	**0.0155**	**0.0000**	**47.3068**	**47.3068**	**0.0113**	**0.0000**	**47.5445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0465	0.3386	0.6830	1.5600e-003	0.0447	6.8200e-003	0.0515	0.0128	6.2700e-003	0.0190	0.0000	132.4287	132.4287	9.9000e-004	0.0000	132.4494
Worker	0.0583	0.0844	0.8846	3.1500e-003	0.2571	2.0000e-003	0.2591	0.0683	1.8600e-003	0.0701	0.0000	199.1965	199.1965	9.0300e-003	0.0000	199.3861
Total	**0.1048**	**0.4230**	**1.5676**	**4.7100e-003**	**0.3018**	**8.8200e-003**	**0.3106**	**0.0810**	**8.1300e-003**	**0.0892**	**0.0000**	**331.6252**	**331.6252**	**0.0100**	**0.0000**	**331.8355**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0348	0.3185	0.3347	5.5000e-004		0.0165	0.0165		0.0155	0.0155	0.0000	47.3068	47.3068	0.0113	0.0000	47.5444
Total	**0.0348**	**0.3185**	**0.3347**	**5.5000e-004**		**0.0165**	**0.0165**		**0.0155**	**0.0155**	**0.0000**	**47.3068**	**47.3068**	**0.0113**	**0.0000**	**47.5444**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0465	0.3386	0.6830	1.5600e-003	0.0447	6.8200e-003	0.0515	0.0128	6.2700e-003	0.0190	0.0000	132.4287	132.4287	9.9000e-004	0.0000	132.4494
Worker	0.0583	0.0844	0.8846	3.1500e-003	0.2571	2.0000e-003	0.2591	0.0683	1.8600e-003	0.0701	0.0000	199.1965	199.1965	9.0300e-003	0.0000	199.3861
Total	**0.1048**	**0.4230**	**1.5676**	**4.7100e-003**	**0.3018**	**8.8200e-003**	**0.3106**	**0.0810**	**8.1300e-003**	**0.0892**	**0.0000**	**331.6252**	**331.6252**	**0.0100**	**0.0000**	**331.8355**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.4080					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6300e-003	0.0672	0.0800	1.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	11.2343	11.2343	7.7000e-004	0.0000	11.2505
Total	**2.4176**	**0.0672**	**0.0800**	**1.3000e-004**		**4.1400e-003**	**4.1400e-003**		**4.1400e-003**	**4.1400e-003**	**0.0000**	**11.2343**	**11.2343**	**7.7000e-004**	**0.0000**	**11.2505**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0387	0.4046	1.3600e-003	0.1106	8.6000e-004	0.1114	0.0294	8.0000e-004	0.0302	0.0000	87.1055	87.1055	4.0500e-003	0.0000	87.1906
Total	**0.0265**	**0.0387**	**0.4046**	**1.3600e-003**	**0.1106**	**8.6000e-004**	**0.1114**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**87.1055**	**87.1055**	**4.0500e-003**	**0.0000**	**87.1906**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.4080					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6300e-003	0.0672	0.0800	1.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	11.2343	11.2343	7.7000e-004	0.0000	11.2505
Total	**2.4176**	**0.0672**	**0.0800**	**1.3000e-004**		**4.1400e-003**	**4.1400e-003**		**4.1400e-003**	**4.1400e-003**	**0.0000**	**11.2343**	**11.2343**	**7.7000e-004**	**0.0000**	**11.2505**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0387	0.4046	1.3600e-003	0.1106	8.6000e-004	0.1114	0.0294	8.0000e-004	0.0302	0.0000	87.1055	87.1055	4.0500e-003	0.0000	87.1906
Total	**0.0265**	**0.0387**	**0.4046**	**1.3600e-003**	**0.1106**	**8.6000e-004**	**0.1114**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**87.1055**	**87.1055**	**4.0500e-003**	**0.0000**	**87.1906**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1046					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1756
Total	**4.1199**	**0.1056**	**0.1360**	**2.2000e-004**		**6.1300e-003**	**6.1300e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**19.1494**	**19.1494**	**1.2500e-003**	**0.0000**	**19.1756**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0427	0.0619	0.6484	2.3100e-003	0.1884	1.4700e-003	0.1899	0.0500	1.3600e-003	0.0514	0.0000	146.0086	146.0086	6.6200e-003	0.0000	146.1475
Total	**0.0427**	**0.0619**	**0.6484**	**2.3100e-003**	**0.1884**	**1.4700e-003**	**0.1899**	**0.0500**	**1.3600e-003**	**0.0514**	**0.0000**	**146.0086**	**146.0086**	**6.6200e-003**	**0.0000**	**146.1475**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1046					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1756
Total	**4.1199**	**0.1056**	**0.1360**	**2.2000e-004**		**6.1300e-003**	**6.1300e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**19.1494**	**19.1494**	**1.2500e-003**	**0.0000**	**19.1756**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0427	0.0619	0.6484	2.3100e-003	0.1884	1.4700e-003	0.1899	0.0500	1.3600e-003	0.0514	0.0000	146.0086	146.0086	6.6200e-003	0.0000	146.1475
Total	**0.0427**	**0.0619**	**0.6484**	**2.3100e-003**	**0.1884**	**1.4700e-003**	**0.1899**	**0.0500**	**1.3600e-003**	**0.0514**	**0.0000**	**146.0086**	**146.0086**	**6.6200e-003**	**0.0000**	**146.1475**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4692	0.6141	9.6000e-004		0.0240	0.0240		0.0221	0.0221	0.0000	84.2861	84.2861	0.0273	0.0000	84.8586
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0465**	**0.4692**	**0.6141**	**9.6000e-004**		**0.0240**	**0.0240**		**0.0221**	**0.0221**	**0.0000**	**84.2861**	**84.2861**	**0.0273**	**0.0000**	**84.8586**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	2.3200e-003	0.0244	9.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	5.4833	5.4833	2.5000e-004	0.0000	5.4885
Total	**1.6100e-003**	**2.3200e-003**	**0.0244**	**9.0000e-005**	**7.0800e-003**	**6.0000e-005**	**7.1300e-003**	**1.8800e-003**	**5.0000e-005**	**1.9300e-003**	**0.0000**	**5.4833**	**5.4833**	**2.5000e-004**	**0.0000**	**5.4885**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4692	0.6141	9.6000e-004		0.0240	0.0240		0.0221	0.0221	0.0000	84.2860	84.2860	0.0273	0.0000	84.8585
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0465**	**0.4692**	**0.6141**	**9.6000e-004**		**0.0240**	**0.0240**		**0.0221**	**0.0221**	**0.0000**	**84.2860**	**84.2860**	**0.0273**	**0.0000**	**84.8585**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	2.3200e-003	0.0244	9.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	5.4833	5.4833	2.5000e-004	0.0000	5.4885
Total	**1.6100e-003**	**2.3200e-003**	**0.0244**	**9.0000e-005**	**7.0800e-003**	**6.0000e-005**	**7.1300e-003**	**1.8800e-003**	**5.0000e-005**	**1.9300e-003**	**0.0000**	**5.4833**	**5.4833**	**2.5000e-004**	**0.0000**	**5.4885**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.9935	14.1410	64.2242	0.1793	11.8972	0.2467	12.1440	3.1842	0.2277	3.4118	0.0000	12,313.9820	12,313.9820	0.4260	0.0000	12,322.9288
Unmitigated	7.7509	19.5403	82.7963	0.2660	17.9326	0.3581	18.2906	4.7995	0.3304	5.1298	0.0000	18,272.1635	18,272.1635	0.6152	0.0000	18,285.0834

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,117.20	1,360.40	1153.30	3,953,986	2,737,393
Condo/Townhouse High Rise	3,239.88	3,945.16	3344.57	11,466,561	7,938,439
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	5,820.08	0.00	0.00	12,837,976	8,280,614
High Turnover (Sit Down Restaurant)	966.34	1,203.61	1001.98	1,370,092	903,191
Hotel	1,552.30	1,556.10	1130.50	3,561,565	2,342,143
Library	3,357.03	4,068.47	2227.83	8,324,778	5,372,919
Regional Shopping Center	3,076.18	1,519.09	767.30	5,458,791	3,592,075
Total	19,239.96	13,763.78	9,736.43	47,293,012	31,376,223

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,917.2237	2,917.2237	0.1341	0.0277	2,928.6403
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,558.3571	5,558.3571	0.2555	0.0529	5,580.1098
NaturalGas Mitigated	0.1223	1.0858	0.7406	6.6700e-003		0.0845	0.0845		0.0845	0.0845	0.0000	1,210.7369	1,210.7369	0.0232	0.0222	1,218.1053
NaturalGas Unmitigated	0.1457	1.2932	0.8825	7.9500e-003		0.1007	0.1007		0.1007	0.1007	0.0000	1,442.0330	1,442.0330	0.0276	0.0264	1,450.8090

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.73715e+006	0.0148	0.1261	0.0537	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	146.0645	146.0645	2.8000e-003	2.6800e-003	146.9534
Condo/Townhouse High Rise	7.93772e+006	0.0428	0.3658	0.1556	2.3300e-003		0.0296	0.0296		0.0296	0.0296	0.0000	423.5871	423.5871	8.1200e-003	7.7700e-003	426.1650
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	5.97874e+006	0.0322	0.2931	0.2462	1.7600e-003		0.0223	0.0223		0.0223	0.0223	0.0000	319.0485	319.0485	6.1200e-003	5.8500e-003	320.9902
High Turnover (Sit Down Restaurant)	1.77088e+006	9.5500e-003	0.0868	0.0729	5.2000e-004		6.6000e-003	6.6000e-003		6.6000e-003	6.6000e-003	0.0000	94.5007	94.5007	1.8100e-003	1.7300e-003	95.0758
Hotel	6.90252e+006	0.0372	0.3384	0.2842	2.0300e-003		0.0257	0.0257		0.0257	0.0257	0.0000	368.3446	368.3446	7.0600e-003	6.7500e-003	370.5863
Library	1.64399e+006	8.8600e-003	0.0806	0.0677	4.8000e-004		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	87.7298	87.7298	1.6800e-003	1.6100e-003	88.2637
Regional Shopping Center	51680	2.8000e-004	2.5300e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7578	2.7578	5.0000e-005	5.0000e-005	2.7746
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1457**	**1.2933**	**0.8825**	**7.9500e-003**		**0.1007**	**0.1007**		**0.1007**	**0.1007**	**0.0000**	**1,442.0330**	**1,442.0330**	**0.0276**	**0.0264**	**1,450.8090**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.30185e+006	0.0124	0.1061	0.0451	6.8000e-004		8.5800e-003	8.5800e-003		8.5800e-003	8.5800e-003	0.0000	122.8357	122.8357	2.3500e-003	2.2500e-003	123.5833
Condo/Townhouse High Rise	6.67538e+006	0.0360	0.3076	0.1309	1.9600e-003		0.0249	0.0249		0.0249	0.0249	0.0000	356.2236	356.2236	6.8300e-003	6.5300e-003	358.3915
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	4.82566e+006	0.0260	0.2366	0.1987	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.5156	257.5156	4.9400e-003	4.7200e-003	259.0828
High Turnover (Sit Down Restaurant)	1.70213e+006	9.1800e-003	0.0834	0.0701	5.0000e-004		6.3400e-003	6.3400e-003		6.3400e-003	6.3400e-003	0.0000	90.8320	90.8320	1.7400e-003	1.6700e-003	91.3847
Hotel	5.74603e+006	0.0310	0.2817	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	306.6300	306.6300	5.8800e-003	5.6200e-003	308.4961
Library	1.39298e+006	7.5100e-003	0.0683	0.0574	4.1000e-004		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	74.3348	74.3348	1.4200e-003	1.3600e-003	74.7872
Regional Shopping Center	44323.2	2.4000e-004	2.1700e-003	1.8300e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.3653	2.3653	5.0000e-005	4.0000e-005	2.3797
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1223**	**1.0858**	**0.7406**	**6.6700e-003**		**0.0845**	**0.0845**		**0.0845**	**0.0845**	**0.0000**	**1,210.7369**	**1,210.7369**	**0.0232**	**0.0222**	**1,218.1052**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	2.42323e+006	693.4487	0.0319	6.5900e-003	696.1626
Condo/Townhouse High Rise	835597	239.1203	0.0110	2.2700e-003	240.0561
Enclosed Parking with Elevator	1.37226e+006	392.6965	0.0181	3.7300e-003	394.2334
Enclosed Parking with Elevator	1.9546e+006	559.3418	0.0257	5.3200e-003	561.5308
Enclosed Parking with Elevator	674000	192.8765	8.8700e-003	1.8300e-003	193.6313
Government (Civic Center)	7.94795e+006	2,274.4412	0.1046	0.0216	2,283.3422
High Turnover (Sit Down Restaurant)	356516	102.0231	4.6900e-003	9.7000e-004	102.4223
Hotel	2.34498e+006	671.0556	0.0309	6.3800e-003	673.6818
Library	1.05317e+006	301.3824	0.0139	2.8700e-003	302.5619
Regional Shopping Center	461168	131.9710	6.0700e-003	1.2600e-003	132.4875
Total		**5,558.3570**	**0.2555**	**0.0529**	**5,580.1098**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	1.48485e+006	424.9137	0.0195	4.0400e-003	426.5766
Condo/Townhouse High Rise	512016	146.5220	6.7400e-003	1.3900e-003	147.0954
Enclosed Parking with Elevator	298763	85.4959	3.9300e-003	8.1000e-004	85.8305
Enclosed Parking with Elevator	608280	174.0697	8.0000e-003	1.6600e-003	174.7510
Enclosed Parking with Elevator	866411	247.9382	0.0114	2.3600e-003	248.9085
Government (Civic Center)	4.17986e+006	1,196.1361	0.0550	0.0114	1,200.8172
High Turnover (Sit Down Restaurant)	218299	62.4698	2.8700e-003	5.9000e-004	62.7143
Hotel	1.24322e+006	355.7680	0.0164	3.3800e-003	357.1603
Library	579298	165.7759	7.6200e-003	1.5800e-003	166.4247
Regional Shopping Center	203148	58.1342	2.6700e-003	5.5000e-004	58.3617
Total		**2,917.2237**	**0.1341**	**0.0277**	**2,928.6403**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.9123	0.0795	6.7690	3.3000e-004		0.0368	0.0368		0.0368	0.0368	0.0000	10.6535	10.6535	9.3700e-003	0.0000	10.8503
Unmitigated	11.2799	0.0890	7.6973	4.1000e-004		0.0423	0.0423		0.0423	0.0423	0.0000	12.5409	12.5409	0.0123	0.0000	12.7998

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.9350					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1086					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2363	0.0890	7.6973	4.1000e-004		0.0423	0.0423		0.0423	0.0423	0.0000	12.5409	12.5409	0.0123	0.0000	12.7998
Total	**11.2799**	**0.0890**	**7.6973**	**4.1000e-004**		**0.0423**	**0.0423**		**0.0423**	**0.0423**	**0.0000**	**12.5409**	**12.5409**	**0.0123**	**0.0000**	**12.7998**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6232					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1086					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1805	0.0795	6.7690	3.3000e-004		0.0368	0.0368		0.0368	0.0368	0.0000	10.6535	10.6535	9.3700e-003	0.0000	10.8503
Total	**9.9123**	**0.0795**	**6.7690**	**3.3000e-004**		**0.0368**	**0.0368**		**0.0368**	**0.0368**	**0.0000**	**10.6535**	**10.6535**	**9.3700e-003**	**0.0000**	**10.8503**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	866.7647	4.4441	0.1117	994.7266
Unmitigated	1,024.2621	5.5534	0.1393	1,184.0684

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.777	12.0083	5.5000e-004	1.1000e-004	12.0553
Condo/Townhouse High Rise	48.2791 / 30.4368	291.9817	1.5859	0.0398	337.6165
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	108.667 / 66.6023	651.1366	3.5693	0.0895	753.8277
High Turnover (Sit Down Restaurant)	2.30686 / 0.147246	9.7958	0.0756	1.8600e-003	11.9600
Hotel	4.81969 / 0.535521	21.1907	0.1580	3.9000e-003	25.7152
Library	2.73465 / 4.27727	24.6562	0.0902	2.3300e-003	27.2728
Regional Shopping Center	2.2518 / 1.38014	13.4929	0.0740	1.8500e-003	15.6209
Total		**1,024.2621**	**5.5534**	**0.1393**	**1,184.0684**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.5466	11.2758	5.2000e-004	1.1000e-004	11.3199
Condo/Townhouse High Rise	38.6233 / 28.5802	247.0362	1.2691	0.0319	283.5771
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	86.9335 / 62.5395	550.3425	2.8562	0.0718	632.5666
High Turnover (Sit Down Restaurant)	1.84548 / 0.138264	7.9017	0.0605	1.4900e-003	9.6324
Hotel	3.85575 / 0.502854	17.1892	0.1264	3.1100e-003	20.8078
Library	2.18772 / 4.01636	21.6152	0.0722	1.8800e-003	23.7148
Regional Shopping Center	1.80144 / 1.29595	11.4043	0.0592	1.4900e-003	13.1081
Total		**866.7647**	**4.4441**	**0.1117**	**994.7266**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	764.4437	45.1773	0.0000	1,713.1675
Unmitigated	764.4437	45.1773	0.0000	1,713.1675

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse High Rise	340.86	69.1915	4.0891	0.0000	155.0626
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3117.9	632.9055	37.4036	0.0000	1,418.3821
High Turnover (Sit Down Restaurant)	90.44	18.3585	1.0850	0.0000	41.1426
Hotel	104.02	21.1151	1.2479	0.0000	47.3203
Library	80.49	16.3387	0.9656	0.0000	36.6162
Regional Shopping Center	31.92	6.4795	0.3829	0.0000	14.5209
Total		**764.4437**	**45.1773**	**0.0000**	**1,713.1675**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse High Rise	340.86	69.1915	4.0891	0.0000	155.0626
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	3117.9	632.9055	37.4036	0.0000	1,418.3821
High Turnover (Sit Down Restaurant)	90.44	18.3585	1.0850	0.0000	41.1426
Hotel	104.02	21.1151	1.2479	0.0000	47.3203
Library	80.49	16.3387	0.9656	0.0000	36.6162
Regional Shopping Center	31.92	6.4795	0.3829	0.0000	14.5209
Total		**764.4437**	**45.1773**	**0.0000**	**1,713.1675**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Reduced Density Alternative

Long Beach Civic Center

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	547.00	1000sqft	3.78	547,003.00	0
Library	87.40	1000sqft	1.73	87,400.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	7.60	1000sqft	0.00	7,600.00	0
Hotel	190.00	Room	0.00	275,880.00	0
Condo/Townhouse High Rise	190.00	Dwelling Unit	0.90	223,250.00	543
Condo/Townhouse High Rise	551.00	Dwelling Unit	6.29	617,500.00	1576
Regional Shopping Center	30.40	1000sqft	0.00	30,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD. Reduced by 5%.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing. Reduced by 5% for Alt.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113. Assumed compliance with MM AQ-3.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	839,984.00	413,911.70
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	839,984.00	47,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	839,984.00	294,690.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,519,952.00	1,241,735.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,519,952.00	142,500.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,519,952.00	884,070.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	567,506.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	567,506.00	150,693.80
tblArchitecturalCoating	ConstArea_Residential_Exterior	567,506.00	416,812.50
tblArchitecturalCoating	ConstArea_Residential_Interior	1,702,519.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	1,702,519.00	452,081.30
tblArchitecturalCoating	ConstArea_Residential_Interior	1,702,519.00	1,250,438.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_Nonresidential_Interior	2519952	2268305
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	50
tblConstructionPhase	NumDays	20.00	238.00
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	20.00	349.00
tblConstructionPhase	NumDays	300.00	87.00
tblConstructionPhase	NumDays	300.00	346.00
tblConstructionPhase	NumDays	300.00	694.00
tblConstructionPhase	NumDays	20.00	86.00
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	20.00	110.00

tblConstructionPhase	NumDays	30.00	154.00
tblConstructionPhase	NumDays	30.00	284.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	86.00
tblConstructionPhase	NumDays	20.00	195.00
tblConstructionPhase	NumDays	20.00	282.00
tblConstructionPhase	PhaseEndDate	1/26/2023	7/29/2022
tblConstructionPhase	PhaseEndDate	7/3/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	3/4/2019	10/31/2019
tblConstructionPhase	PhaseEndDate	4/30/2020	3/31/2020
tblConstructionPhase	PhaseEndDate	4/29/2022	2/28/2022
tblConstructionPhase	PhaseEndDate	11/28/2019	4/30/2019
tblConstructionPhase	PhaseEndDate	9/29/2020	6/30/2020
tblConstructionPhase	PhaseEndDate	5/1/2020	11/29/2019
tblConstructionPhase	PhaseEndDate	2/1/2021	12/31/2020
tblConstructionPhase	PhaseEndDate	6/1/2017	3/31/2017
tblConstructionPhase	PhaseEndDate	3/2/2020	12/31/2019
tblConstructionPhase	PhaseEndDate	11/28/2022	7/29/2022
tblConstructionPhase	PhaseEndDate	1/28/2020	12/29/2017
tblConstructionPhase	PhaseEndDate	11/30/2020	11/29/2019
tblConstructionPhase	PhaseStartDate	3/1/2022	9/1/2021
tblConstructionPhase	PhaseStartDate	12/30/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	7/2/2018
tblConstructionPhase	PhaseStartDate	1/1/2020	12/2/2019
tblConstructionPhase	PhaseStartDate	1/1/2021	11/2/2020
tblConstructionPhase	PhaseStartDate	4/1/2017	9/1/2016
tblConstructionPhase	PhaseStartDate	4/1/2020	1/1/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	7/1/2019

tblConstructionPhase	PhaseStartDate	7/1/2020	6/1/2020
tblConstructionPhase	PhaseStartDate	4/30/2016	3/1/2016
tblConstructionPhase	PhaseStartDate	11/30/2019	10/1/2019
tblConstructionPhase	PhaseStartDate	7/30/2022	4/1/2022
tblConstructionPhase	PhaseStartDate	5/1/2019	4/3/2017
tblConstructionPhase	PhaseStartDate	11/1/2019	11/1/2018
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	629.85	0.00
tblFireplaces	NumberNoFireplace	74.10	0.00
tblFireplaces	NumberWood	37.05	0.00
tblGrading	AcresOfGrading	385.00	2.00
tblGrading	AcresOfGrading	710.00	4.20
tblGrading	AcresOfGrading	165.00	3.10
tblGrading	MaterialExported	0.00	200,000.00
tblGrading	MaterialExported	0.00	180,000.00
tblGrading	MaterialImported	0.00	68,200.00
tblLandUse	LandUseSquareFeet	547,000.00	547,003.00
tblLandUse	LandUseSquareFeet	190,000.00	223,250.00
tblLandUse	LandUseSquareFeet	551,000.00	617,500.00
tblLandUse	LotAcreage	12.56	3.78
tblLandUse	LotAcreage	2.01	1.73
tblLandUse	LotAcreage	2.25	0.00
tblLandUse	LotAcreage	4.58	0.00
tblLandUse	LotAcreage	6.52	0.00
tblLandUse	LotAcreage	0.17	0.00
tblLandUse	LotAcreage	6.33	0.00

tblLandUse	LotAcreage	2.97	0.90
tblLandUse	LotAcreage	8.61	6.29
tblLandUse	LotAcreage	0.70	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	VendorTripNumber	355.00	354.00
tblTripsAndVMT	VendorTripNumber	355.00	354.00
tblTripsAndVMT	VendorTripNumber	355.00	354.00
tblTripsAndVMT	WorkerTripNumber	1,181.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	1,181.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	236.00	229.00
tblTripsAndVMT	WorkerTripNumber	1,181.00	1,143.00
tblTripsAndVMT	WorkerTripNumber	236.00	229.00
tblTripsAndVMT	WorkerTripNumber	236.00	229.00
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	3.16	3.42
tblVehicleEF	HHD	1.68	1.69
tblVehicleEF	HHD	53.80	51.65
tblVehicleEF	HHD	528.22	527.54
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.93	3.33
tblVehicleEF	HHD	4.25	3.36
tblVehicleEF	HHD	3.53	3.38
tblVehicleEF	HHD	9.7330e-003	9.3010e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03

tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	8.9550e-003	8.5570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4370e-003	1.3690e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.56	0.61
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.42	1.22
tblVehicleEF	HHD	5.5990e-003	5.5920e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4410e-003	1.3960e-003
tblVehicleEF	HHD	1.4370e-003	1.3690e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.64	0.69
tblVehicleEF	HHD	1.0510e-003	1.0190e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.52	1.30
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.30	2.49
tblVehicleEF	HHD	1.69	1.70

tblVehicleEF	HHD	43.34	41.60
tblVehicleEF	HHD	559.60	558.89
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	4.06	3.43
tblVehicleEF	HHD	4.01	3.17
tblVehicleEF	HHD	3.38	3.24
tblVehicleEF	HHD	8.2050e-003	7.8410e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	7.5490e-003	7.2140e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	2.3200e-003	2.1960e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.53	0.57
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.24	1.06
tblVehicleEF	HHD	5.9320e-003	5.9240e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.2710e-003	1.2330e-003

tblVehicleEF	HHD	2.3200e-003	2.1960e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.60	0.65
tblVehicleEF	HHD	1.6920e-003	1.6070e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	1.32	1.14
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	4.35	4.71
tblVehicleEF	HHD	1.68	1.69
tblVehicleEF	HHD	54.58	52.38
tblVehicleEF	HHD	484.88	484.26
tblVehicleEF	HHD	1,524.51	1,522.69
tblVehicleEF	HHD	49.77	49.32
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.76	3.18
tblVehicleEF	HHD	4.18	3.31
tblVehicleEF	HHD	3.54	3.40
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	9.6100e-004	6.9000e-004
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7160e-003	8.7220e-003
tblVehicleEF	HHD	0.08	0.08

tblVehicleEF	HHD	8.6600e-004	6.4000e-004
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.61	0.66
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.24	0.24
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.44	1.23
tblVehicleEF	HHD	5.1400e-003	5.1330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4540e-003	1.4080e-003
tblVehicleEF	HHD	1.4620e-003	1.3640e-003
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.69	0.75
tblVehicleEF	HHD	1.0540e-003	1.0120e-003
tblVehicleEF	HHD	0.27	0.28
tblVehicleEF	HHD	0.30	0.28
tblVehicleEF	HHD	1.54	1.31
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.77	0.71
tblVehicleEF	LDA	1.39	1.21
tblVehicleEF	LDA	248.70	239.34
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003

tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5970e-003	3.6040e-003
tblVehicleEF	LDA	7.6100e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.86	0.79
tblVehicleEF	LDA	1.09	0.95
tblVehicleEF	LDA	261.60	251.82
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003

tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	3.7860e-003	3.7940e-003
tblVehicleEF	LDA	7.5600e-004	7.5400e-004
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.74	0.68
tblVehicleEF	LDA	1.44	1.25
tblVehicleEF	LDA	244.71	235.50
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003

tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5390e-003	3.5450e-003
tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76
tblVehicleEF	LDT1	3.77	3.19
tblVehicleEF	LDT1	303.51	294.33
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003

tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52
tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23

tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29

tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95
tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35
tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45

tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.2300e-004	5.1800e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39

tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48

tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
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tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
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tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
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tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003

tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30
tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37

tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003

tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54

tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06

tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68

tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32

tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
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tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29

tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
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tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40

tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
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tblVehicleEF	MHD	4.69	3.42
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tblVehicleEF	MHD	1.62	1.43
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tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
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tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40

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tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06
tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003

tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
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tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32

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tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
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tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
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tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
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tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08
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tblVehicleEF	MHD	9.7500e-003	9.7330e-003
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tblVehicleEF	MHD	0.20	0.22
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tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
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tblVehicleEF	OBUS	9.5470e-003	8.7920e-003
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tblVehicleEF	OBUS	0.04	0.04
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tblVehicleEF	OBUS	0.04	0.04
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tblVehicleEF	OBUS	0.03	0.03
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tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
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tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
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tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
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tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	9.4430e-003
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.29
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003

tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52

tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83

tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88
tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64

tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02

tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	37.05	0.00
tblWoodstoves	NumberNoncatalytic	37.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.0469	161.6853	193.8570	0.3886	23.0128	6.5084	29.5212	7.8547	6.0259	13.8806	0.0000	36,523.5374	36,523.5374	3.4037	0.0000	36,595.0150
2017	36.4854	149.2067	181.1991	0.3884	26.2319	5.9670	32.1989	8.6450	5.5240	14.1690	0.0000	35,641.3255	35,641.3255	3.3332	0.0000	35,711.3231
2018	44.7872	73.8943	139.5446	0.3251	17.7166	3.1280	20.8446	4.7419	2.9204	7.6624	0.0000	27,878.4395	27,878.4395	2.1422	0.0000	27,923.4258
2019	45.8311	135.3750	167.8930	0.4240	23.6533	5.6473	28.4575	8.0279	5.2243	12.4745	0.0000	37,440.6680	37,440.6680	3.9602	0.0000	37,523.8331
2020	14.7810	124.7773	166.2826	0.4481	24.2259	4.4808	28.7067	8.1871	4.1457	12.3327	0.0000	38,685.5928	38,685.5928	3.2268	0.0000	38,753.3562
2021	62.8309	40.9887	105.9604	0.3003	17.5493	1.5015	19.0508	4.6976	1.4091	6.1067	0.0000	23,711.9153	23,711.9153	1.2915	0.0000	23,739.0370
2022	62.3768	37.1682	101.6335	0.3002	17.5493	1.3361	18.8855	4.6976	1.2535	5.9512	0.0000	23,479.9852	23,479.9852	1.2617	0.0000	23,506.4808
Total	**286.1394**	**723.0954**	**1,056.3701**	**2.5746**	**149.9391**	**28.5691**	**177.6652**	**46.8519**	**26.5029**	**72.5770**	**0.0000**	**223,361.4637**	**223,361.4637**	**18.6194**	**0.0000**	**223,752.4709**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.0469	161.6853	193.8570	0.3886	19.6526	6.5084	26.1610	6.0272	6.0259	12.0531	0.0000	36,523.5374	36,523.5374	3.4037	0.0000	36,595.0149
2017	36.4854	149.2067	181.1991	0.3884	22.8717	5.9670	28.8387	6.8175	5.5240	12.3415	0.0000	35,641.3255	35,641.3255	3.3332	0.0000	35,711.3231
2018	44.7872	73.8943	139.5446	0.3251	17.7166	3.1280	20.8446	4.7419	2.9204	7.6624	0.0000	27,878.4395	27,878.4395	2.1422	0.0000	27,923.4258
2019	45.8311	135.3750	167.8930	0.4240	20.2495	5.6473	25.0537	6.1946	5.2243	10.6412	0.0000	37,440.6680	37,440.6680	3.9602	0.0000	37,523.8330
2020	14.7810	124.7773	166.2826	0.4481	20.8254	4.4808	25.3062	6.3534	4.1457	10.4991	0.0000	38,685.5928	38,685.5928	3.2268	0.0000	38,753.3562
2021	62.8309	40.9887	105.9604	0.3003	17.5493	1.5015	19.0508	4.6976	1.4091	6.1067	0.0000	23,711.9153	23,711.9153	1.2915	0.0000	23,739.0370
2022	62.3768	37.1682	101.6335	0.3002	17.5493	1.3361	18.8855	4.6976	1.2535	5.9512	0.0000	23,479.9852	23,479.9852	1.2617	0.0000	23,506.4808
Total	**286.1394**	**723.0954**	**1,056.3701**	**2.5746**	**136.4144**	**28.5691**	**164.1405**	**39.5298**	**26.5029**	**65.2550**	**0.0000**	**223,361.4637**	**223,361.4637**	**18.6194**	**0.0000**	**223,752.4708**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**9.02**	**0.00**	**7.61**	**15.63**	**0.00**	**10.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	62.4034	0.7116	61.5781	3.2500e-003		0.3381	0.3381		0.3381	0.3381	0.0000	110.5915	110.5915	0.1087	0.0000	112.8745
Energy	0.7984	7.0863	4.8354	0.0436		0.5516	0.5516		0.5516	0.5516		8,709.9689	8,709.9689	0.1669	0.1597	8,762.9764
Mobile	53.9481	124.4165	559.6226	1.8875	124.5608	2.4408	127.0016	33.2871	2.2518	35.5389		142,584.2986	142,584.2986	4.6259		142,681.4422
Total	**117.1500**	**132.2144**	**626.0360**	**1.9343**	**124.5608**	**3.3306**	**127.8914**	**33.2871**	**3.1415**	**36.4286**	**0.0000**	**151,404.8590**	**151,404.8590**	**4.9016**	**0.1597**	**151,557.2930**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	54.7687	0.6363	54.1519	2.6800e-003		0.2946	0.2946		0.2946	0.2946	0.0000	93.9478	93.9478	0.0826	0.0000	95.6829
Energy	0.6704	5.9494	4.0581	0.0366		0.4632	0.4632		0.4632	0.4632		7,312.9259	7,312.9259	0.1402	0.1341	7,357.4312
Mobile	48.6316	90.2790	421.2011	1.2696	82.5116	1.6781	84.1897	22.0501	1.5484	23.5984		95,917.5072	95,917.5072	3.1975		95,984.6553
Total	**104.0706**	**96.8647**	**479.4111**	**1.3088**	**82.5116**	**2.4359**	**84.9475**	**22.0501**	**2.3061**	**24.3562**	**0.0000**	**103,324.3808**	**103,324.3808**	**3.4203**	**0.1341**	**103,437.7694**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	11.16	26.74	23.42	32.34	33.76	26.86	33.58	33.76	26.59	33.14	0.00	31.76	31.76	30.22	16.04	31.75

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 452,081; Residential Outdoor: 150,694; Non-Residential Indoor: 142,500; Non-Residential Outdoor: 47,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38
Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29
Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7615	0.0000	4.7615	0.7209	0.0000	0.7209			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**4.7615**	**2.2921**	**7.0537**	**0.7209**	**2.1365**	**2.8575**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3763	6.0306	4.2655	0.0162	0.3833	0.0957	0.4791	0.1050	0.0881	0.1930		1,634.9338	1,634.9338	0.0116		1,635.1778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.4390**	**6.1089**	**5.2405**	**0.0183**	**0.5510**	**0.0971**	**0.6481**	**0.1494**	**0.0894**	**0.2388**		**1,813.3526**	**1,813.3526**	**0.0208**		**1,813.7888**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1427	0.0000	2.1427	0.3244	0.0000	0.3244			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**2.1427**	**2.2921**	**4.4348**	**0.3244**	**2.1365**	**2.4610**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3763	6.0306	4.2655	0.0162	0.3833	0.0957	0.4791	0.1050	0.0881	0.1930		1,634.9338	1,634.9338	0.0116		1,635.1778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0783	0.9750	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4188	178.4188	9.1500e-003		178.6110
Total	**0.4390**	**6.1089**	**5.2405**	**0.0183**	**0.5510**	**0.0971**	**0.6481**	**0.1494**	**0.0894**	**0.2388**		**1,813.3526**	**1,813.3526**	**0.0208**		**1,813.7888**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.1095**	**3.5842**	**9.6937**	**3.3228**	**3.2975**	**6.6203**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3551	21.7171	15.3606	0.0584	1.6913	0.3448	2.0361	0.4543	0.3171	0.7714		5,887.6458	5,887.6458	0.0418		5,888.5244
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**1.4387**	**21.8215**	**16.6606**	**0.0612**	**1.9149**	**0.3466**	**2.2615**	**0.5136**	**0.3188**	**0.8324**		**6,125.5375**	**6,125.5375**	**0.0541**		**6,126.6724**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**2.7493**	**3.5842**	**6.3335**	**1.4953**	**3.2975**	**4.7928**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3551	21.7171	15.3606	0.0584	1.6913	0.3448	2.0361	0.4543	0.3171	0.7714		5,887.6458	5,887.6458	0.0418		5,888.5244
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0836	0.1045	1.3000	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.8917	237.8917	0.0122		238.1480
Total	**1.4387**	**21.8215**	**16.6606**	**0.0612**	**1.9149**	**0.3466**	**2.2615**	**0.5136**	**0.3188**	**0.8324**		**6,125.5375**	**6,125.5375**	**0.0541**		**6,126.6724**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.1095**	**3.3172**	**9.4266**	**3.3228**	**3.0518**	**6.3746**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2803	19.9056	14.7308	0.0584	4.9098	0.3151	5.2248	1.2443	0.2899	1.5342		5,790.9948	5,790.9948	0.0410		5,791.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0751	0.0943	1.1759	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.7867	228.7867	0.0113		229.0232
Total	**1.3554**	**19.9999**	**15.9068**	**0.0612**	**5.1333**	**0.3169**	**5.4502**	**1.3036**	**0.2915**	**1.5951**		**6,019.7815**	**6,019.7815**	**0.0522**		**6,020.8782**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**2.7493**	**3.3172**	**6.0664**	**1.4953**	**3.0518**	**4.5471**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2803	19.9056	14.7308	0.0584	4.9098	0.3151	5.2248	1.2443	0.2899	1.5342		5,790.9948	5,790.9948	0.0410		5,791.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0751	0.0943	1.1759	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.7867	228.7867	0.0113		229.0232
Total	**1.3554**	**19.9999**	**15.9068**	**0.0612**	**5.1333**	**0.3169**	**5.4502**	**1.3036**	**0.2915**	**1.5951**		**6,019.7815**	**6,019.7815**	**0.0522**		**6,020.8782**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9475	30.5740	35.2552	0.0770	2.2124	0.5034	2.7159	0.6301	0.4629	1.0930		7,718.2237	7,718.2237	0.0551		7,719.3805
Worker	4.7752	5.9697	74.2972	0.1619	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		13,595.5091	13,595.5091	0.6976		13,610.1576
Total	**7.7226**	**36.5437**	**109.5523**	**0.2389**	**14.9885**	**0.6102**	**15.5987**	**4.0183**	**0.5611**	**4.5794**		**21,313.7328**	**21,313.7328**	**0.7526**		**21,329.5381**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9475	30.5740	35.2552	0.0770	2.2124	0.5034	2.7159	0.6301	0.4629	1.0930		7,718.2237	7,718.2237	0.0551		7,719.3805
Worker	4.7752	5.9697	74.2972	0.1619	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		13,595.5091	13,595.5091	0.6976		13,610.1576
Total	**7.7226**	**36.5437**	**109.5523**	**0.2389**	**14.9885**	**0.6102**	**15.5987**	**4.0183**	**0.5611**	**4.5794**		**21,313.7328**	**21,313.7328**	**0.7526**		**21,329.5381**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7008	27.8195	33.1546	0.0769	2.2131	0.4490	2.6621	0.6304	0.4129	1.0433		7,593.2098	7,593.2098	0.0532		7,594.3279
Worker	4.2907	5.3896	67.2036	0.1618	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		13,075.1599	13,075.1599	0.6437		13,088.6766
Total	**6.9915**	**33.2091**	**100.3582**	**0.2387**	**14.9892**	**0.5517**	**15.5409**	**4.0186**	**0.5077**	**4.5263**		**20,668.3697**	**20,668.3697**	**0.6969**		**20,683.0044**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7008	27.8195	33.1546	0.0769	2.2131	0.4490	2.6621	0.6304	0.4129	1.0433		7,593.2098	7,593.2098	0.0532		7,594.3279
Worker	4.2907	5.3896	67.2036	0.1618	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		13,075.1599	13,075.1599	0.6437		13,088.6766
Total	**6.9915**	**33.2091**	**100.3582**	**0.2387**	**14.9892**	**0.5517**	**15.5409**	**4.0186**	**0.5077**	**4.5263**		**20,668.3697**	**20,668.3697**	**0.6969**		**20,683.0044**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.5327	25.5324	31.5858	0.0768	2.2132	0.4232	2.6364	0.6304	0.3893	1.0196		7,465.7922	7,465.7922	0.0529		7,466.9030
Worker	3.8677	4.8889	61.0458	0.1617	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		12,588.6496	12,588.6496	0.5974		12,601.1941
Total	**6.4004**	**30.4212**	**92.6317**	**0.2385**	**14.9892**	**0.5232**	**15.5124**	**4.0186**	**0.4818**	**4.5004**		**20,054.4418**	**20,054.4418**	**0.6503**		**20,068.0971**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.5327	25.5324	31.5858	0.0768	2.2132	0.4232	2.6364	0.6304	0.3893	1.0196		7,465.7922	7,465.7922	0.0529		7,466.9030
Worker	3.8677	4.8889	61.0458	0.1617	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		12,588.6496	12,588.6496	0.5974		12,601.1941
Total	**6.4004**	**30.4212**	**92.6317**	**0.2385**	**14.9892**	**0.5232**	**15.5124**	**4.0186**	**0.4818**	**4.5004**		**20,054.4418**	**20,054.4418**	**0.6503**		**20,068.0971**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0707	0.8819	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.5900	171.5900	8.4500e-003		171.7674
Total	**0.0563**	**0.0707**	**0.8819**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.5900**	**171.5900**	**8.4500e-003**		**171.7674**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.2359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**23.5682**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8596	1.0798	13.4643	0.0324	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,619.6077	2,619.6077	0.1290		2,622.3158
Total	**0.8596**	**1.0798**	**13.4643**	**0.0324**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,619.6077**	**2,619.6077**	**0.1290**		**2,622.3158**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.2359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**23.5682**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8596	1.0798	13.4643	0.0324	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,619.6077	2,619.6077	0.1290		2,622.3158
Total	**0.8596**	**1.0798**	**13.4643**	**0.0324**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,619.6077**	**2,619.6077**	**0.1290**		**2,622.3158**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**33.2811**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7749	0.9795	12.2305	0.0324	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,522.1354	2,522.1354	0.1197		2,524.6487
Total	**0.7749**	**0.9795**	**12.2305**	**0.0324**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,522.1354**	**2,522.1354**	**0.1197**		**2,524.6487**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**33.2811**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7749	0.9795	12.2305	0.0324	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,522.1354	2,522.1354	0.1197		2,524.6487
Total	**0.7749**	**0.9795**	**12.2305**	**0.0324**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,522.1354**	**2,522.1354**	**0.1197**		**2,524.6487**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**33.2489**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7133	0.8984	11.2408	0.0323	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,426.5195	2,426.5195	0.1120		2,428.8722
Total	**0.7133**	**0.8984**	**11.2408**	**0.0323**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,426.5195**	**2,426.5195**	**0.1120**		**2,428.8722**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**33.2489**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7133	0.8984	11.2408	0.0323	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,426.5195	2,426.5195	0.1120		2,428.8722
Total	**0.7133**	**0.8984**	**11.2408**	**0.0323**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,426.5195**	**2,426.5195**	**0.1120**		**2,428.8722**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0642	0.8011	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2054	165.2054	7.8400e-003		165.3700
Total	**0.0508**	**0.0642**	**0.8011**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2054**	**165.2054**	**7.8400e-003**		**165.3700**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0642	0.8011	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2054	165.2054	7.8400e-003		165.3700
Total	**0.0508**	**0.0642**	**0.8011**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2054**	**165.2054**	**7.8400e-003**		**165.3700**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**		**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.0467**	**0.0589**	**0.7363**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**158.9423**	**158.9423**	**7.3400e-003**		**159.0964**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**	**0.0000**	**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.0467**	**0.0589**	**0.7363**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**158.9423**	**158.9423**	**7.3400e-003**		**159.0964**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2349	0.0000	1.2349	0.1870	0.0000	0.1870			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316		3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**1.2349**	**1.6448**	**2.8797**	**0.1870**	**1.5316**	**1.7185**		**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0878	1.2432	1.0165	4.1900e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0481		402.4140	402.4140	2.9700e-003		402.4764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.1345**	**1.3021**	**1.7528**	**6.3100e-003**	**0.2672**	**0.0240**	**0.2911**	**0.0717**	**0.0220**	**0.0938**		**561.3563**	**561.3563**	**0.0103**		**561.5728**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5557	0.0000	0.5557	0.0841	0.0000	0.0841			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316	0.0000	3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**0.5557**	**1.6448**	**2.2005**	**0.0841**	**1.5316**	**1.6157**	**0.0000**	**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0878	1.2432	1.0165	4.1900e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0481		402.4140	402.4140	2.9700e-003		402.4764
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0467	0.0589	0.7363	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		158.9423	158.9423	7.3400e-003		159.0964
Total	**0.1345**	**1.3021**	**1.7528**	**6.3100e-003**	**0.2672**	**0.0240**	**0.2911**	**0.0717**	**0.0220**	**0.0938**		**561.3563**	**561.3563**	**0.0103**		**561.5728**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1888	0.0000	6.1888	3.3333	0.0000	3.3333			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1888**	**2.5049**	**8.6937**	**3.3333**	**2.3045**	**5.6378**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9860	28.1274	22.9975	0.0947	2.2516	0.5128	2.7643	0.6166	0.4717	1.0884		9,104.5102	9,104.5102	0.0672		9,105.9211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0785	0.9817	2.8200e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		211.9231	211.9231	9.7800e-003		212.1286
Total	**2.0483**	**28.2059**	**23.9792**	**0.0975**	**2.4751**	**0.5145**	**2.9896**	**0.6759**	**0.4733**	**1.1492**		**9,316.4333**	**9,316.4333**	**0.0770**		**9,318.0497**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7849	0.0000	2.7849	1.5000	0.0000	1.5000			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**2.7849**	**2.5049**	**5.2899**	**1.5000**	**2.3045**	**3.8045**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9860	28.1274	22.9975	0.0947	2.2516	0.5128	2.7643	0.6166	0.4717	1.0884		9,104.5102	9,104.5102	0.0672		9,105.9211
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0785	0.9817	2.8200e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		211.9231	211.9231	9.7800e-003		212.1286
Total	**2.0483**	**28.2059**	**23.9792**	**0.0975**	**2.4751**	**0.5145**	**2.9896**	**0.6759**	**0.4733**	**1.1492**		**9,316.4333**	**9,316.4333**	**0.0770**		**9,318.0497**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3985	23.5467	30.3988	0.0765	2.2134	0.4016	2.6150	0.6304	0.3694	0.9998		7,320.7556	7,320.7556	0.0519		7,321.8448
Worker	3.5602	4.4843	56.1058	0.1614	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		12,111.4052	12,111.4052	0.5592		12,123.1481
Total	**5.9586**	**28.0310**	**86.5046**	**0.2379**	**14.9894**	**0.4998**	**15.4892**	**4.0187**	**0.4605**	**4.4792**		**19,432.1608**	**19,432.1608**	**0.6111**		**19,444.9929**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1429	0.0000	2.1429	0.3245	0.0000	0.3245			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865		3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**2.1429**	**1.4899**	**3.6327**	**0.3245**	**1.3865**	**1.7110**		**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1493	1.9225	1.7365	7.2500e-003	0.1726	0.0390	0.2116	0.0473	0.0359	0.0831		682.0991	682.0991	5.1500e-003		682.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0546	0.6862	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		152.5097	152.5097	6.9500e-003		152.6556
Total	**0.1931**	**1.9770**	**2.4227**	**9.3700e-003**	**0.3403**	**0.0403**	**0.3805**	**0.0917**	**0.0370**	**0.1288**		**834.6088**	**834.6088**	**0.0121**		**834.8629**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9643	0.0000	0.9643	0.1460	0.0000	0.1460			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865	0.0000	3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**0.9643**	**1.4899**	**2.4542**	**0.1460**	**1.3865**	**1.5325**	**0.0000**	**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1493	1.9225	1.7365	7.2500e-003	0.1726	0.0390	0.2116	0.0473	0.0359	0.0831		682.0991	682.0991	5.1500e-003		682.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0546	0.6862	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		152.5097	152.5097	6.9500e-003		152.6556
Total	**0.1931**	**1.9770**	**2.4227**	**9.3700e-003**	**0.3403**	**0.0403**	**0.3805**	**0.0917**	**0.0370**	**0.1288**		**834.6088**	**834.6088**	**0.0121**		**834.8629**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1827	0.0000	6.1827	3.3340	0.0000	3.3340			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810		5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**6.1827**	**2.2619**	**8.4447**	**3.3340**	**2.0810**	**5.4149**		**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4476	31.5239	28.4747	0.1189	2.8300	0.6390	3.4690	0.7751	0.5878	1.3629		11,184.8862	11,184.8862	0.0845		11,186.6603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0727	0.9149	2.8200e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		203.3463	203.3463	9.2700e-003		203.5409
Total	**2.5059**	**31.5967**	**29.3897**	**0.1217**	**3.0536**	**0.6407**	**3.6942**	**0.8344**	**0.5894**	**1.4238**		**11,388.2325**	**11,388.2325**	**0.0938**		**11,390.2011**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7822	0.0000	2.7822	1.5003	0.0000	1.5003			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810	0.0000	5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**2.7822**	**2.2619**	**5.0442**	**1.5003**	**2.0810**	**3.5813**	**0.0000**	**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4476	31.5239	28.4747	0.1189	2.8300	0.6390	3.4690	0.7751	0.5878	1.3629		11,184.8862	11,184.8862	0.0845		11,186.6603
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0727	0.9149	2.8200e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		203.3463	203.3463	9.2700e-003		203.5409
Total	**2.5059**	**31.5967**	**29.3897**	**0.1217**	**3.0536**	**0.6407**	**3.6942**	**0.8344**	**0.5894**	**1.4238**		**11,388.2325**	**11,388.2325**	**0.0938**		**11,390.2011**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2772	20.5555	29.3711	0.0764	2.2136	0.3677	2.5813	0.6305	0.3383	0.9688		7,155.9334	7,155.9334	0.0508		7,156.9991
Worker	3.3365	4.1573	52.2877	0.1614	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		11,621.2382	11,621.2382	0.5296		11,632.3595
Total	**5.6137**	**24.7128**	**81.6588**	**0.2378**	**14.9896**	**0.4653**	**15.4549**	**4.0188**	**0.4288**	**4.4476**		**18,777.1716**	**18,777.1716**	**0.5803**		**18,789.3586**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2014	17.4549	28.5687	0.0764	2.2136	0.3352	2.5488	0.6305	0.3084	0.9389		7,152.7514	7,152.7514	0.0511		7,153.8249
Worker	3.1574	3.8878	49.1827	0.1617	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		11,442.4415	11,442.4415	0.5069		11,453.0868
Total	**5.3588**	**21.3427**	**77.7514**	**0.2381**	**14.9896**	**0.4329**	**15.4225**	**4.0188**	**0.3990**	**4.4178**		**18,595.1929**	**18,595.1929**	**0.5580**		**18,606.9117**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.2014	17.4549	28.5687	0.0764	2.2136	0.3352	2.5488	0.6305	0.3084	0.9389		7,152.7514	7,152.7514	0.0511		7,153.8249
Worker	3.1574	3.8878	49.1827	0.1617	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		11,442.4415	11,442.4415	0.5069		11,453.0868
Total	**5.3588**	**21.3427**	**77.7514**	**0.2381**	**14.9896**	**0.4329**	**15.4225**	**4.0188**	**0.3990**	**4.4178**		**18,595.1929**	**18,595.1929**	**0.5580**		**18,606.9117**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1568	15.8452	27.9077	0.0763	2.2136	0.3315	2.5451	0.6305	0.3050	0.9355		7,146.3541	7,146.3541	0.0522		7,147.4509
Worker	2.9898	3.6473	46.3070	0.1617	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		11,253.7458	11,253.7458	0.4854		11,263.9388
Total	**5.1466**	**19.4926**	**74.2147**	**0.2380**	**14.9897**	**0.4291**	**15.4188**	**4.0188**	**0.3956**	**4.4143**		**18,400.1000**	**18,400.1000**	**0.5376**		**18,411.3897**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1568	15.8452	27.9077	0.0763	2.2136	0.3315	2.5451	0.6305	0.3050	0.9355		7,146.3541	7,146.3541	0.0522		7,147.4509
Worker	2.9898	3.6473	46.3070	0.1617	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		11,253.7458	11,253.7458	0.4854		11,263.9388
Total	**5.1466**	**19.4926**	**74.2147**	**0.2380**	**14.9897**	**0.4291**	**15.4188**	**4.0188**	**0.3956**	**4.4143**		**18,400.1000**	**18,400.1000**	**0.5376**		**18,411.3897**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**54.9464**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6326	0.7789	9.8538	0.0324	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,292.4927	2,292.4927	0.1016		2,294.6254
Total	**0.6326**	**0.7789**	**9.8538**	**0.0324**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,292.4927**	**2,292.4927**	**0.1016**		**2,294.6254**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**54.9464**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6326	0.7789	9.8538	0.0324	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,292.4927	2,292.4927	0.1016		2,294.6254
Total	**0.6326**	**0.7789**	**9.8538**	**0.0324**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,292.4927**	**2,292.4927**	**0.1016**		**2,294.6254**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**54.9320**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5990	0.7307	9.2776	0.0324	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,254.6875	2,254.6875	0.0973		2,256.7297
Total	**0.5990**	**0.7307**	**9.2776**	**0.0324**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,254.6875**	**2,254.6875**	**0.0973**		**2,256.7297**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**54.9320**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5990	0.7307	9.2776	0.0324	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,254.6875	2,254.6875	0.0973		2,256.7297
Total	**0.5990**	**0.7307**	**9.2776**	**0.0324**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,254.6875**	**2,254.6875**	**0.0973**		**2,256.7297**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131		2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**		**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0479	0.6077	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		147.6870	147.6870	6.3700e-003		147.8207
Total	**0.0392**	**0.0479**	**0.6077**	**2.1200e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**147.6870**	**147.6870**	**6.3700e-003**		**147.8207**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131	0.0000	2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**	**0.0000**	**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0479	0.6077	2.1200e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		147.6870	147.6870	6.3700e-003		147.8207
Total	**0.0392**	**0.0479**	**0.6077**	**2.1200e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**147.6870**	**147.6870**	**6.3700e-003**		**147.8207**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	48.6316	90.2790	421.2011	1.2696	82.5116	1.6781	84.1897	22.0501	1.5484	23.5984		95,917.5072	95,917.5072	3.1975		95,984.6553
Unmitigated	53.9481	124.4165	559.6226	1.8875	124.5608	2.4408	127.0016	33.2871	2.2518	35.5389		142,584.2986	142,584.2986	4.6259		142,681.4422

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,117.20	1,360.40	1153.30	3,953,986	2,737,393
Condo/Townhouse High Rise	3,239.88	3,945.16	3344.57	11,466,561	7,938,439
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	5,820.08	0.00	0.00	12,837,976	8,280,614
High Turnover (Sit Down Restaurant)	966.34	1,203.61	1001.98	1,370,092	903,191
Hotel	1,552.30	1,556.10	1130.50	3,561,565	2,342,143
Library	3,357.03	4,068.47	2227.83	8,324,778	5,372,919
Regional Shopping Center	3,076.18	1,519.09	767.30	5,458,791	3,592,075
Total	19,239.96	13,763.78	9,736.43	47,293,012	31,376,223

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.6704	5.9494	4.0581	0.0366		0.4632	0.4632		0.4632	0.4632		7,312.9259	7,312.9259	0.1402	0.1341	7,357.4312
NaturalGas Unmitigated	0.7984	7.0863	4.8354	0.0436		0.5516	0.5516		0.5516	0.5516		8,709.9689	8,709.9689	0.1669	0.1597	8,762.9764

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	21747.2	0.2345	2.0042	0.8528	0.0128		0.1620	0.1620		0.1620	0.1620		2,558.4924	2,558.4924	0.0490	0.0469	2,574.0629
Condo/Townhouse High Rise	7499.03	0.0809	0.6911	0.2941	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.2387	882.2387	0.0169	0.0162	887.6079
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	16380.1	0.1767	1.6059	1.3490	9.6400e-003		0.1221	0.1221		0.1221	0.1221		1,927.0726	1,927.0726	0.0369	0.0353	1,938.8005
High Turnover (Sit Down Restaurant)	4851.72	0.0523	0.4757	0.3996	2.8500e-003		0.0362	0.0362		0.0362	0.0362		570.7900	570.7900	0.0109	0.0105	574.2637
Hotel	18911	0.2039	1.8540	1.5574	0.0111		0.1409	0.1409		0.1409	0.1409		2,224.8244	2,224.8244	0.0426	0.0408	2,238.3643
Library	4504.09	0.0486	0.4416	0.3709	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.8933	529.8933	0.0102	9.7100e-003	533.1182
Regional Shopping Center	141.589	1.5300e-003	0.0139	0.0117	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003		16.6575	16.6575	3.2000e-004	3.1000e-004	16.7589
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.7984**	**7.0863**	**4.8354**	**0.0435**		**0.5516**	**0.5516**		**0.5516**	**0.5516**		**8,709.9689**	**8,709.9689**	**0.1670**	**0.1597**	**8,762.9764**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	6.30645	0.0680	0.5812	0.2473	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.9354	741.9354	0.0142	0.0136	746.4507
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	13.221	0.1426	1.2962	1.0888	7.7800e-003		0.0985	0.0985		0.0985	0.0985		1,555.4103	1,555.4103	0.0298	0.0285	1,564.8763
High Turnover (Sit Down Restaurant)	4.66336	0.0503	0.4572	0.3840	2.7400e-003		0.0348	0.0348		0.0348	0.0348		548.6306	548.6306	0.0105	0.0101	551.9695
Hotel	15.7425	0.1698	1.5434	1.2964	9.2600e-003		0.1173	0.1173		0.1173	0.1173		1,852.0640	1,852.0640	0.0355	0.0340	1,863.3354
Library	3.81639	0.0412	0.3742	0.3143	2.2400e-003		0.0284	0.0284		0.0284	0.0284		448.9867	448.9867	8.6100e-003	8.2300e-003	451.7192
Regional Shopping Center	0.121433	1.3100e-003	0.0119	0.0100	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004		14.2863	14.2863	2.7000e-004	2.6000e-004	14.3732
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	18.2887	0.1972	1.6854	0.7172	0.0108		0.1363	0.1363		0.1363	0.1363		2,151.6126	2,151.6126	0.0412	0.0395	2,164.7070
Total		**0.6704**	**5.9494**	**4.0581**	**0.0366**		**0.4632**	**0.4632**		**0.4632**	**0.4632**		**7,312.9259**	**7,312.9259**	**0.1402**	**0.1341**	**7,357.4312**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	54.7687	0.6363	54.1519	2.6800e-003		0.2946	0.2946		0.2946	0.2946	0.0000	93.9478	93.9478	0.0826	0.0000	95.6829
Unmitigated	62.4034	0.7116	61.5781	3.2500e-003		0.3381	0.3381		0.3381	0.3381	0.0000	110.5915	110.5915	0.1087	0.0000	112.8745

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.6027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	49.9102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8905	0.7116	61.5781	3.2500e-003		0.3381	0.3381		0.3381	0.3381		110.5915	110.5915	0.1087		112.8745
Total	**62.4034**	**0.7116**	**61.5781**	**3.2500e-003**		**0.3381**	**0.3381**		**0.3381**	**0.3381**	**0.0000**	**110.5915**	**110.5915**	**0.1087**	**0.0000**	**112.8745**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.4149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	49.9102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4436	0.6363	54.1519	2.6800e-003		0.2946	0.2946		0.2946	0.2946		93.9478	93.9478	0.0826		95.6829
Total	**54.7687**	**0.6363**	**54.1519**	**2.6800e-003**		**0.2946**	**0.2946**		**0.2946**	**0.2946**	**0.0000**	**93.9478**	**93.9478**	**0.0826**	**0.0000**	**95.6829**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Reduced Density Alternative

Long Beach Civic Center

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	547.00	1000sqft	3.78	547,003.00	0
Library	87.40	1000sqft	1.73	87,400.00	0
Enclosed Parking with Elevator	509.00	Space	0.00	203,600.00	0
Enclosed Parking with Elevator	250.00	Space	0.00	100,000.00	0
Enclosed Parking with Elevator	725.00	Space	0.00	290,000.00	0
City Park	3.17	Acre	3.17	138,085.20	0
High Turnover (Sit Down Restaurant)	7.60	1000sqft	0.00	7,600.00	0
Hotel	190.00	Room	0.00	275,880.00	0
Condo/Townhouse High Rise	190.00	Dwelling Unit	0.90	223,250.00	543
Condo/Townhouse High Rise	551.00	Dwelling Unit	6.29	617,500.00	1576
Regional Shopping Center	30.40	1000sqft	0.00	30,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Civic Center includes City Hall, Port Bldg, and plaza. Total lot acreage divided by uses (estimated from site plan). SF from PD. Reduced by 5%.

Construction Phase - Construction Schedule from applicant provided material. Courthouse Demolition assumed to occur before grading begins.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - Demolition includes City Hall, Library, and Old Courthouse.

Grading - Grading area estimated from export study.

Architectural Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. SF updated based on phasing. Reduced by 5% for Alt.

Vehicle Trips - Trip rates from LLG Traffic Study (Appendix E).

Woodstoves - Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 - wood burning devices cannot be installed in new developments.

Area Coating - Use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Non-residential SF does not include park.

Construction Off-road Equipment Mitigation - Assumed compliance with SCAQMD Fugitive Dust Rule 403 and Downtown Plan EIR Mitigation Measure AQ-1(c).

Mobile Land Use Mitigation - Approx. 107 du/acre (Center Block and Third and Pacific Block). Project site in Downtown.

Mobile Commute Mitigation - Assumed compliance with Downtown Plan EIR Mitigation Measure AQ-2.

Area Mitigation - Use of low-VOC paint (150 g/L for nonflat coatings) SCAQMD Rule 1113. Assumed compliance with MM AQ-3.

Energy Mitigation - Assumed compliance with DP EIR MM AQ-2 and MM GHG-2(b). Light energy reduction https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com

Water Mitigation - Assumed compliance with DP EIR MM GHG-2(b)

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
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tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003

tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5970e-003	3.6040e-003
tblVehicleEF	LDA	7.6100e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.22	0.21
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.86	0.79
tblVehicleEF	LDA	1.09	0.95
tblVehicleEF	LDA	261.60	251.82
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003

tblVehicleEF	LDA	1.7880e-003	1.8620e-003
tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.08	0.07
tblVehicleEF	LDA	3.7860e-003	3.7940e-003
tblVehicleEF	LDA	7.5600e-004	7.5400e-004
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.21	0.19
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	9.9910e-003	9.4500e-003
tblVehicleEF	LDA	5.4270e-003	4.6120e-003
tblVehicleEF	LDA	0.74	0.68
tblVehicleEF	LDA	1.44	1.25
tblVehicleEF	LDA	244.71	235.50
tblVehicleEF	LDA	52.85	50.62
tblVehicleEF	LDA	0.51	0.50
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.09	0.07
tblVehicleEF	LDA	1.9290e-003	2.0080e-003
tblVehicleEF	LDA	3.3720e-003	3.7590e-003
tblVehicleEF	LDA	1.7880e-003	1.8620e-003

tblVehicleEF	LDA	3.1270e-003	3.4870e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.08
tblVehicleEF	LDA	3.5390e-003	3.5450e-003
tblVehicleEF	LDA	7.6200e-004	7.5900e-004
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.25	0.23
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.05	1.76
tblVehicleEF	LDT1	3.77	3.19
tblVehicleEF	LDT1	303.51	294.33
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003

tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.28	0.23
tblVehicleEF	LDT1	4.1550e-003	4.1640e-003
tblVehicleEF	LDT1	9.1300e-004	9.0500e-004
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.28	0.26
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.93	0.85
tblVehicleEF	LDT1	0.30	0.25
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	2.24	1.94
tblVehicleEF	LDT1	2.97	2.52
tblVehicleEF	LDT1	318.71	309.20
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.25	0.23

tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.24	0.20
tblVehicleEF	LDT1	4.3690e-003	4.3790e-003
tblVehicleEF	LDT1	8.9900e-004	8.9400e-004
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.30	0.28
tblVehicleEF	LDT1	0.18	0.17
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	0.87	0.80
tblVehicleEF	LDT1	0.25	0.21
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	1.98	1.71
tblVehicleEF	LDT1	3.88	3.29
tblVehicleEF	LDT1	299.01	289.93
tblVehicleEF	LDT1	63.81	61.80
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.20	0.17
tblVehicleEF	LDT1	0.22	0.19
tblVehicleEF	LDT1	3.6870e-003	3.3980e-003
tblVehicleEF	LDT1	4.7320e-003	4.6830e-003
tblVehicleEF	LDT1	3.4190e-003	3.1520e-003
tblVehicleEF	LDT1	4.3890e-003	4.3440e-003
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29

tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.28	0.24
tblVehicleEF	LDT1	4.0920e-003	4.1010e-003
tblVehicleEF	LDT1	9.1500e-004	9.0700e-004
tblVehicleEF	LDT1	0.16	0.14
tblVehicleEF	LDT1	0.31	0.29
tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	0.07	0.06
tblVehicleEF	LDT1	1.10	1.00
tblVehicleEF	LDT1	0.30	0.26
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.07	0.95
tblVehicleEF	LDT2	2.03	1.71
tblVehicleEF	LDT2	369.06	359.70
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8850e-003	4.8920e-003
tblVehicleEF	LDT2	1.0390e-003	1.0350e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.41	0.39
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.19	1.06
tblVehicleEF	LDT2	1.60	1.35
tblVehicleEF	LDT2	387.84	378.07
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.12	0.10
tblVehicleEF	LDT2	5.1360e-003	5.1440e-003
tblVehicleEF	LDT2	1.0320e-003	1.0290e-003
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.39	0.36
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	7.9760e-003	6.6260e-003
tblVehicleEF	LDT2	1.03	0.92
tblVehicleEF	LDT2	2.10	1.77
tblVehicleEF	LDT2	363.33	354.11
tblVehicleEF	LDT2	77.44	75.28
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.11	0.10
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	1.9220e-003	1.9830e-003
tblVehicleEF	LDT2	3.3610e-003	3.7230e-003
tblVehicleEF	LDT2	1.7830e-003	1.8400e-003
tblVehicleEF	LDT2	3.1180e-003	3.4540e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.48	0.45

tblVehicleEF	LDT2	0.14	0.12
tblVehicleEF	LDT2	4.8080e-003	4.8150e-003
tblVehicleEF	LDT2	1.0410e-003	1.0360e-003
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.48	0.45
tblVehicleEF	LDT2	0.15	0.13
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.05	3.65
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.98	0.85
tblVehicleEF	LHD1	1.30	1.23
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3000e-004
tblVehicleEF	LHD1	2.6250e-003	2.4700e-003
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6290e-003	1.5850e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.42	0.40
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	1.01	0.82
tblVehicleEF	LHD1	3.28	2.96
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.91	0.79
tblVehicleEF	LHD1	1.25	1.19
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.41	0.39
tblVehicleEF	LHD1	0.32	0.28
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.2300e-004	5.1800e-004
tblVehicleEF	LHD1	4.1230e-003	3.8730e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5230e-003	2.4310e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.41	0.39

tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.2780e-003	1.2420e-003
tblVehicleEF	LHD1	0.01	9.7370e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.19	0.18
tblVehicleEF	LHD1	0.99	0.81
tblVehicleEF	LHD1	4.08	3.68
tblVehicleEF	LHD1	7.70	7.70
tblVehicleEF	LHD1	528.12	529.38
tblVehicleEF	LHD1	41.54	41.72
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.96	0.83
tblVehicleEF	LHD1	1.31	1.24
tblVehicleEF	LHD1	4.7900e-004	4.7700e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	8.9560e-003	8.9540e-003
tblVehicleEF	LHD1	6.6480e-003	6.0830e-003
tblVehicleEF	LHD1	9.0800e-004	7.6100e-004
tblVehicleEF	LHD1	4.4100e-004	4.3800e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.1210e-003	5.6000e-003
tblVehicleEF	LHD1	8.4000e-004	7.0600e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.37	0.32
tblVehicleEF	LHD1	5.8180e-003	5.8290e-003
tblVehicleEF	LHD1	5.3600e-004	5.3100e-004
tblVehicleEF	LHD1	2.7730e-003	2.5660e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.6400e-003	1.5860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.45	0.44
tblVehicleEF	LHD1	0.39	0.34
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.34	2.09
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.56	1.33
tblVehicleEF	LHD2	0.86	0.80
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.22	0.18
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.4630e-003	1.3330e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5100e-004	9.0900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.24	0.22
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.66	0.56
tblVehicleEF	LHD2	1.90	1.70
tblVehicleEF	LHD2	8.48	8.48

tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.47	1.25
tblVehicleEF	LHD2	0.82	0.77
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.19	0.16
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5000e-004	3.4800e-004
tblVehicleEF	LHD2	2.2700e-003	2.0650e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4440e-003	1.3650e-003

tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.23	0.21
tblVehicleEF	LHD2	0.21	0.18
tblVehicleEF	LHD2	1.0000e-003	9.7700e-004
tblVehicleEF	LHD2	7.6760e-003	6.5600e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.15	0.15
tblVehicleEF	LHD2	0.65	0.55
tblVehicleEF	LHD2	2.37	2.12
tblVehicleEF	LHD2	8.48	8.48
tblVehicleEF	LHD2	509.57	510.07
tblVehicleEF	LHD2	28.34	28.48
tblVehicleEF	LHD2	6.7260e-003	6.8350e-003
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.53	1.30
tblVehicleEF	LHD2	0.86	0.81
tblVehicleEF	LHD2	1.0450e-003	1.0370e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.9790e-003	9.9800e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.7300e-004	3.7700e-004
tblVehicleEF	LHD2	9.6200e-004	9.5400e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.3800e-004	3.5000e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.22	0.19
tblVehicleEF	LHD2	5.5450e-003	5.5490e-003
tblVehicleEF	LHD2	3.5800e-004	3.5500e-004
tblVehicleEF	LHD2	1.5110e-003	1.3460e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.4300e-004	8.9500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.26	0.24
tblVehicleEF	LHD2	0.23	0.20
tblVehicleEF	MCY	20.61	20.09
tblVehicleEF	MCY	10.01	10.06
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.16	1.15
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.39	2.37

tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.06	2.05
tblVehicleEF	MCY	1.9700e-003	1.9740e-003
tblVehicleEF	MCY	6.5000e-004	6.4300e-004
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.41	0.41
tblVehicleEF	MCY	0.55	0.55
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.24	1.19
tblVehicleEF	MCY	2.21	2.20
tblVehicleEF	MCY	19.99	19.50
tblVehicleEF	MCY	8.80	8.82
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.01	1.01
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.33	2.31
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.81	1.80
tblVehicleEF	MCY	1.9590e-003	1.9640e-003

tblVehicleEF	MCY	6.2300e-004	6.1600e-004
tblVehicleEF	MCY	1.66	1.67
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.56	2.55
tblVehicleEF	MCY	1.16	1.11
tblVehicleEF	MCY	1.95	1.93
tblVehicleEF	MCY	20.49	19.97
tblVehicleEF	MCY	10.06	10.12
tblVehicleEF	MCY	141.43	142.62
tblVehicleEF	MCY	38.50	37.84
tblVehicleEF	MCY	4.4000e-003	4.3080e-003
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	3.1500e-004	2.7700e-004
tblVehicleEF	MCY	9.6300e-004	8.3500e-004
tblVehicleEF	MCY	2.6400e-004	2.3600e-004
tblVehicleEF	MCY	8.0000e-004	7.0500e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.39	2.37
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.08	2.06
tblVehicleEF	MCY	1.9680e-003	1.9730e-003
tblVehicleEF	MCY	6.5100e-004	6.4400e-004
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.54	0.54

tblVehicleEF	MCY	0.54	0.54
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	1.48	1.43
tblVehicleEF	MCY	2.23	2.21
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.78	1.52
tblVehicleEF	MDV	3.77	3.26
tblVehicleEF	MDV	488.73	477.62
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.35	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.2060e-003	6.2200e-003
tblVehicleEF	MDV	1.3410e-003	1.3350e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.20	0.20
tblVehicleEF	MDV	0.09	0.09

tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.60	0.59
tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.96	1.69
tblVehicleEF	MDV	2.97	2.56
tblVehicleEF	MDV	514.18	502.64
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.27	0.23
tblVehicleEF	MDV	6.5340e-003	6.5500e-003
tblVehicleEF	MDV	1.3270e-003	1.3220e-003
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.06

tblVehicleEF	MDV	0.57	0.56
tblVehicleEF	MDV	0.29	0.24
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.72	1.46
tblVehicleEF	MDV	3.88	3.37
tblVehicleEF	MDV	481.27	470.30
tblVehicleEF	MDV	102.89	100.49
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.36	0.30
tblVehicleEF	MDV	2.1720e-003	2.1510e-003
tblVehicleEF	MDV	3.5290e-003	3.7110e-003
tblVehicleEF	MDV	2.0090e-003	1.9940e-003
tblVehicleEF	MDV	3.2670e-003	3.4420e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.70	0.68
tblVehicleEF	MDV	0.32	0.27
tblVehicleEF	MDV	6.1110e-003	6.1240e-003
tblVehicleEF	MDV	1.3430e-003	1.3360e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.70	0.68

tblVehicleEF	MDV	0.34	0.29
tblVehicleEF	MH	1.60	1.00
tblVehicleEF	MH	6.03	5.23
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.25	1.08
tblVehicleEF	MH	0.68	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.59	1.32
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1500e-004	4.0000e-004
tblVehicleEF	MH	0.95	0.79
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.39	0.34
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.59	1.32

tblVehicleEF	MH	0.36	0.30
tblVehicleEF	MH	1.64	1.03
tblVehicleEF	MH	4.81	4.19
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.15	1.00
tblVehicleEF	MH	0.66	0.60
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.56	1.29
tblVehicleEF	MH	0.29	0.25
tblVehicleEF	MH	6.6400e-003	6.6500e-003
tblVehicleEF	MH	3.9500e-004	3.8200e-004
tblVehicleEF	MH	1.47	1.22
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.61	0.53
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.56	1.29

tblVehicleEF	MH	0.31	0.27
tblVehicleEF	MH	1.59	1.00
tblVehicleEF	MH	6.06	5.25
tblVehicleEF	MH	602.71	604.56
tblVehicleEF	MH	27.93	27.82
tblVehicleEF	MH	2.1590e-003	2.2880e-003
tblVehicleEF	MH	1.22	1.06
tblVehicleEF	MH	0.69	0.62
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.5800e-003	8.5810e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	6.4900e-004	4.6700e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	5.9600e-004	4.3400e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	1.68	1.40
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	6.6390e-003	6.6500e-003
tblVehicleEF	MH	4.1600e-004	4.0000e-004
tblVehicleEF	MH	1.07	0.87
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.41	0.35
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	1.68	1.40

tblVehicleEF	MH	0.36	0.31
tblVehicleEF	MHD	7.4570e-003	8.1650e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.89	2.07
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.44	12.47
tblVehicleEF	MHD	572.02	572.08
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.69	3.42
tblVehicleEF	MHD	1.64	1.04
tblVehicleEF	MHD	1.62	1.43
tblVehicleEF	MHD	0.01	7.9640e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	7.3270e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.16	0.18
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.42	0.40

tblVehicleEF	MHD	0.86	0.73
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.0400e-004	7.6600e-004
tblVehicleEF	MHD	2.3690e-003	2.1250e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.18	0.20
tblVehicleEF	MHD	1.5020e-003	1.4000e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.42	0.40
tblVehicleEF	MHD	0.92	0.78
tblVehicleEF	MHD	7.0270e-003	7.6940e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	1.37	1.51
tblVehicleEF	MHD	0.69	0.57
tblVehicleEF	MHD	11.64	10.06
tblVehicleEF	MHD	606.00	606.07
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.84	3.53
tblVehicleEF	MHD	1.54	0.97
tblVehicleEF	MHD	1.56	1.37
tblVehicleEF	MHD	9.3480e-003	6.7140e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	8.6000e-003	6.1770e-003

tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.15	0.17
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.76	0.65
tblVehicleEF	MHD	6.4240e-003	6.4250e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	7.5700e-004	7.2500e-004
tblVehicleEF	MHD	3.6600e-003	3.2710e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	2.2910e-003	2.1040e-003
tblVehicleEF	MHD	0.11	0.10
tblVehicleEF	MHD	0.41	0.39
tblVehicleEF	MHD	0.81	0.69
tblVehicleEF	MHD	8.0500e-003	8.8140e-003
tblVehicleEF	MHD	3.5450e-003	3.3250e-003
tblVehicleEF	MHD	2.60	2.85
tblVehicleEF	MHD	0.68	0.56
tblVehicleEF	MHD	14.78	12.76
tblVehicleEF	MHD	525.09	525.15
tblVehicleEF	MHD	914.53	913.05
tblVehicleEF	MHD	49.60	49.32

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.48	3.27
tblVehicleEF	MHD	1.60	1.02
tblVehicleEF	MHD	1.63	1.44
tblVehicleEF	MHD	0.01	9.6910e-003
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.3970e-003	1.0860e-003
tblVehicleEF	MHD	0.01	8.9150e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.2800e-003	1.0070e-003
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.17	0.19
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.09	0.08
tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.88	0.74
tblVehicleEF	MHD	5.5660e-003	5.5670e-003
tblVehicleEF	MHD	9.7500e-003	9.7330e-003
tblVehicleEF	MHD	8.1000e-004	7.7100e-004
tblVehicleEF	MHD	2.5250e-003	2.2210e-003
tblVehicleEF	MHD	0.10	0.09
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	1.5230e-003	1.4060e-003
tblVehicleEF	MHD	0.11	0.10

tblVehicleEF	MHD	0.46	0.44
tblVehicleEF	MHD	0.94	0.79
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	2.74	3.30
tblVehicleEF	OBUS	0.97	0.86
tblVehicleEF	OBUS	8.80	7.92
tblVehicleEF	OBUS	534.88	533.47
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.65	3.20
tblVehicleEF	OBUS	2.28	1.27
tblVehicleEF	OBUS	1.24	1.12
tblVehicleEF	OBUS	9.5470e-003	8.7920e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	8.7830e-003	8.0890e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004

tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.54	0.48
tblVehicleEF	OBUS	5.6700e-003	5.6550e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.1900e-004	5.0200e-004
tblVehicleEF	OBUS	9.6600e-004	9.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.53	0.64
tblVehicleEF	OBUS	5.3100e-004	5.3300e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.33	0.33
tblVehicleEF	OBUS	0.58	0.51
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	1.99	2.40
tblVehicleEF	OBUS	0.98	0.86
tblVehicleEF	OBUS	7.12	6.40
tblVehicleEF	OBUS	566.66	565.16
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.79	3.30
tblVehicleEF	OBUS	2.14	1.19
tblVehicleEF	OBUS	1.19	1.08
tblVehicleEF	OBUS	8.0480e-003	7.4120e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01

tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	7.4040e-003	6.8190e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.48	0.42
tblVehicleEF	OBUS	6.0070e-003	5.9910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.9000e-004	4.7700e-004
tblVehicleEF	OBUS	1.4470e-003	1.4230e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	7.8300e-004	7.8100e-004
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.32	0.32
tblVehicleEF	OBUS	0.51	0.45
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	2.7960e-003	2.9670e-003
tblVehicleEF	OBUS	3.78	4.55
tblVehicleEF	OBUS	0.97	0.85

tblVehicleEF	OBUS	8.99	8.09
tblVehicleEF	OBUS	491.00	489.70
tblVehicleEF	OBUS	1,017.03	1,018.77
tblVehicleEF	OBUS	32.78	32.73
tblVehicleEF	OBUS	1.9410e-003	1.9660e-003
tblVehicleEF	OBUS	4.44	3.06
tblVehicleEF	OBUS	2.24	1.25
tblVehicleEF	OBUS	1.25	1.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.7800e-004	4.9700e-004
tblVehicleEF	OBUS	0.01	9.8420e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6450e-003	2.6520e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	5.3400e-004	4.6100e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	0.12	0.12
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.55	0.49
tblVehicleEF	OBUS	5.2050e-003	5.1910e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	5.2200e-004	5.0500e-004
tblVehicleEF	OBUS	9.8600e-004	9.5600e-004

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.57	0.69
tblVehicleEF	OBUS	0.14	0.13
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	0.58	0.52
tblVehicleEF	SBUS	4.4530e-003	4.6460e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.05	1.12
tblVehicleEF	SBUS	2.96	2.66
tblVehicleEF	SBUS	27.16	24.72
tblVehicleEF	SBUS	547.00	552.46
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.58	7.35
tblVehicleEF	SBUS	7.03	6.65
tblVehicleEF	SBUS	2.02	1.89
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.03	0.03

tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.30	0.28
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.66	1.48
tblVehicleEF	SBUS	5.7980e-003	5.8560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7600e-003	1.7140e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	1.95	1.92
tblVehicleEF	SBUS	1.77	1.59
tblVehicleEF	SBUS	4.1970e-003	4.3790e-003
tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	0.76	0.82
tblVehicleEF	SBUS	3.03	2.73
tblVehicleEF	SBUS	23.01	20.96
tblVehicleEF	SBUS	579.49	585.28
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.82	7.58
tblVehicleEF	SBUS	6.62	6.25
tblVehicleEF	SBUS	1.91	1.78

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.01	9.4430e-003
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.29
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.49	1.33
tblVehicleEF	SBUS	6.1430e-003	6.2040e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6900e-003	1.6500e-003
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.21	0.20
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.34	0.32
tblVehicleEF	SBUS	1.79	1.77
tblVehicleEF	SBUS	1.59	1.42
tblVehicleEF	SBUS	4.8080e-003	5.0160e-003

tblVehicleEF	SBUS	5.5860e-003	5.8530e-003
tblVehicleEF	SBUS	1.45	1.55
tblVehicleEF	SBUS	2.94	2.64
tblVehicleEF	SBUS	27.94	25.44
tblVehicleEF	SBUS	502.12	507.13
tblVehicleEF	SBUS	1,037.25	1,032.35
tblVehicleEF	SBUS	115.53	115.30
tblVehicleEF	SBUS	5.7400e-004	5.6800e-004
tblVehicleEF	SBUS	7.24	7.02
tblVehicleEF	SBUS	6.92	6.54
tblVehicleEF	SBUS	2.04	1.91
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.57	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.05	0.04
tblVehicleEF	SBUS	3.6960e-003	3.2240e-003
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7470e-003	2.7410e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.4060e-003	2.9910e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.29	0.28
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.69	1.52

tblVehicleEF	SBUS	5.3230e-003	5.3760e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.7730e-003	1.7260e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.33	0.31
tblVehicleEF	SBUS	2.30	2.26
tblVehicleEF	SBUS	1.81	1.62
tblVehicleEF	UBUS	4.38	4.22
tblVehicleEF	UBUS	9.86	9.55
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.91	10.49
tblVehicleEF	UBUS	1.17	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.78	0.83

tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.8100e-004	4.7600e-004
tblVehicleEF	UBUS	5.4570e-003	5.3760e-003
tblVehicleEF	UBUS	0.09	0.09
tblVehicleEF	UBUS	3.0100e-003	2.9670e-003
tblVehicleEF	UBUS	0.80	0.78
tblVehicleEF	UBUS	0.78	0.83
tblVehicleEF	UBUS	0.78	0.76
tblVehicleEF	UBUS	4.44	4.28
tblVehicleEF	UBUS	8.28	8.02
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.28	9.88
tblVehicleEF	UBUS	1.12	1.10
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.73	0.71
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.65	0.64

tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.5400e-004	4.5000e-004
tblVehicleEF	UBUS	8.0610e-003	7.9260e-003
tblVehicleEF	UBUS	0.10	0.09
tblVehicleEF	UBUS	4.5490e-003	4.4570e-003
tblVehicleEF	UBUS	0.81	0.79
tblVehicleEF	UBUS	0.73	0.77
tblVehicleEF	UBUS	0.70	0.68
tblVehicleEF	UBUS	4.37	4.21
tblVehicleEF	UBUS	9.99	9.68
tblVehicleEF	UBUS	1,917.54	1,907.03
tblVehicleEF	UBUS	27.32	27.40
tblVehicleEF	UBUS	2.4830e-003	2.5030e-003
tblVehicleEF	UBUS	10.70	10.29
tblVehicleEF	UBUS	1.18	1.15
tblVehicleEF	UBUS	0.68	0.68
tblVehicleEF	UBUS	0.18	0.17
tblVehicleEF	UBUS	6.0900e-004	5.8900e-004
tblVehicleEF	UBUS	0.29	0.29
tblVehicleEF	UBUS	0.16	0.16
tblVehicleEF	UBUS	5.6400e-004	5.4700e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.72	0.70
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.73	0.72
tblVehicleEF	UBUS	0.02	0.02

tblVehicleEF	UBUS	4.8300e-004	4.7900e-004
tblVehicleEF	UBUS	6.2690e-003	6.1660e-003
tblVehicleEF	UBUS	0.12	0.11
tblVehicleEF	UBUS	3.2440e-003	3.1950e-003
tblVehicleEF	UBUS	0.80	0.77
tblVehicleEF	UBUS	0.92	0.97
tblVehicleEF	UBUS	0.78	0.77
tblVehicleTrips	ST_TR	1.59	35.00
tblVehicleTrips	SU_TR	1.59	35.00
tblVehicleTrips	WD_TR	1.59	35.00
tblVehicleTrips	WD_TR	6.59	5.88
tblVehicleTrips	WD_TR	27.92	10.64
tblVehicleTrips	WD_TR	56.24	38.41
tblVehicleTrips	WD_TR	42.94	101.19
tblWoodstoves	NumberCatalytic	37.05	0.00
tblWoodstoves	NumberNoncatalytic	37.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.5093	163.8386	197.2309	0.3777	23.0128	6.5144	29.5272	7.8547	6.0314	13.8861	0.0000	35,587.1767	35,587.1767	3.4059	0.0000	35,658.7005
2017	36.8328	151.1470	184.8872	0.3774	26.2319	5.9721	32.2040	8.6450	5.5287	14.1737	0.0000	34,737.1330	34,737.1330	3.3355	0.0000	34,807.1777
2018	45.0888	75.0855	140.1807	0.3122	17.7166	3.1320	20.8486	4.7419	2.9241	7.6660	0.0000	26,864.4925	26,864.4925	2.1439	0.0000	26,909.5148
2019	45.9407	136.5386	173.4646	0.4129	23.6533	5.6484	28.4622	8.0279	5.2254	12.4788	0.0000	36,587.8535	36,587.8535	3.9613	0.0000	36,671.0401
2020	15.1353	126.7817	173.0115	0.4369	24.2259	4.4851	28.7110	8.1871	4.1497	12.3367	0.0000	37,858.2649	37,858.2649	3.2299	0.0000	37,926.0928
2021	63.0701	41.8321	107.3338	0.2874	17.5493	1.5040	19.0533	4.6976	1.4115	6.1091	0.0000	22,789.5839	22,789.5839	1.2934	0.0000	22,816.7449
2022	62.6044	37.9452	103.0679	0.2873	17.5493	1.3387	18.8880	4.6976	1.2559	5.9535	0.0000	22,570.1567	22,570.1567	1.2636	0.0000	22,596.6932
Total	**288.1814**	**733.1687**	**1,079.1766**	**2.4917**	**149.9391**	**28.5946**	**177.6943**	**46.8519**	**26.5264**	**72.6038**	**0.0000**	**216,994.6612**	**216,994.6612**	**18.6335**	**0.0000**	**217,385.9640**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	19.5093	163.8386	197.2309	0.3777	19.6526	6.5144	26.1670	6.0272	6.0314	12.0586	0.0000	35,587.1767	35,587.1767	3.4059	0.0000	35,658.7005
2017	36.8328	151.1470	184.8872	0.3774	22.8717	5.9721	28.8438	6.8175	5.5287	12.3461	0.0000	34,737.1330	34,737.1330	3.3355	0.0000	34,807.1777
2018	45.0888	75.0855	140.1807	0.3122	17.7166	3.1320	20.8486	4.7419	2.9241	7.6660	0.0000	26,864.4925	26,864.4925	2.1439	0.0000	26,909.5147
2019	45.9407	136.5386	173.4646	0.4129	20.2495	5.6484	25.0584	6.1946	5.2254	10.6455	0.0000	36,587.8534	36,587.8534	3.9613	0.0000	36,671.0401
2020	15.1353	126.7817	173.0115	0.4369	20.8254	4.4851	25.3105	6.3534	4.1497	10.5030	0.0000	37,858.2649	37,858.2649	3.2299	0.0000	37,926.0928
2021	63.0701	41.8321	107.3338	0.2874	17.5493	1.5040	19.0533	4.6976	1.4115	6.1091	0.0000	22,789.5839	22,789.5839	1.2934	0.0000	22,816.7449
2022	62.6044	37.9452	103.0679	0.2873	17.5493	1.3387	18.8880	4.6976	1.2559	5.9535	0.0000	22,570.1567	22,570.1567	1.2636	0.0000	22,596.6932
Total	**288.1814**	**733.1687**	**1,079.1766**	**2.4917**	**136.4144**	**28.5946**	**164.1696**	**39.5298**	**26.5264**	**65.2818**	**0.0000**	**216,994.6611**	**216,994.6611**	**18.6335**	**0.0000**	**217,385.9639**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**9.02**	**0.00**	**7.61**	**15.63**	**0.00**	**10.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	62.4034	0.7116	61.5781	3.2500e-003		0.3381	0.3381		0.3381	0.3381	0.0000	110.5915	110.5915	0.1087	0.0000	112.8745
Energy	0.7984	7.0863	4.8354	0.0436		0.5516	0.5516		0.5516	0.5516		8,709.9689	8,709.9689	0.1669	0.1597	8,762.9764
Mobile	55.6061	130.6070	560.5235	1.7930	124.5608	2.4492	127.0100	33.2871	2.2594	35.5465		135,888.6828	135,888.6828	4.6334		135,985.9836
Total	**118.8079**	**138.4049**	**626.9370**	**1.8398**	**124.5608**	**3.3389**	**127.8997**	**33.2871**	**3.1492**	**36.4363**	**0.0000**	**144,709.2432**	**144,709.2432**	**4.9090**	**0.1597**	**144,861.8344**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	54.7687	0.6363	54.1519	2.6800e-003		0.2946	0.2946		0.2946	0.2946	0.0000	93.9478	93.9478	0.0826	0.0000	95.6829
Energy	0.6704	5.9494	4.0581	0.0366		0.4632	0.4632		0.4632	0.4632		7,312.9259	7,312.9259	0.1402	0.1341	7,357.4312
Mobile	50.4777	94.4557	436.9831	1.2065	82.5116	1.6864	84.1981	22.0501	1.5561	23.6061		91,417.4587	91,417.4587	3.2050		91,484.7640
Total	**105.9167**	**101.0414**	**495.1931**	**1.2457**	**82.5116**	**2.4442**	**84.9558**	**22.0501**	**2.3138**	**24.3639**	**0.0000**	**98,824.3324**	**98,824.3324**	**3.4278**	**0.1341**	**98,937.8781**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	10.85	27.00	21.01	32.29	33.76	26.80	33.58	33.76	26.53	33.13	0.00	31.71	31.71	30.17	16.04	31.70

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase One:Demolition	Demolition	1/1/2016	4/29/2016	5	86	
2	Phase One: Grading	Grading	3/1/2016	3/31/2017	5	284	
3	Phase One:Building Construction	Building Construction	9/1/2016	4/30/2019	5	694	
4	Phase Two: Paving	Paving	4/3/2017	12/29/2017	5	195	
5	Phase Two: Architectural Coating	Architectural Coating	5/1/2017	10/31/2017	5	132	
6	Phase One:Architectural Coating	Architectural Coating	7/2/2018	10/31/2019	5	349	
7	Phase One:Paving	Paving	11/1/2018	11/29/2019	5	282	
8	Phase Three: Demolition	Demolition	7/1/2019	11/29/2019	5	110	
9	Phase Three: Grading	Grading	10/1/2019	12/31/2019	5	66	
10	Phase Three: Construction	Building Construction	12/2/2019	3/31/2020	5	87	
11	Phase Four:Demolition	Demolition	1/1/2020	6/30/2020	5	130	
12	Phase Four: Grading	Grading	6/1/2020	12/31/2020	5	154	
13	Phase Four: Construction	Building Construction	11/2/2020	2/28/2022	5	346	
14	Phase Four: Architectural Coating	Architectural Coating	9/1/2021	7/29/2022	5	238	
15	Phase Four: Paving	Paving	4/1/2022	7/29/2022	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 452,081; Residential Outdoor: 150,694; Non-Residential Indoor: 142,500; Non-Residential Outdoor: 47,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase One:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase One:Demolition	Excavators	3	8.00	162	0.38
Phase One:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase One: Grading	Excavators	2	8.00	162	0.38
Phase One: Grading	Graders	1	8.00	174	0.41
Phase One: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase One: Grading	Scrapers	2	8.00	361	0.48
Phase One: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase One:Building Construction	Cranes	1	7.00	226	0.29
Phase One:Building Construction	Forklifts	3	8.00	89	0.20
Phase One:Building Construction	Generator Sets	1	8.00	84	0.74
Phase One:Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase One:Building Construction	Welders	1	8.00	46	0.45
Phase Two: Paving	Pavers	2	8.00	125	0.42
Phase Two: Paving	Paving Equipment	2	8.00	130	0.36
Phase Two: Paving	Rollers	2	8.00	80	0.38
Phase Two: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase One:Paving	Pavers	2	8.00	125	0.42
Phase One:Paving	Paving Equipment	2	8.00	130	0.36
Phase One:Paving	Rollers	2	8.00	80	0.38
Phase Three: Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Three: Demolition	Excavators	3	8.00	162	0.38
Phase Three: Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Phase Three: Grading	Excavators	2	8.00	162	0.38
Phase Three: Grading	Graders	1	8.00	174	0.41
Phase Three: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Three: Grading	Scrapers	2	8.00	361	0.48
Phase Three: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Three: Construction	Cranes	1	7.00	226	0.29
Phase Three: Construction	Forklifts	3	8.00	89	0.20
Phase Three: Construction	Generator Sets	1	8.00	84	0.74
Phase Three: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Three: Construction	Welders	1	8.00	46	0.45
Phase Four:Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Phase Four:Demolition	Excavators	3	8.00	162	0.38
Phase Four:Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Phase Four: Grading	Excavators	2	8.00	162	0.38
Phase Four: Grading	Graders	1	8.00	174	0.41
Phase Four: Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase Four: Grading	Scrapers	2	8.00	361	0.48
Phase Four: Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase Four: Construction	Cranes	1	7.00	226	0.29
Phase Four: Construction	Forklifts	3	8.00	89	0.20
Phase Four: Construction	Generator Sets	1	8.00	84	0.74
Phase Four: Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase Four: Construction	Welders	1	8.00	46	0.45
Phase Four: Architectural Coating	Air Compressors	1	6.00	78	0.48
Phase Four: Paving	Pavers	2	8.00	125	0.42
Phase Four: Paving	Paving Equipment	2	8.00	130	0.36
Phase Four: Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase One:Demolition	6	15.00	0.00	1,892.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One: Grading	8	20.00	0.00	22,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Building Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Two: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Architectural Coa	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase One:Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Demolition	6	15.00	0.00	628.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Grading	8	20.00	0.00	8,525.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Three: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four:Demolition	6	15.00	0.00	1,287.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Grading	8	20.00	0.00	25,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Construction	9	1,143.00	354.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Architectural Coating	1	229.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Phase Four: Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Phase One:Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7615	0.0000	4.7615	0.7209	0.0000	0.7209			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**4.7615**	**2.2921**	**7.0537**	**0.7209**	**2.1365**	**2.8575**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3976	6.2495	4.8898	0.0162	0.3833	0.0960	0.4793	0.1050	0.0883	0.1932		1,631.0464	1,631.0464	0.0118		1,631.2936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.4616**	**6.3355**	**5.7881**	**0.0182**	**0.5510**	**0.0974**	**0.6484**	**0.1494**	**0.0896**	**0.2390**		**1,798.4037**	**1,798.4037**	**0.0209**		**1,798.8432**

3.2 Phase One:Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1427	0.0000	2.1427	0.3244	0.0000	0.3244			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**2.1427**	**2.2921**	**4.4348**	**0.3244**	**2.1365**	**2.4610**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3976	6.2495	4.8898	0.0162	0.3833	0.0960	0.4793	0.1050	0.0883	0.1932		1,631.0464	1,631.0464	0.0118		1,631.2936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.4616**	**6.3355**	**5.7881**	**0.0182**	**0.5510**	**0.0974**	**0.6484**	**0.1494**	**0.0896**	**0.2390**		**1,798.4037**	**1,798.4037**	**0.0209**		**1,798.8432**

3.3 Phase One: Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.1095**	**3.5842**	**9.6937**	**3.3228**	**3.2975**	**6.6203**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4317	22.5054	17.6088	0.0583	1.6913	0.3456	2.0369	0.4543	0.3179	0.7722		5,873.6466	5,873.6466	0.0424		5,874.5369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**1.5170**	**22.6200**	**18.8066**	**0.0610**	**1.9149**	**0.3474**	**2.2623**	**0.5136**	**0.3196**	**0.8332**		**6,096.7896**	**6,096.7896**	**0.0546**		**6,097.9363**

3.3 Phase One: Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**2.7493**	**3.5842**	**6.3335**	**1.4953**	**3.2975**	**4.7928**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4317	22.5054	17.6088	0.0583	1.6913	0.3456	2.0369	0.4543	0.3179	0.7722		5,873.6466	5,873.6466	0.0424		5,874.5369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**1.5170**	**22.6200**	**18.8066**	**0.0610**	**1.9149**	**0.3474**	**2.2623**	**0.5136**	**0.3196**	**0.8332**		**6,096.7896**	**6,096.7896**	**0.0546**		**6,097.9363**

3.3 Phase One: Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1095	0.0000	6.1095	3.3228	0.0000	3.3228			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.1095**	**3.3172**	**9.4266**	**3.3228**	**3.0518**	**6.3746**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3474	20.6264	16.9960	0.0582	4.9098	0.3158	5.2255	1.2443	0.2905	1.5348		5,777.2137	5,777.2137	0.0415		5,778.0859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**1.4239**	**20.7299**	**18.0756**	**0.0609**	**5.1333**	**0.3176**	**5.4509**	**1.3036**	**0.2921**	**1.5958**		**5,991.7859**	**5,991.7859**	**0.0528**		**5,992.8946**

3.3 Phase One: Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7493	0.0000	2.7493	1.4953	0.0000	1.4953			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**2.7493**	**3.3172**	**6.0664**	**1.4953**	**3.0518**	**4.5471**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3474	20.6264	16.9960	0.0582	4.9098	0.3158	5.2255	1.2443	0.2905	1.5348		5,777.2137	5,777.2137	0.0415		5,778.0859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**1.4239**	**20.7299**	**18.0756**	**0.0609**	**5.1333**	**0.3176**	**5.4509**	**1.3036**	**0.2921**	**1.5958**		**5,991.7859**	**5,991.7859**	**0.0528**		**5,992.8946**

3.4 Phase One:Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2313	31.3458	42.3245	0.0764	2.2124	0.5086	2.7210	0.6301	0.4677	1.0978		7,653.4946	7,653.4946	0.0567		7,654.6859
Worker	4.8753	6.5528	68.4557	0.1517	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		12,752.6253	12,752.6253	0.6976		12,767.2738
Total	**8.1066**	**37.8985**	**110.7802**	**0.2282**	**14.9885**	**0.6153**	**15.6038**	**4.0183**	**0.5658**	**4.5842**		**20,406.1199**	**20,406.1199**	**0.7543**		**20,421.9598**

3.4 Phase One:Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2313	31.3458	42.3245	0.0764	2.2124	0.5086	2.7210	0.6301	0.4677	1.0978		7,653.4946	7,653.4946	0.0567		7,654.6859
Worker	4.8753	6.5528	68.4557	0.1517	12.7760	0.1068	12.8828	3.3883	0.0982	3.4864		12,752.6253	12,752.6253	0.6976		12,767.2738
Total	**8.1066**	**37.8985**	**110.7802**	**0.2282**	**14.9885**	**0.6153**	**15.6038**	**4.0183**	**0.5658**	**4.5842**		**20,406.1199**	**20,406.1199**	**0.7543**		**20,421.9598**

3.4 Phase One:Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9506	28.5049	40.1784	0.0764	2.2131	0.4534	2.6665	0.6304	0.4170	1.0473		7,529.3734	7,529.3734	0.0549		7,530.5264
Worker	4.3711	5.9145	61.6991	0.1516	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		12,262.7995	12,262.7995	0.6437		12,276.3161
Total	**7.3218**	**34.4194**	**101.8775**	**0.2280**	**14.9892**	**0.5561**	**15.5453**	**4.0186**	**0.5117**	**4.5303**		**19,792.1728**	**19,792.1728**	**0.6986**		**19,806.8426**

3.4 Phase One:Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9506	28.5049	40.1784	0.0764	2.2131	0.4534	2.6665	0.6304	0.4170	1.0473		7,529.3734	7,529.3734	0.0549		7,530.5264
Worker	4.3711	5.9145	61.6991	0.1516	12.7760	0.1027	12.8788	3.3883	0.0948	3.4830		12,262.7995	12,262.7995	0.6437		12,276.3161
Total	**7.3218**	**34.4194**	**101.8775**	**0.2280**	**14.9892**	**0.5561**	**15.5453**	**4.0186**	**0.5117**	**4.5303**		**19,792.1728**	**19,792.1728**	**0.6986**		**19,806.8426**

3.4 Phase One:Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7576	26.1476	38.5536	0.0762	2.2132	0.4272	2.6404	0.6304	0.3929	1.0233		7,402.8932	7,402.8932	0.0546		7,404.0400
Worker	3.9309	5.3636	55.8281	0.1515	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		11,804.9092	11,804.9092	0.5974		11,817.4538
Total	**6.6885**	**31.5112**	**94.3816**	**0.2278**	**14.9892**	**0.5272**	**15.5164**	**4.0186**	**0.4855**	**4.5041**		**19,207.8024**	**19,207.8024**	**0.6520**		**19,221.4937**

3.4 Phase One:Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.7576	26.1476	38.5536	0.0762	2.2132	0.4272	2.6404	0.6304	0.3929	1.0233		7,402.8932	7,402.8932	0.0546		7,404.0400
Worker	3.9309	5.3636	55.8281	0.1515	12.7760	0.1000	12.8760	3.3883	0.0925	3.4808		11,804.9092	11,804.9092	0.5974		11,817.4538
Total	**6.6885**	**31.5112**	**94.3816**	**0.2278**	**14.9892**	**0.5272**	**15.5164**	**4.0186**	**0.4855**	**4.5041**		**19,207.8024**	**19,207.8024**	**0.6520**		**19,221.4937**

3.4 Phase One:Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.4 Phase One:Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.5 Phase Two: Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.5 Phase Two: Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9074**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.6 Phase Two: Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.2359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**23.5682**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8758	1.1850	12.3614	0.0304	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,456.8513	2,456.8513	0.1290		2,459.5594
Total	**0.8758**	**1.1850**	**12.3614**	**0.0304**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,456.8513**	**2,456.8513**	**0.1290**		**2,459.5594**

3.6 Phase Two: Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.2359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**23.5682**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8758	1.1850	12.3614	0.0304	2.5597	0.0206	2.5803	0.6788	0.0190	0.6978		2,456.8513	2,456.8513	0.1290		2,459.5594
Total	**0.8758**	**1.1850**	**12.3614**	**0.0304**	**2.5597**	**0.0206**	**2.5803**	**0.6788**	**0.0190**	**0.6978**		**2,456.8513**	**2,456.8513**	**0.1290**		**2,459.5594**

3.7 Phase One:Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**33.2811**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7876	1.0746	11.1852	0.0304	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,365.1131	2,365.1131	0.1197		2,367.6264
Total	**0.7876**	**1.0746**	**11.1852**	**0.0304**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,365.1131**	**2,365.1131**	**0.1197**		**2,367.6264**

3.7 Phase One:Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**33.2811**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7876	1.0746	11.1852	0.0304	2.5597	0.0200	2.5797	0.6788	0.0185	0.6974		2,365.1131	2,365.1131	0.1197		2,367.6264
Total	**0.7876**	**1.0746**	**11.1852**	**0.0304**	**2.5597**	**0.0200**	**2.5797**	**0.6788**	**0.0185**	**0.6974**		**2,365.1131**	**2,365.1131**	**0.1197**		**2,367.6264**

3.7 Phase One:Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**33.2489**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7242	0.9854	10.2515	0.0303	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,275.0788	2,275.0788	0.1120		2,277.4314
Total	**0.7242**	**0.9854**	**10.2515**	**0.0303**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,275.0788**	**2,275.0788**	**0.1120**		**2,277.4314**

3.7 Phase One:Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**33.2489**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7242	0.9854	10.2515	0.0303	2.5597	0.0197	2.5794	0.6788	0.0182	0.6971		2,275.0788	2,275.0788	0.1120		2,277.4314
Total	**0.7242**	**0.9854**	**10.2515**	**0.0303**	**2.5597**	**0.0197**	**2.5794**	**0.6788**	**0.0182**	**0.6971**		**2,275.0788**	**2,275.0788**	**0.1120**		**2,277.4314**

3.8 Phase One:Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.8 Phase One:Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.8 Phase One:Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**		**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

3.8 Phase One:Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447	0.0000	2,208.9731	2,208.9731	0.6989		2,223.6499
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4259**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**	**0.0000**	**2,208.9731**	**2,208.9731**	**0.6989**		**2,223.6499**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

3.9 Phase Three: Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2349	0.0000	1.2349	0.1870	0.0000	0.1870			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316		3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**1.2349**	**1.6448**	**2.8797**	**0.1870**	**1.5316**	**1.7185**		**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0919	1.2880	1.1804	4.1800e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0482		401.4527	401.4527	3.0100e-003		401.5160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.1393**	**1.3525**	**1.8519**	**6.1600e-003**	**0.2672**	**0.0240**	**0.2912**	**0.0717**	**0.0221**	**0.0938**		**550.4753**	**550.4753**	**0.0104**		**550.6927**

3.9 Phase Three: Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5557	0.0000	0.5557	0.0841	0.0000	0.0841			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316	0.0000	3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**0.5557**	**1.6448**	**2.2005**	**0.0841**	**1.5316**	**1.6157**	**0.0000**	**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0919	1.2880	1.1804	4.1800e-003	0.0995	0.0227	0.1222	0.0273	0.0209	0.0482		401.4527	401.4527	3.0100e-003		401.5160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.1393**	**1.3525**	**1.8519**	**6.1600e-003**	**0.2672**	**0.0240**	**0.2912**	**0.0717**	**0.0221**	**0.0938**		**550.4753**	**550.4753**	**0.0104**		**550.6927**

3.10 Phase Three: Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1888	0.0000	6.1888	3.3333	0.0000	3.3333			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1888**	**2.5049**	**8.6937**	**3.3333**	**2.3045**	**5.6378**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0782	29.1403	26.7055	0.0945	2.2516	0.5138	2.7654	0.6166	0.4727	1.0893		9,082.7608	9,082.7608	0.0682		9,084.1924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**2.1415**	**29.2264**	**27.6008**	**0.0972**	**2.4751**	**0.5156**	**2.9907**	**0.6759**	**0.4743**	**1.1502**		**9,281.4576**	**9,281.4576**	**0.0780**		**9,283.0947**

3.10 Phase Three: Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7849	0.0000	2.7849	1.5000	0.0000	1.5000			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**2.7849**	**2.5049**	**5.2899**	**1.5000**	**2.3045**	**3.8045**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0782	29.1403	26.7055	0.0945	2.2516	0.5138	2.7654	0.6166	0.4727	1.0893		9,082.7608	9,082.7608	0.0682		9,084.1924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**2.1415**	**29.2264**	**27.6008**	**0.0972**	**2.4751**	**0.5156**	**2.9907**	**0.6759**	**0.4743**	**1.1502**		**9,281.4576**	**9,281.4576**	**0.0780**		**9,283.0947**

3.11 Phase Three: Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.11 Phase Three: Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6064	24.1004	37.2869	0.0760	2.2134	0.4052	2.6186	0.6304	0.3728	1.0032		7,258.7979	7,258.7979	0.0536		7,259.9237
Worker	3.6148	4.9183	51.1678	0.1512	12.7760	0.0982	12.8743	3.3883	0.0911	3.4793		11,355.5241	11,355.5241	0.5592		11,367.2669
Total	**6.2212**	**29.0187**	**88.4547**	**0.2272**	**14.9894**	**0.5034**	**15.4928**	**4.0187**	**0.4638**	**4.4825**		**18,614.3220**	**18,614.3220**	**0.6128**		**18,627.1907**

3.11 Phase Three: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.11 Phase Three: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.12 Phase Four:Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1429	0.0000	2.1429	0.3245	0.0000	0.3245			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865		3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**2.1429**	**1.4899**	**3.6327**	**0.3245**	**1.3865**	**1.7110**		**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1559	1.9913	2.0213	7.2400e-003	0.1726	0.0391	0.2116	0.0473	0.0359	0.0832		680.4683	680.4683	5.2300e-003		680.5781
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.2004**	**2.0511**	**2.6459**	**9.2200e-003**	**0.3403**	**0.0403**	**0.3806**	**0.0917**	**0.0371**	**0.1288**		**823.4356**	**823.4356**	**0.0122**		**823.6914**

3.12 Phase Four:Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9643	0.0000	0.9643	0.1460	0.0000	0.1460			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865	0.0000	3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**0.9643**	**1.4899**	**2.4542**	**0.1460**	**1.3865**	**1.5325**	**0.0000**	**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1559	1.9913	2.0213	7.2400e-003	0.1726	0.0391	0.2116	0.0473	0.0359	0.0832		680.4683	680.4683	5.2300e-003		680.5781
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.2004**	**2.0511**	**2.6459**	**9.2200e-003**	**0.3403**	**0.0403**	**0.3806**	**0.0917**	**0.0371**	**0.1288**		**823.4356**	**823.4356**	**0.0122**		**823.6914**

3.13 Phase Four: Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1827	0.0000	6.1827	3.3340	0.0000	3.3340			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810		5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**6.1827**	**2.2619**	**8.4447**	**3.3340**	**2.0810**	**5.4149**		**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5564	32.6529	33.1448	0.1187	2.8300	0.6403	3.4703	0.7751	0.5890	1.3641		11,158.1446	11,158.1446	0.0858		11,159.9455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**2.6157**	**32.7327**	**33.9776**	**0.1213**	**3.0536**	**0.6420**	**3.6955**	**0.8344**	**0.5906**	**1.4250**		**11,348.7676**	**11,348.7676**	**0.0950**		**11,350.7631**

3.13 Phase Four: Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7822	0.0000	2.7822	1.5003	0.0000	1.5003			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810	0.0000	5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**2.7822**	**2.2619**	**5.0442**	**1.5003**	**2.0810**	**3.5813**	**0.0000**	**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5564	32.6529	33.1448	0.1187	2.8300	0.6403	3.4703	0.7751	0.5890	1.3641		11,158.1446	11,158.1446	0.0858		11,159.9455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**2.6157**	**32.7327**	**33.9776**	**0.1213**	**3.0536**	**0.6420**	**3.6955**	**0.8344**	**0.5906**	**1.4250**		**11,348.7676**	**11,348.7676**	**0.0950**		**11,350.7631**

3.14 Phase Four: Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.14 Phase Four: Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.4711	21.0238	36.2044	0.0759	2.2136	0.3707	2.5843	0.6305	0.3411	0.9716		7,095.2018	7,095.2018	0.0526		7,096.3052
Worker	3.3871	4.5574	47.5953	0.1512	12.7760	0.0976	12.8737	3.3883	0.0905	3.4788		10,894.1068	10,894.1068	0.5296		10,905.2280
Total	**5.8582**	**25.5811**	**83.7997**	**0.2270**	**14.9896**	**0.4684**	**15.4580**	**4.0188**	**0.4316**	**4.4504**		**17,989.3085**	**17,989.3085**	**0.5821**		**18,001.5333**

3.14 Phase Four: Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3842	17.8517	35.3378	0.0758	2.2136	0.3377	2.5513	0.6305	0.3107	0.9412		7,092.0130	7,092.0130	0.0530		7,093.1258
Worker	3.2044	4.2598	44.6876	0.1515	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		10,724.6567	10,724.6567	0.5069		10,735.3020
Total	**5.5886**	**22.1115**	**80.0254**	**0.2273**	**14.9896**	**0.4355**	**15.4251**	**4.0188**	**0.4014**	**4.4201**		**17,816.6696**	**17,816.6696**	**0.5599**		**17,828.4278**

3.14 Phase Four: Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3842	17.8517	35.3378	0.0758	2.2136	0.3377	2.5513	0.6305	0.3107	0.9412		7,092.0130	7,092.0130	0.0530		7,093.1258
Worker	3.2044	4.2598	44.6876	0.1515	12.7760	0.0977	12.8738	3.3883	0.0906	3.4789		10,724.6567	10,724.6567	0.5069		10,735.3020
Total	**5.5886**	**22.1115**	**80.0254**	**0.2273**	**14.9896**	**0.4355**	**15.4251**	**4.0188**	**0.4014**	**4.4201**		**17,816.6696**	**17,816.6696**	**0.5599**		**17,828.4278**

3.14 Phase Four: Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3306	16.2058	34.5106	0.0757	2.2136	0.3340	2.5476	0.6305	0.3073	0.9378		7,085.6561	7,085.6561	0.0542		7,086.7937
Worker	3.0346	3.9943	42.0012	0.1514	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		10,546.3434	10,546.3434	0.4854		10,556.5364
Total	**5.3652**	**20.2001**	**76.5118**	**0.2272**	**14.9897**	**0.4317**	**15.4213**	**4.0188**	**0.3979**	**4.4166**		**17,631.9996**	**17,631.9996**	**0.5396**		**17,643.3301**

3.14 Phase Four: Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.3306	16.2058	34.5106	0.0757	2.2136	0.3340	2.5476	0.6305	0.3073	0.9378		7,085.6561	7,085.6561	0.0542		7,086.7937
Worker	3.0346	3.9943	42.0012	0.1514	12.7760	0.0977	12.8737	3.3883	0.0906	3.4788		10,546.3434	10,546.3434	0.4854		10,556.5364
Total	**5.3652**	**20.2001**	**76.5118**	**0.2272**	**14.9897**	**0.4317**	**15.4213**	**4.0188**	**0.3979**	**4.4166**		**17,631.9996**	**17,631.9996**	**0.5396**		**17,643.3301**

3.15 Phase Four: Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**54.9464**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6420	0.8535	8.9532	0.0303	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,148.6845	2,148.6845	0.1016		2,150.8173
Total	**0.6420**	**0.8535**	**8.9532**	**0.0303**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,148.6845**	**2,148.6845**	**0.1016**		**2,150.8173**

3.15 Phase Four: Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**54.9464**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6420	0.8535	8.9532	0.0303	2.5597	0.0196	2.5793	0.6788	0.0182	0.6970		2,148.6845	2,148.6845	0.1016		2,150.8173
Total	**0.6420**	**0.8535**	**8.9532**	**0.0303**	**2.5597**	**0.0196**	**2.5793**	**0.6788**	**0.0182**	**0.6970**		**2,148.6845**	**2,148.6845**	**0.1016**		**2,150.8173**

3.15 Phase Four: Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**54.9320**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6080	0.8003	8.4149	0.0303	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,112.9595	2,112.9595	0.0973		2,115.0016
Total	**0.6080**	**0.8003**	**8.4149**	**0.0303**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,112.9595**	**2,112.9595**	**0.0973**		**2,115.0016**

3.15 Phase Four: Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	54.7275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**54.9320**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6080	0.8003	8.4149	0.0303	2.5597	0.0196	2.5792	0.6788	0.0182	0.6970		2,112.9595	2,112.9595	0.0973		2,115.0016
Total	**0.6080**	**0.8003**	**8.4149**	**0.0303**	**2.5597**	**0.0196**	**2.5792**	**0.6788**	**0.0182**	**0.6970**		**2,112.9595**	**2,112.9595**	**0.0973**		**2,115.0016**

3.16 Phase Four: Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131		2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**		**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0398	0.0524	0.5512	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		138.4035	138.4035	6.3700e-003		138.5372
Total	**0.0398**	**0.0524**	**0.5512**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**138.4035**	**138.4035**	**6.3700e-003**		**138.5372**

3.16 Phase Four: Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0815	10.9108	14.2815	0.0223		0.5577	0.5577		0.5131	0.5131	0.0000	2,160.6869	2,160.6869	0.6988		2,175.3619
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0815**	**10.9108**	**14.2815**	**0.0223**		**0.5577**	**0.5577**		**0.5131**	**0.5131**	**0.0000**	**2,160.6869**	**2,160.6869**	**0.6988**		**2,175.3619**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0398	0.0524	0.5512	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		138.4035	138.4035	6.3700e-003		138.5372
Total	**0.0398**	**0.0524**	**0.5512**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**138.4035**	**138.4035**	**6.3700e-003**		**138.5372**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	50.4777	94.4557	436.9831	1.2065	82.5116	1.6864	84.1981	22.0501	1.5561	23.6061		91,417.4587	91,417.4587	3.2050		91,484.7640
Unmitigated	55.6061	130.6070	560.5235	1.7930	124.5608	2.4492	127.0100	33.2871	2.2594	35.5465		135,888.6828	135,888.6828	4.6334		135,985.9836

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	110.95	110.95	110.95	319,263	209,450
Condo/Townhouse High Rise	1,117.20	1,360.40	1153.30	3,953,986	2,737,393
Condo/Townhouse High Rise	3,239.88	3,945.16	3344.57	11,466,561	7,938,439
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government (Civic Center)	5,820.08	0.00	0.00	12,837,976	8,280,614
High Turnover (Sit Down Restaurant)	966.34	1,203.61	1001.98	1,370,092	903,191
Hotel	1,552.30	1,556.10	1130.50	3,561,565	2,342,143
Library	3,357.03	4,068.47	2227.83	8,324,778	5,372,919
Regional Shopping Center	3,076.18	1,519.09	767.30	5,458,791	3,592,075
Total	19,239.96	13,763.78	9,736.43	47,293,012	31,376,223

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504606	0.059848	0.182048	0.140509	0.043346	0.006835	0.016277	0.034901	0.001966	0.002503	0.004308	0.000568	0.002288

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.6704	5.9494	4.0581	0.0366		0.4632	0.4632		0.4632	0.4632		7,312.9259	7,312.9259	0.1402	0.1341	7,357.4312
NaturalGas Unmitigated	0.7984	7.0863	4.8354	0.0436		0.5516	0.5516		0.5516	0.5516		8,709.9689	8,709.9689	0.1669	0.1597	8,762.9764

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	21747.2	0.2345	2.0042	0.8528	0.0128		0.1620	0.1620		0.1620	0.1620		2,558.4924	2,558.4924	0.0490	0.0469	2,574.0629
Condo/Townhouse High Rise	7499.03	0.0809	0.6911	0.2941	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.2387	882.2387	0.0169	0.0162	887.6079
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	16380.1	0.1767	1.6059	1.3490	9.6400e-003		0.1221	0.1221		0.1221	0.1221		1,927.0726	1,927.0726	0.0369	0.0353	1,938.8005
High Turnover (Sit Down Restaurant)	4851.72	0.0523	0.4757	0.3996	2.8500e-003		0.0362	0.0362		0.0362	0.0362		570.7900	570.7900	0.0109	0.0105	574.2637
Hotel	18911	0.2039	1.8540	1.5574	0.0111		0.1409	0.1409		0.1409	0.1409		2,224.8244	2,224.8244	0.0426	0.0408	2,238.3643
Library	4504.09	0.0486	0.4416	0.3709	2.6500e-003		0.0336	0.0336		0.0336	0.0336		529.8933	529.8933	0.0102	9.7100e-003	533.1182
Regional Shopping Center	141.589	1.5300e-003	0.0139	0.0117	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003		16.6575	16.6575	3.2000e-004	3.1000e-004	16.7589
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.7984**	**7.0863**	**4.8354**	**0.0435**		**0.5516**	**0.5516**		**0.5516**	**0.5516**		**8,709.9689**	**8,709.9689**	**0.1670**	**0.1597**	**8,762.9764**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	18.2887	0.1972	1.6854	0.7172	0.0108		0.1363	0.1363		0.1363	0.1363		2,151.6126	2,151.6126	0.0412	0.0395	2,164.7070
Condo/Townhouse High Rise	6.30645	0.0680	0.5812	0.2473	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.9354	741.9354	0.0142	0.0136	746.4507
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	13.221	0.1426	1.2962	1.0888	7.7800e-003		0.0985	0.0985		0.0985	0.0985		1,555.4103	1,555.4103	0.0298	0.0285	1,564.8763
High Turnover (Sit Down Restaurant)	4.66336	0.0503	0.4572	0.3840	2.7400e-003		0.0348	0.0348		0.0348	0.0348		548.6306	548.6306	0.0105	0.0101	551.9695
Hotel	15.7425	0.1698	1.5434	1.2964	9.2600e-003		0.1173	0.1173		0.1173	0.1173		1,852.0640	1,852.0640	0.0355	0.0340	1,863.3354
Library	3.81639	0.0412	0.3742	0.3143	2.2400e-003		0.0284	0.0284		0.0284	0.0284		448.9867	448.9867	8.6100e-003	8.2300e-003	451.7192
Regional Shopping Center	0.121433	1.3100e-003	0.0119	0.0100	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004		14.2863	14.2863	2.7000e-004	2.6000e-004	14.3732
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.6704**	**5.9494**	**4.0581**	**0.0366**		**0.4632**	**0.4632**		**0.4632**	**0.4632**		**7,312.9259**	**7,312.9259**	**0.1402**	**0.1341**	**7,357.4312**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	54.7687	0.6363	54.1519	2.6800e-003		0.2946	0.2946		0.2946	0.2946	0.0000	93.9478	93.9478	0.0826	0.0000	95.6829
Unmitigated	62.4034	0.7116	61.5781	3.2500e-003		0.3381	0.3381		0.3381	0.3381	0.0000	110.5915	110.5915	0.1087	0.0000	112.8745

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.6027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	49.9102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8905	0.7116	61.5781	3.2500e-003		0.3381	0.3381		0.3381	0.3381		110.5915	110.5915	0.1087		112.8745
Total	**62.4034**	**0.7116**	**61.5781**	**3.2500e-003**		**0.3381**	**0.3381**		**0.3381**	**0.3381**	**0.0000**	**110.5915**	**110.5915**	**0.1087**	**0.0000**	**112.8745**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.4149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	49.9102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4436	0.6363	54.1519	2.6800e-003		0.2946	0.2946		0.2946	0.2946		93.9478	93.9478	0.0826		95.6829
Total	**54.7687**	**0.6363**	**54.1519**	**2.6800e-003**		**0.2946**	**0.2946**		**0.2946**	**0.2946**	**0.0000**	**93.9478**	**93.9478**	**0.0826**	**0.0000**	**95.6829**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Greenhouse Gas Emission Worksheet

N20 Mobile Emissions Long Beach Civic Center Project - Existing

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT: 14,261,076

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	46.0%	0.04	0.0184	0.04	0.0184
Light Truck < 3750 lbs	10.3%	0.05	0.00515	0.06	0.00618
Light Truck 3751-5750 lbs	23.2%	0.05	0.0116	0.06	0.01392
Med Truck 5751-8500 lbs	12.2%	0.12	0.01464	0.2	0.0244
Lite-Heavy Truck 8501-10,000 lbs	2.1%	0.12	0.00252	0.2	0.0042
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.00045	0.125	0.000625
Med-Heavy Truck 14,001-33,000 lbs	1.0%	0.06	0.0006	0.05	0.0005
Heavy-Heavy Truck 33,001-60,000 lbs	2.9%	0.06	0.00174	0.05	0.00145
Other Bus	0.1%	0.06	0.00006	0.05	0.00005
Urban Bus	0.1%	0.06	0.00006	0.05	0.00005
Motorcycle	1.1%	0.09	0.00099	0.01	0.00011
School Bus	0.1%	0.06	0.00006	0.05	0.00005
Motor Home	0.4%	0.09	0.00036	0.125	0.0005
Total	**100.0%**		**0.05663**		**0.070435**

Total Emissions (metric tons) =
Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4	21	GWP
N2O	310	GWP
1 ton (short, US) =	0.90718474	metric ton

Annual Mobile Emissions:

	Total Emissions		Total CO2e units	
N20 Emissions:	1.0045	metric tons N2O	**311.39**	metric tons CO2e
		Project Total:	***311.39 metric tons CO2e***	

References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).
in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
Assume Model year 2000-present, gasoline fueled.

** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

*** From URBEMIS 2007 results for mobile sources

Greenhouse Gas Emission Worksheet

N20 Mobile Emissions Long Beach Civic Center Project

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT: 33,016,588

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	46.0%	0.04	0.0184	0.04	0.0184
Light Truck < 3750 lbs	10.3%	0.05	0.00515	0.06	0.00618
Light Truck 3751-5750 lbs	23.2%	0.05	0.0116	0.06	0.01392
Med Truck 5751-8500 lbs	12.2%	0.12	0.01464	0.2	0.0244
Lite-Heavy Truck 8501-10,000 lbs	2.1%	0.12	0.00252	0.2	0.0042
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.00045	0.125	0.000625
Med-Heavy Truck 14,001-33,000 lbs	1.0%	0.06	0.0006	0.05	0.0005
Heavy-Heavy Truck 33,001-60,000 lbs	2.9%	0.06	0.00174	0.05	0.00145
Other Bus	0.1%	0.06	0.00006	0.05	0.00005
Urban Bus	0.1%	0.06	0.00006	0.05	0.00005
Motorcycle	1.1%	0.09	0.00099	0.01	0.00011
School Bus	0.1%	0.06	0.00006	0.05	0.00005
Motor Home	0.4%	0.09	0.00036	0.125	0.0005
Total	**100.0%**		**0.05663**		**0.070435**

Total Emissions (metric tons) =
Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4	21	GWP
N2O	310	GWP
1 ton (short, US) =	0.90718474	metric ton

Annual Mobile Emissions:

	Total Emissions		Total CO2e units	
N20 Emissions:	2.3255	metric tons N2O	**720.91**	metric tons CO2e
		Project Total:	***720.91 metric tons CO2e***	

References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).
in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
Assume Model year 2000-present, gasoline fueled.

** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

*** From URBEMIS 2007 results for mobile sources

Greenhouse Gas Emission Worksheet
Construction Emissions Marriott

Annual Mobile Emissions:

	Project Total:	***544 metric tons CO2e***
References	**Amortarized (30 years)**	**18.12**
CalEEMod Output		

Appendix C

Cultural Resources Study



City of Long Beach

Civic Center Project

Cultural Resources Study

U.S.G.S. *Long Beach, CA* quadrangle

Prepared for:
City of Long Beach
333 W. Ocean Boulevard, 7th Floor
Long Beach, CA 90802

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October 2015

Keywords: USGS Long Beach, CA quadrangle; Los Angeles County; Intensive pedestrian survey; Civic Center, eligible, CRHR, historic district

Carmack, S., and Hunt, K.
2015 *Cultural Resources Study for the Civic Center Project, Long Beach, Los Angeles County, California*. Rincon Consultants Project No. 15-01260. Report on file at the South Central Coastal Information Center, California State University, Fullerton.

Civic Center Project

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EXECUTIVE SUMMARY

Rincon Consultants was retained by the City of Long Beach Department of Development Services, to conduct a cultural resources study in support of the Long Beach Civic Center Project (Project) Supplemental Environmental Impact Report (SEIR). The 15.87-acre Project Site is located within the existing Long Beach Civic Center, downtown Long Beach, County of Los Angeles, California (Project Site). The City is seeking to redevelop the Project Site for the construction of a new Civic Center. This study has been conducted to assist the City of Long Beach with preparation of an SEIR for the proposed project in accordance with requirements of the California Environmental Quality Act (CEQA). This study includes a cultural resources records search, Native American scoping, an intensive pedestrian survey of the Project Site, evaluation of historic built environment resources, and preparation of this report.

Background research conducted for this study found no previously recorded archaeological resources or resources important to Native Americans within the Project Site. The Native American Heritage Commission (NAHC) search revealed that no Native American cultural resources are listed on the Sacred Lands File within or near the Project Site. One of the NAHC contacts responded to Rincon's coordination letters and included a recommendation for the use of a Native American monitor during any ground-disturbing activities or construction. Rincon's intensive-level cultural resources survey did not identify any archaeological resources within the Project Site.

One previously recorded historical resource was identified within the Project Site: the Old Courthouse building constructed in 1960 by architects Francis J. Heusel and Kenneth S. Wing. The Old Courthouse was previously evaluated and found individually eligible for historic significance on two occasions: in 2006, it was found eligible for local listing as a City of Long Beach Historic Landmark, and in 2008, the property was found eligible for listing in the California Register of Historical Resources (CRHR) under Criteria 3, as an example of Corporate International style architecture. Rincon concurs with this finding and ~~.~~notes it is also eligible for listing in the CRHR under Criteria 1, for its association with the civic development of Long Beach, ~~-~~it~~It~~ is therefore considered a historical resource for the purposes of the California Environmental Quality Act (CEQA).

Rincon identified three additional built environment resources requiring survey and historic evaluation for CRHR eligibility within the Project Site: the City Hall-Library Complex, Lincoln Park, and the Broadway Parking Garage. Although not within the Project Site, the Public Safety Building located to the northwest of the Project Site within the Civic Center was also surveyed and evaluated due to its proximity to the Project Site and association with the remaining Civic Center buildings and structures on the property. Rincon found that the City Hall-Library Complex appears individually eligible for listing in the CRHR as an individual resource under Criteria 1, for its association with the civic development of Long Beach and under ~~on~~ Criteria 3 as a representative example of the Late Modern-style with unique landscape design elements and as the work of a group of local master architects. For the same reasons, the City Hall-Library Complex is also eligible for City of Long Beach Landmark Designation. The City Hall-Library Complex and the Old-Courthouse are considered historical resources for the purposes of CEQA.

The Public Safety Building and Lincoln Park have undergone continuous alterations since their construction, significantly reducing their historic integrity. The Broadway Parking Garage is a simple structure, lacking in design and character, constructed outside of the historic district period of significance. The Public Safety Building, Lincoln Park and the Broadway Parking Garage were found to be ineligible for listing in the CRHR as individual resources.

The project site and the adjacent Public Safety Building were also assessed to determine if the buildings and structures were eligible for listing in the CRHR or at the local level as a potential historic district. While the buildings and structures within the Civic Center are all functionally related and were each designed for municipal purposes, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district.

No archaeological resources were identified within the Project Site. However, the literature review indicates that the Project Site is situated in a geographic location that was ideal for prehistoric human occupation. In addition, construction of the nearby Court House building in 2014 resulted in the identification of archaeological deposits. It is possible that intact archaeological deposits are present at subsurface levels. Rincon recommends that a qualified archaeologist, working under the direction of a qualified principal investigator, be present to spot-check monitor ground-disturbing activities. Mitigation Measures CR MM-1, CR MM-2 and CR MM-3 would reduce potential effects on impacts to unanticipated archaeological resources.

Rincon's assessment of the proposed Project finds that demolition of the City Hall-Library Complex and the Old Courthouse, would result in a significant adverse impact to historical resources. Implementation of mitigation measures CR MM-4 and CR MM-5 would reduce significant direct and cumulative impacts to historical resources scheduled for demolition, but not to the level of less than significant. The demolition of the City Hall-Library Complex and the Courthouse would still remain a significant adverse impact.

1.0 INTRODUCTION

Rincon Consultants (Rincon) was retained by the City of Long Beach to conduct a cultural resources study for the Civic Center Project (Project) in the City of Long Beach, Los Angeles County, California (Figure 1). This study has been conducted to assist the City of Long Beach with preparation of a Supplemental Environmental Impact Report for the proposed project in accordance with requirements of the California Environmental Quality Act (CEQA). This study includes a cultural resources records search, Native American scoping, intensive pedestrian survey of the Project Site, evaluation of cultural resources, and preparation of this report.

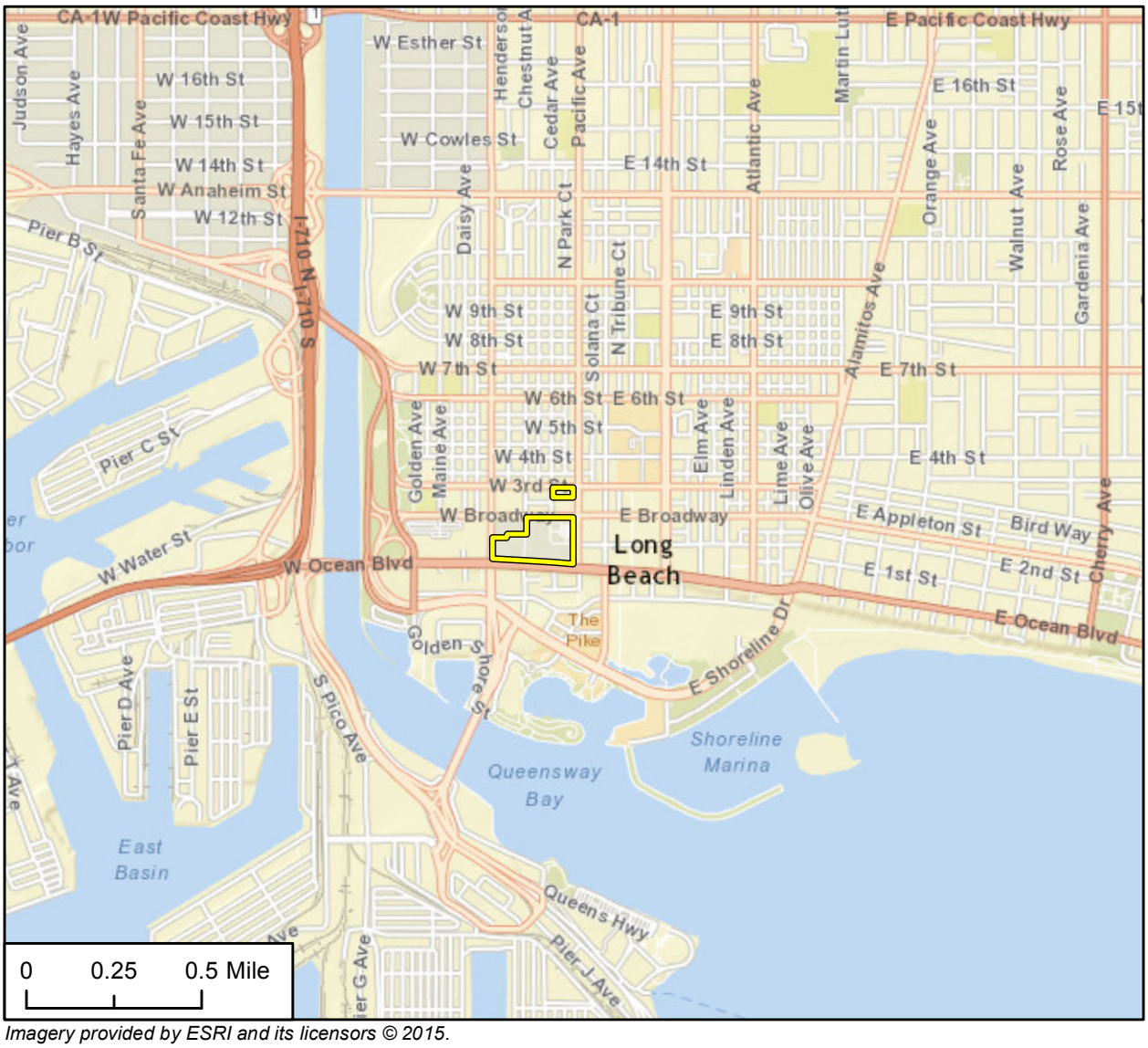
The Project Site is located within downtown Long Beach, Los Angeles County, California. The 15.87-acre Project Site is separated into two discontigous parcels and generally bound by Third Street to the north, Pacific Avenue to the east, Magnolia Avenue to the west and Ocean Boulevard to the south. The northern portion of the Project Site is rectangular parcel that contains a paved parking lot. It is bound by Third Street to the north, Pacific Avenue to the east and Cedar Avenue to the west. The southern boundary is adjacent to a vacant lot. The larger, southern portion of the Project Site is an irregular-shaped parcel bound by Magnolia Avenue and Chestnut Avenue to the west, Broadway to the north, Pacific Avenue to the east, and Ocean Boulevard to the south. Figure 1 shows the project vicinity and Figure 2 shows an aerial photograph of the Project Site. Figure 3 shows the Project Site on the U.S. Geologic Survey (USGS) Long Beach, California 7.5-minute quadrangle.

1.1 PROJECT DESCRIPTION

The design of the proposed Civic Center Project follows the guidance of the Downtown Plan (the "Downtown Plan"), which was adopted in January 2012. A Final Program Environmental Impact Report (FEIR) was prepared for the Downtown Plan in accordance with the California Environmental Quality Act (CEQA) and was certified in January 2012. The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development (Figure 4). In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the Project Site. The Lincoln Park Garage and Broadway Garage would be retained and would be used by city staff and public parking. Both the City Hall and Port buildings would be up to 11 stories in height. See Figure 4 for a site plan of proposed components.

The Project includes the demolition of the former Long Beach Courthouse building. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not certified. The former courthouse would be demolished leaving the building foundation partially deconstructed with stem walls along the north and east property lines left in place. Prior to demolition, equipment and materials would be removed. Hazardous materials, if present, would be removed in accordance with federal and state abatement policies and procedures.

Specific Project components are described in more detail below.

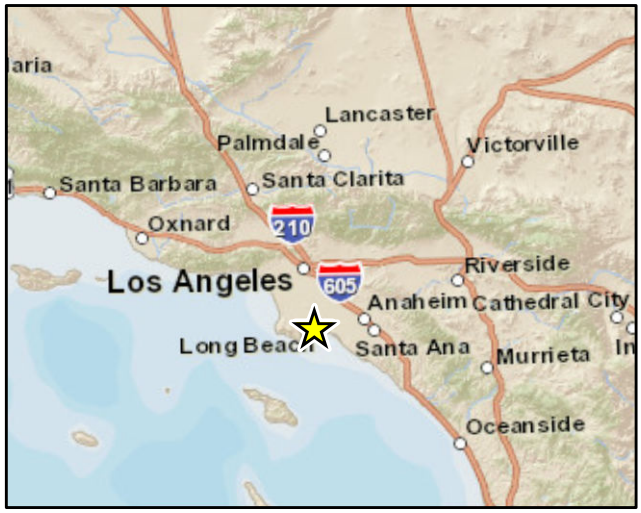


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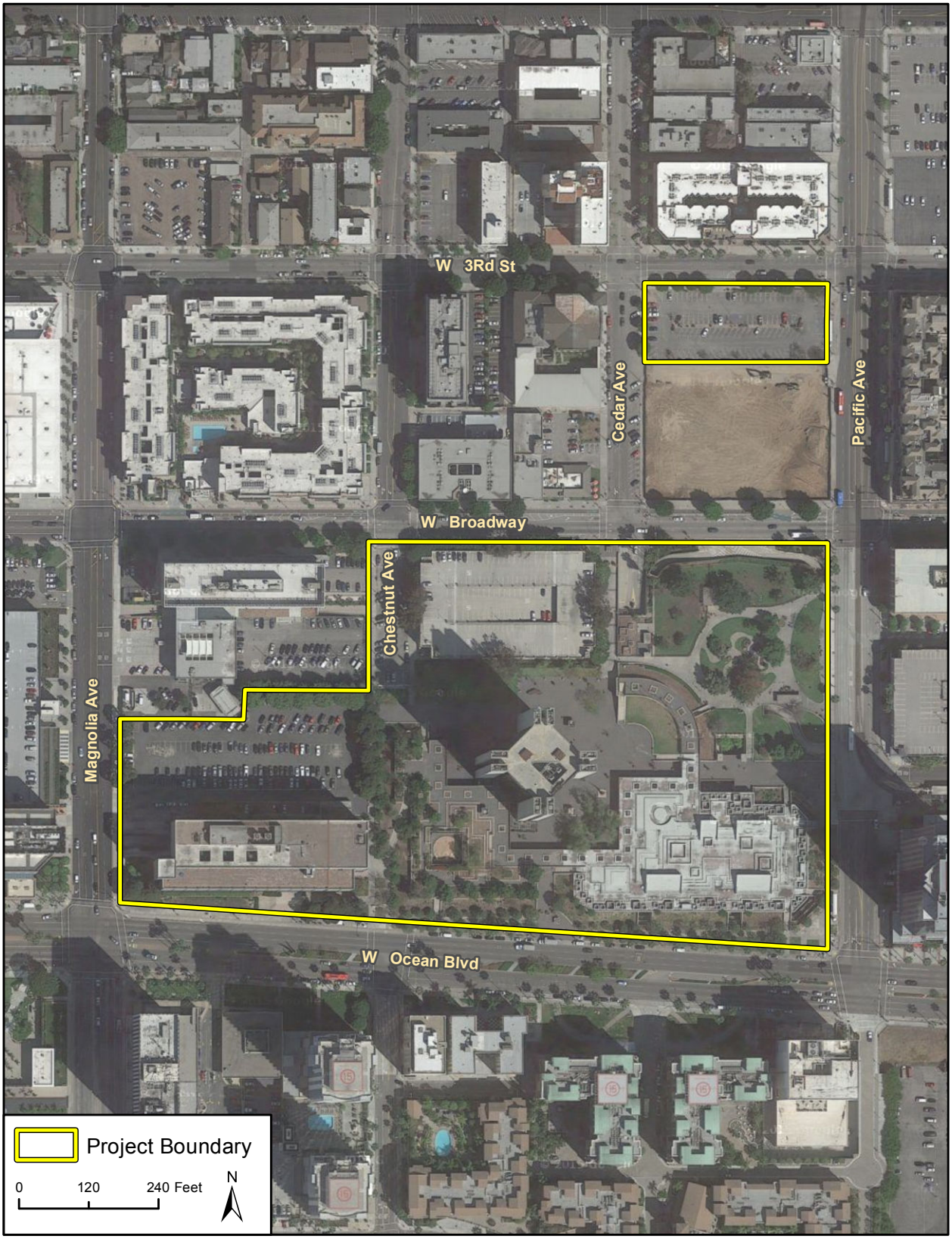
Project Boundary

Project Location



Regional Vicinity

Figure 1

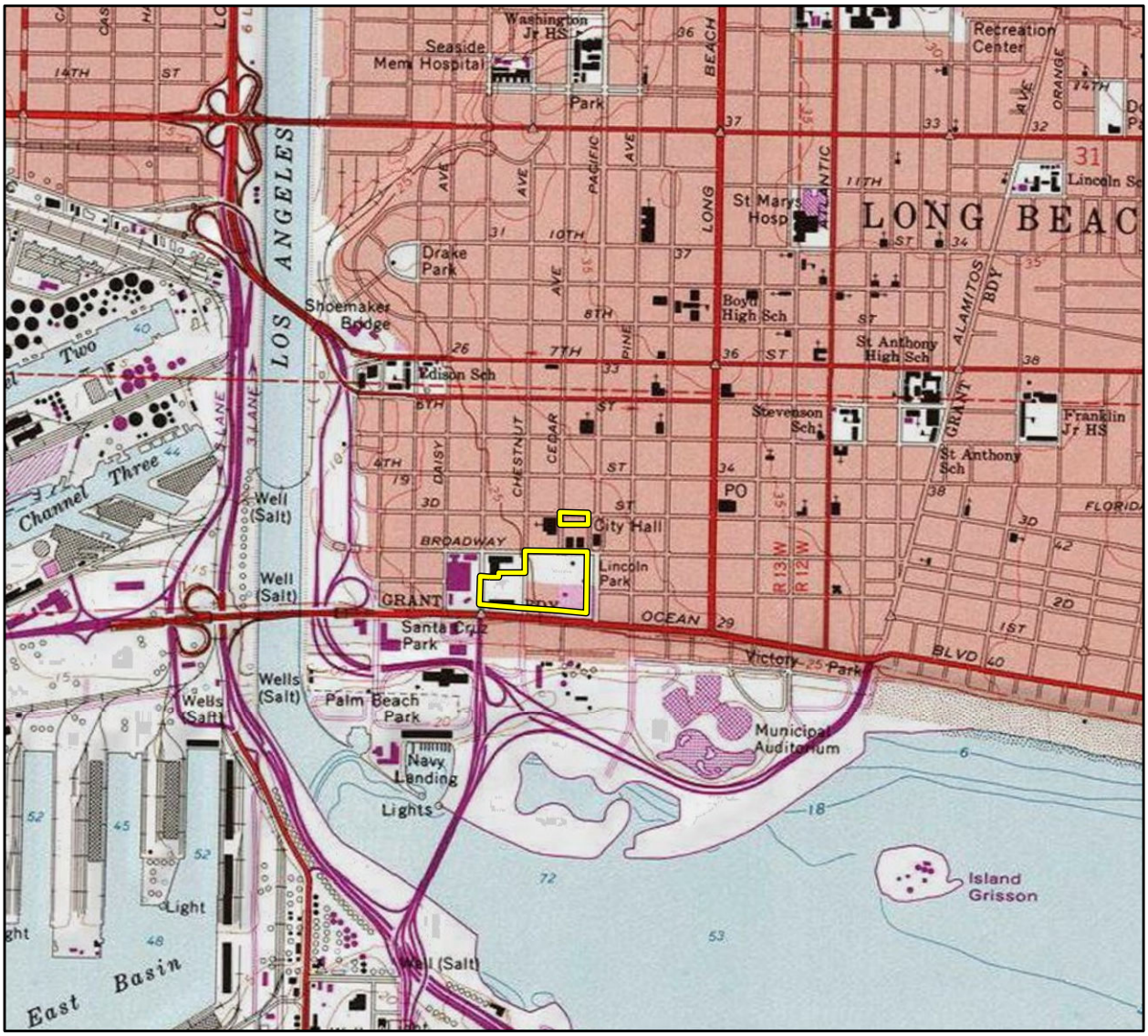


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Project Location

Figure 2

City of Long Beach



Imagery provided by National Geographic Society, ESRI and its licensors © 2015. Long Beach Quadrangle. T5S, R13W, S1. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



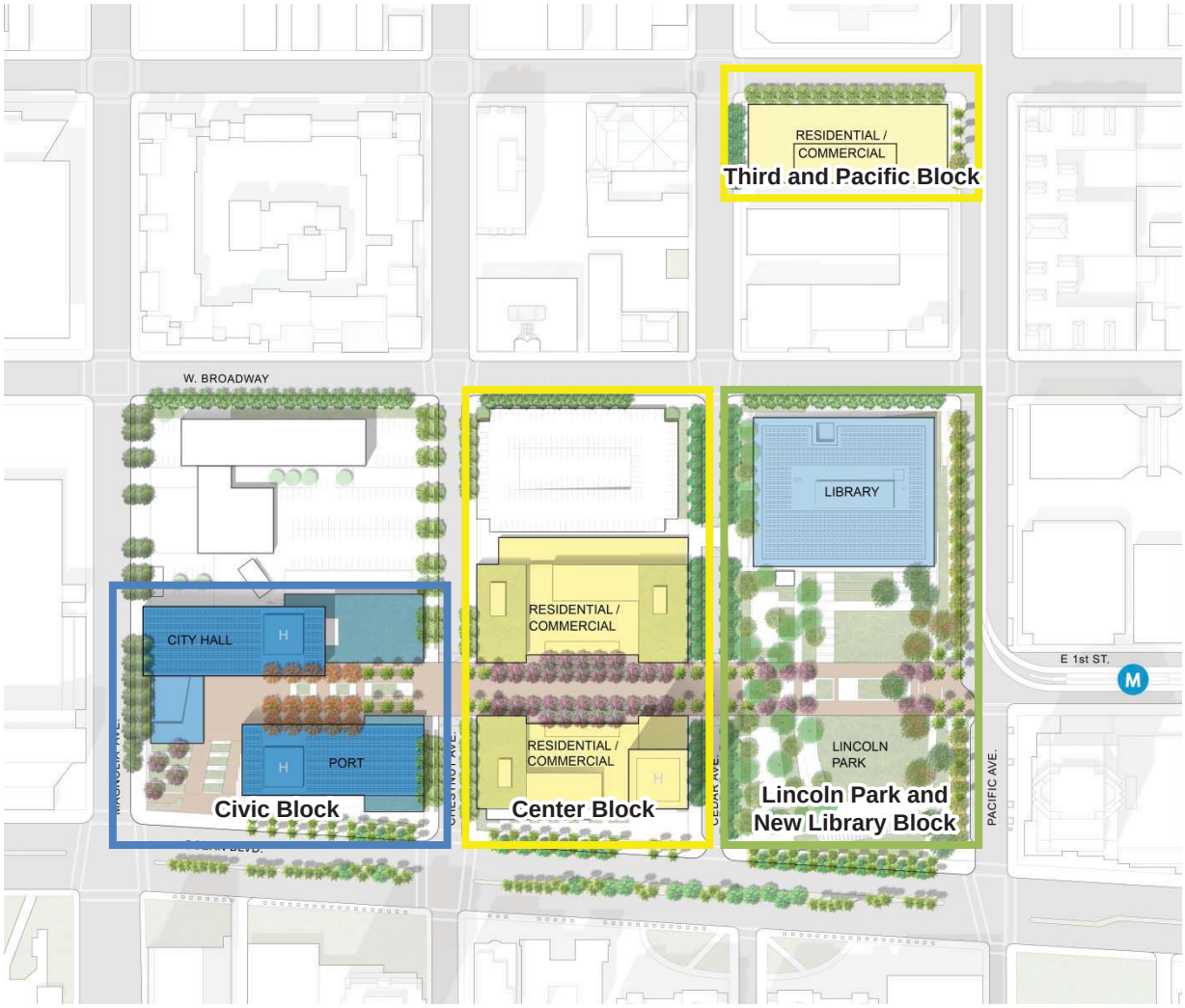
Project Boundary

0 1,000 2,000
Feet
1:24,000

N

Project Location Map

Figure 3



N

Not to Scale

Site Plan

Figure 4

Source: PECP, 2015

Civic Block. The Civic Block consists of three major components:

Port Building. The Port Building would be up to 11 stories, utilizing a concrete frame structure of up to 240,000 gross square feet (gsf). It would be designed to house the administrative functions of the Harbor Department. The space within this building would be primarily office space.

City Hall Building. The City Hall building would be an approximately 270,000 gsf up to 11-story concrete frame structure that includes office space for City staff and elected officials. The structure would also include Council Chambers, meeting rooms, transaction counters and other public serving components. Located around and between the City Hall and Port Building would be a 73,000 square foot (sf) Civic Plaza, which would include hardscape and landscape elements appropriate for larger spontaneous gatherings as well as planned events.

Port and City Hall Foundations. The Port and City Hall buildings would share a common underground parking structure that includes shared infrastructure such as the combined central plant, common points of vehicular access and shared loading dock services. Up to 510 new spaces of underground parking would be available to the Harbor Department and the City's priority parking users, including Americans with Disabilities Act (ADA) accessible parking spaces, in a 2 to 2.5 level below grade structure that includes a below grade loading dock.

Construction on the Civic Block would begin once the former Long Beach Courthouse building occupying the site is removed.

Lincoln Park Block. Improvements to the Lincoln Park Block consist of two primary components:

Main Library. A new two-story Main Library of up to 92,000 gsf would be constructed utilizing a wood frame structure built on top of the existing Lincoln Parking Garage roof deck. In addition to the aboveground component, service, support and archive functions would be constructed on the P1 level of the Lincoln Parking Garage. Lincoln Parking Garage renovations would include enhancements to the existing parking structure necessary to support the Library and would allow access to the garage using the existing Pacific and Cedar Street access ramps. These temporary ramps would be modified and replaced with a new ramp system as part of the Center Block work described below.

Lincoln Park. After occupation of the new Library, the existing Main Library would be demolished. The site would be redeveloped into a new Lincoln Park. The deeded 4.8 acres of Lincoln Park would remain in its current location. The new Main Library would be located in the park under a conditional use permit. The planned park area, not including the library footprint, would be approximately four acres.

Lincoln Park would include California friendly landscaping and hardscape treatment to support planned programs and events. The planned park amenities include a multi-purpose event lawn, a dog park, and a children's play area. A new public washroom would also be added.

*History and Cultural Loop. History and Cultural Loops***.** The project includes the development of History and Cultural Loops, a walking tour that would include historical, cultural, and educational points of interest throughout the project site. Points of interest would include the Carillon Clock Tower and 1915 Lincoln Park statue, as well as the Original Carnegie Library Cornerstone, Marlin Sculpture, time capsules (including the time capsule dedicated in 1976 at the Civic Center), and additional historical and cultural elements. Temporary art exhibits and historical timeline markers would also be present within the walking loops.

Third & Pacific Block. The commercial parcel at Third Street and Pacific Avenue is currently an approximately 0.9-acre surface parking lot. The project would include construction of a seven story, multi-family residential complex on this lot. The structure would have up to 200 units and be up to 235,000 gsf. The proposed building is a five to seven-story structure of a combination of concrete and wood frame. The complex would also include a parking structure with up to two levels below grade and up to three levels above ground partially wrapped by the residential units. Up to 250 parking stalls would be included in this structure and the building would be serviced by at grade loading facilities.

Center Block. After the New City Hall is operational, the existing City Hall structure would be demolished and a mixed use project would be developed in its place. The Center Block commercial development would include up to 580 residential units totaling up to 650,000 gsf and up to 40,000 gsf of retail. A 200 room hotel may also be included as part of the project. An underground parking garage would service this parcel with up to 725 new parking spaces and the two buildings comprising the new development would be serviced by at-grade loading facilities. In the event of a hotel use within the Ocean Boulevard parcel, a porte-cochere would be provided at the corner of Ocean Boulevard and Cedar Street.

Site Infrastructure. The project would require site infrastructure improvements to service the buildings. The primary infrastructure components include:

Street Extensions. Chestnut Street would be extended to connect Broadway to Ocean Boulevard as part of the Civic Block work discussed above. Cedar Street would be extended to connect Broadway to Ocean as part of the Center Block work discussed above. A section of First Street with non-traditional paving and a curbless design would be developed as a privately owned and operated street between Chestnut and Cedar Streets as part of the Center Block development. Street improvements would include new streetscape treatments and traffic signalization, cross walks, and on-street parking where feasible.

Utilities. Existing utilities that are not required to remain would be cut, capped and removed as necessary for each phase of construction. Utilities that need to remain in service, but that conflict with elements of the Downtown Plan would be re-located in coordination with appropriate utility provider.

Landscaping. Landscaping for the site was designed at a Downtown Plan level to bring landscape consistency to the entire project and to ensure the project meets the City's requirements for streetscape improvements. Specific landscape and hardscape plans would be included with each of the major work components outlined above.

1.2 PERSONNEL

Rincon Architectural Historian Shannon Carmack, B.A., conducted the Native American scoping, the pedestrian survey and served as primary author of this report. Rincon Cultural Resources Program Manager Kevin Hunt, B.A., assisted in preparation of this report. GIS Analyst Kevin Howen, B.A., prepared the figures found in this report. Rincon Vice President Duane Vander Pluym, D. Env., reviewed this report for quality control.

2.0 REGULATORY SETTING

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural resources, which must be adhered to before and during implementation of the proposed Long Beach Courthouse Redevelopment Project.

2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2) Is associated with the lives of persons important in our past;
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4) Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and [c]).

PRC, Section 21083.2(g) defines a *unique archaeological resource* as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or

3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

2.1.1 50 Year Threshold for the CRHR

According to CEQA, all buildings constructed over 50 years ago and that possess architectural or historical significance may be considered potential historic resources. Most resources must meet the 50-year threshold for historic significance; however, resources less than 50 years in age may be eligible for listing on the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance.

2.2 CITY OF LONG BEACH

2.2.1 Historic Context Statement

In July 2009, the City completed a citywide Historic Context Statement to provide a framework for the investigation of the City's historic resources; serve as a tool for preservation planning; and provide historic preservation specialists, planners, and the public with guidance in assessing the significance of Long Beach's built environment. The Historic Context Statement was also designed to assist City staff to evaluate proposed projects that may have a significant impact on cultural resources as they relate to CEQA.

The Historic Context Statement uses the Multiple Property Submission (MPS) approach to historic survey and registration efforts developed by the National Park Service. The MPS approach facilitates the evaluation of individual properties by comparing them with resources that share similar physical characteristics and historical associations. By evaluating groups of related properties, the MPS approach streamlines the identification process and establishes a consistent framework for assessing potential historic resources.

The Historic Context Statement spans Long Beach history from prehistory through development of the modern city and concludes in 1965. The Historic Context Statement addresses six specific objectives (Sapphos Environmental 2009):

- Identification of significant themes in Long Beach history and architecture;
- Definition and description of property types that represent the contexts and provision of known examples of resources that illustrate and explain the property types;
- Description of architectural styles and character-defining features representative of development in Long Beach;
- Identification of architects and builders known to have influenced the physical character of Long Beach;
- Listing of known important buildings constructed in Long Beach;
- Establishment of registration requirements for Long Beach's historic resources.

2.2.2 Historic Preservation Element

The City of Long Beach Historic Preservation Element was adopted by the City Council on June 22, 2010, to create a proactive, focused plan for use by residents, local preservation advocates, City staff, the Cultural Heritage Commission, Planning Commission, and City Council. The Historic Preservation Element outlines a vision for future historic preservation efforts and the actions that need to be taken to achieve them. Development of the Historic Preservation Element was coordinated with the City's 2030 General Plan update.

To ensure that the rich history of Long Beach is preserved through the identification, protection, and celebration of historic resources highly valued for their role in the City's environment, urban design, economic prosperity, and contributions to the quality of life in City neighborhoods, the Historic Preservation Element establishes five main goals, each with corresponding policies and implementation measures that affirm the City''s commitment to historic preservation:

GOAL 1: Maintain and support a comprehensive, citywide historic preservation program to identify and protect Long Beach's historic, cultural, and archaeological resources.

GOAL 2: Protect historic resources from demolition and inappropriate alterations through the use of the City's regulatory framework, technical assistance, and incentives.

GOAL 3: Maintain and expand the inventory of historic resources in Long Beach.

GOAL 4: Increase public awareness and appreciation of the City's history and historic, cultural, and archaeological resources.

GOAL 5: Integrate historic preservation policies into the City's community development, economic development, and sustainable-city strategies.

Additional information on the corresponding policies and implementation measures adopted by the City for each of the five historic preservation goals can be found in the Historic Preservation Element of the General Plan (Historic Resources Group 2010).

2.2.3 Local Designation

Since 1988 the City of Long Beach has had an active program to recognize buildings and neighborhoods that have special architectural or historical value. Chapter 2.63.060 of the City of Long Beach Municipal Code established the procedures for the designation of individual landmarks and landmark districts, and designated historic landmarks are listed in Chapter 16.52 of the Municipal Code. As of May 2015, 130 landmarks and 17 historic districts have been designated.

A resource must meet one or more of the following criteria of significance to be designated as a City of Long Beach landmark or landmark district:

Criterion A: It possesses a significant character, interest, or value attributable to the development, heritage, or cultural characteristics of the city, the Southern California region, the state or the nation.

Criterion B: It is the site of an historic event with a significant place in history.

Criterion C: It is associated with the life of a person or persons significant to the community, city, region or nation.

Criterion D: It portrays the environment in an era of history characterized by a distinctive architectural style.

Criterion E: It embodies those distinguishing characteristics of an architectural type or engineering specimen.

Criterion F: It is the work of a person or persons whose work has significantly influenced the development of the city or the Southern California region.

Criterion G: It contains elements of design, detail, materials, or craftsmanship that represent a significant innovation.

Criterion H It is a part of or related to a distinctive area and should be developed or preserved according to a specific historical, cultural or architectural motif.

Criterion I: It represents an established and familiar visual feature of a neighborhood or community due to its unique location or specific distinguishing characteristic.

Criterion J: It is, or has been, a valuable information source important to the prehistory or history of the city, the Southern California region, or the state.

Criterion K: It is one of the few remaining examples in the city, region, state, or nation possessing distinguishing characteristics of an architectural or historical type.

3.0 SETTING

The Project Site is situated within a highly urbanized section of the City of Long Beach. The Project Site primarily paved and covered by buildings and landscaping. The Project is located approximately 0.5 mile of the terminus of the Los Angeles River into the Pacific Ocean. Elevation within the Project Site is approximately 25 feet (8 meters) above mean sea level (AMSL).

3.1 PREHISTORY

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of southern California (c.f., Jones and Klar 2007; Moratto 1984). Wallace (1955, 1978) devised a prehistoric chronology for the southern California coastal region based on early studies and focused on data synthesis that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Though initially lacking the chronological precision of absolute dates (Moratto 1984), Wallace's (1955) synthesis has been modified and improved using thousands of radiocarbon dates obtained by southern California researchers over recent decades (Byrd and Raab 2007; Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The prehistoric chronological sequence for southern California presented below is a composite based on Wallace (1955) and Warren (1968) as well as later studies, including Jones and Klar (2007).

3.1.1 Early Man Horizon (ca. 10,000 – 6,000 B.C.)

Numerous pre-8000 B.C. sites have been identified along the mainland coast and Channel Islands of southern California (c.f., Erlandson 1991; Johnson et al. 2002; Jones and Klar 2007; Moratto 1984; Rick et al. 2001:609). The Arlington Springs site on Santa Rosa Island produced human femurs dated to approximately 13,000 years ago (Arnold et al. 2004; Johnson et al. 2002). On nearby San Miguel Island, human occupation at Daisy Cave (SMI-261) has been dated to nearly 13,000 years ago and included basketry greater than 12,000 years old, the earliest on the Pacific Coast (Arnold et al. 2004).

Although few Clovis or Folsom style fluted points have been found in southern California (e.g., Dillon 2002; Erlandson et al. 1987), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (e.g., Jones et al. 2002) and on inland Pleistocene lakeshores (Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6000 B.C. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

3.1.2 Milling Stone Horizon (6000–3000 B.C.)

Wallace (1955:219) defined the Milling Stone Horizon as "marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns." The dominance of such artifact types indicate a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources were consumed including

small and large terrestrial mammals, sea mammals, birds, shellfish, fishes, and other littoral and estuarine species, yucca, agave, and seeds and other plant products (Kowta 1969; Reinman 1964). Variability in artifact collections over time and from the coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007). The Topanga Canyon site in the Santa Monica Mountains is considered one of the definitive Milling Stone Horizon sites within Los Angeles County.

Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone and in addition to ground stone tools such as manos and metates, chopping, scraping, and cutting tools are very common. Kowta (1969) attributes the presence of numerous scraper-plane tools in Milling Stone Horizon collections to the processing of agave or yucca for food or fiber. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968).

Mortuary practices observed at Milling Stone Horizon sites include extended and loosely flexed burials. Flexed burials oriented north were common in Orange and San Diego counties, with reburials common in Los Angeles County (Wallace 1955, 1978; Warren 1968).

3.1.3 Intermediate Horizon (3000 B.C. – A.D. 500)

Wallace's Intermediate Horizon dates from approximately 3000 B.C.-A.D. 500 and is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods. During the Intermediate Horizon, a noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish, land mammal, and sea mammal remains along the coast. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (e.g., Glassow et al. 1988; True 1993). Mortuary practices during the Intermediate typically included fully flexed burials oriented toward the north or west (Warren 1968).

3.1.4 Late Prehistoric Horizon (A.D. 500–Historic Contact)

During Wallace's (1955, 1978) Late Prehistoric Horizon the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon. More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955).

Warren (1968) attributes this dramatic change in material culture, burial practices, and subsistence focus to the westward migration of desert people he called the Takic, or Numic, Tradition in Los Angeles, Orange, and western Riverside counties. This Takic Tradition was formerly referred to as the "Shoshonean wedge" (Warren 1968), but this nomenclature is no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups (Heizer 1978, Shipley 1978). Modern Gabrielino/Tongva in Los Angeles County are generally considered by archaeologists to be descendants of these prehistoric Uto-Aztecan, Takic-speaking populations that settled along the California coast during the Late Prehistoric Horizon.

3.2 ETHNOGRAPHY

The Project Site is located within the traditional territory of the Native American group known as the Gabrielino. The name Gabrielino was applied by the Spanish to those natives that were attached to Mission San Gabriel (Bean and Smith 1978). Today, most contemporary Gabrielino prefer to identify themselves as Tongva, a term that will be used throughout the remainder of this section (King 1994).

Tongva territory included the Los Angeles basin and southern Channel Islands as well as the coast from Aliso Creek in the south to Topanga Creek in the north. Their territory encompassed several biotic zones, including Coastal Marsh, Coastal Strand, Prairie, Chaparral, Oak Woodland, and Pine Forest (Bean and Smith 1978).

The Tongva language belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin region (Mithun 2004). This language family includes dialects spoken by the nearby Juaneño and Luiseño but is considerably different from those of the Chumash people living to the north and the Diegueño (including Ipai, Tipai, and Kumeyaay) people living to the south.

Tongva society was organized along patrilineal non-localized clans, a common Takic pattern. Each clan had a ceremonial leader and contained several lineages. The Tongva established large permanent villages and smaller satellite camps throughout their territory. Recent ethnohistoric work (O'Neil 2002) suggests a total tribal population of nearly 10,000, considerably more than earlier estimates of around 5,000 people (Bean and Smith 1978).

Tongva subsistence was oriented around acorns supplemented by the roots, leaves, seeds, and fruits of a wide variety of plants. Meat sources included large and small mammals, freshwater and saltwater fish, shellfish, birds, reptiles, and insects. (Bean and Smith 1978, Langenwalter et al. 2001; Kroeber 1925; McCawley 1996). The Tongva employed a wide variety of tools and implements to gather and hunt food. The digging stick, used to extract roots and tubers, was frequently noted by early European explorers (Rawls 1984). Other tools included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Like the Chumash, the Tongva made oceangoing plank canoes (known as a ti'at) capable of holding six to 14 people and used for fishing, travel, and trade between the mainland and the Channel Islands. Tule reed canoes were employed for near-shore fishing (Blackburn 1963; McCawley 1996).

Chinigchinich, the last in a series of heroic mythological figures, was central to Tongva religious life at the time of Spanish contact (Kroeber 1925). The belief in Chinigchinich was spreading south among other Takic-speaking groups at the same time the Spanish were establishing Christian missions. Elements of Chinigchinich beliefs suggest it was a syncretic mixture of Christianity and native religious practices (McCawley 1996).

Prior to European contact, deceased Tongva were either buried or cremated, with burial more common on the Channel Islands and the adjacent mainland coast and cremation on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). After pressure from Spanish missionaries, cremation essentially ceased during the post-contact period (McCawley 1996). Major Tongva villages located within Long Beach include Tevaaxa'anga, an inland village located near the Los Angeles River, and Ahwaanga and Povuu'nga which were coastal villages (Tongvapeople.com 2014).

3.3 HISTORY

The post-contact history of California is generally divided into three time spans: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each of these periods is briefly described below.

3.3.1 Spanish Period (1769–1822)

Spanish exploration of California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968, Rolle 2003). In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in what was then known as Alta (upper) California at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. It was during this time that initial Spanish settlement of the project vicinity began.

On September 8, 1771, Fathers Pedro Cambón and Angel Somera established the Mission San Gabriel de Arcángel near the present-day city of Montebello (Johnson et al. 1972). In 1775, the mission was moved to its current location in the City of San Gabriel due to better agricultural lands. The establishment of Mission San Gabriel marked the first sustained European occupation of the Los Angeles Basin. The mission, despite a slow start partially due to misconduct by Spanish soldiers, eventually became so prosperous it was known as "The Queen of the Missions" (Johnson et al. 1972).

In addition to Mission San Gabriel, the Spanish also established a pueblo (town) in the Los Angeles Basin known as El Pueblo de la Reina de los Angeles de la Porciúncula in 1781. This pueblo was one of only three pueblos established in Alta California and eventually became the City of Los Angeles (Robinson 1979). It was also during this period that the Spanish crown began to deed ranchos to prominent citizens and soldiers. To manage and expand their herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population (Engelhardt 1927a). Native populations were also affected by the missions who were responsible for their administration as well as converting the population to Christianity

(Engelhardt 1927b). The increased European presence during this period led to the spread of disease which devastated the native populations (McCawley 1996). In 1784, the Spanish King Carlos III granted Manuel Nieto the Rancho Los Nietos land grant. This grant was one of the first and largest of the land grants and encompassed much of present day Los Angeles and Orange counties (Shumway 2007).

3.3.2 Mexican Period (1822–1848)

The Mexican Period commenced when news of the success of the Mexican War of Independence (1810-1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. This Act federalized mission lands and enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). In 1834, Governor Jose Figueroa declared the Rancho Los Nietos grant to be partitioned into six smaller ranchos. The Long Beach area was divided into two land grants, Rancho Los Cerritos and Rancho Los Alamitos, the boundary for these two grants was Signal Hill (Stewart 2013). The Rancho Los Cerritos grant was located on the western side of the boundary and included the current Project Site. Later in 1834, Jonathon Temple purchased the Los Cerritos land grant.

During this time, the population of the pueblo of Los Angeles nearly doubled, rising from 650 to 1,250 between 1822 and 1845 (Weber 1982). In 1842, gold was discovered by Francisco Lopez in Placerita Canyon on a rancho associated with Mission San Fernando (Guinn 1977, Workman 1935).

The Mexican Period for the Los Angeles region ended in early January 1847. Mexican forces fought and lost to combined U.S. Army and Navy forces in the Battle of the San Gabriel River on January 8 and in the Battle of La Mesa on January 9 (Nevin 1978). On January 10, leaders of the pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander of California Andrés Pico surrendered all of Alta California to U.S. Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga (Nevin 1978).

3.3.3 American Period (1848–Present)

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for conquered territory including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of the Los Angeles region increased dramatically in the early American Period. Los Angeles County was established on February 18, 1850, one of 27 counties established in the months prior to California becoming the 31st state.

The discovery of gold in northern California in 1848 led to the California Gold Rush, despite the aforementioned 1842 discovery in Placerita Canyon (Guinn 1977, Workman 1935). By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to immigrate to the state, particularly after the completion of the First Transcontinental Railroad in

1869. The U.S. Congress in 1854 agreed to let San Pedro become an official port of entry. By the 1880s, the railroads had established networks from the port and throughout the county, resulting in fast and affordable shipment of goods, as well as a means to transport new residents to the booming region (Dumke 1944). New residents included many health-seekers drawn to the area by the fabled climate in the 1870s–1880s.

Many ranchos in Los Angeles County were sold or otherwise acquired by Americans in the mid-1800s, and most were subdivided into agricultural parcels or towns. Nonetheless, ranching retained its importance and, by the late 1860s, Los Angeles was one of the top dairy production centers in the West (Rolle 2003). By 1876, the county had a population of 30,000 (Dumke 1944). Ranching was supplanted by farming and urban professions during the late nineteenth century due to droughts and increased population growth.

3.3.4 Long Beach

European settlement of what was later to become the City of Long Beach began as early as 1784 as part of a land grant given to Manuel Nieto that became Rancho Los Nietos (Shumway 2007). After Nieto's death in 1804 much of the land grant remained intact and was managed by his heirs. In 1834, however the Governor declared Rancho Los Nietos should be divided into six smaller ranchos. Two of these ranchos form the majority of what is now the City of Long Beach. The current Project Site is within former Rancho Los Cerritos lands, which was inherited by Nieto's daughter Manuela Cota. Following Manuela's death, Rancho Los Cerritos was sold to Jonathan Temple, a Los Angeles entrepreneur (City of Long Beach 2010).

During the 1860s, a massive drought decimated much of the cattle ranching in the Long Beach area causing several ranches to fall into debt (Stewart 2013). In 1866, Temple sold Rancho Los Cerritos to Thomas and Benjamin Flint and Lewellyn Bixby. The Bixby family bought Rancho Los Alamitos, combining the two and forming the Bixby Ranch. Beginning in the 1870s, Flint, Bixby, and Co., began selling the land. By 1884, Long Beach, then known as both the American Colony and Wilmore City, covered the southwestern portion of Rancho Los Cerritos. The failed Wilmore City development was purchased in 1884 by Pomeroy and Mills, a San Francisco real-estate company, and the community began to grow under its new name of Long Beach. Expansion of transportation networks sparked further growth and in 1888 Long Beach was incorporated as a city with a population of 800. Long Beach became a major producer of oil beginning in the 1920s with the drilling of the Signal Hill Oil Field. By 1950 the field produced more than 750 million barrels of crude, averaging more than 500,000 barrels of oil per acre, making it one of the richest oil fields in terms of production per acre in the world (Franks and Lambert 1985). Long Beach also became a tourist destination, transportation center, and shipping industry hub with the construction of the wharf and multiple piers. Today, Long Beach has the busiest port on the West Coast, just east of the former port of San Pedro (now the Port of Los Angeles) and is one of the most populous cities in the state of California (Historic Resources Group 2010).

3.3.5 Civic Center History

The following narrative is an excerpt from the *Cultural Resources Impacts Report, Long Beach Courthouse Redevelopment Project, City of Long Beach, County of Los Angeles* (Carmack, et. al, 2014).

> The primary municipal services of Long Beach have been continuously located in the general vicinity of the project area dating to the establishment of the city in 1888. The first bimonthly meetings of city trustees were conducted in a room at the Tower Building, located at the intersection of Ocean Park Boulevard (present-day West Ocean Boulevard) and Pacific Avenue (Sapphos Environmental 2009). Coinciding with the growth of the city, plans for a dedicated City Hall building were developed in 1897. Situated on Pacific Avenue between Third Street and Second Street (present-day Broadway), the new building was designed by architect Henry F. Starbuck in a neoclassical style and dedicated in 1899. A library was initially located on the second floor of the city hall building, however due to increased demand, City leaders soon worked to secure funds for a new facility through philanthropist Andrew Carnegie. Completed in 1909, the Neoclassical-style building was designed by architect Franklin Burnham and constructed at Pacific Park (present-day Lincoln Park) at the southwest corner of Pacific Avenue and West Broadway (Ivers 2008).
>
> By 1920, the City's municipal functions had once again outgrown the offices at City Hall despite multiple expansions to the original building. City officials called for the development of a new, larger building and commissioned the "dean" of Long Beach architects, W. Horace Austin and engineer Harvey Lochridge to head the project. Completed in 1922, the eight-story classical-style building was located at the site of the former city hall (which was moved 125 feet to the west and used for offices for the Public Utilities department) and was large enough to house not only all of the city departments, but also offices for the police and county court, and a jail (Ivers 2009; Sapphos Environmental 2009). City Hall and the library were damaged during the 1933 Long Beach Earthquake and both were subsequently remodeled, with City Hall receiving Art Deco details and the library given a more simplified style with fluted piers (Ivers 2009). The construction of the adjacent Municipal Utilities Building in 1931-32 and the Veterans Memorial Building in 1936-37, resulted in the creation of a formal Civic Center, which was centered on Lincoln Park and incorporated City Hall and the library.
>
> As the population and size of Long Beach grew in the years after World War II, the City Council adopted the "Civic Center Addition" plan in 1953 to update many of the city's aging municipal facilities. The plan sought to expand the Civic Center area west to North Daisy Avenue and north as far as Fourth Street. It also established sites for the Public Safety Building and the County Courts Building, both of which began construction in 1958 (City of Long Beach Department of City Planning 1958). That same year, a master plan was completed that further outlined future development in the Civic Center, including a new City Hall, Library, Federal Building, and other various municipal buildings (City of Long Beach Department of City Planning 1958). Although the County Courts Building

and the Public Safety Building were completed in 1960, development at the Civic Center did not progress during the 1960s; most likely due to the economic downturn of the downtown area and the financial aftereffects of the subsidence restoration program.

In 1973, city officials commissioned a consortium of local firms named Allied Architects to address the need for expanded and updated facilities (Ivers 2009). The result was the present-day City Hall and Library, which were both designed in a Late Modern style and completed in 1977. Innovative for their time, the new City Hall incorporated all of the public departments into a single 15-story building, while the library was set one story below grade with rooftop planters and grass berms at grade level. The Civic Center master plan was further realized with the 1983 construction of the California Veterans Memorial State Office Building immediately north of Lincoln Park.

A number of changes to the Civic Center have occurred since construction ended in the 1980s. In the early 1990s, the California Veterans Memorial State Office Building was vacated, repurposed as an office complex and demolished in 2014. The Public Safety Building underwent a seismic rehabilitation and remodel which included significant modifications to the first floor entrances. The Old Courthouse was vacated in 2013 with its function transferred to the recently completed George Deukmejian Courthouse. The Old Courthouse has remained vacant.

4.0 BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

A search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton was initiated on January 31, 2014, as part of the Long Beach Courthouse Redevelopment study. The search was conducted to identify all previously recorded cultural resources and previously conducted cultural resources work within a 0.5-mile radius around the Project Site. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR) and State Historic Resources Inventory (HRI), the California Points of Historical Interest list, the California Historical Landmarks list, and the Archaeological Determinations of Eligibility list. The records search also included a review of all available historic USGS 7.5- and 15-minute quadrangle maps.

4.1.1 Previously Conducted Cultural Resource Studies

Eleven cultural resources studies have been previously conducted within 0.25 mile of the Project Site (Table 1). Of these, two were conducted within at least a portion of the Project Site (LA-02399 and LA-10527). A brief summary of these two studies is provided in the paragraphs that follow. An additional 14 unmapped studies were also conducted within the Long Beach quadrangle. Most of these studies are overview reports encompassing very large areas, and all appear to be located outside of the Project Site. Appendix A provides a complete bibliography from the SCCIC, including the unmapped studies that are not included in Table 1.

LA-02399 and LA-10527. In 1978, Lois J. Weinman and E. Gary Stickel prepared Los Angeles-Long Beach Harbor Areas Cultural Resource Survey. The report is an overview of 27,103 acres, of which 13,484 are sub-marine, and 13,619 are above sea level. The study boundary extends from Point Fermin to Seal Beach Boulevard, along Seal Beach to Pacific Coast Highway, northeast to Anaheim Street to the Harbor Freeway, south on the Harbor Freeway to Gaffey Street, south on Gaffey to Hamilton Avenue, west on Hamilton to Alma Street, and west to the ocean. Only resources relating to harbor history were investigated. Sixty-nine cultural resources were identified during the survey including 18 prehistoric sites, 21 shipwrecks, and 30 historical resources. The purpose of the study was to locate, identify, and where applicable, nominate historic resources for inclusion in the NRHP. The study recommended that further research be conducted and that more nominations be made.

Table 1
Previous Studies Within 0.25-Mile Radius of Project Site

SCCIC Report No.	Author	Year	Study	Proximity to Project Site
LA-02399	Weinman, L., and E. Stickel	1978	Los Angeles-Long Beach Harbor Areas Cultural Resource Survey	**Within**
LA-05403	Moffatt, N.	1994	Environmental Impact Report Queensway Bay Master Plan State Clearinghouse No. 94081033 EIR No. E-13-94	Outside
LA-05886	Duke, C.	2002	Cultural Resource Assessment AT&T Wireless Services Facility No. 05084a Los Angeles County, California	Outside
LA-08485	Tibbet, C. and T. Jacquemain	2005	Historic-Period Building Survey: Downtown and Central Long Beach Redevelopment Plans Master EIR Project	Outside
LA-09129	Strudwick, I.	2007	Cultural Resources Analysis for the Shoemaker Street Bridge Project in the City of Long Beach, Los Angeles County, California	Outside
LA-10404	Mason, R.	2001	Cultural Resources Record Search and Literature Review Report for an AT&T Telecommunications Facility: Number D189 Ocean Center Building in the City of Long Beach, Los Angeles, California	Outside
LA-10527	Weinman, L.	1978	Los Angeles-Long Beach Harbor Areas Regional Cultural History, Los Angeles County, California	**Within**
LA-10587	Hatoff, B.	2010	Verizon Cellular Communications Tower Site-LTE Long Beach Convention Center, 110 W. Ocean Blvd., Long Beach, CA 90802	Outside
LA-11466	Supernowicz, D.	2011	Cultural Resources Study of the AT&T Mobility Site No. LAD189, 101 Seaside Way, Long Beach, Los Angeles County, California 90802	Outside
LA-11993	O'Neill, L.	2012	Finding of No Adverse Effect for the Proposed Interstate 710 Project Between Ocean Boulevard and the State Route 60 Interchange	Outside
LA-12329	Gibson, H., L. Kry, and A. Amaral	2013	Archaeological Assessment for the New Long Beach Courthouse Project, City of Long Beach, California	Outside

Source: South Central Coastal Information Center, 2014

4.1.2 Previously Recorded Cultural Resources

The SCCIC records search indicates that seven cultural resources have been previously recorded and mapped within 0.25 mile (0.4km) of the Project Site (Table 2). One resource is a historic archaeological site and six are historic built environment resources; none of these is located within the Project Site. As indicated by the HRI, an additional 48 unmapped properties are located within 0.25 mile of the Project Site, and consist of historic-era buildings, structures, and objects. Of the 56 total previously-recorded cultural resources, three are listed in the NRHP, four have been determined eligible for listing in the NRHP and are listed in CRHR, seven appear eligible for listing in the NRHP, one is recommended eligible for the CRHR, and 25 are

recognized as historically significant by the City. A detailed list of the previously-recorded cultural resources and the HRI is included in Appendix A.

Table 2
Previously Recorded Cultural Resources Within 0.25-Mile Radius of Project Site

Primary Number	Resource Description	NRHP/CRHR Eligibility Status*	Recorded/Updated By and Year	Proximity to Project Site
19-004313	Historic: Privy, Pipe Trench, and Trash Scatter	Recommended eligible for the CRHR	Kry, L., J. Wallace and H. Gibson 2011	Outside
19-150350; 19-178922	Historic: Wotton Apartments 530 Chestnut Avenue	5S2	Felgemaker, G. 1996	Outside
19-150356	Historic: 520-522Chestnut Avenue	5D2	Felgemaker, G. 1996	Outside
19-178682	Historic: First Congregational Church of Long Beach	1S	Beall, E. 2012	Outside
19-178702	Historic: Enloe Building/First National Bank of Long Beach	1S	Heumann, L. 1990	Outside
19-178703	Historic: Ocean Center Building	2S2	Milges 2010	Outside
19-187051	Historic: The Willmore/ Stillwell Apartments	1S	Johnson, C. 1998	Outside

Notes:
1S = Individual property listed in the NRHP by the Keeper. Listed in the CRHR.
2S2 = Individual property determined eligible for the listing in the NRHP by a consensus through Section 106 process. Listed in the CRHR.
5D2 = Contributor to a district that is eligible for local listing or designation.
5S2 = Individual property that is eligible for local listing or designation.

Source: South Central Coastal Information Center, 2014

4.1.3 Historic Maps

Rincon reviewed historic maps provided by the SCCIC as part of the records search. The 1896 Downey, California 15-minute USGS quadrangle shows that the project area and much of surrounding land was beginning to develop at this time. The 1896 map plots numerous buildings and structures, as well as the eastern terminus of both the Southern Pacific Railroad (SPRR) Long Beach and San Pedro Branches. The 1927 Downey, California 15-minute USGS quadrangle plots extensive development radiating from Long Beach Harbor primarily to the north and east. The 1943 Downey, California 15-minute USGS quadrangle shows that the Project Site was already heavily developed up to the border of the City of Los Angeles, as evidenced by a dense urban grid.

4.1.4 Previous Studies within Project Site

Rincon also reviewed cultural resources data provided by the City of Long Beach concerning the Project Site, including:

- Survey of Historic Properties within Downtown Long Beach. Prepared by ICF Jones and Stokes, October 2009.
- Long Beach County Building, 415 West Ocean Boulevard, Long Beach, California, City Landmark Assessment Report, prepared by Peter Moruzzi in 2006.

- New Long Beach Courthouse Cultural Resources Technical Report. Prepared by Sapphos Environmental, Inc., 2008.
- Cultural Resources Impacts Report, Long Beach Courthouse Redevelopment Project, City of Long Beach, County of Los Angeles, prepared by Shannon Carmack, Steven Treffers and Heather Gibson in September 2014.

4.1.4 Archival Research

Archival research was carried out in April and May of 2015. Research methodology focused on review of a variety of primary and secondary source materials relating to the history and development of the subject property. Sources included, but were not limited to, historic maps, aerial photographs, and written histories of the area. The following repositories, publications, and individuals were contacted to identify known historical land uses and the locations of research materials pertinent to the Project Site:

- Long Beach Public Library
- Long Beach Historical Society
- County of Los Angeles Assessor Records
- *Los Angeles Times* Index, ProQuest Database, Los Angeles Public Library, City of Los Angeles
- California Index and various publications, Los Angeles Public Library, City of Los Angeles
- aerial photographs
- Sanborn Fire Insurance Company Maps
- United States Geological Survey Maps

4.2 NATIVE AMERICAN HERITAGE COMMISSION

Rincon Consultants initiated Native American coordination for this project April 10, 2015. As part of the process of identifying cultural resources within or near the Project Site, Rincon Consultants contacted the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF). As of May 22, 2015, Rincon has not yet received the results of the SLF search, however a previous SLF search completed last year for the Long Beach Courthouse Redevelopment Project, stated that a search of the SLF "failed to indicate the presence of Native American cultural resources in the immediate project area"(Carmack et. al, 2014). The NAHC provided a list of ten Native American contacts who may have knowledge of cultural resources in or near the Project Site. Rincon prepared and mailed letters (Appendix B) to each of the NAHC-listed contacts on April 24, 2015, requesting information regarding any Native American cultural resources within or immediately adjacent to the Project Site

Mr. Andrew Salas of the Gabrielino/Tongva Band of Mission Indians replied by email on May 10, 2015. Mr. Salas states the project site lies within a culturally sensitive area and has requested to work respectfully with the proposed Project to protect any and all cultural resources. Mr. Salas offered his groups' services as certified Native American monitors to be present during any and all ground disturbances.

As of May 22, 2015, Rincon has not received any additional responses.

5.0 SURVEY METHODS

Rincon Architectural Historian Shannon Carmack conducted an intensive pedestrian survey of the Project Site on May 12, 2015, to identify and record any cultural resources that may be located within or adjacent to the Project Site (Figure 4). The field survey consisted of a visual inspection of all features of the property, including buildings, structures, and associated features.

Ms. Carmack documented her fieldwork using field notes, digital photography, close-scale field maps and aerial photographs.

6.0 RESULTS

The intensive pedestrian survey did not identify any surficial archaeological resources within the Project Site. Bare ground visibility during the survey was poor (less than 1 percent) within the entire Project Site. The Project Site is predominantly paved with asphalt and contains a complex of buildings and structures, thereby reducing bare ground visibility to nearly zero.

The built environment resources within the Project Site were surveyed for historic significance. Located within the Long Beach Civic Center, the survey identified four buildings, a park and their associated structures and features within the Project Site: City Hall, Library, Lincoln Park, the Broadway Parking Garage and the Old Courthouse. Although not included within the project site, Public Safety Building was also surveyed for its association with the Civic Center development and for potential indirect impacts associated with the proposed project (Figure 5). Rincon recorded and evaluated these resources on California Department of Parks and Recreation (DPR) 523 forms (Appendix C).

6.1 LONG BEACH CIVIC CENTER

The Long Beach Civic Center is a rectangular parcel that occupies six blocks in downtown Long Beach and spans approximately 19 acres. It is bound by Broadway to the north, Ocean Boulevard to the south, Pacific Avenue to the east and Magnolia Avenue to the west. Primary buildings, sites and structures include the City Hall-Library Complex (1977), Long Beach Courthouse (1960), Public Safety Building (1960), Lincoln Park (1964) and Broadway Parking Garage (ca. 1980s) (Table 3).

Table 3
Long Beach Civic Center Built Environment Resources

Resource Name	Address	Architect	Year Completed
City Hall-Library Complex	333 W. Ocean Boulevard and 101 Pacific Avenue	Allied Architects; Peter Walker (Landscape Architect)	1977
Old Courthouse	415 W. Ocean Boulevard	Francis Heusel and Kenneth S. Wing, Sr.	1960
Public Safety Building	400 W. Broadway	Francis Heusel and Killingsworth, Brady and Smith	1960
Lincoln Park	n/a	Allied Architects; Peter Walker (Landscape Architect)	1964
Broadway Parking Garage	n/a	unknown	post-1980



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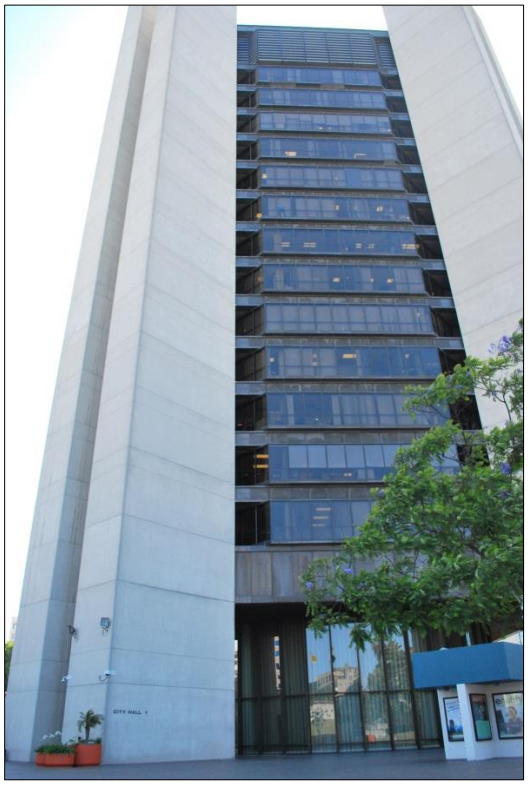
Resources Surveyed

Figure 5

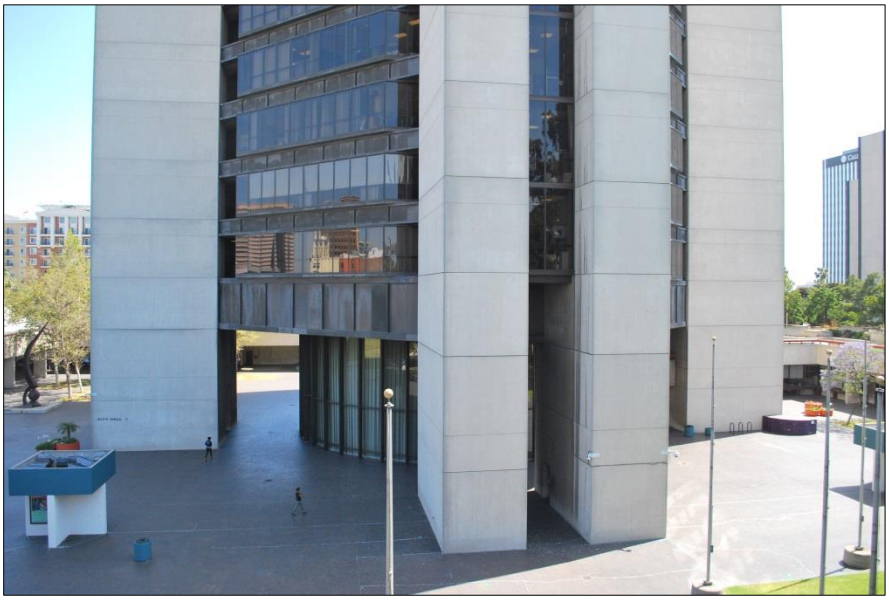
6.1.1 City Hall-Library Complex

The centerpiece of the Civic Center property is the Late Modern-style City Hall-Library Complex that includes the City Hall, Library and an integrated landscape that incorporates green spaces into the building design. Designed by Allied Architects, these elements include terraced roof gardens with seating areas, stairs and walkways that connect each of the buildings. The buildings all face inward towards a tiled plaza featuring landscaped planters, informational kiosks, a clock tower and a bronze statue.

City Hall is a 15-story tower designed in the Late Modern-style. Rectangular in plan with a flat roof, the tower is a complex union of glass, aluminum and concrete that typifies the Late Modern style. The tower superstructure features glass curtain walls separated by intersecting girders that connect at each floor to pairs of detached pre-cast concrete columns that dominate each building corner. The recessed ground floor includes a curved glass curtain wall which opens to the city council chambers. The tower is situated towards the center of the Civic Center property. The primary entry is on the southeast facing elevation, through glass doors that face the tiled plaza and the raised berm area of Centennial Plaza (Photographs 1 through 3).



Photograph 1. City Hall, facing south.



Photograph 2. City Hall, facing south.



Photograph 3. City Hall council chambers, facing south.

The Library is a two story 135,000 square-foot building located east of the City Hall tower. Constructed of precast concrete and glass, the primary entry is on the north elevation from the Civic Center plaza. The building has a rectangular plan with a flat roof that serves as a roof garden. The rooftop garden features a complex design of rectangular planters, seating areas and walking paths. Large clerestory windows provide light into the central first floor space. Extending from the north roof level elevation is a curving foot bridge that connects the roof garden to the adjacent Centennial Plaza berm area (Photographs 4 and 5).

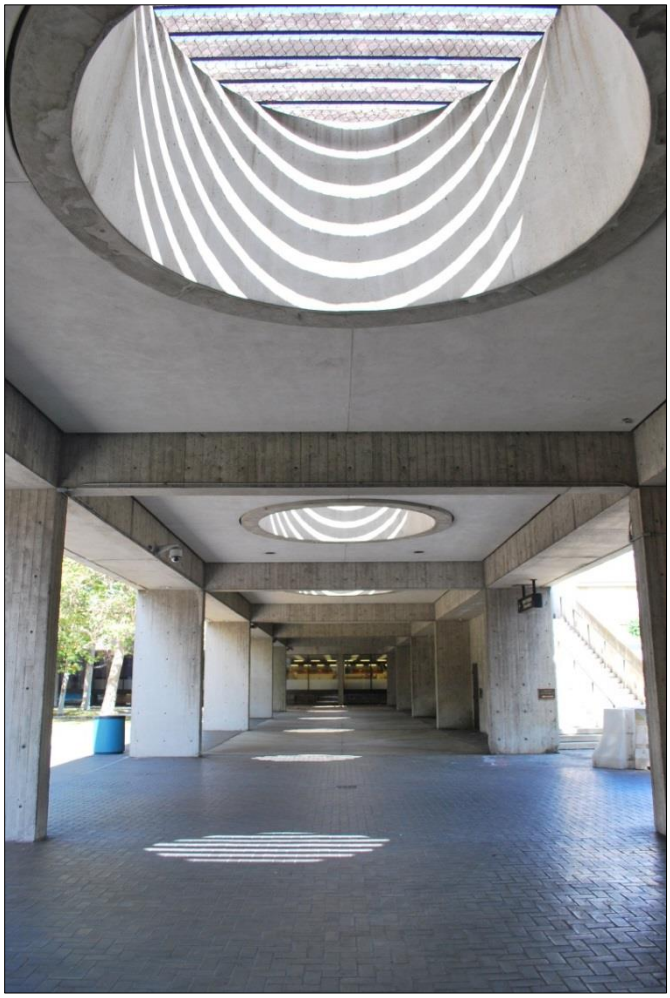


Photograph 4. Library facade, facing south and overlooking the civic center plaza.



Photograph 5. Library facade, facing southeast.

Connecting at the southwest end of the tower is a single-story building that was designed to house additional city agencies, including the gas department, city clerk and city treasurer. The building is rectangular in plan with entrances that face north towards the open plaza. Designed to complement the tower and library, these offices feature walls of glass and precast concrete beneath a garden roof complex featuring raised concrete garden beds, seating areas and pathways and that are all interconnected to the city hall tower, library and Centennial Plaza berm area. A series of large circular vent openings pierce through the pathway floors and provide natural light to the buildings at the plaza level. (Photograph 6).



Photograph 6. View to the east at plaza level, beneath the rooftop walking paths.

Situated near the center of the Civic Center is the 100-foot bicentennial carillon clock tower, also designed by Allied Architects. Dedicated in November 1976, it was constructed at a cost of $150,000. The construction was financed through funds donated by Long Beach realtor-philanthropist Isabel Paterson as well as contributions by the city's bicentennial committee. The tower features an electronically amplified carillon that can be heard throughout the civic center property. A pair of 49-key keyboards can be moved to the base of the tower for open-air concerts; however it is unknown if the keyboards still exist (Independent Press-Telegram September 1976) (Photograph 7).



Photograph 7. Carillon Clock Tower,
view towards north.

A 29 foot-tall Cor-ten steel statue, comprised of stacked geometric shapes resting on a raised concrete foundation is situated between the library and city hall tower (Photograph 8). Designed by Brough Miller and titled, 'Marlin' the statue was installed in the plaza in 1991 and is on loan from the Kilroy Realty Company. The statue is part of a series of sculptures, with the remaining being located at the Kilroy Airport Center off Redondo Avenue in Long Beach.



Photograph 8. View towards south of 'The Marlin'.

6.1.2 Old Courthouse

Previously surveyed in 2006 and 2008, the building was described in the *New Long Beach Courthouse Cultural Resources Technical Report*:

> This building is a ten-story, steel-framed courthouse, constructed in the Corporate International style. The building has a flat roof, with a rectangular floor plan and features two offset wings, which visually divide the building into two segments. The taller, north wing is 10 stories in height, while the smaller, southern wing stands 6 stories tall. The south-facing façade is symmetrical in appearance, and is divided into 16 bays on the smaller, southern wing of the building. The larger, northern wing features an additional bay, which extends past the southern wing on the eastern portion of the south elevation. The north, south and a portion of the west elevation has are constructed of curtain walls made of glass glazing and blue porcelain-enamel panels set in aluminum frames. Vertical steel columns separate each window bay and extend toward the ground floor, creating the illusion that the steel posts are supporting the building. Solid walls of pre-cast concrete inlaid with quartz aggregate are located on the west and east elevations. The primary, public entrance is on the south elevation via a recessed first floor that creates a covered walkway at the building's entrance. The entrance and walkway features terrazzo flooring, and a pair of staircases encased

> by glass are located to the southeast of the building. The original name of the building, "Long Beach County Building," is prominently featured at the center portion of the first floor façade. The building features a private entrance for public officials on the north elevation. The building faces south towards Ocean Boulevard and is surrounded by raised concrete planters and ground level landscaping on the west, east, and south elevations (Sapphos Environmental 2008).

Since it was last recorded in 2008, the architectural description for the Old Courthouse Building remains accurate. Although fencing has been installed around the entire building, no alterations are visible and the property remains in the same condition (Photographs 9 and 10).



Photograph 9. View to the east of the Old Courthouse.



Photograph 10. View to the west of the Old Courthouse.

6.1.3 Public Safety Building

Located at the northwest corner of the Civic Center is the Public Safety Building. Completed in 1960 in the Corporate International style, the Public Safety Building is one of the two original buildings constructed as part of the reimagined post-war Civic Center. The building is composed of two rectangular masses that form a roughly L-shaped plan. The larger northern segment is a 6-story mass with north and south elevation curtain walls boxed in by windowless west and east facades of concrete. The southern two-story segment has similar concrete walls, with three large bays for emergency vehicles on the western elevation. Originally the building superstructure rested on concrete piers with a recessed first floor of glass walls. Since its construction in 1960, the Public Safety Building has undergone significant alterations. The original recessed first floor's glass walls on the primary east and north entrances were completely replaced with concrete and extended out to be flush with the superstructure. These walls have been covered with slate and now have modern door and window openings on the north elevation. In addition, the original curtain walls located on the north and south elevations were replaced with a new energy efficient skin that does not resemble the original window patterning, material or design (Photographs 11 and 12).



Photograph 11. View to the west of the Public Safety Building.



Photograph 12. View to the northeast of the Public Safety Building.

6.1.4 Lincoln Park

Once known as Pacific Park, this 4.8-acre park within the Civic Center has been continuously used as public space since 1888 (Sapphos 2009). It housed the Carnegie library from 1908 until 1972 when the library was destroyed by fire. The current park layout was established in 1964, when the northern half of the original park was redeveloped following the construction of a subterranean parking structure. The library roof features landscaped gardens and passive areas, however it is now considered part of the library and no longer part of Lincoln Park. The redesign included shuffleboard and roque courts, as well as construction of the Yokkaichi Garden, a tribute to Long Beach's Japanese sister city. Original garden elements included native Japanese trees and bushes, rocks and a shallow pool with walking bridge. A torii gate was added in 1989 and a plaque was installed in 1998. In 2013, the Yokkaichi Garden was relocated to Recreation Park and none of the original elements remain. In addition, the shuffleboard and roque courts were removed and replaced with lawn. The dog park, located at the north end of the park was added in 2009.

The Lincoln statue, located in the central plaza area that separates the northern green space from the rooftop garden area was originally brought to the park in 1915 when the park was dedicated to the Veterans of the Civil War. It was designed as a replica of Augustus Saint-Gaudens's famous bronze, "Abraham Lincoln: The Man" (1877) that is located in Chicago's Lincoln Park. The Long Beach version was constructed locally by the Brittain Monument Works (Schipske 2014). The statue was returned to the park following the construction of the City Hall-Library Complex (Photographs 13 and 14).



Photograph 13. View east overlooking Lincoln Park.



Photograph 14. View southwest towards library of the Lincoln Statue.

6.1.5 Broadway Parking Garage

A modern three-story parking garage, constructed ca. 1980s is located at the northern center of the Civic Center property. The modest structure is rectangular in plan, with a flat roof that provides a fourth level of parking. The north elevation features precast concrete walls that mirror the board-formed pattern that appears throughout the City Hall-Library Complex (Photograph 15).



Photograph 15. View northeast of Parking Garage.

6.2. PROPERTY HISTORY

By the early 1950s, it was clear that new infrastructure was desperately needed in a rapidly expanding post-war Long Beach. With a population of 322,000, the city was relying on outdated buildings spread across downtown and designed to accommodate significantly fewer residents. The City Hall was constructed in 1921, when the city population was 56,000, while the library, completed in 1909, was constructed to serve 17,800 residents. The city began actively developing a plan for a Civic Center that would consolidate these public services into a central location (Independent-Press Telegram 1955, Gore 1976).

Although city municipal services had always been located downtown, some community members preferred construction of a new civic center away from the urbanized coastline, believing the acquisition costs would be cheaper and the services would be more centrally located within the city. A proposed site bound by 37th Street to the north, 32nd Street to the south, Long Beach Boulevard west and Atlantic Avenue to the east, amongst a field of active oil wells was presented as the alternative to downtown. City officials disagreed with the so-called "Oil Field site," citing transportation and logistical concerns (Independent 1954).

In 1953, the Long Beach City Council accepted an offer from the Los Angeles County Board of Supervisors to construct a new courthouse to serve Municipal and Superior Courts in Long Beach. The northeast corner of Ocean Boulevard and Magnolia Avenue was selected as the

preferred site for the new building, near the existing city hall and library (Los Angeles Times 1953).
In 1956, the voters approved funding for the new Public Safety Building, which would consolidate police and fire department resources in a modern, expanded facility. Architects Frances J. Heusel with assistance by Killingsworth, Brady and Smith were commissioned to design the new building (Figure 6). Heusel was also tasked to design the new Courthouse, with assistance by Kenneth Wing Sr. The city evidently favored local firms when selecting the architects for both projects. Like the Courthouse and Public Safety buildings, many of the city's larger-scale projects were constructed through multi-firm partnerships. Although somewhat unusual amongst other southern California cities, Long Beach's history of architectural collaboration was borne out of necessity, as many of the local firms simply did not have the resources to complete larger projects on their own (Ivers 2014).

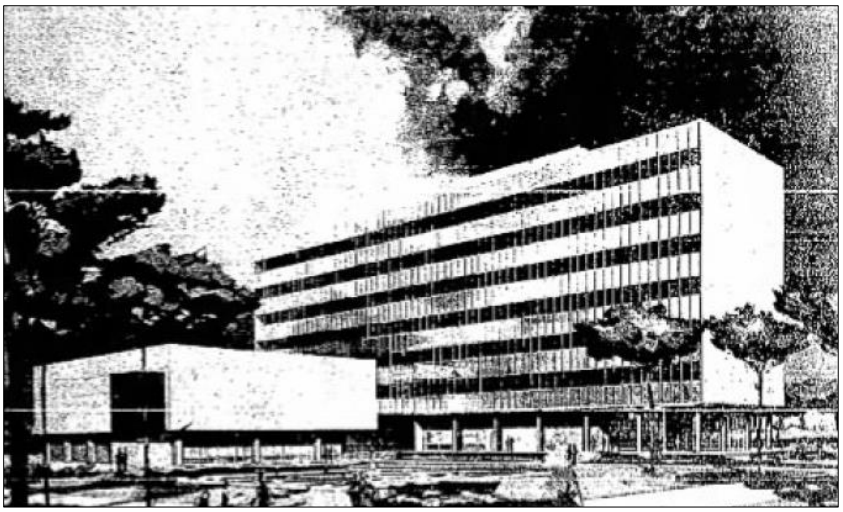


Figure 6. Design Rendering of Public Safety Building.
Source: Historical Society of Long Beach

Francis Heusel (1906-1968) was born in Detroit Michigan and received his degree in architecture from the Ecole des Beaux Arts in Paris in 1931. He began practicing architecture in 1938. He later formed a partnership with Frank Homolka in 1960, just prior to the completion of the Long Beach Courthouse. Heusel, Homolka & Associates would later design the addition made to the Long Beach courthouse in 1971 as well as many other buildings in Long Beach including the Water Department Administration building and St. Luke's Church. Homolka would later continue on to complete the City Hall Library Complex as part of Allied Architects.

Kenneth S. Wing (1903-1987), attended high school in Long Beach and graduated from the University of Southern California (USC) School of Architecture. One of the city's most prolific and celebrated architects, Wing's local projects includes the Long Beach Arena; the Southern California Edison Building and the renovation of the historic Bixby Ranch in Los Cerritos.

Edward A. Killingsworth (1917- 2004) earned his architecture degree from USC in 1940, also receiving a special award from the American Institute of Architects for his outstanding academic record. In 1945, he was hired as a draftsman in the office of Long Beach architect Kenneth S. Wing. By 1953, Killingsworth had formed his own practice, teaming with Jules Brady (1908-1996). Killingsworth is most widely recognized for his work on the Case Study

House Program, being one of only two architects to receive four commissions through the program; the other being famed Modern architect Richard Neutra. Architectural photographer Julius Schulman described Killingsworth's Case Study House # 25 (1962, the Frank House), as "the most successful of all the Case Study houses."(Woo 2004).

By 1958, a citywide master plan was drafted that included a new vision for the Civic Center. In addition to a new city hall and library, the plan envisioned space for a museum and other municipal facilities with "…gardens, open grass spaces, terraces, reflecting pools, shrubs and tree plantings, to provide beautiful vistas between the buildings and unite the entire area with Lincoln Park" (City of Long Beach 1958). The master plan maintained that a cohesive plan for the Civic Center, in downtown Long Beach was absolutely essential to the success of the municipal redevelopment, stating,

> The Civic Center should be immediately contiguous to the Central Business District, but in no case within it nor in the path of its expanding growth. The governmental administration center is part of the Business District – not a thing apart. The development, therefore must be integrated with the District as a whole. The uses of buildings in a civic center are completely compatible. Likewise, the uses which tend to cluster around the center also compatible. A complete civic center adds materially to the stabilization of uses and activities within the entire downtown area (City of Long Beach 1958, Figure 7).

The Public Safety Building was dedicated on March 1, 1960 in an elaborate ceremony attended by hundreds of residents and city officials. At the time of its construction, the building was celebrated for representing a new era in city development, being the first new municipal construction in three decades (Independent-Press Telegram 1960b). The building was constructed by Twaits-Wittenburg Co. who constructed municipal projects throughout southern California, including the City of Los Angeles's Parker Center (1954) and the City of Los Angeles Hall of Records (Independent-Press Telegram 1955, Gore 1976) (Figures 8 and 9).

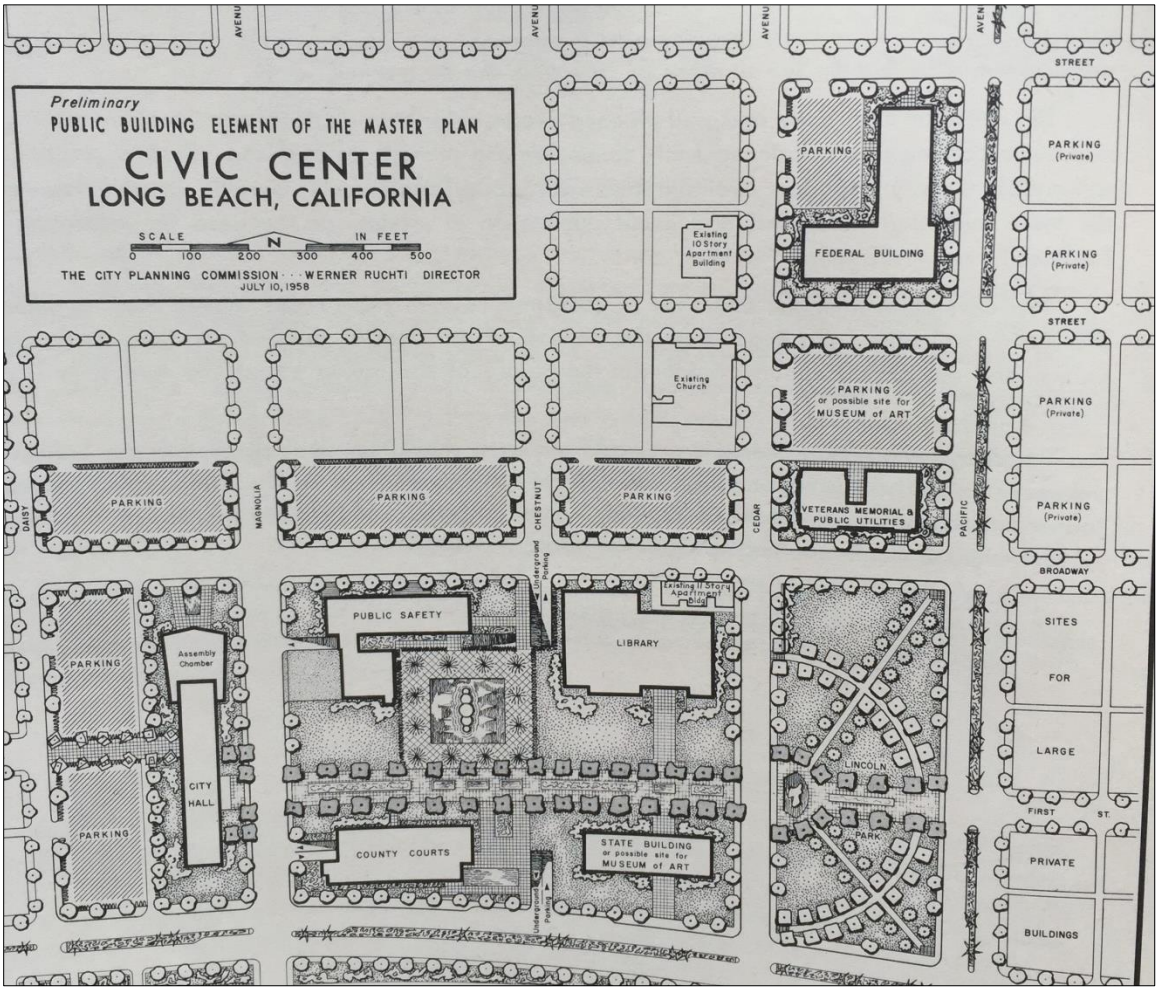


Figure 7. Proposed Master Plan, 1958.

Source: City of Long Beach Department of Planning 1958.



Figure 8. View southeast of Public Safety Building, north and west elevations, 1961.
Source: Getty Research Institute, Julius Schulman Collection.



Figure 9. View north of south elevation, Public Safety Building, ca. 1960.
Source: Historical Society of Long Beach

The Long Beach Courthouse was completed several months later, in December 1960 (Figures 10 and 11). The building featured many of the latest modern conveniences for the staff and visitors such as air conditioning, full-service cafeteria, and elevators and escalators (Maddock 1960). Designed to complement the Public Safety Building, both buildings reflected the Corporate International style, which evolved from the innovative designs of prominent German architect Ludwig Mies Van de Rohe in the 1920s. According to David Gebhard and Robert Winter in *A Guide to Architecture in Los Angeles and Southern California*, Mies Van de Rohe's designs could be

described as, "The concept of clothing a building in a moduled, thin metal paneled and glass skin independent of the structural skeleton" (Gebhard and Winter 1977).



Figure 10. View northeast of Courthouse and Public Safety Building, 1960.
Source: City of Long Beach Library



Figure 11. View northwest of Courthouse and Public Safety Buildings, 1960.
Source: City of Long Beach Library

Despite the overwhelming support for the Courthouse and Public Safety buildings, completion of the remaining civic center plan stalled through the 1960s. Voters repeatedly rejected proposed city-issued bonds to develop a new city hall and library, to the frustration of city officials (Independent-Press Telegram 1955, Gore 1976).

In 1960, the city authorized the construction of a subterranean Lincoln parking garage. The project was unique for the time, as it was funded by downtown business leaders through private bonds. In the agreement between the city and the Long Beach Lincoln Park Parking

Corporation, an association of downtown business owners, the garage would be operated by an outside lessee as a non-profit. All revenues collected through parking fees would be first used to pay down the construction costs, with surplus funds going to the city. Costs to replace the park on top of the below grade garage structure would be divided between the city and the parking corporation. The city received over 1,000 protests from downtown residents, particularly from the elderly who frequented the roque and shuffleboard courts. In spite of objections, the city proceeded with the planned development (Independent Press Telegram 1960a and 1960b).

The north half of Lincoln Park was redeveloped on top of the subterranean parking structure as promised, complete with lawn, pathways and ball courts. At the center of the park was a 140-foot diameter circle featuring landscaping elements including trees, bushes, rocks and a reflecting pond, all with a nonspecific Asian influence (Figure 12). After construction was already underway, it was decided that the park would be dedicated as the Yokkaichi Garden, to honor the Japanese sister city of Long Beach. To avoid offending the Yokkaichi representatives at the dedication ceremony, city officials quickly sought guidance from members of the Japanese American Citizens League to correct some of the more apparent cultural inaccuracies of the landscape features (Independent Press Telegram 1964).



Figure 12. View of Yokkaichi Garden, City Hall under construction, 1974.
Source: City of Long Beach Library

Despite aggressive advertising in the local newspapers, the parking garage never turned a profit. By 1969, the Long Beach Lincoln Park Parking Corporation had defaulted on the loans and was reporting an annual net loss of over $100,000 (Brackenbury 1968 and 1969).

Outside of an addition to the Courthouse which added a 60,000 square foot east wing to the building, few changes occurred within the Civic Center property again until the late 1960s, when the city re-energized discussions to construct a city hall and library (Los Angeles Times 1965, Gore 1976). In 1969, the City Council selected Allied Architects to develop plans for the project. Returning to the custom of utilizing a team of local architects to design municipal projects, Allied Architects was a consortium comprising Hugh and Donald Gibbs, Frank Homolka, Killingsworth, Brady and Associates, Kenneth S. Wing Jr. and Sr. and Landscape Architect, Peter Walker (Gore 1976).

A new addition to the Civic Center project was the firm Gibbs and Gibbs. Also local architects, father Hugh opened the Long Beach firm in 1934 and Donald joined in 1961, following his graduation from USC. Together, Gibbs and Gibbs designed numerous local buildings, including the Galaxy Towers (1967), the Portofino (1962), the Terrace Theater (1978) and their office building on Long Beach Boulevard (1963) (Gibbs 2014).

Peter Walker of Sasaki, Walker and Associates was brought into the team to assist with the landscape design elements. The firm was established in 1957 in Watertown, Massachusetts, by Hideo Sasaki and Peter Walker. Sasaki was chairman of the landscape architecture department of Harvard University's Graduate School of Design and Walker was his pupil. Walker is widely recognized as a "veteran designer of corporate campuses and estates"(Mozingo 2011). In 2004 he received the American Society of Landscape Architects (ASLA) Medal, which honors those whose "lifetime achievements and contributions to the profession have had a unique and lasting impact on the welfare of the public and the environment." His most widely recognized projects include Transbay Transit Center, San Francisco, California, Constitution Gardens: Washington, D.C. and the World Trade Center Memorial at Ground Zero, New York (ASLA.com 2015).

The Allied Architects design called for a 14-story tower, overlooking a complex of single-story buildings including a library and offices. The new buildings would have flat roofs with landscaping to provide additional green space. Incorporating the existing Public Safety Building and Civic Center into the complex, Chestnut and Cedar Avenues between Broadway and Ocean Boulevards would be closed off, to create a civic center "super block." An art museum was also proposed for the site, to be completed after the initial construction (Independent 1971; Brackenbury 1972, Figure 13).

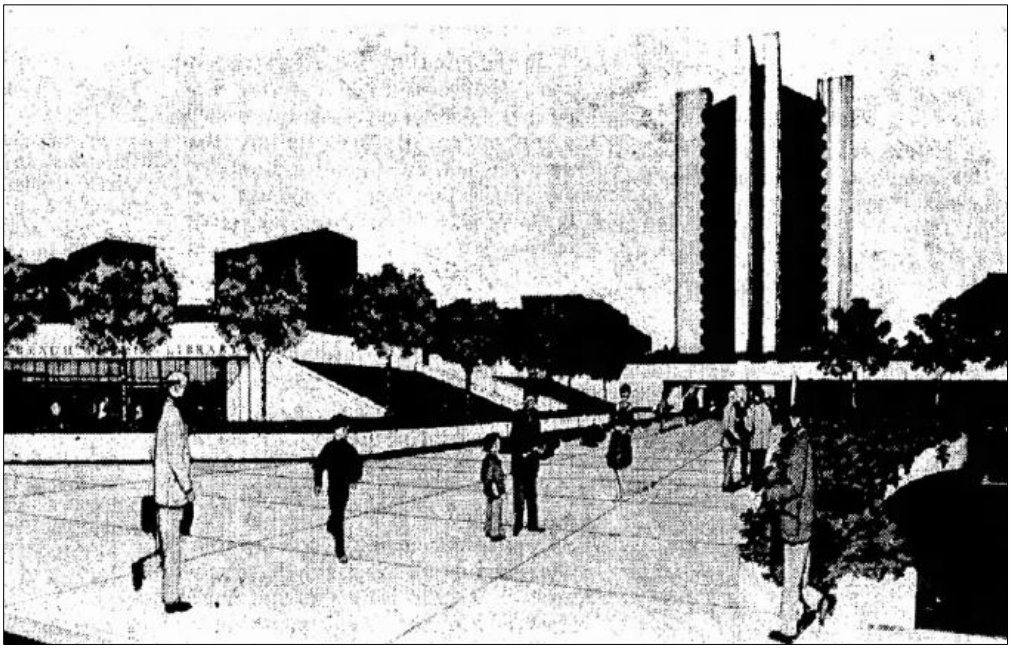


Figure 13. Rendering of the Proposed City Hall and Library.
Source: Long Beach Independent 18 May 1971.

In early 1973, the Civic Center Authority, established through a joint powers agreement between the City and County issued a $38 million bond for the project and the project broke ground later that year (Gore 1976). The new design was applauded as a "distinctive architectural symbol of Long Beach and its role as the International City" (Brackenbury 1976) (Figure 14).



Figure 14. View of City Hall under construction.
Source: City of Long Beach Library

The City Hall-Library Complex was designed in the Late Modern style, which emerged during the 1970s as an update to the earlier Modern aesthetic. Characterized by the application of concrete, glass and metal, the style featured minimal ornamentation, flat roofs, and organic geometric lines. The Late Modern design was largely applied in high-rise construction, such as City Hall; however the style was also adapted for low-rise buildings and applied for residential uses as well as schools, shopping centers and other institutional as evident in the Library.

City Hall's impressive 250-seat City Council chamber was constructed near the plaza entrance and designed with glass expanses to provide ground-floor views into the meeting hall and featured stadium seating which sloped below ground level towards the crescent shaped desk council. The council chamber design also incorporated advanced accessibility features including a plaza-level platform with microphones so that residents unable to walk down to the dais could address the council from the main level. The expansive library building, with its second floor set below grade featured 135,000 square feet of study areas and meeting halls, all punctuated by light wells, clerestory windows and atriums that let in the natural light from the roof and plazas. The elaborate series of rooftop gardens with concrete planters and grass berms connected the building masses and provided a unified, landscaped space. Architect Donald Gibbs credited the design influence for the City-Hall and Library complex to two award-winning Late-Modern buildings; the Knights of Columbus Building in New Haven, Connecticut and the Oakland Museum of California, both of which were completed in 1969 and designed by Kevin Roche and John Dinkeloo of KRJDA and Associates (Gibbs 2014) (Figures 15 and 16).



Figure 15. Knights of Columbus Headquarters. New Haven, Connecticut.
Source: KRJDA and Associates

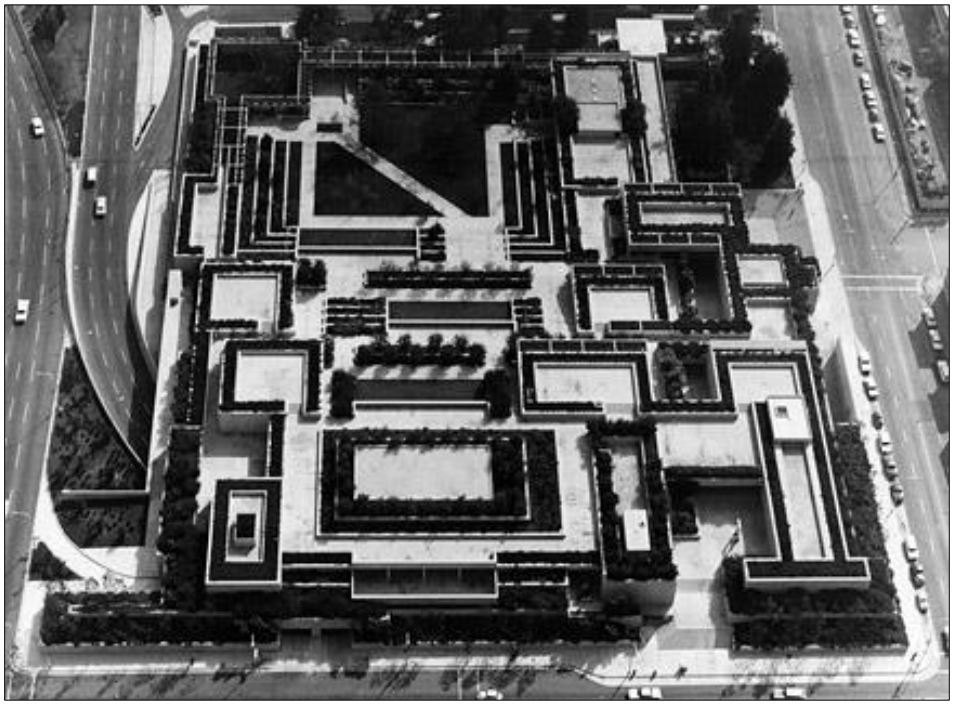


Figure 16. Oakland Museum of Art. Oakland, California.
Source: KRJDA and Associates

The new City Hall and Library Complex was dedicated on July 4, 1976, despite the fact that the project was still not complete. It was dedicated the Burton W. Chace Civic Center, in honor of the former mayor and district supervisor who died in a car accident in 1972 (Figure17) (Sherman 1976).



Figure 17. View of completed Civic Center, circa 1977
Source: City of Long Beach Library

Despite the celebrated opening, the new Civic Center was plagued with design and construction flaws, resulting in significant project delays and costly redesigns, prompting the City to consider suing Allied Architects for overrun costs in excess of $1 million. A series of 108 decorative triangular landings situated between the glass walls and concrete towers were criticized for being "pigeon roosts" and requiring the city to purchase $70k worth of special window-washing equipment. The heating and cooling system installed in the building was found to be very costly to operate, as design and construction began prior to the 1974 energy crisis. The budget department estimated the heating and cooling system in the new City Hall would cost $625k to operate annually, in contrast to the $60k they were spending at the time (Gore 1976).

And unlike the rooftop park on the Oakland Museum, the Library park areas never attracted sufficient visitors to gain local appreciation. The space lacked activities to attract visitors and the variation in rooflines and landscaping gave the rooftop areas a reputation of being unsafe. Eventually, the landscaped rooftop and berms areas began to leak prompting the City to abandon the landscaping and close off the areas off to the public. To reduce the weight of the roof the landscaping and soil within the concrete planters and berms was eliminated, leaving the exposed concrete shell as it appears today (Gibbs 2014).

6.3 EVALUATIONS

The Long Beach Civic Center buildings were evaluated for listing in the CRHR and for designation as a City of Long Beach Landmark, both individually and as contributors to a potential Civic Center historic district.

The City Hall-Library Complex and the Old Courthouse appear individually eligible for listing in the CRHR and as City of Long Beach Landmarks. The Public Safety Building and Lincoln Park have undergone continuous alterations since their construction, significantly reducing their historic integrity. The Broadway Parking Garage is a simple structure, lacking in design and character, constructed outside of the historic district period of significance. The Public Safety Building, Lincoln Park and the Broadway Parking Garage were found to be ineligible for listing in the CRHR as individual resources.

The project site and the adjacent Public Safety Building were also assessed to determine if the buildings and structures were eligible for listing in the CRHR or at the local level as a potential historic district. While the buildings and structures within the Civic Center are all functionally related and were each designed for municipal purposes, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district (Figure 18, Table 4).



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Resources Identified

Figure 18

Table 4
Evaluation of Resources with Project Site

Resource Name	Year Completed	Historic Status
City Hall-Library Complex	1977	Appears eligible for individual listing in the CRHR and as a City of Long Beach Landmark does not appear eligible for listing in the CRHR as a contributor to a potential Civic Center historic district; does not appear locally eligible as a contributor to a potential city landmark district.
Old Courthouse	1960	Appears eligible for individual listing in the CRHR and as a City of Long Beach Landmark/. does not appear eligible for listing in the CRHR as a contributor to a potential Civic Center historic district; does not appear locally eligible as a contributor to a potential city landmark district.
Public Safety Building	1960	Does not appear eligible for individual listing in the CRHR or as a City of Long Beach Landmark; does not appear eligible for listing in the CRHR as a contributor to a potential Civic Center historic district; does not appear locally eligible as a contributor to a potential city landmark district.
Lincoln Park	1964	Does not appear eligible for individual listing in the CRHR or as a City of Long Beach Landmark; does not appear eligible for listing in the CRHR as a contributor to a potential Civic Center historic district; does not appear locally eligible as a contributor to a potential city landmark district.
Broadway Parking Garage	ca. 1980s	Does not appear eligible for individual listing in the CRHR or as a City of Long Beach Landmark; does not appear eligible for listing in the CRHR as a contributor to a potential Civic Center historic district; does not appear locally eligible as a contributor to a potential city landmark district.

6.3.1 City Hall-Library Complex

Completed in 1977 by Allied Architects, the Long Beach City Hall-Library Complex is an intact example of Late Modern architecture that retains integrity of design, materials, feeling, workmanship, association and location. The complex appears eligible for individual listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project. The complex also appears eligible for individual listing under Criterion 3 within the context of the architectural evolution of Long Beach. Although the City Hall-Library Complex is less than 50 years in age (constructed in 1977) the complex is one of a limited number of ~~fine~~ examples of the Late Modern Style of architecture remaining in the city. Designed by a consortium of local architects that consisted of Hugh and Donald Gibbs, Frank Homolka, Killingsworth, Brady and Associates, and Kenneth S. Wing Jr. and Sr., e~~E~~ach considered local masters in their own right, the complex is unique for its collaborative design amongst local architects and represents the collective work of a group of masters. The Library rooftop design contributions of master landscape architect Peter Walker also contribute to the significance and eligibility of the complex. ~~Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project.~~

Although completion of the Civic Center took over two decades to complete and deviates from the original 1950s design layout, the buildings within the Civic Center represent a distinct grouping of civic and governmental properties ~~united historically by plan and physical development~~. However, the alterations to the Public Safety Building and Lincoln Park and

construction of the Broadway Parking Garage have reduced the overall integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district.

6.3.2 Old Courthouse

The Old Long Beach Courthouse also appears eligible for listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Competed in 1960 the Old Courthouse was one of the first projects of the long-awaited Civic Center Master Plan. The Old Long Beach Courthouse also appears eligible for listing in the CRHR as an individual resource under Criterion 3 within the context of the architectural evolution of Long Beach, as one of a limited number of ~~fine~~ examples of the Corporate International Style of architecture remaining in the City. The building embodies the distinctive characteristics of the Corporate International Style, and is a representative example of the style designed by local architects, Francis Heusel and Kenneth S. Wing. Despite having undergone a 60,000 square foot alteration in 1971, the building's exterior appearance still reflects its period of construction and retains a high degree of integrity of location, feeling, association, setting, design, materials and workmanship. The building has retained most of its character-defining features: curtain wall construction and glass windows inset in recliner grids, recessed first floor and use of squared columns, terrazzo floors, and windows and vertical surfaces on the same plane. ~~Competed in 1960 the Old Courthouse was one of the first projects of the Civic Center Master Plan.~~

While completion of the project took over two decades, the buildings within the Civic Center represent a distinct grouping of five civic and governmental properties united historically by plan and physical development. However, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the overall integrity of the site and weakened its cohesive overall identity, making the Civic Center ineligible for consideration as a CRHR or locally eligible historic district
.

6.2.4 Public Safety Building

Completed in 1960, the Public Safety Building is one of the two original buildings constructed as part of the reimagined post-war Civic Center. The building was designed by local architects; Francis Heusel serving as principal designer with assistance by Killingsworth, Brady and Associates. Both architecture firms are widely recognized for their influence on mid-century southern California architecture. The building was designed in the Corporate International Style which evolved out of the innovative designs of prominent German architect Ludwig Mies Van de Rohe in the 1920s. Since its construction in 1960, the Public Safety Building has undergone significant alterations. The original recessed first floor's glass walls on the primary east and north entrances were completely replaced with concrete and extended out to be flush with the superstructure. These walls have been covered with slate and now have modern door and window openings. In addition, the original curtain walls located on the north and south elevations were replaced with a new energy efficient skin that does not resemble the original window patterning, material or design. While the western elevation remains relatively unchanged, the visible alterations on the remaining elevations have significantly reduced the

integrity of materials, design, feeling and workmanship associate with the building as originally designed. Due to the described alterations, the building does not retain sufficient integrity to be recognizable to its original appearance.

The building is not eligible for listing in the California Register under any significance criteria as an individual resource or as a contributor to a historic district. As originally constructed, the building was an excellent example of the Corporate International Style, however recent alterations have significantly diminished the historic integrity of the building (Criterion 3) and it does not warrant further evaluation under Criteria 1 or 2 because it no longer retains integrity to convey its association with significant events or persons. No evidence was discovered to warrant consideration under Criterion 4. For the same reasons, the building also does not qualify for listing as a City of Long Beach Landmark or as a contributor to a Landmark historic district (Criteria A-K). The Public Safety Building should not be considered a historical resource under CEQA.

6.2.5 Lincoln Park

Established first as a park in 1888, the existing 4.8-acre park footprint was reconstructed in 1964, following the completion of a subterranean parking garage which reduced the park size by half. Since its reconstruction, Lincoln Park has undergone significant alterations. The original Japanese garden at the center of the park was removed and relocated, leaving minimal remnants behind. In addition, the roque and shuffleboard courts were removed, and a dog park was added in 2009. Due to the described alterations, the park does not retain sufficient integrity to be recognizable to its 1964 appearance.

Lincoln Park is not eligible for listing in the CRHR under any significance criteria as an individual resource or as a contributor to a potential Civic Center Historic District. Although the park dates to 1888, it retains none of the original landscaping elements from earlier periods of its history. The existing layout and landscaping are remnants from the 1964 period, however removal of park features have significantly diminished the historic integrity of the park (Criterion 3) and it does not warrant further evaluation under Criteria 1 or 2 because the park no longer retains integrity to convey its association with significant events or persons. No evidence was discovered to warrant consideration under Criterion 4. For the same reasons, the park also does not qualify for listing as a City of Long Beach Landmark or as a contributor to a landmark historic district (Criteria A-K). Lincoln Park should not be considered a historical resource under CEQA.

Although the park itself does not qualify for historic significance, the Lincoln Statue located at the southern border of the park has maintained a continued presence in the vicinity since 1915. While statue has been relocated over the years, it serves as the only remaining relic that dates to the city's first period of municipal growth and expansion. As an individual resource, the statue does not merit historic designation due to its relocation, however because of its age, excellent condition and history, the statue does warrant special consideration in local planning.

6.2.6 Broadway Parking Garage

Constructed ca. 1980s the parking garage is a simple utilitarian structure. It does not appear eligible for listing in the CRHR, nor is it a contributor to a larger California Register-eligible historic district. The building is not directly associated with any specific events or trends that

have contributed to history (Criteria 1). It was not directly associated with persons significant in our past (Criteria 2). As a simple utilitarian structure, the building does not exhibit any architectural quality or character and is not the work of a master or unique in its design (Criteria 3). There is no reason to believe that the property may yield important information about prehistory or history (Criteria 4). For the same reasons, the building also does not qualify for listing as a City of Long Beach Landmark or as a contributor to a landmark historic district (Criteria A-K). The Parking Garage should not be considered a historical resource under CEQA.

7.0 PROJECT IMPACTS AND MITIGATION MEASURES

CEQA Guidelines state that a project may have a significant effect on the environment if it can be expected to "cause a substantial adverse change in the significance of an historical resource" (CEQA Guidelines, Section 15064.5 (b)). Such changes can include physical demolition, destruction, relocation, or alteration of a historical resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

7.1 ARCHAEOLOGICAL RESOURCES

Although no archaeological resources were identified during the cultural resources survey, it is possible that intact archaeological deposits could remain capped below the original layer of fill material. The Los Angeles River drains into the Pacific Ocean approximately 0.5 mile from the Project Site and archaeological resources were identified during construction of the new Court House building, approximately 420 feet to the north of the Project Site. Although much of the Project Site includes subterranean structural features, other portions have the potential to possess prehistoric or historic archaeological resources. For these reasons, and the fact that no archaeological testing has ever occurred within the Project Site, it should be treated as potentially sensitive for archaeological resources.

7.1.1 Archaeological Mitigation Measures

The Long Beach Downtown Plan EIR (the "Downtown Plan EIR") examined the potentially historic resources in the Downtown Plan area. The Downtown Plan EIR determined that the Downtown Plan would have a significant but mitigable impact on archaeological resources. This determination was due to the fact that no surveys could be conducted prior to onset of demolition or other ground-disturbing activities. The project would be subject to the same general mitigation measures identified and analyzed in the Downtown Plan EIR, specifically CR-2(a) through CR-2(c), which require a qualified project archaeologist or archaeological monitor approved by the City to be present during excavation into native sediments; that the monitor shall also prepare a final report of any cultural resource finds; and that if human remains are encountered during excavation and grading activities, proper handling procedures shall be implemented, as regulated by the State Health and Safety Code.

7.2 BUILT ENVIRONMENT/HISTORIC RESOURCES

The Project Site was found to contain two historical resources: The Long Beach Courthouse and the City Hall-Library Complex, as representative examples of the Corporate and Late Modern styles and their associations with the institutional development of the City. Both resources were found individually eligible for the CRHR and are also eligible for City of Long Beach Landmark Designation. Therefore, the former Long Beach Courthouse and the City Hall-Library Complex are considered historical resources for the purposes of CEQA.

As currently proposed, the Project would result in the demolition of these buildings, and would constitute a significant direct impact to cultural resources insofar as it entails a substantial adverse change in the significance of historical resources.

7.2.1 Built Environment Mitigation Measures

Three mitigation measure has been identified that would lessen project impacts on historical resources. Measures CR MM-1(a) and CR MM-1(b) are proposed to address these impacts.

CR MM-1(a). Impacts resulting from the demolition of the City Hall-Library Complex and Courthouse shall be minimized through development of an archival identification and collections program. The purpose of this program will be to identify the existing historic artifacts, documents and other objects that are currently stored at the City Library, City Hall and Port of Long Beach facilities so that these important relics can be utilized in the future by researchers and the public for educational purposes. The program will work with City staff to itemize, catalogue and rehouse the items, and establish appropriate conservation and storage measures for long-term preservation. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Development Services.

CR MM-1(b). Impacts resulting from the demolition of the City Hall-Library Complex and Old Courthouse shall be minimized through archival documentation of as-built and as-found condition. Prior to issuance of demolition permits, the lead agency shall ensure that documentation of the building is completed in accordance with the general guidelines of Historic American Building Survey (HABS) documentation. The documentation shall include large-format photographic recordation, a historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to repositories that will make it available for current and future generations. Archival copies of the documentation also would be submitted to the City of Long Beach Development Services, the downtown branch of the Long Beach Public Library, and the Historical Society of Long Beach where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Development Services.

7.3 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of Downtown Plan EIR Mitigation Measures CR-1(a) and CR-1(b), would reduce the level of impacts to archaeological resources to less than significant.

Implementation of mitigation measure CR MM-1(a) and CR MM-1(b), and the project's Cultural and Historic Loops would reduce significant direct and cumulative impacts to the historical resource scheduled for demolition, but not to the level of less than significant. Therefore, the demolition of the Old Courthouse and the City Hall-Library Complex would still remain a significant adverse impact.

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Appendix A

Records Search Summary

Appendix B

Native American Scoping

Appendix C

Resource Records

South Central Coastal Information Center
California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542
anthro.fullerton.edu/sccic.html - sccic@fullerton.edu
California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

January 31, 2014 SCCIC #13678.0357

Mr. Sam Murray
SWCA Environmental
150 S Arroyo Pkwy, 2nd Floor
Pasadena, CA 91105
(626) 240-0587

RE: Project#: 27597/Long Beach Courthouse Project, 415 W Ocean Boulevard, Long Beach, CA 90802

Dear Mr. Murray,

As per your request received on January 24, 2014, a records search was conducted for the above referenced project. The search includes a review of all recorded archaeological sites within a ¼-mile radius of the project site as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (SPHI), the California Historical Landmarks (SHL), the California Register of Historical Resources (CAL REG), the National Register of Historic Places (NRHP), and the California State Historic Resources Inventory (HRI) listings were reviewed for the above referenced project. The following is a discussion of the findings.

Long Beach, CA USGS 7.5′ Quadrangle

MAPPED ARCHAEOLOGICAL RESOURCES:

One archaeological site (19-004313) has been identified on our maps within a ¼-mile radius of the project site. No archaeological sites are located within the project site. No sites are listed on the Archaeological Determination of Eligibility (DOE) list. No isolates have been identified within a ¼-mile radius of the project site. No isolates are located within the project site.

MAPPED HISTORIC BUILT-ENVIRONMENT RESOURCES:

Six above-ground historic resources (19-150350, 19-150356, 19-178682, 19-178702, 19-178703, 19-187051) have been identified on our maps within a ¼-mile radius of the project site. No above-ground historic resources are located within the project site.

ADDITIONAL CULTURAL RESOURCES (all other listings)

The **California Historic Resources Inventory (HRI)** lists fifty-two properties that have been evaluated for historical significance within a ¼-mile radius of the project site **(see**

enclosed list). These are additional resources that are listed in the Historic Property Data File and are located either within the project site or within the search radius.

The **California Point of Historical Interest (SPHI)** of the Office of Historic Preservation, Department of Parks and Recreation, lists no properties within a ¼-mile radius of the project site.

The **California Historical Landmarks (SHL)** of the Office of Historic Preservation, Department of Parks and Recreation, lists no properties within a ¼-mile radius of the project site.

The **California Register of Historical Resources (CAL REG)** lists six properties within a ¼-mile radius of the project site **(+see enclosed list)**. These are properties determined to have a National Register of Historic Places Status of 1 or 2, a California Historical Landmark numbering 770 and higher, or a Point of Historical Interest listed after 1/1/1998.

The **National Register of Historic Places (NRHP)** lists two properties within a ¼-mile radius of the project site **(*see enclosed list and see below)**.

Long Beach 19-178702 1st National Bank of Long Beach 101—125 Pine Ave. Long Beach 19900913 90001432

Long Beach 19-187051 Willmore, The /The Stillwell 315 West Third Street Long Beach 99000579

HISTORIC MAPS:

Copies of our historic maps – Downey, CA (1896, 1942, 1943) 15' USGS - are enclosed for your review.

PREVIOUS CULTURAL RESOURCES INVESTIGATIONS:

Eleven studies (LA2399*, LA5403, LA5886, LA8485, LA9129, LA10404, LA10527*, LA10587, LA11466, LA11993, LA12329) have been conducted within a ¼-mile radius of the project site. Of these, two are located within the project site. There are fourteen additional investigations located on the Long Beach, CA 7.5' USGS Quadrangle that are potentially within a ¼-mile radius of the project site. These reports are not mapped due to insufficient locational information.
(= Located within the project site)*

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you **do not include** resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at 657.278.5395 Monday through Thursday 9:00 am to 3:30 pm.

Should you require any additional information for the above referenced project, reference the SCCIC number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,
SCCIC

Lindsey Noyes
Lead Staff Researcher

Enclosures:

(X) Maps – Long Beach, CA 7.5' USGS Quadrangle, Downey, CA (1896, 1942, & 1943) 15' USGS Quadrangle – 9 pages
(X) Bibliography – 27 pdf pages
(X) HRI – 11 pages
(X) National Register Status Codes – 1 page
(X) Site Records – (19-004313) – 10 pdf pages
(X) Survey Reports – (LA2399, LA10527) – 274 pdf pages
(X) Invoice #13678.0357

South Central Coastal Information Center Detail Record: LA-02399

Citation Information

Authors: Winman, Lois J.
E. Gary Stickel
Year: 1978
Title: Los Angeles-long Beach Harbor Areas Cultural Resource Survey.
Affiliation:
Lead Agency: United States Army Engineer District Los Angeles, California Angeles
Report Type(s): Special study/analysis
No. Pages:
Collections:
Disclosure:

Associated Resources

Primary No.	*HRI No.*	*Trinomial*	*Name*
P-19-167246	021197		Old St Peter's Episcopal Church
P-19-167265	021218		Battery Osgood-Farley
P-19-167266	021219		Point Fermin Lighthouse
P-19-167267	021220		S S Catalina
P-19-174912	090236		Site of Diego Sepulveda Home
P-19-176737	021215		Banning Park / Banning House
P-19-186116	021216		Drum Barracks
P-19-186554	090237		Site of Old Whaling Station

Notes

Location Info

USGS 7.5' Quads: SAN PEDRO
TORRANCE
Address:

Database Record Metadata

	Date	*User*	
Entered:	5/5/2008	jay	
Last Modified:	3/10/2011	mgalaz	
IC Actions:	*Date*	*User*	*Action take*
	5/6/2008	jay	Appended records from old Surveys database.
	3/10/2011	mgalaz	Entered resources.

SCCIC Bibliography: Long Beach Courthouse Project

LA-11993

Author(s): O'Neill, Laura
Year: 2012
Title: Findning of No Adverse Effect for the Proposed Interstate 710 Corridor Project Between Ocean Boulevard and the State Route 60 Interchange
Affliliation: Galvin Preservation Associates
Resources:
Quads: LONG BEACH, LOS ANGELES, SOUTH GATE
Pages: 58
Notes:

LA-12329

Author(s): Gibson, Heather, Kry, Linda, and Amaral, Adela
Year: 2013
Title: Archaeological Assessment for the New Long Beach Courthouse Project, City of Long Beach, California
Affliliation: AECOM
Resources: 19-004313
Quads: LONG BEACH
Pages: 172
Notes:

South Central Coastal Information Center Detail Record: LA-02399

Citation Information

Authors: Winman, Lois J.
E. Gary Stickel
Year: 1978
Title: Los Angeles-long Beach Harbor Areas Cultural Resource Survey.
Affiliation:
Lead Agency: United States Army Engineer District Los Angeles, California Angeles
Report Type(s): Special study/analysis
No. Pages:
Collections:
Disclosure:

Associated Resources

Primary No.	*HRI No.*	*Trinomial*	*Name*
P-19-167246	021197		Old St Peter's Episcopal Church
P-19-167265	021218		Battery Osgood-Farley
P-19-167266	021219		Point Fermin Lighthouse
P-19-167267	021220		S S Catalina
P-19-174912	090236		Site of Diego Sepulveda Home
P-19-176737	021215		Banning Park / Banning House
P-19-186116	021216		Drum Barracks
P-19-186554	090237		Site of Old Whaling Station

Notes

Location Info

USGS 7.5' Quads: SAN PEDRO
TORRANCE
Address:

Database Record Metadata

	Date	*User*	
Entered:	5/5/2008	jay	
Last Modified:	3/10/2011	mgalaz	
IC Actions:	*Date*	*User*	*Action take*
	5/6/2008	jay	Appended records from old Surveys database.
	3/10/2011	mgalaz	Entered resources.

South Central Coastal Information Center Detail Record: LA-05403

Citation Information

Authors: Moffatt, Nicole
Year: 1994
Title: Environmental Impact Report Queensway Bay Master Plan State Clearinghouse No. 94081033 Eir No. E-13-94
Affiliation: City of Long Beach
Lead Agency: City of Long Beach
Report Type(s): Management plan/EIR
No. Pages:
Collections:
Disclosure:

Associated Resources

Notes

Location Info

USGS 7.5' Quads: LONG BEACH
Address:

Database Record Metadata

	Date	*User*
Entered:	5/5/2008	jay
Last Modified:		

IC Actions:	*Date*	*User*	*Action take*
	5/6/2008	jay	Appended records from old Surveys database.

South Central Coastal Information Center Detail Record: LA-05886

Citation Information

Authors: Duke, Curt
Year: 2002
Title: Cultural Resource Assessment At&t Wireless Services Facility No. 05084a Los Angeles County, California
Affiliation: LSA Associates, Inc.
Lead Agency: Geotrans, Inc.
Report Type(s): Records/literature search only
No. Pages:
Collections:
Disclosure:

Associated Resources

Notes

Location Info

USGS 7.5' Quads: LONG BEACH
Address:

Database Record Metadata

	Date	*User*
Entered:	5/5/2008	jay
Last Modified:		

IC Actions:	*Date*	*User*	*Action take*
	5/6/2008	jay	Appended records from old Surveys database.

South Central Coastal Information Center Detail Record: LA-08485

Citation Information

Authors: Tibbet, Casey
Terri Jacquemain

Year: 2005

Title: Historic-period Building Survey: Downtown and Central Long Beach Redevelopment Plans Master Eir Project

Affiliation: CRM Tech

Lead Agency: RBF Consulting

Report Type(s): Historic evaluation
Historic survey
Management plan/EIR

No. Pages:

Collections:

Disclosure:

Associated Resources

Notes

No maps for records/no primary numbers assigned to records

Location Info

USGS 7.5' Quads: LONG BEACH

Address:

Database Record Metadata

	Date	*User*	
Entered:	5/5/2008	jay	
Last Modified:			
IC Actions:	*Date*	*User*	*Action take*
	5/6/2008	jay	Appended records from old Surveys database.

South Central Coastal Information Center Detail Record: LA-09129

Citation Information

Authors: Strudwick, Ivan
Year: 2007
Title: Cultural Resources Analysis for the Shoemaker Street Bridge Project in the City of Long Beach, Los Angeles County, California
Affiliation: LSA Associates
Lead Agency: California Department of Transportation
Report Type(s): Archaeological survey
No. Pages: 13
Collections:
Disclosure:

Associated Resources

Primary No.	*HRI No.*	*Trinomial*	*Name*
P-19-150348	091901		726 Maine Ave

Notes

Location Info

USGS 7.5' Quads: LONG BEACH
Address:

Database Record Metadata

	Date	*User*
Entered:	9/3/2008	
Last Modified:		

IC Actions:	*Date*	*User*	*Action take*
	9/3/2008	jay	Appended records from Biblio database (second round of additions)

South Central Coastal Information Center Detail Record: LA-10404

Citation Information

Authors: Mason, Roger

Year: 2001

Title: Cultural Resources Record Search and Literature Review Report for an AT&T Telecommunications Facility: Number D189 Ocean Center Building in the City of Long Beach, Los Angeles, California

Affiliation: Chambers Group, Inc.

Lead Agency: GeoTrans, Inc.

Report Type(s): Records/literature search only

No. Pages: 24

Collections: No

Disclosure: Not for publication

Associated Resources

Notes

Location Info

USGS 7.5' Quads: LONG BEACH

Address:	*Address*	*City*	*Assessor's parcel no.*
		Long Beach	

Database Record Metadata

	Date	*User*	
Entered:	3/18/2010	mgalaz	
Last Modified:	3/18/2010	mgalaz	
IC Actions:	*Date*	*User*	*Action take*
	3/18/2010	mgalaz	D Grijavla

South Central Coastal Information Center Detail Record: LA-10527

Citation Information

Authors: Weinman, Lois J.
Year: 1978
Title: Los Angeles-Long Beach Harbor Areas Regional Cultural History, Los Angeles County, California
Affiliation:
Lead Agency: U.S. Army Corps of Engineers
Report Type(s): Archaeological survey
NRHP evaluation/nomination
No. Pages: 114
Collections: No
Disclosure: Not for publication

Associated Resources

Notes

UNMAPPABLE!

Location Info

USGS 7.5' Quads: LONG BEACH
SAN PEDRO
TORRANCE
Address:

Database Record Metadata

	Date	*User*
Entered:	7/29/2010	agarcia
Last Modified:	7/29/2010	agarcia
IC Actions:		

South Central Coastal Information Center Detail Record: LA-10587

Citation Information

Authors: Hatoff, Brian
Year: 2010
Title: Verizon Cellular Communications Tower Site - LTE Long Beach Convention Center, 110 W. Ocean Blvd., Long Beach, CA 90802
Affiliation: URS
Lead Agency: Verizon Wireless
Report Type(s): Historic evaluation
No. Pages: 35
Collections: No
Disclosure: Not for publication

Associated Resources

Primary No.	*HRI No.*	*Trinomial*	*Name*
P-19-002660		CA-LAN-2660H	Casa Corazon
P-19-150350	029608		Wotton Apts
P-19-150352	086182		535 Chesnut Ave
P-19-150356			520 Chestnut Ave
P-19-178703	029386		Ocean Center Bldg

Notes

Location Info

USGS 7.5' Quads: LONG BEACH

Address:	*Address*	*City*	*Assessor's parcel no.*
	110 W. Ocean Blvd.	Long Beach	7278-007-035

Database Record Metadata

	Date	*User*
Entered:	9/1/2010	agarcia
Last Modified:	9/1/2010	agarcia
IC Actions:		

South Central Coastal Information Center Detail Record: LA-11466

Citation Information

Authors: Supernowicz, Dana
Year: 2011
Title: Cultural Resources Study of the AT&T Mobility Site No. LAD189, 101 Seaside Way, Long Beach, Los Angeles County, California 90802
Affiliation: Historic Resource Associates
Lead Agency: ATC Associates
Report Type(s): Archaeological survey
Historic survey
No. Pages: 96
Collections:
Disclosure:

Associated Resources

Primary No.	*HRI No.*	*Trinomial*	*Name*
P-19-178703	029386		Ocean Center Bldg

Notes

Location Info

USGS 7.5' Quads: LONG BEACH

Address: *Address*	*City*	*Assessor's parcel no.*
101 Seaside Way	Long Beach, CA	

Database Record Metadata

	Date	*User*
Entered:	2/6/2012	lnoyes
Last Modified:	2/6/2012	lnoyes
IC Actions:		

South Central Coastal Information Center Detail Record: LA-11993

Citation Information

Authors: O'Neill, Laura
Year: 2012
Title: Findning of No Adverse Effect for the Proposed Interstate 710 Corridor Project Between Ocean Boulevard and the State Route 60 Interchange
Affiliation: Galvin Preservation Associates
Lead Agency: CalTrans
Report Type(s): Historic survey
No. Pages: 58
Collections:
Disclosure:

Associated Resources

Notes

Location Info

USGS 7.5' Quads: LONG BEACH
SOUTH GATE
LOS ANGELES
Address:

Database Record Metadata

	Date	*User*
Entered:	2/27/2013	lnoyes
Last Modified:	2/27/2013	lnoyes
IC Actions:		

South Central Coastal Information Center Detail Record: LA-12329

Citation Information

Authors: Gibson, Heather
Kry, Linda
Amaral, Adela

Year: 2013

Title: Archaeological Assessment for the New Long Beach Courthouse Project, City of Long Beach, California

Affiliation: AECOM

Lead Agency: Clark Design Build of California & Admin Office of the Courts

Report Type(s): Archaeological survey

No. Pages: 172

Collections:

Disclosure:

Associated Resources

Primary No.	*HRI No.*	*Trinomial*	*Name*
P-19-004313		CA-LAN-4313H	New Long Beach Courthouse Site

Notes

Location Info

USGS 7.5' Quads: LONG BEACH

Address:

Database Record Metadata

	Date	*User*
Entered:	7/18/2013	lnoyes
Last Modified:	7/18/2013	lnoyes

IC Actions:

SCCIC Bibliography: Long Beach Courthouse Project

LA-02399

Author(s): Winman, Lois J. and E. Gary Stickel
Year: 1978
Title: Los Angeles-long Beach Harbor Areas Cultural Resource Survey.
Affliliation:
Resources: 19-167246, 19-167265, 19-167266, 19-167267, 19-174912, 19-176737, 19-186116, 19-186554
Quads: SAN PEDRO, TORRANCE
Pages:
Notes:

LA-05403

Author(s): Moffatt, Nicole
Year: 1994
Title: Environmental Impact Report Queensway Bay Master Plan State Clearinghouse No. 94081033 Eir No. E-13-94
Affliliation: City of Long Beach
Resources:
Quads: LONG BEACH
Pages:
Notes:

LA-05886

Author(s): Duke, Curt
Year: 2002
Title: Cultural Resource Assessment At&t Wireless Services Facility No. 05084a Los Angeles County, California
Affliliation: LSA Associates, Inc.
Resources:
Quads: LONG BEACH
Pages:
Notes:

LA-08485

Author(s): Tibbet, Casey and Terri Jacquemain
Year: 2005
Title: Historic-period Building Survey: Downtown and Central Long Beach Redevelopment Plans Master Eir Project
Affliliation: CRM Tech
Resources:
Quads: LONG BEACH
Pages:
Notes: No maps for records/no primary numbers assigned to records

LA-09129

Author(s): Strudwick, Ivan
Year: 2007
Title: Cultural Resources Analysis for the Shoemaker Street Bridge Project in the City of Long Beach, Los Angeles County, California
Affliliation: LSA Associates
Resources: 19-150348
Quads: LONG BEACH
Pages: 13
Notes:

SCCIC Bibliography: Long Beach Courthouse Project

LA-10404

Author(s): Mason, Roger
Year: 2001
Title: Cultural Resources Record Search and Literature Review Report for an AT&T Telecommunications Facility: Number D189 Ocean Center Building in the City of Long Beach, Los Angeles, California
Affliliation: Chambers Group, Inc.
Resources:
Quads: LONG BEACH
Pages: 24
Notes:

LA-10527

Author(s): Weinman, Lois J.
Year: 1978
Title: Los Angeles-Long Beach Harbor Areas Regional Cultural History, Los Angeles County, California
Affliliation:
Resources:
Quads: LONG BEACH, SAN PEDRO, TORRANCE
Pages: 114
Notes: UNMAPPABLE!

LA-10587

Author(s): Hatoff, Brian
Year: 2010
Title: Verizon Cellular Communications Tower Site - LTE Long Beach Convention Center, 110 W. Ocean Blvd., Long Beach, CA 90802
Affliliation: URS
Resources: 19-002660, 19-150350, 19-150352, 19-150356, 19-178703
Quads: LONG BEACH
Pages: 35
Notes:

LA-11466

Author(s): Supernowicz, Dana
Year: 2011
Title: Cultural Resources Study of the AT&T Mobility Site No. LAD189, 101 Seaside Way, Long Beach, Los Angeles County, California 90802
Affliliation: Historic Resource Associates
Resources: 19-178703
Quads: LONG BEACH
Pages: 96
Notes:

SCCIC Bibliography: Long Beach Courthouse Project

LA-11993

Author(s): O'Neill, Laura
Year: 2012
Title: Findning of No Adverse Effect for the Proposed Interstate 710 Corridor Project Between Ocean Boulevard and the State Route 60 Interchange
Affliliation: Galvin Preservation Associates
Resources:
Quads: LONG BEACH, LOS ANGELES, SOUTH GATE
Pages: 58
Notes:

LA-12329

Author(s): Gibson, Heather, Kry, Linda, and Amaral, Adela
Year: 2013
Title: Archaeological Assessment for the New Long Beach Courthouse Project, City of Long Beach, California
Affliliation: AECOM
Resources: 19-004313
Quads: LONG BEACH
Pages: 172
Notes:

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Carlsbad, California 92008

760 918 9444
FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Date: April 7, 2015

Project: Long Beach Civic Center Redevelopment Project

County: Los Angeles

USGS Quadrangle Name: Long Beach, CA

Township 13S Range 5E Section(s) 5 South/13 West/Unsectioned

Company/Firm/Agency: Rincon Consultants, Inc.

Contact Person: Shannon Carmack

Street Address: 5135 Avenida Encinas, Suite A

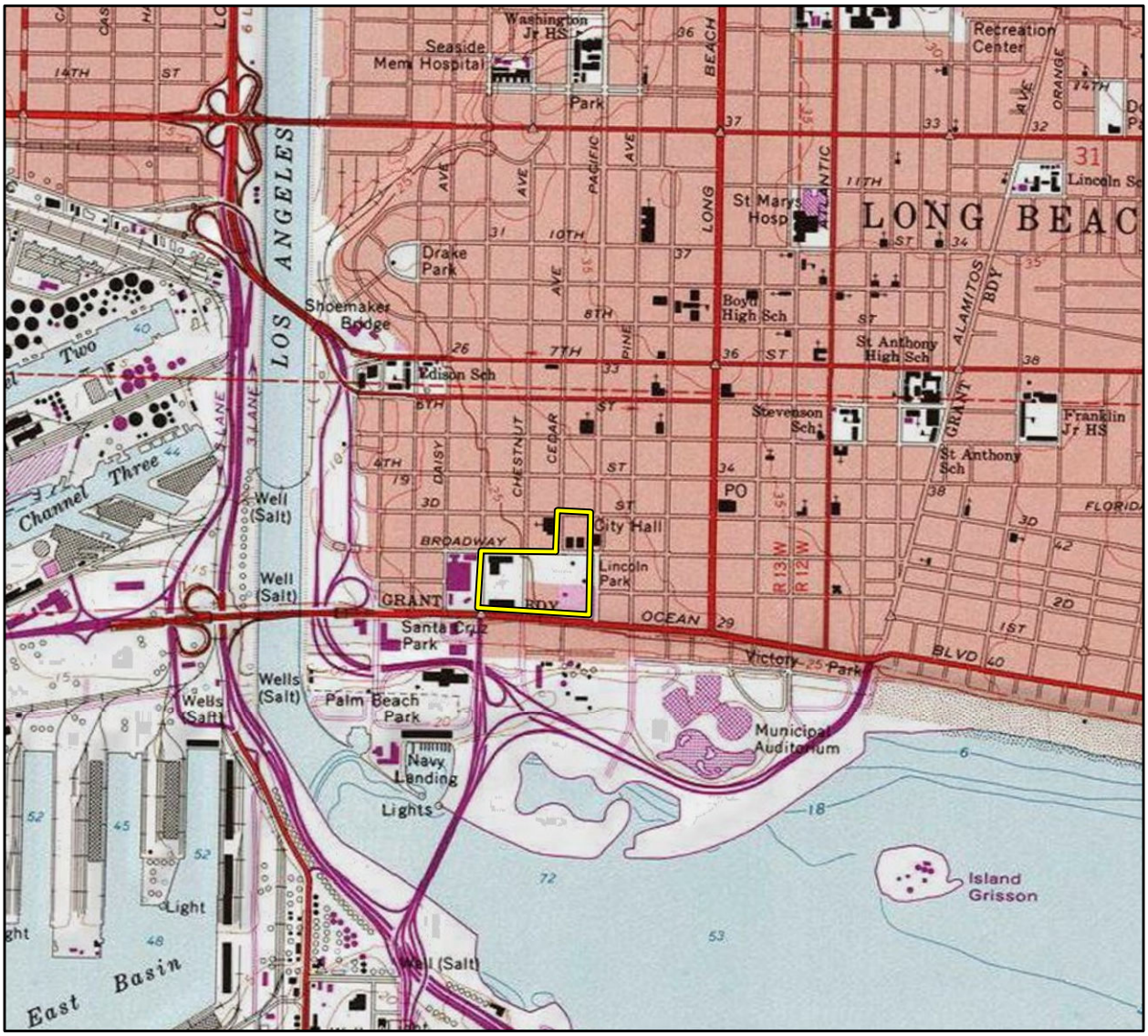
City: Carlsbad Zip: 92008

Phone: 562-676-5485

Fax: 760.918.9449

Email: scarmack@rinconconsultants.com

Project Description:
The proposed project would redevelop the existing civic center property for municipal reuse. Please include a 0.5-mile radius, as depicted in the attached map.



Imagery provided by National Geographic Society, ESRI and its licensors © 2015. Long Beach Quadrangle. T5S, R13W, S1. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



Project Boundary

0 1,000 2,000
Feet
1:24,000

N

Project Location Map

Figure 1

Shannon Carmack

From: Shannon Carmack
Sent: Friday, April 10, 2015 12:37 PM
To: 'nahc@nahc.ca.gov'
Subject: Sacred Land File Request - Long Beach Civic Center
Attachments: SLF NAHC rqst.pdf

Good afternoon,

Attached is a SLF request for the Long Beach Civic Center Redevelopment Project. Please let me know if you have any questions.

Thanks,

Shannon Carmack
Architectural Historian

rincon
Rincon Consultants, Inc.
562 676 5485
www.rinconconsultants.com
Environmental Scientists Planners Engineers
Ranked "#1 Best Firm to Work For" – *CE News*

Rincon Consultants, Inc.
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FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

April 23, 2015

John Tommy Rosas
Tongva Ancestral Territorial Tribal Nation
Email: tattnlaw@gmail.com

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Rosas:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

Rincon Consultants, Inc.
5135 Avenida Encinas, Suite A
Carlsbad, California 92008

760 918 9444
FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

April 23, 2015

Anthony Morales
Gabrielino/Tongva San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA 91778

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Morales:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

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April 23, 2015

Sandonne Goad
Gabrielino/Tongva Nation
P.O. Box 86908
Los Angeles, CA 90086

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Ms. Goad:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

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Carlsbad, California 92008

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FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

April 23, 2015

Robert Dorame
Gabrielino Tongva Indians of California Tribal Council
P.O. Box 490
Bellflower, CA 90707

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Dorame:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

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5135 Avenida Encinas, Suite A
Carlsbad, California 92008

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FAX 918 9449

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www.rinconconsultants.com

April 23, 2015

Bernie Acuna
Gabrielino-Tongva Tribe
P.O. Box 180
Bonsall, CA 92003

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Acuna:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

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www.rinconconsultants.com

April 23, 2015

Linda Candelaria
Gabrielino-Tongva Tribe
P.O. Box 180
Bonsall, CA 92003

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Ms. Candelaria:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

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Carlsbad, California 92008

760 918 9444
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www.rinconconsultants.com

April 23, 2015

Andrew Salas
Gabrielino Band of Mission Indians
P.O. Box 393
Covina, CA 91723

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Salas:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

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Carlsbad, California 92008

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info@rinconconsultants.com
www.rinconconsultants.com

April 23, 2015

Conrad Acuna
Gabrielino-Tongva Tribe
P.O. Box 180
Bonsall, CA 92003

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Acuna:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

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Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

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Carlsbad, California 92008

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FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

April 23, 2015

Sam Dunlap
Gabrielino/Tongva Nation
P.O. Box 86908
Los Angeles, CA 90086

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Dunlap:

Rincon Consultants has been retained to conduct a cultural resources study for the Long Beach Civic Center Project, Los Angeles County, California. The proposed project would include the construction of a new City Hall, a new Harbor Department administration building, a new main library, and a new commercial mixed use development, and the redevelopment of Lincoln Park in Long Beach (see enclosed map). In total, the project proposes six new buildings, three parking garages, and related infrastructure and landscaping.

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has not yet received the results of the SLF search, but is aware that the project site is within your area of concern.

If you have knowledge of cultural resources that may exist within or near the project area, please contact me in writing at the above address or scarmack@rinconconsultants.com, or by telephone at 562-676-5485. Thank you for your assistance.

Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

Rincon Consultants, Inc.
5135 Avenida Encinas, Suite A
Carlsbad, California 92008

760 918 9444
FAX 918 9449

info@rinconconsultants.com
www.rinconconsultants.com

April 23, 2015

LA City/County Native American Indian Commission
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles, CA 90020
randrade@css.lacounty.gov

RE: Cultural Resources Study for the Long Beach Civic Center Project, Los Angeles County, California

Dear Mr. Dunlap:

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Sincerely,

Shannon Carmack
Architectural Historian

Enclosure: Project Location Map

Shannon Carmack

From: Andy <gabrielenoindians@yahoo.com>
Sent: Sunday, May 10, 2015 8:17 PM
To: Shannon Carmack
Cc: Christina Swindall Martinez. Kizh Gabrieleno; Tim Miguel.Kizh Gabrieleno; Matt Teutimez.Kizh Gabrieleno; Martha Gonzalez. Kizh Gabrieleno
Subject: Cultural resources study for the long beach Civic Center project Los Angeles county , California

Dear Shannon Carmack
This email is in regards to your letter Dated April 23,2015 Long Beach Civic Center Project. As you may know the project location is with in an area of sensitivity, therefore we would like to request one of our tribal monitors be on site during any and all ground disturbances . Thank You Chairman Andrew Salas

Sent from my iPhone

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 3CS

Other Listings
Review Code | Reviewer | Date

***Resource Name or #:** City Hall-Library Complex

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County: Los Angeles**

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** *Long Beach* **Date:** 2012 **T** 5S; **R** 13W; **¼ of ¼ of Sec** 1; S.B. **B.M.**

c. Address: 333 W. Ocean Boulevard and 101 Pacific Avenue City: Long Beach Zip: 90802

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The City Hall-Library Complex is the centerpiece of the Long Beach Civic Center. The Late Modern-style complex includes the City Hall, Library and an integrated landscape that incorporates green spaces into the building design. These elements include terraced roof gardens with seating areas, stairs and walkways that connect each of the buildings. The buildings all face inward towards a tiled plaza featuring landscaped planters, informational kiosks, a clock tower and a bronze statue.

See continuation sheet, page 4.

***P3b. Resource Attributes:** (List attributes and codes) HP14 Government Buildings

***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
View to the west ca. 1977
Source: Library Digital Archive, City of Long Beach

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
1977, City of Long Beach

***P7. Owner and Address:**
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Carmack
Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

***P9. Date Recorded:** 05/12/2015

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") City of Long Beach Civic Center Project, City of Long Beach, County of Los Angeles, California. Rincon Consultants, May 2015.

***Attachments:** ☐NONE ☑Location Map ☐Sketch Map ☑Continuation Sheet ☑Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

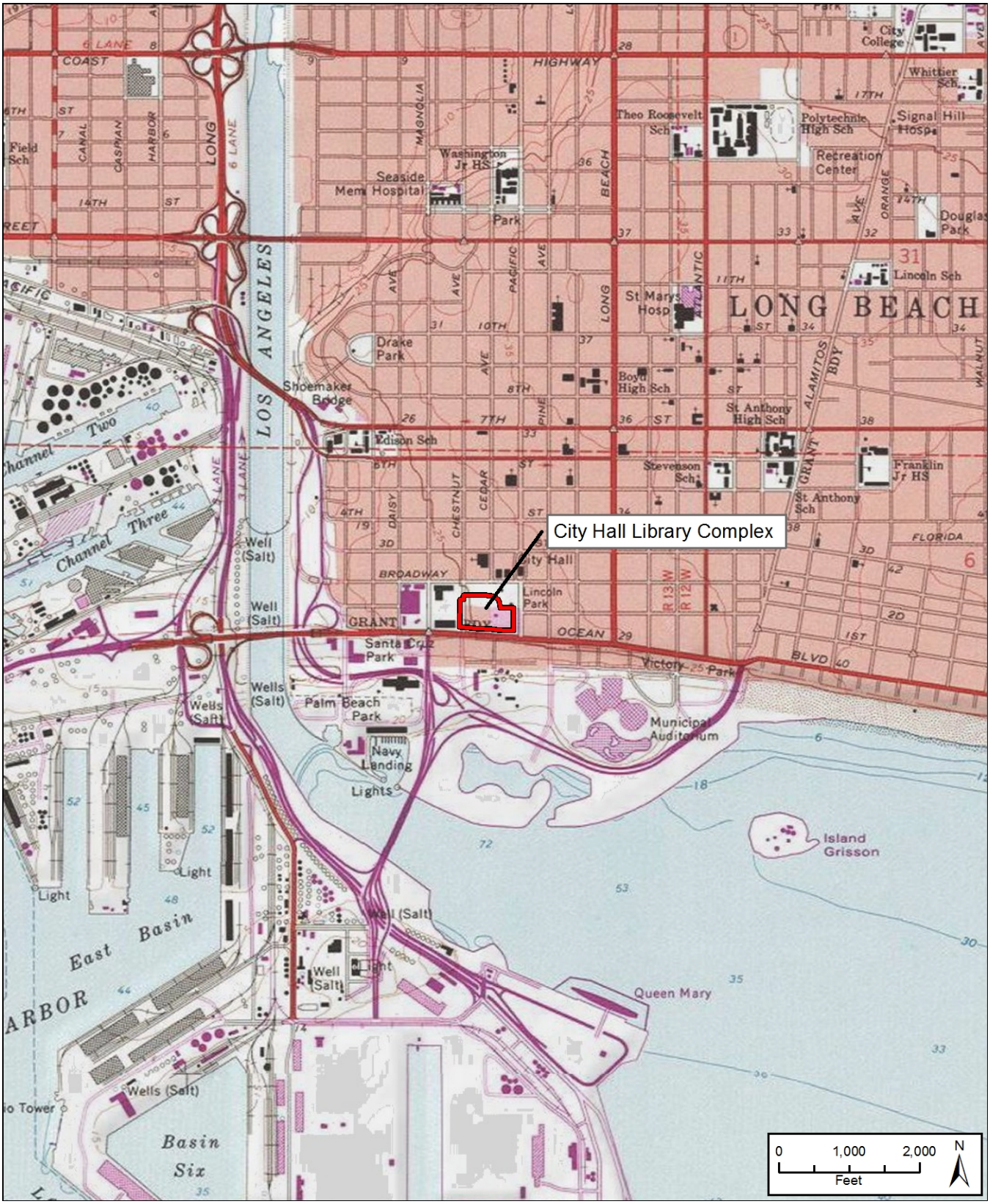
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** City Hall-Library Complex

***Map Name:** Long Beach, CA ***Scale:** 1: 24,000 ***Date of Map:** 2015 (electronic)



*Required information

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3CS

***Resource Name or #** (Assigned by recorder) City Hall-Library Complex

B1. Historic Name: City Hall-Library
B2. Common Name:
B3. Original Use: Government buildings B4. Present Use: government buildings
***B5. Architectural Style:** Late Modern-style
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Constructed in 1977

***B7. Moved?** ☑No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:**
Other buildings, sites, and structures within Long Beach Civic Center- Long Beach Courthouse, Public Safety Building, Lincoln Park, and Broadway Parking Garage

B9a. Architect: Allied Architects b. Builder:
***B10. Significance: Theme:** Civic Development **Area:** City of Long Beach
Period of Significance: 1977 **Property Type:** Government building **Applicable Criteria:** 3
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

By the early 1950s, it was clear that new infrastructure was desperately needed in a rapidly expanding post-war Long Beach. With a population of 322,000, the city was relying on outdated buildings spread across downtown and designed to accommodate significantly fewer residents. The City Hall was constructed in 1921, when the city population was 56,000, while the library, completed in 1909, was constructed to serve 17,800 residents. The city began actively developing a plan for a Civic Center that would consolidate these public services into a central location (Independent-Press Telegram 1955, Gore 1976).

Although city municipal services had always been located downtown, some community members preferred construction of a new civic center away from the urbanized coastline, believing the acquisition costs would be cheaper and the services would be more centrally located within the city. A proposed site bound by 37th Street to the north, 32nd Street to the south, Long Beach Boulevard west and Atlantic Avenue to the east, amongst a field of active oil wells was presented as the alternative to downtown. City officials disagreed with the so-called "Oil Field site," citing transportation and logistical concerns (Independent 1954).

In 1953, the Long Beach City Council accepted an offer from the Los Angeles County Board of Supervisors to construct a new courthouse to serve Municipal and Superior Courts in Long Beach. The northeast corner of Ocean Boulevard and Magnolia Avenue was selected as the preferred site for the new building, near the existing city hall and library (Los Angeles Times 1953).

See Continuation Sheet, pages 4-7.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**
ASLA.com. 2015 "Peter E. Walker." Available at: http://www.asla.org/AwardRecipient.aspx?id=16126 Accessed May 10, 2015

See Continuation Sheet 7 and 8.

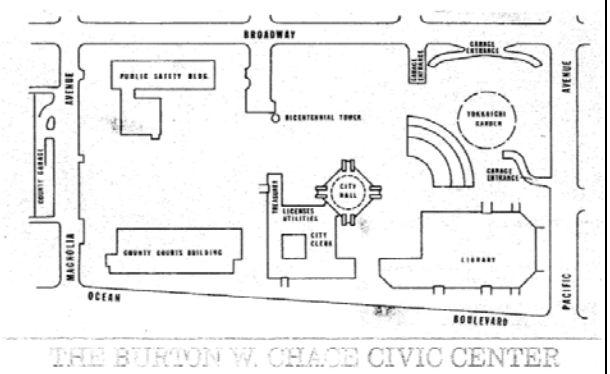
B13. Remarks:

***B14. Evaluator:** Shannon Carmack, Rincon Consultants Inc.,

***Date of Evaluation:** May, 15 2015

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



THE BURTON W. CHACE CIVIC CENTER

***Recorded by:** Shannon Carmack, Rincon Consultants, Inc. ***Date:** 5/12/15 ☑ Continuation ☐Update

***P3a. Description:**

City Hall is a 15-story tower designed in the Late Modern-style. Rectangular in plan with a flat roof, the tower is a complex union of glass, aluminum and concrete that typifies the Late Modern style. The tower superstructure features glass curtain walls separated by intersecting girders that connect at each floor to pairs of detached pre-cast concrete columns that dominate each building corner. The recessed ground floor includes a curved glass curtain wall which opens to the city council chambers. The tower is situated towards the center of the Civic Center property. The primary entry is on the southeast facing elevation, through glass doors that face the tiled plaza and the raised berm area of Centennial Plaza.

The Library is a two story 135,000, square-foot building located east of the City Hall tower. Constructed of precast concrete and glass, the primary entry is on the north elevation from the Civic Center plaza. The building has a rectangular plan with a flat roof that serves as a roof garden. The rooftop garden features a complex design of rectangular planters, seating areas and walking paths. Large clerestory windows provide light into the central first floor space. Extending from the north roof level elevation is a curving foot bridge that connects the roof garden to the adjacent Centennial Plaza berm area.

Connecting at the southwest end of the tower is single-story building that was designed to house additional city agencies, including the gas department, city clerk and city treasurer. The building is rectangular in plan with entrances that face out towards the open plaza. Designed to complement the tower and library, these offices feature walls of glass and precast concrete beneath a garden roof complex featuring raised concrete garden beds, seating areas and pathways and that are all interconnected to the city hall tower, library and stadium. A series of large circular vent openings pierce through the pathway floors and provide natural light to the buildings at the plaza level.

Situated near the center of the Civic Center is the 100-foot bicentennial carillon clock tower, also designed by Allied Architects. Dedicated in November 1976, it was constructed at a cost of $150,000. The construction was financed through funds donated by Long Beach realtor-philanthropist Isabel Paterson as well as contributions by the city's bicentennial committee. The tower features an electronically amplified carillon that could be heard throughout the civic center property. A pair of 49-key keyboards could be moved to the base of the tower for open-air concerts

A 29 foot-tall Cor-ten steel statue, comprised of stacked geometric shapes resting on a raised concrete foundation is situated between the library and city hall tower (Photograph 8). Designed by Brough Miller and titled, 'Marlin' the statue was installed in the plaza in 1991 and is on permanent loan from the Kilroy Realty Company. The statue is part of a series of sculptures, with the remaining being located at the Kilroy Airport Center off Redondo Avenue in Long Beach.

***B10. Significance: Continued.**

In 1956, the voters approved funding for the new Public Safety Building, which would consolidate police and fire department resources in a modern, expanded facility. Architects Frances J. Heusel with assistance by Killingsworth, Brady and Smith were commissioned to design the new building. Heusel was also tasked to design the new Courthouse, with assistance by Kenneth Wing Sr. The city evidently favored local firms when selecting the architects for both projects. Like the Courthouse and Public Safety buildings, many of the city's larger-scale projects were constructed through multi-firm partnerships. Although somewhat unusual amongst other southern California cities, Long Beach's history of architectural collaboration was borne out of necessity, as many of the local firms simply did not have the resources to complete larger projects on their own (Ivers 2014).

Francis Heusel (1906-1968) was born in Detroit Michigan and received his degree in architecture from the Ecole des Beaux Arts in Paris in 1931. He began practicing architecture in 1938. He later formed a partnership with Frank Homolka in 1960, just prior to the completion of the Long Beach Courthouse. Heusel, Homolka & Associates would later design the addition made to the Long Beach courthouse in 1971 as well as many other buildings in Long Beach including the Water Department Administration building and St. Luke's Church. Homolka would later continue on to complete the City Hall Library Complex as part of Allied Architects.

Kenneth S. Wing (1903-1987), attended high school in Long Beach and graduated from the University of Southern California (USC) School of Architecture. One of the city's most prolific and celebrated architects, Wing's local projects includes the Long Beach Arena; the Southern California Edison Building and the renovation of the historic Bixby Ranch in Los Cerritos.

See Continuation Sheet, Page 5.

***Recorded by:** Shannon Carmack, Rincon Consultants, Inc. ***Date:** 5/12/15 ☑ Continuation ☐Update

***B10. Significance:**

Edward A. Killingsworth (1917- 2004) earned his architecture degree from USC in 1940, also receiving a special award from the American Institute of Architects for his outstanding academic record. In 1945, he was hired as a draftsman in the office of Long Beach architect Kenneth S. Wing. By 1953, Killingsworth had formed his own practice, teaming with Jules Brady (1908-1996). Killingsworth is most widely recognized for his work on the Case Study House Program, being one of only two architects to receive four commissions through the program; the other being famed Modern architect Richard Neutra. Architectural photographer Julius Schulman described Killingsworth's Case Study House # 25 (1962, the Frank House), as "the most successful of all the Case Study houses."(Woo 2004).

By 1958, a citywide master plan was drafted that included a new vision for the Civic Center. In addition to a new city hall and library, the plan envisioned space for a museum and other municipal facilities with "…gardens, open grass spaces, terraces, reflecting pools, shrubs and tree plantings, to provide beautiful vistas between the buildings and unite the entire area with Lincoln Park" (City of Long Beach 1958). The master plan maintained that a cohesive plan for the Civic Center, in downtown Long Beach was absolutely essential to the success of the municipal redevelopment, stating,

> The Civic Center should be immediately contiguous to the Central Business District, but in no case within it nor in the path of its expanding growth. The governmental administration center is part of the Business District – not a thing apart. The development, therefore must be integrated with the District as a whole. The uses of buildings in a civic center are completely compatible. Likewise, the uses which tend to cluster around the center also compatible. A complete civic center adds materially to the stabilization of uses and activities within the entire downtown area (City of Long Beach 1958).

The Public Safety Building was dedicated on March 1, 1960 in an elaborate ceremony attended by hundreds of residents and city officials. At the time of its construction, the building was celebrated for representing a new era in city development, being the first new municipal construction in three decades (Independent-Press Telegram 1960b). The building was constructed by Twaits-Wittenburg Co. who constructed municipal projects throughout southern California, including the City of Los Angeles's Parker Center (1954) and the City of Los Angeles Hall of Records (Independent-Press Telegram 1955, Gore 1976).

The Long Beach Courthouse was completed several months later, in December 1960. The building featured many of the latest modern conveniences for the staff and visitors such as air conditioning, full-service cafeteria, and elevators and escalators (Maddock 1960). Designed to complement the Public Safety Building, both buildings reflected the Corporate International style, which evolved from the innovative designs of prominent German architect Ludwig Mies Van de Rohe in the 1920s. According to David Gebhard and Robert Winter in A Guide to Architecture in Los Angeles and Southern California, Mies Van de Rohe's designs could be described as, "The concept of clothing a building in a moduled, thin metal paneled and glass skin independent of the structural skeleton" (Gebhard and Winter 1977).

Despite the overwhelming support for the Courthouse and Public Safety buildings, completion of the remaining civic center plan stalled through the 1960s. Voters repeatedly rejected proposed city-issued bonds to develop a new city hall and library, to the frustration of city officials (Independent-Press Telegram 1955, Gore 1976).

In 1960, the city authorized the construction of a subterranean Lincoln parking garage. The project was unique for the time, as it was funded by downtown business leaders through private bonds. In the agreement between the city and the Long Beach Lincoln Park Parking Corporation, an association of downtown business owners, the garage would be operated by an outside lessee as a non-profit. All revenues collected through parking fees would be first used to pay down the construction costs, with surplus funds going to the city. Costs to replace the park on top of the below grade garage structure would be divided between the city and the parking corporation. The city received over 1,000 protests from downtown residents, particularly from the elderly who frequented the roque and shuffleboard courts. In spite of objections, the city proceeded with the planned development (Independent Press Telegram 1960a and 1960b).

The north half of Lincoln Park was redeveloped on top of the subterranean parking structure as promised, complete with lawn, pathways and ball courts. At the center of the park was a 140-foot diameter circle featuring landscaping elements including trees, bushes, rocks and a reflecting pond, all with a nonspecific Asian influence. After construction was already underway, it was decided that the park would be dedicated as the Yokkaichi Garden, to honor the Japanese sister city of Long Beach. To avoid offending the Yokkaichi representatives at the dedication ceremony, city officials quickly sought guidance from members of the Japanese American Citizens League to correct some of the more apparent cultural inaccuracies of the landscape features (Independent Press Telegram 1964). **See Continuation Sheet Page 6.**

***B10. Significance: Continued**

Despite aggressive advertising in the local newspapers, the parking garage never turned a profit. By 1969, the Long Beach Lincoln Park Parking Corporation had defaulted on the loans and was reporting an annual net loss of over $100,000 (Brackenbury 1968 and 1969).

Outside of an addition to the Courthouse which added a 60,000 square foot east wing to the building, few changes occurred within the Civic Center property again until the late 1960s, when the city re-energized discussions to construct a city hall and library (Los Angeles Times 1965, Gore 1976). In 1969, the City Council selected Allied Architects to develop plans for the project. Returning to the custom of utilizing a team of local architects to design municipal projects, Allied Architects was a consortium comprising Hugh and Donald Gibbs, Frank Homolka, Killingsworth, Brady and Associates, Kenneth S. Wing Jr. and Sr. and Landscape Architect, Peter Walker (Gore 1976).

A new addition to the Civic Center project was the firm Gibbs and Gibbs. Also local architects, father Hugh opened the Long Beach firm in 1934 and Donald joined in 1961, following his graduation from USC. Together, Gibbs and Gibbs designed numerous local buildings, including the Galaxy Towers (1967), the Portofino (1962), the Terrace Theater (1978) and their office building on Long Beach Boulevard (1963) (Gibbs 2014).

Peter Walker of Sasaki, Walker and Associates was brought into the team to assist with the landscape design elements. The firm was established in 1957 in Watertown, Massachusetts, by Hideo Sasaki and Peter Walker. Sasaki was chairman of the landscape architecture department of Harvard University's Graduate School of Design and Walker was his pupil. Walker is widely recognized as a "veteran designer of corporate campuses and estates"(Mozingo 2011). In 2004 he received the American Society of Landscape Architects (ASLA) Medal, which honors those whose "lifetime achievements and contributions to the profession have had a unique and lasting impact on the welfare of the public and the environment." His most widely recognized projects include Transbay Transit Center, San Francisco, California, Constitution Gardens: Washington, D.C. and the World Trade Center Memorial at Ground Zero, New York (ASLA.com 2015).

The Allied Architects design called for a 14-story tower, overlooking a complex of single-story buildings including a library and offices. The new buildings would have flat roofs with landscaping to provide additional green space. Incorporating the existing Public Safety Building and Civic Center into the complex, Chestnut and Cedar Avenues between Broadway and Ocean Boulevards would be closed off, to create a civic center "super block." An art museum was also proposed for the site, to be completed after the initial construction (Independent 1971; Brackenbury 1972).

In early 1973, the Civic Center Authority, established through a joint powers agreement between the City and County issued a $38 million bond for the project and the project broke ground later that year (Gore 1976). The new design was applauded as a "distinctive architectural symbol of Long Beach and its role as the International City" (Brackenbury 1976).

The City Hall-Library Complex was designed in the Late Modern style, which emerged during the 1970s as an update to the earlier Modern aesthetic. Characterized by the application of concrete, glass and metal, the style featured minimal ornamentation, flat roofs, and organic geometric lines. The Late Modern design was largely applied in high-rise construction, such as City Hall; however the style was also adapted for low-rise buildings and applied for residential uses as well as schools, shopping centers and other institutional as evident in the Library.

City Hall's impressive 250-seat City Council chamber was constructed near the plaza entrance and designed with glass expanses to provide ground-floor views into the meeting hall and featured stadium seating which sloped below ground level towards the crescent shaped desk council. The council chamber design also incorporated advanced accessibility features including a plaza-level platform with microphones so that residents unable to walk down to the dais could address the council from the main level. The expansive library building, with its second floor set below grade featured 135,000 square feet of study areas and meeting halls, all punctuated by light wells, clerestory windows and atriums that let in the natural light from the roof and plazas. The elaborate series of rooftop gardens with concrete planters and grass berms connected the building masses and provided a unified, landscaped space. Architect Donald Gibbs credited the design influence for the City-Hall and Library complex to two award-winning Late-Modern buildings; the Knights of Columbus Building in New Haven, Connecticut and the Oakland Museum of California, both of which were completed in 1969 and designed by Kevin Roche and John Dinkeloo of KRJDA and Associates (Gibbs 2014).

The new City Hall and Library Complex was dedicated on July 4, 1976, despite the fact that the project was still not complete. It was dedicated the Burton W. Chace Civic Center, in honor of the former mayor and district supervisor who died in a car accident in 1972 (Sherman 1976). **See Continuation Sheet, Page 7.**

***Recorded by:** Shannon Carmack, Rincon Consultants, Inc. ***Date:** 5/12/15 ☑ Continuation ☐Update

***B10. Significance: Continued**

Despite the celebrated opening, the new Civic Center was plagued with design and construction flaws, resulting in significant project delays and costly redesigns, prompting the City to consider suing Allied Architects for overrun costs in excess of $1 million. A series of 108 decorative triangular landings situated between the glass walls and concrete towers were criticized for being "pigeon roosts" and requiring the city to purchase $70k worth of special window-washing equipment. The heating and cooling system installed in the building was found to be very costly to operate, as design and construction began prior to the 1974 energy crisis. The budget department estimated the heating and cooling system in the new City Hall would cost $625k to operate annually, in contrast to the $60k they were spending at the time (Gore 1976).

And unlike the rooftop park on the Oakland Museum, the Library park areas never attracted sufficient visitors to gain local appreciation. The space lacked activities to attract visitors and the variation in rooflines and landscaping gave the rooftop areas a reputation of being unsafe. Eventually, the landscaped rooftop and berms areas began to leak prompting the City to abandon the landscaping and close off the areas off to the public. To reduce the weight of the roof the landscaping and soil within the concrete planters and berms was eliminated, leaving the exposed concrete shell as it appears today (Gibbs 2014).

Completed in 1977 by Allied Architects, the Long Beach City Hall-Library Complex is an intact example of Late Modern architecture that retains integrity of design, materials, feeling, workmanship, association and location. The complex appears eligible for individual listing in the CRHR as well as a contributor to a Civic Center Historic District under Criterion 3 within the context of the architectural evolution of Long Beach. Although the City Hall-Library Complex is less than 50 years in age (constructed in 1977) the complex is one of a limited number of fine examples of the Late Modern Style of architecture remaining in the city. Designed by a consortium of local architects that consisted of Hugh and Donald Gibbs, Frank Homolka, Killingsworth, Brady and Associates, and Kenneth S. Wing Jr. and Sr. Each considered local masters in their own right, the complex is unique for its collaborative design amongst local architects and represents the collective work of a group of masters. The Library rooftop design contributions of master landscape architect Peter Walker also contribute to the significance and eligibility of the complex. Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project.

Although completion of the Civic Center took over two decades to complete and deviates from the original 1950s design layout, the buildings within the Civic Center represent a distinct grouping of civic and governmental properties united historically by plan and physical development. However, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the overall integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district.

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See Continuation Sheet, Page 8.

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Workman, Boyle 1935 The City that Grew. Southland Publication Co., Los Angeles.

***Recorded by:** Shannon Carmack, Rincon Consultants, Inc. ***Date:** 5/12/2015 ☐ Continuation ☒Update

The Long Beach Courthouse was surveyed on May 12, 2015 and appears to be in a similar to condition to what is described in the original resource record. Although fencing has been installed around the entire building, there are no visible alterations and the exterior of the building remains in the same fair physical condition.



Courthouse, view to the northwest. 5/12/2015

State of California— The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI
Trinomial #
NRHP Status Code
Other Listings
Review Code Reviewer Date

*Resource Name or # (Assigned by recorder) 415 West Ocean Boulevard, Long Beach, CA 90802

P1. Other Identifier: Long Beach Courthouse

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County Los Angeles

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Date T ;R ; ¼of ¼ of Sec ; B.M.

c. Address 415 West Ocean Boulevard City Long Beach Zip 90802

d. UTM: (Give more than one for large and/or linear resources) Zone ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

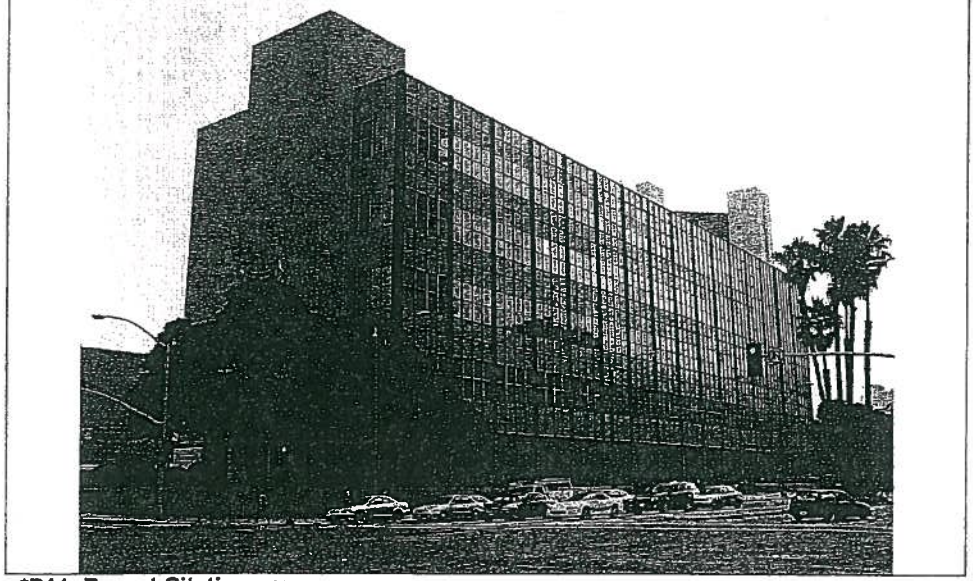
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This is an eleven-story courthouse building, nearly symmetrical in appearance, with a rectangular floor plan. The north and south elevations are divided by 16 bays. The steel-framed courthouse, constructed in the Corporate International style, has a flat roof. The building is framed in steel and has curtain walls made of glass glazing and blue porcelain-enamel panels set in aluminum frames; solid walls of precast concrete inlaid with quartz aggregate are located on the west and east elevations. The first floor is recessed and has squared columns making the building appear as if were standing on stilts. The main entrance is located within this recessed walkway and it is used by the general public; a private entrance for lawyers, judges, law enforcement, and the like, is located on the north elevation. There is a staircase located on the southeast section of the building and it is encased by glass. The pedestrian walkways are made of terrazzo flooring. There are raised concrete planters and ground level planting areas on the west, east and south elevations.

*P3b. Resource Attributes: (List attributes and codes) HP14. Government building

*P4. Resources Present: ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.):

*P5a. Photograph or Drawing (Photograph required for buildings, structures or objects)



P5b. Description of Photo: (view, date, accession #) View facing north-east at south-facing façade. August 13, 2008

*P6. Date Constructed/Age and Sources: ☒Historic ☐Prehistoric ☐Both
1960, "Warren Dedicates New Long Beach Courthouse" *LA Times* 21 Dec 1960

*P7. Owner and Address:

*P8. Recorded by: Name, affiliation, and address)
L. Carias
430 N. Halstead Street
Pasadena, CA 91107

*P9. Date Recorded: Sept. 22, 2008

*P10. Survey Type: (Describe)
☒ Intensive
☐ Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")
"New Long Beach Courthouse Initial Study" Sapphos Environmental, Inc. Pasadena, CA October 2008.

*Attachments: NONE ☐ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure & Object Record
☐Archaeological Record ☐ District Record ☐Linear Feature Record ☐ Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photographic Record ☐ Other (List)

State of California--- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # _____
HRI _____

BUILDING, STRUCTURE AND OBJECT RECORD

*NRHP Status Code

B1. Historic Name: Long Beach Courthouse
B2. Common Name: Long Beach Courthouse
B3. Original Use: Courthouse B4. Present Use: Courthouse
*B5. **Architectural Style** Corporate International
*B6. **Construction History:** (Construction date, alterations, and date of alterations)
The construction for the courthouse began in 1958 and was completed in 1960. A 170,000 square foot east wing was added and completed in 1971.
*B7. **Moved?** ☒No ☐Yes ☐Unknown **Date:** _____ **Original Location:** _____
*B8. **Related Features:**

B9a. Architect: Kenneth S. Wing and Francis J. Heusel b. Builder: Robert E. McKee General Contractors, Inc.
*B10. **Significance: Theme** Architecture - Corporate International style **Area** Long Beach
Period of Significance: 1958-present **Property Type:** HP 14. Government building **Applicable Criteria:** CR: 3
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Long Beach Courthouse is architecturally significant as a well-articulated example of the Corporate International Style, a building type that reached its fullest expression in the 1960s and was prevalent in Southern California. The Long Beach Courthouse also is a representative example of the work of master modern architect, Kenneth S. Wing, who's distinguished career spanned some sixty years in Long Beach.

The evolution of the City of Long Beach began with the arrival of Spanish explores and missionaries in the late 18th century. Mission San Gabriel Archangel, originally founded in what is now Montebello, was awarded jurisdiction over most of this region after its establishment in 1771. Ten years later, the Pobladores, a group of 12 families from present-day Mexico, founded a community in what is now downtown Los Angeles. During the Spanish and subsequent Mexican reign over Alta California, the southern portion of present-day County of Los Angeles was held in a variety of land grants. In 1784, Juan Manuel Nieto, a Spanish soldier, had been granted 300,000 acres (an amount reduced in 1790 to 167,000 acres) to reward his military service. After his death in 1804, the land became the property of his heirs; in 1834, it was divided into five smaller ranchos, including Rancho Los Alamitos and Rancho Los Cerritos. These two ranchos spanned the majority of what now comprises the City of Long Beach; Alamitos Avenue along the eastern edge of the study area traces the boundary that separated the two ranchos.

Long Beach (originally Willmore City) was founded in 1881 from a small portion of the Rancho Los Cerritos as William Willmore's American Colony project. The southern manager for the California Immigrant Union, Willmore was a promoter not

(continued page 3)

B11. Additional Resource Attributes: (List attributes and codes) _____
*B12. **References:** See page XXX

(Sketch Map with north arrow required.)

B13. Remarks:

*B14. **Evaluator:** Laura G. Carias
430 North Halstead Street
Pasadena, CA 90280

*Date of Evaluation: September 22, 2008

(This space reserved for official comments.)

*Resource Name or # (Assigned by recorder) 415 West Ocean Boulevard, Long Beach, CA 90802
Recorded By: Laura G. Carias Date: Sept. 22, 2008 ☒ Continuation ☐ Update

***B10. Significance (continued from page 2):**

only of local real estate but also of the Southern California lifestyle, a concept that was initially overstated but ultimately lasting.[1] Willmore City was touted as a healthful seaside resort in newspapers throughout the country. Despite extensive marketing, Willmore's days as a promoter of the Southern California lifestyle were not successful, and Jotham Bixby resumed ownership by default in 1884. Bixby sold the town to a new syndicate called the Long Beach Land and Water Company, who changed the colony's name to Long Beach and took ownership in 1887.[2]

Long Beach promoters and business people sought to attract newcomers from other local cities, some of which exceeded the city's population by thousands and even tens of thousands. This goal was assisted by the availability of local rail transportation. Trains had been serving the general area since 1869, when Phineas Banning constructed a 22-mile railway from Los Angeles to San Pedro. In 1891, the Long Beach City Council allowed the Los Angeles Terminal Railroad Company to install a rail line along Ocean Avenue to connect Long Beach with Los Angeles.[3] By 1898, Southern Pacific had taken over the Long Beach Railroad line along Second Street at Pacific Avenue. From 1895 to 1902, the geographic boundary of most development within Long Beach expanded northwest to Anaheim Street (north) and Monterey Avenue (west) to accommodate the growing population, which had increased to approximately 4,000 residents.

In 1905, the Los Angeles Dock and Terminal Company purchased the 800 acres of marshland that had been included in the original sale of the town to the Long Beach Development Company (1887) and began to improve the area in preparation for shipping. Beginning in 1906, the San Gabriel River was dredged, and a 1,400-foot turning basin and three channels were created.[4] A 500-foot-long municipal wharf was constructed on Channel 3 in 1911, and the Port of Long Beach opened in June 1911. The harbor ultimately played a role in wartime shipping, including the transportation of ships, food, clothing, and munitions, as well as the construction of ships and submarines, among the many other World War I support efforts in which Long Beach residents engaged. The following year, Long Beach and the U.S. Army Corps of Engineers permanently established regular navigation between the Los Angeles and Long Beach inner harbors by improving the Cerritos Channel.[5,6]

A series of annexations to Long Beach in the 1900s, including the absorption of Alamitos Beach (1905) to the east, Carroll Park (1908), and Belmont Heights (1911), and convenient transportation, seaside amenities, and a burgeoning harbor industry, helped increase the permanent local population.[7,8] Sanborn maps indicate that, from 1902 to 1905, Long Beach's population tripled, from approximately 4,000 to 12,000. By 1910, the population was 17,809,[9] and the city had expanded to approximately 10 square miles.[10]

(continued page 4)

[1] McWilliams, Carey. 1946. *Southern California: An Island on the Land*, pp. 96, 119. Layton, UT: Gibbs Smith.

[2] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles-Long Beach Harbor Areas Cultural Resource Survey*, p. 63. Prepared for: U.S. Army Corps of Engineers, Los Angeles.

[3] Johnson Heumann Research Associates. 1988. *Expanded Downtown Long Beach Historic Survey, Final Report*, p. 13. City of Long Beach, Office of Neighborhood and Historic Preservation.

[4] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles-Long Beach Harbor Areas Cultural Resource Survey*, p. 63. Prepared for: U.S. Army Corps of Engineers, Los Angeles.

[5] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles-Long Beach Harbor Areas Cultural Resource Survey*, p. 64. Prepared for: U.S. Army Corps of Engineers, Los Angeles.

[6] Berner, Loretta. 1990. "A Step Back in Time." In *Shades of the Past. Journal of the Historical Society of Long Beach*, p. 67. Edited by Lorette Berner. Long Beach, CA.

[7] Mullio, Cara, and Jennifer Volland. 2004. *Long Beach Architecture: The Unexpected Metropolis*, p. 23. Santa Monica, CA: Hennessey and Ingalls.

[8] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles-Long Beach Harbor Areas Cultural Resource Survey*, p. 63. Prepared for: U.S. Army Corps of Engineers, Los Angeles.

[9] U.S. Census Bureau. 1910. Census records for the City of Long Beach. On file, City of Long Beach Office of Neighborhood and Historic Preservation.

[10] Harshbarger, Tom. Spring 1999. "History in a Seashell." *California State University Long Beach, University Magazine Online*, 3(1). Available at: http://www.csulb.edu

Primary #
HRI

*Resource Name or # (Assigned by recorder) 415 West Ocean Boulevard, Long Beach, CA 90802

Recorded By: Laura G. Carias Date: Sept. 22, 2008 ☒ Continuation ☐ Update

***B10. Significance (continued from page3):**

In 1921, the discovery of oil in Signal Hill by the Shell Oil Company brought radical changes to Long Beach, as the ownership, production, and sale of oil became the city's primary economic industry.[11] The field in Signal Hill proved remarkably rich in oil producing 859 million barrels of oil and more than 100 million cubic feet of natural gas in the first 50 years. Speculators, promoters, and experienced oilmen descended on Signal Hill, competing for mineral leases.[12] Although Signal Hill was an unincorporated island within the City of Long Beach, the building boom resulting from the area's oil production had a dramatic effect on Long Beach's population.[13] From 1920 to 1925, the population more than doubled, growing from 55,000 in 1920 to an estimated 135,000 in 1925.[14,15] This population boom continued until 1929 and the stock market crash which led the country into the Great Depression. Although development slowed significantly after the crash, as it did in communities across the country, so too did the rate of population increase in the late 1920s, slowing new construction.

In March 1933, the City of Long Beach was hit by a magnitude 6.3 earthquake that toppled masonry buildings, shook houses and apartments off their foundations, damaged and destroyed schools and churches, and disabled the city's natural gas service. Reconstruction was financed with federal reconstruction grants and loans, which, coupled with the activity generated through rebuilding, rejuvenated the local economy.[16] Many buildings that were repaired or reconstructed during this period incorporated the Art Deco or Streamline Moderne styles popular at the time. In 1935, funding provided by the federal Works Progress Administration (which later became the Works Projects Administration, WPA) was used to build and improve parks and transportation facilities, as well as civic and recreational buildings throughout the city.

In 1936, oil was struck again—this time at the Wilmington Oil Field near the Long Beach Harbor. In the late 1930s, the defense industry continued to establish a strong presence in the area with the opening of Reeves Field (1937) on Terminal Island, the first permanent naval base in Long Beach. Soon thereafter, air transportation emerged which further boosted the importance of the local defense industry.
In 1919, aviation pioneer Earl Daugherty had established his own airport in the north part of the city, and in 1924, moved his airfield to the present site of the Long Beach Municipal Airport after persuading the city to designate the land.[17,18] The location and scale of the Long Beach Airport was a deciding factor in the selection of Long Beach by the Douglas Aircraft Company for a new production plant. Construction on the 242-acre facility began in November 1940 and concluded in August 1942 before the United States entered World War II.

In the immediate aftermath of the Japanese attack on Pearl Harbor, the city became involved in the war effort. The federal government constructed the Roosevelt Naval Base, Naval Shipyard, and Naval Hospital on Terminal Island. Douglas Aircraft established a hiring office on American Avenue (now Long Beach Boulevard). By the eve of World War II, the local economy

(continued on page 4)

[11] Robinson, W.W. 1948. *Long Beach: A Calendar of Events in the Making of a City*, p. 14. Reprinted by: Title Insurance and Trust Company, Los Angeles, CA. Available at: City of Long Beach Office of Neighborhood and Historic Preservation.

[12] Berner, Loretta. 1995. "Al Brown Remembers the Pike." In *Shades of the Past. Journal of the Historical Society of Long Beach*, pp. 18-19. Edited by Loretta Berner. Long Beach, CA.

[13] Robinson, W.W. 1948. *Long Beach: A Calendar of Events in the Making of a City*, p. 14. Reprinted by: Title Insurance and Trust Company, Los Angeles, CA. Available at: City of Long Beach Office of Neighborhood and Historic Preservation.

[14] Johnson Heumann Research Associates. 1988. *Expanded Downtown Long Beach Historic Survey, Final Report*, p. 14. City of Long Beach, Office of Neighborhood and Historic Preservation.

[15] U.S. Census Bureau. 1920. Census records for the City of Long Beach. On file, City of Long Beach Office of Neighborhood and Historic Preservation.

[16] Mullio, Cara, and Jennifer Volland. 2004. *Long Beach Architecture: The Unexpected Metropolis*, p. 31. Santa Monica, CA: Hennessey and Ingalls.

[17] League of Women Voters. 1980. *Long Beach: From Rancho to Renewal*, p. 15. On file, City of Long Beach Office of Neighborhood and Historic Preservation.

[18] Mullio, Cara, and Jennifer Volland. 2004. *Long Beach Architecture: The Unexpected Metropolis*, p. 28. Santa Monica, CA: Hennessey and Ingalls.

***B10. Significance (continued from page 4):**

had been invigorated, but the volume of wartime defense industry production in Long Beach served to fully restore the economy. The war effort had infused Long Beach with employment, economic resources, and people, and brought tourists back to the Pike.[19] By January 1941, Long Beach's population had increased to 164,271, a population increase of 22,239 from 1931.[20] Although much of the increase could be credited to the military personal moving into the area, there was also an influx of individuals and families drawn to Long Beach's promise of a large business district next to the sea.

In the late 1940s, the Los Altos area in the eastern portion of Long Beach transitioned from agricultural to residential uses. In the early 1950s, Bixby Knolls, a suburban shopping center, was developed, followed by the Lakewood Center. The subdivision of Ranchos Los Alamitos was completed by John Bixby's grandchildren, and the Alamitos Bay Marine was begun in 1954. In the postwar period, Long Beach was forced to address a growing problem in its downtown area—subsidence at the harbor. The problem, which had been identified before World War II, had been exacerbated by the development of the Wilmington Oil Field in 1936. The city had been sinking at a slow rate. Damage to harbor buildings, streets, railroad tracks, and underground systems was extensive. A $90 million dollar tidelands restoration program, funded by the State Tidelands Fund, began in 1953 and concluded successfully in 1958.[21] Earlier claims of inappropriate use of Tidelands Funds (which had resulted in lawsuits and much unfavorable publicity) are blamed by some to have caused the delayed economic recovery of downtown and the shoreline.[22]

Further hampering economic growth downtown was the postwar decrease in tourism. By the late 1950s and early 1960s, the addition of major tourist attractions, such as Disneyland and Knott's Berry Farm in neighboring communities, began to draw visitors away from Long Beach and caused its own residents to seek diversion in other Southern California cities. And in a trend felt by many U.S. cities in the postwar period, Long Beach's downtown suffered an economic downturn with the growth of the suburbs; many downtown buildings deteriorated from benign neglect, and many others were demolished to make way for urban renewal projects. Downtown property owners were concerned about the future of their investments, as redevelopment was not yet a priority.

The Long Beach Courthouse

The City of Long Beach established its first informal courthouse in 1888 which consisted of fold up chairs in a market. By 1925, the city had its first municipal court, and by 1929, it also served as a branch for the Los Angeles County Superior Court.[23] (This was the first court branch to serve any Superior Court within California.[24]) The population boom following World War II, prompted Long Beach to construct a more efficient courthouse building, and by 1953, the Long Beach City Council had voted unanimously to accept an offer by the County Board of Supervisors to construct a $2 million courthouse. The courthouse, to be designed by architects Kenneth S. Wing and Francis Heusel, would serve the Municipal and Superior Courts.[25] In 1954, it was decided the location for the new building would be the northeast corner of Ocean Boulevard and Magnolia Avenue. Opposition to the location came from many community members who felt it was best to construct the courthouse away from downtown Long Beach because the acquisition costs would be cheaper and the courthouse would be centrally located within the city. The City believed placing the courthouse downtown would eliminate worrying about transportation issues due to the volume traffic it would bring.[26]

(continued on page 6)

[19] Berner, Loretta. 1995. "Al Brown Remembers the Pike." In *Shades of the Past. Journal of the Historical Society of Long Beach*, p. 6. Edited by Loretta Berner. Long Beach, CA.

[20] "Los Angeles County." 2 January 1941. *Los Angeles Times*, D5.

[21] Mullio, Cara, and Jennifer Volland. 2004. *Long Beach Architecture: The Unexpected Metropolis*, p. 40. Santa Monica, CA: Hennessey and Ingalls.

[22] Mullio, Cara, and Jennifer Volland. 2004. *Long Beach Architecture: The Unexpected Metropolis*, p. 24. Santa Monica, CA: Hennessey and Ingalls.

[23] "Courts to Sit in Long Beach" *Los Angeles Times*. 28 Feb 1929. A9.

[24] Simon, Renee B. "Courts Come of Age" *Press Telegram Southland* p. 7-9

[25] "Long Beach Approves Plan for Courthouse." *Los Angeles Times*. 26 Aug 1953. p 4.

[26] "site for New Long Beach Courthouse Stirs Battle" *Los Angeles Times* 4 Sep 1953 A22.

B10. Significance (continued from page 5):

The six-story structure was estimated to be 72,000 square feet in size and to cost $2,133,250. After modifications to the original plans in 1956, the courthouse was finally estimated to cost four million dollars with an overall size of 99,626 square feet.[27] The new plans included the courthouse as part of a civic center plan for the city of Long Beach, complete with a Public Safety building (being constructed at the same time) and a future city hall and library.[28] The architects also included many of the latest modern conveniences for the staff and visitors such as air conditioning, full-service cafeteria, and elevators and escalators.[29]

The new Long Beach Courthouse was scheduled to open in December of 1960 after two and half years of construction time, with a final cost of $6 million. The new building housed the Superior and Municipal Courts, County Clerk, Municipal court clerk, and district attorneys office. There was great excitement surrounding the modern design of the building which featured large windows inlaid with wire designed to cut the glare of the sun. Over one thousand people attended the opening ceremonies of the new Long Beach courthouse which featured Chief Justice Warren as guest speaker. Other speakers included Frank G. Bonelli, chairman of the Board of Supervisors; Mayor Edwin W. Eade of Long Beach; Presiding Judge Joe Raycraft of South District Superior Court and Presiding Judge Lyman B. Sutter of Long Beach Municipal Court District.[30]

In 1964, an addition to the courthouse was being considered since the structure had been designed so a seventh floor could be added. The realized costs for such an addition were too large and instead, a wing to the east side of the building was designed by architects Heusel, Homolka & Associates and Kenneth S. Wing.[31] The 170,000 square foot east wing was completed in 1971 at final cost of $2.7 million dollars.

The Long Beach Courthouse was designed in the Corporate International Style which evolved from the innovative designs of prominent German architect Ludwig Mies Van de Rohe in the 1920s. According to David Gebhard and Robert Winter in *A Guide to Architecture in Los Angeles and Southern California,* Mies Van de Rohe's designs could be described as, "The concept of clothing a building in a moduled, thin metal paneled and glass skin independent of the structural skeleton."[32] Many of his designs featured large glass curtain walls separated by thin metal elements set in rectilinear grids creating an overall uniform appearance. Mies Van der Rohe became well-known in the United States in the 1940s and 1950s due to his innovative modern commercial and residential projects. One of his most significant projects was the Seagram Building in New York which has much gained recognition as "the first weighty skyscraper to be completely enveloped in its glass window wall."[33]

The first example in the United States of the style which came to be known as the Corporate International Style is believed to be the 1952 Lever house in New York designed by the architecture firm of Skidmore, Owings and Merrill.[34] The Corporate International Style promoted the ideas of the machine age in its prefabricated elements and borrowed many of its characteristics from the designs of Mies Van der Rohe, which included its weightless uniform appearance of glass windows inset in recliner grids, and overall fragile appearance usually enhanced by above ground stilts. By the late 1950s, numerous variations on the style were visible and its popularity continued well into the 1970s. The style became popular in Southern California and one of the most well known examples is the Xerox Building completed in 1968 in El Segundo by architects C. Ellwood Associates.

The architects responsible for the modern design of the Long Beach Courthouse were Kenneth S. Wing, in conjunction with Francis J. Heusel. The two architects were initially approached by the City of Long Beach in 1954 to design a modern building to serve as the first permanent courthouse site in the City's history. Although not much is known about Heusel, Wing had a long and distinguished career spanning some sixty years in Long Beach and became known for his modern designs.

(continued on page 7)

[27] "L.B. Courthouse Costs Doubled; Plan OKd" *Long Beach Independent* 18 Jul 1956.
[28] "County, Civic Units Rising" *Los Angeles Times* 25 Jan 1959 F18.
[29] Maddock, Don. "Courts and Offices in New Home Dec. 5" *Press Telegram* 22 Oct 1960.
[30] "Chief Justice Warren to Talk at Long Beach" *Los Angeles Times*. 2 Dec 1960: B9.
[31] "Board to Study County Building Expansion Plans" *Los Angeles Times*. 19 Dec 1965: G14.
[32] Gebhard, David and Robert Winter. 1977. *A Guide to Architecture in Los Angeles & Southern California*. Peregrine Smith, Inc. Publishers. Santa Barbara and Salt Lake City. p. 705.
[33] Jencks, Charles. 1973. *Modern Movements in Architecture*. Penguin Books Publishers. Harmondsworth, Middlesex, England. p. 100.
[34] Gebhard, David and Robert Winter. 1977. *A Guide to Architecture in Los Angeles & Southern California*. Peregrine Smith, Inc. Publishers. Santa Barbara and Salt Lake City. p. 705.

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*Resource Name or # (Assigned by recorder) 415 West Ocean Boulevard, Long Beach, CA 90802

Recorded By: Laura G. Carias **Date:** Sept. 22, 2008 ☒ Continuation ☐ Update

B10. Significance (continued from page 6):

Kenneth S. Wing (1903-1987), a native of Colorado Springs, Colorado, moved with his family to Long Beach in 1918. He graduated from Poly High School and later from the University of Southern California (USC) School of Architecture. While still a student at USC, he designed the West Long Beach Day Nursery. In his early years, Wing designed several single-family residences for the Virginia Country Club, Bixby Knolls, Alamitos Heights, Rolling Hills and Palos Verdes Estates. He closed his firm to head the Los Angeles County's War Housing Department during World War II. Wing was known for his close attention to detail and he believed that he needed to know the needs of his client before beginning a project. He first designed the interior then created the exterior to reflect the element of the interior. Some of Wing's most significant Long Beach projects include the Long Beach Arena; the Southern California Edison Building; United California Bank; the Physical Education facility at California State University, Long Beach; David Starr Jordan High School; many homes in the Virginia Country Club and Bixby Knolls area; and the renovation of the historic Bixby Ranch in Los Cerritos.

Francis J. Heusel (1906-1968) began practicing architecture in 1938 and was a member of the American Institute of Architects. He formed a partnership with Frank Homolka in 1960, just before the Long Beach courthouse was completed. The firm Heusel, Homolka & Associates assisted in designing the addition made to the Long Beach courthouse in 1971 and designed several other buildings in Long Beach including Elks Lodge 888, Water Department headquarters

Significance:

This property was evaluated under the California Register of Historical Resources. In order to be listed on the California Register the property must meet one of the four criteria listed below:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation (Criterion 4).

The Long Beach courthouse was determined eligible for listing in the California Register of Historical Resources under Criterion 3.

Although the building has been altered, its exterior appearance still reflects its period of construction. An excellent example of the Corporate International style, the building retains integrity of location, feeling, association, setting, design, materials and workmanship. The building has retained most of its character-defining features: including its curtain wall construction and glass windows inset in recliner grids, recessed first floor and use of squared columns, terrazzo floors and windows and vertical surfaces on the same plane. The courthouse also represents the work of a master, Kenneth S. Wing, who worked extensively in the Long Beach area.

***B12. References:**

McWilliams, Carey. 1946. *Southern California: An Island on the Land.* Layton, UT: Gibbs Smith.

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Berner, Loretta. 1995. "Al Brown Remembers the Pike." In *Shades of the Past. Journal of the Historical Society of Long Beach*, pp. 18-19. Edited by Loretta Berner. Long Beach, CA.

U.S. Census Bureau. 1920. Census records for the City of Long Beach. On file, City of Long Beach Office of Neighborhood and Historic Preservation.

League of Women Voters. 1980. *Long Beach: From Rancho to Renewal*. On file, City of Long Beach Office of Neighborhood and Historic Preservation.

Los Angeles County." 2 January 1941. *Los Angeles Times*, D5.

"Courts to Sit in Long Beach" *Los Angeles Times*. 28 Feb 1929: A9.

Simon, Renee B. "Courts Come of Age" *Press Telegram Southland* p. 7-9

"Long Beach Approves Plan for Courthouse." *Los Angeles Times*. 26 Aug 1953. p 4.

"Site for New Long Beach Courthouse Stirs Battle" *Los Angeles Times* 4 Sep 1953 A22.

Maddock, Don. "Courts and Offices in New Home Dec. 5" *Press Telegram* 22 Oct 1960.

"Chief Justice Warren to Talk at Long Beach" *Los Angeles Times*. 2 Dec 1960: B9.

"Board to Study County Building Expansion Plans" *Los Angeles Times*. 19 Dec 1965: G14.

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Jencks, Charles. 1973. *Modern Movements in Architecture*. Penguin Books Publishers. Harmondsworth, Middlesex, England.

"L.B. Courthouse Costs Doubled; Plan OKd" *Long Beach Independent* 18 Jul 1956.

"County, Civic Units Rising" *Los Angeles Times* 25 Jan 1959 F18.

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*Resource Name or # (Assigned by recorder) 415 West Ocean Boulevard, Long Beach, CA 90802

Recorded By: Laura G. Carias Date: Sept. 22, 2008 ☒ Continuation ☐ Update



Image 1: View facing northwest at south-facing façade

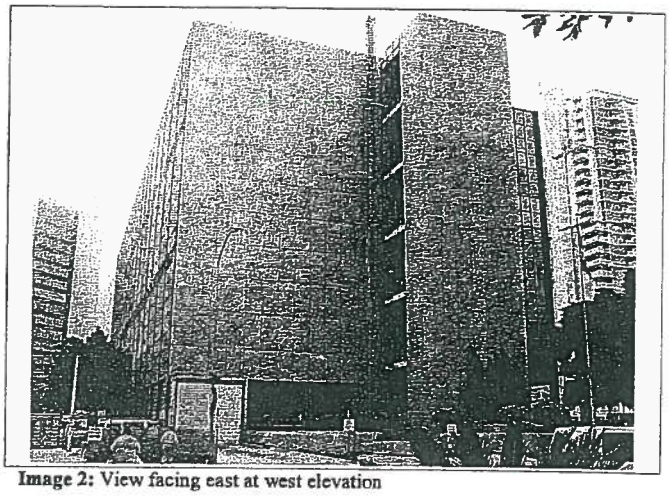


Image 2: View facing east at west elevation

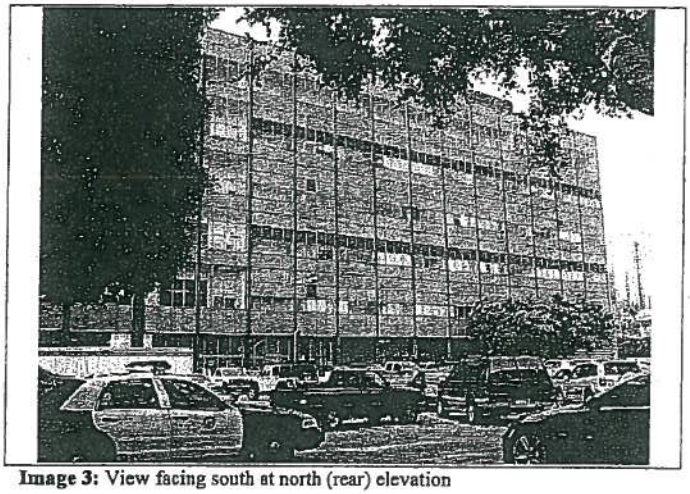


Image 3: View facing south at north (rear) elevation

Image

Image

Image

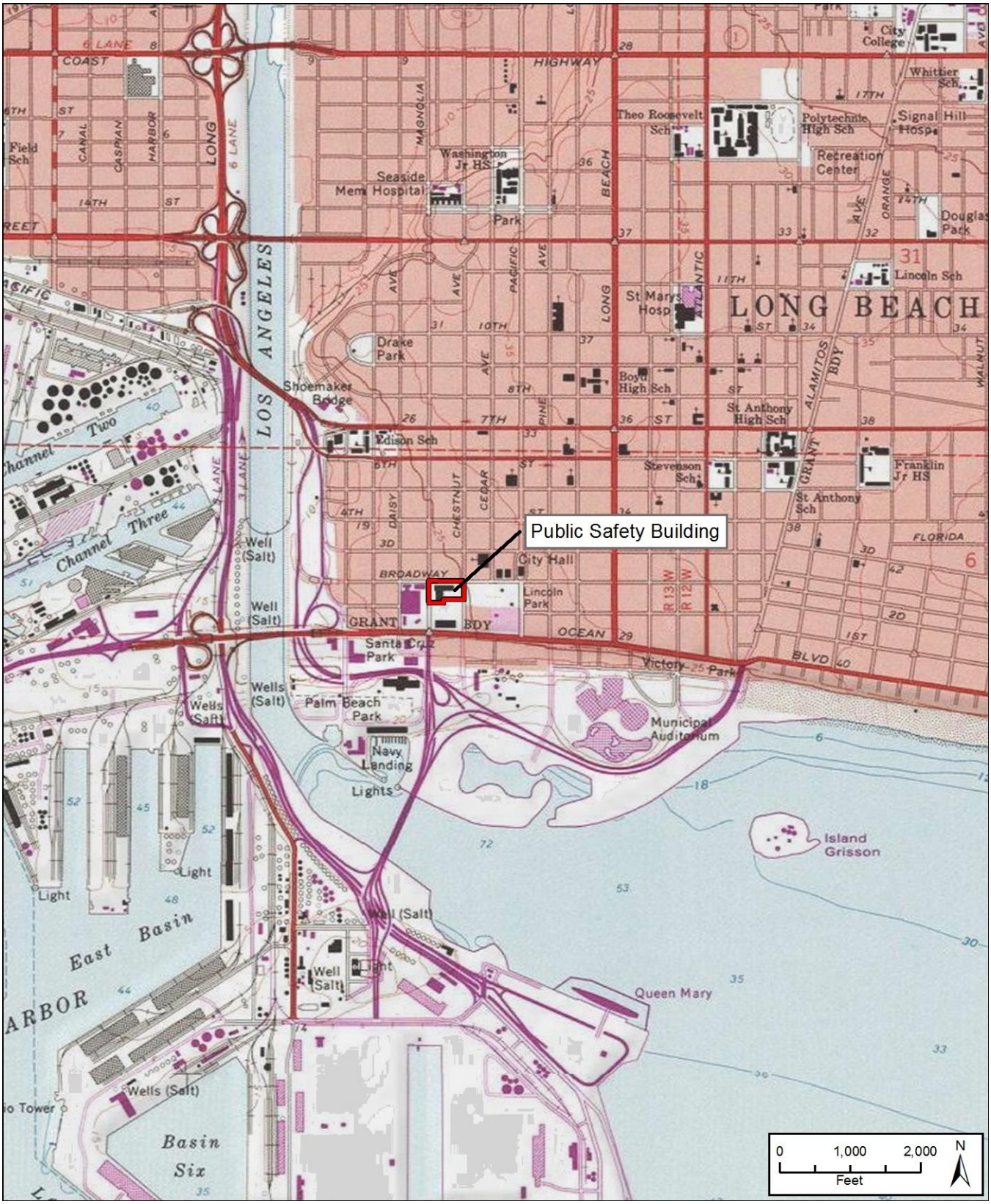
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** Public Safety Building

***Map Name:** Long Beach, CA ***Scale:** 1: 24,000 ***Date of Map:** 2015 (electronic)



*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code | Reviewer | Date

 ***Resource Name or #:** Public Safety Building

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County: Los Angeles**

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** *Long Beach* **Date:** 2012 **T** 5S; **R** 13W; **¼ of ¼ of Sec** 1; S.B. **B.M.**

c. Address: 400 W. Broadway City: Long Beach Zip: 90802

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Located at the northwest corner of the Civic Center is the Public Safety Building. Completed in 1960 in the Corporate International style, the Public Safety Building is one of the two original buildings constructed as part of the reimagined post-war Civic Center. The building is composed of two rectangular masses that form a roughly L-shaped plan. The larger northern segment is a 6-story mass with north and south elevation curtain walls boxed in by windowless west and east facades of concrete. The southern two-story segment has similar concrete walls, with three large bays for emergency vehicles on the western elevation. Originally the building superstructure rested on concrete piers with a recessed first floor of glass walls. Since its construction in 1960, the Public Safety Building has undergone significant alterations. The original recessed first floor's glass walls on the primary east and north entrances were completely replaced with concrete and extended out to be flush with the superstructure. These walls have been covered with slate and now have modern door and window openings on the north elevation. In addition, the original curtain walls located on the north and south elevations were replaced with a new energy efficient skin that does not resemble the original window patterning, material or design.

***P3b. Resource Attributes:** (List attributes and codes) HP14 Government Buildings

***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
View to the west, 5/12/15

***P6. Date Constructed/Age and Sources:** ☑Historic ☐Prehistoric ☐Both
1960, City of Long Beach

***P7. Owner and Address:**
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Carmack
Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

***P9. Date Recorded:** 05/12/2015

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") City of Long Beach Civic Center Project, City of Long Beach, County of Los Angeles, California. Rincon Consultants, May 2015.

***Attachments:** ☐NONE ☑Location Map ☐Sketch Map ☑Continuation Sheet ☑Building, Structure, and Object Record ☐Archaeological Record ☑District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** (Assigned by recorder) Public Safety Building

B1. Historic Name:
B2. Common Name:
B3. Original Use: Government building B4. Present Use: Government building

***B5. Architectural Style:** Corporate International style

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Constructed in 1960

***B7. Moved?** ☑No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**
Other buildings, sites, and structures within Long Beach Civic Center- City Hall-Library Complex, Long Beach Courthouse, Lincoln Park, and Parking Garage

B9a. Architect: Francis Heusel and Killingsworth, Brady and Smith b. Builder: Thwaits-Wittenburg Co.

***B10. Significance: Theme:** **Area:**
Period of Significance: **Property Type:** Government building **Applicable Criteria:** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Public Safety Building was dedicated on March 1, 1960 in an elaborate ceremony attended by hundreds of residents and city officials. At the time of its construction, the building was celebrated for representing a new era in city development, being the first new municipal construction in three decades (Independent-Press Telegram 1960). The building was constructed by Twaits-Wittenburg Co. who constructed municipal projects throughout southern California, including the City of Los Angeles's Parker Center (1954) and the City of Los Angeles Hall of Records (Independent-Press Telegram 1955, Gore 1976).

See Continuation Sheet, page 4.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

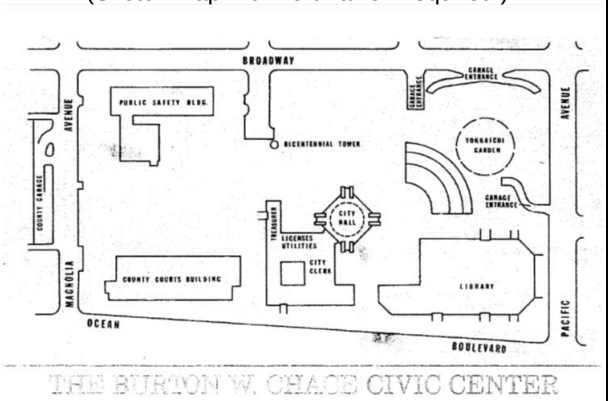
See Continuation Sheet, page 4.

B13. Remarks:

***B14. Evaluator:** Shannon Carmack, Rincon Consultants Inc.

***Date of Evaluation:** May, 15 2015

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

*Required information

***B10. Significance:**

Completed in 1960, the Public Safety Building is one of the two original buildings constructed as part of the reimagined post-war Civic Center. The building was designed by local architects; Francis Heusel serving as principal designer with assistance by Killingsworth, Brady and Associates. Both architecture firms are widely recognized for their influence on mid-century southern California architecture. The building was designed in the Corporate International Style which evolved out of the innovative designs of prominent German architect Ludwig Mies Van de Rohe in the 1920s. Since its construction in 1960, the Public Safety Building has undergone significant alterations. The original recessed first floor's glass walls on the primary east and north entrances were completely replaced with concrete and extended out to be flush with the superstructure. These walls have been covered with slate and now have modern door and window openings. In addition, the original curtain walls located on the north and south elevations were replaced with a new energy efficient skin that does not resemble the original window patterning, material or design. While the western elevation remains relatively unchanged, the visible alterations on the remaining elevations have significantly reduced the integrity of materials, design, feeling and workmanship associate with the building as originally designed. Due to the described alterations, the building does not retain sufficient integrity to be recognizable to its original appearance.

The building is not eligible for listing in the California Register under any significance criteria as an individual resource or as a contributor to a historic district. As originally constructed, the building was an excellent example of the Corporate International Style, however recent alterations have significantly diminished the historic integrity of the building (Criterion 3) and it does not warrant further evaluation under Criteria 1 or 2 because it no longer retains integrity to convey its association with significant events or persons. No evidence was discovered to warrant consideration under Criterion 4. For the same reasons, the building also does not qualify for listing as a City of Long Beach Landmark or as a contributor to a Landmark historic district (Criteria A-K). The Public Safety Building should not be considered a historical resource under CEQA.

***B12. References:**

Independent Press Telegram. 1955."Safety Building Need Urgent Says Group" 25 December 1955. Newspapers.com. Accessed May 1, 2015.

Independent, Press-Telegram. 1960. "Park Users Hit Garage Proposal" 23 March 1960. Newspapers.com. Accessed May 1, 2015.

Gore, Robert.1976. "Appraisal of New City Hall Depends on Point of View" 31 October 1976. Newspapers.com. Accessed May 1, 2015

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code | Reviewer | Date

 *__Resource Name or #:__ Lincoln Park

P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County: Los Angeles**
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad:** *Long Beach* **Date:** 2012 **T** 5S; **R** 13W; **¼ of ¼ of Sec** 1; S.B. **B.M.**
c. Address: n/a City: Long Beach Zip: 90802
d. UTM: Zone: ; mE/ mN (G.P.S.)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Once known as Pacific Park, this 4.9-acre park within the Civic Center has been continuously used as open space since 1888 (Sapphos 2009). It housed the Carnegie library from 1908 until 1972 when it was destroyed by fire. The current park layout was established in 1964, when the northern half of the original park was redeveloped following the construction of a subterranean parking structure. The southern half of the original park was later subsumed by the construction of the new library, thus reducing the original size of the park by half. To compensate for the loss of park space, the library roof features landscaped gardens and passive areas, however it is now considered part of the library and no longer part of Lincoln Park. The redesign included shuffleboard and roque courts, as well as construction of the Yokkaichi Garden, a tribute to Long Beach's Japanese sister city. Original garden elements included native Japanese trees and bushes, rocks and a shallow pool with walking bridge. A torii gate was added in 1989 and a plaque was installed in 1998. In 2013, the Yokkaichi Garden was relocated to Recreation Park and none of the original elements remain. In addition, the shuffleboard and roque courts were removed and replaced with lawn. The dog park, located at the north end of the park was added in 2009.

See continuation sheet, page 4.

***P3b. Resource Attributes:** (List attributes and codes) HP14 Government Buildings
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View east, 5/12/2015

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
1964, City of Long Beach

***P7. Owner and Address:**
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Carmack
Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

***P9. Date Recorded:** 05/12/2015

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") City of Long Beach Civic Center Project, City of Long Beach, County of Los Angeles, California. Rincon Consultants, May 2015.

***Attachments:** ☐NONE ☑Location Map ☐Sketch Map ☑Continuation Sheet ☑Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

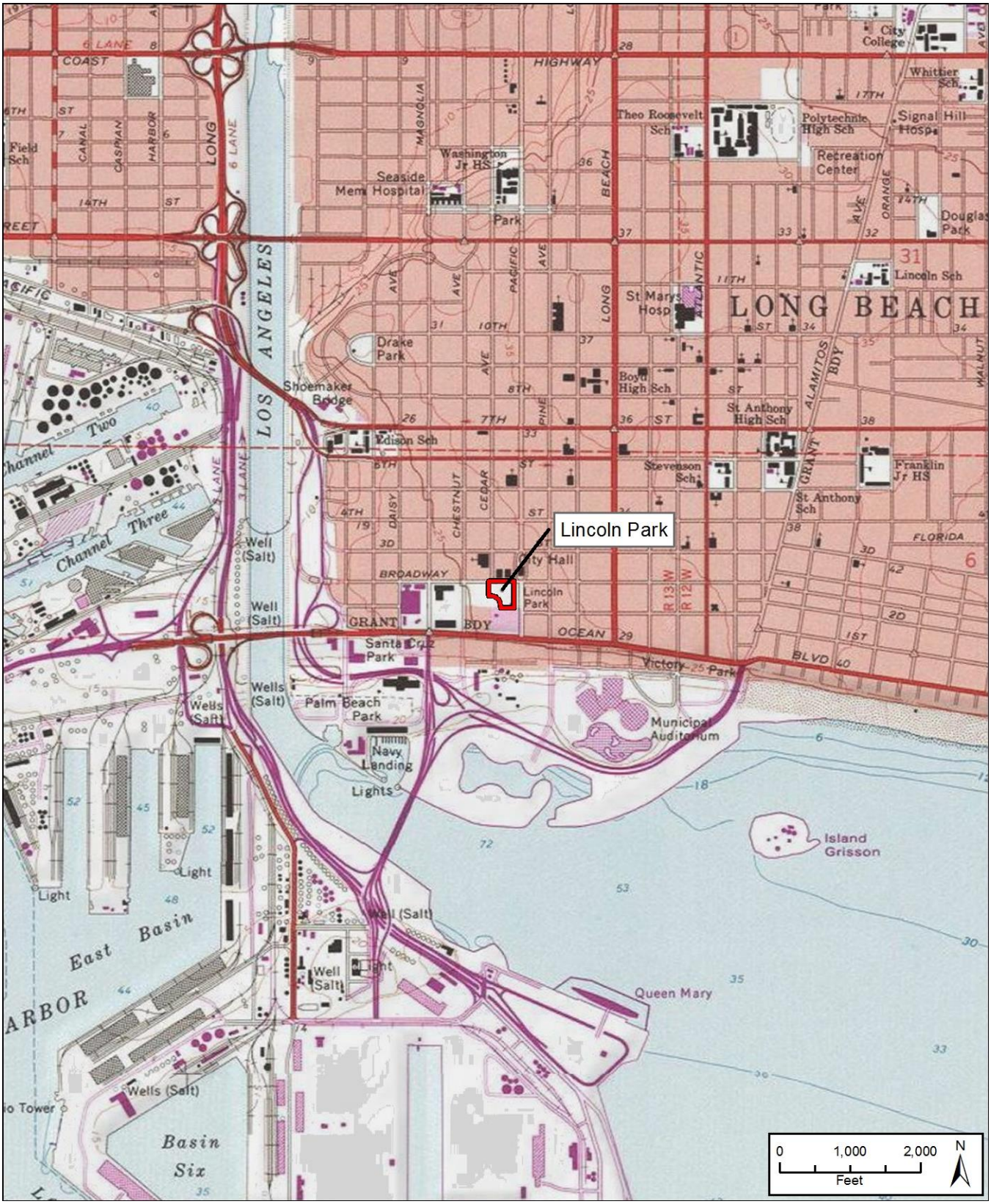
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** Lincoln Park

***Map Name:** Long Beach, CA ***Scale:** 1: 24,000 ***Date of Map:** 2015 (electronic)



DPR 523J (1/95)

*Required information

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code 6Z**

***Resource Name or #** (Assigned by recorder) Lincoln Park

B1. Historic Name:
B2. Common Name:
B3. Original Use: Open space B4. Present Use: Open space, public park

***B5. Architectural Style:**

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Continuously used as open space since 1888; current park layout established in 1964

***B7. Moved?** ☑No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**
Other buildings, sites, and structures within Long Beach Civic Center- City Hall-Library Complex, Long Beach Courthouse, Public Safety Building, and Parking Garage

B9a. Architect: Allied Architects; Peter Walker b. Builder: .

***B10. Significance: Theme:** **Area:**
Period of Significance: **Property Type:** Public park **Applicable Criteria:** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Established first as a park in 1888, the existing 4.9-acre park footprint was reconstructed in 1964, following the completion of a subterranean parking garage which reduced the park size by half. Since its reconstruction, Lincoln Park has undergone significant alterations. The original Japanese garden at the center of the park was removed and relocated, leaving minimal remnants behind. In addition, the roque and shuffleboard courts were removed, and a dog park was added in 2009. Due to the described alterations, the park does not retain sufficient integrity to be recognizable to its 1964 appearance **See Continuation Sheet, page 4.**

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

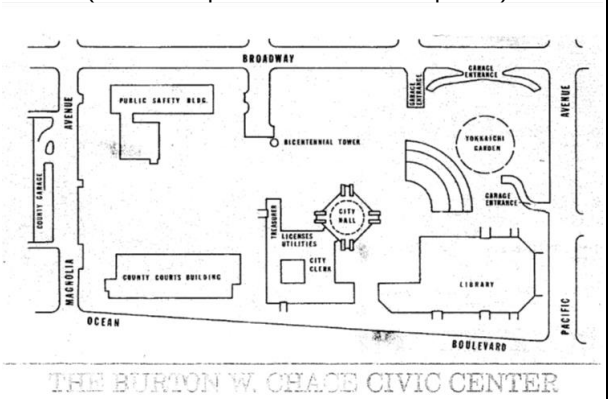
See Continuation Sheet, page 4.

B13. Remarks:

***B14. Evaluator:** Shannon Carmack, Rincon Consultants Inc.

***Date of Evaluation:** May, 15 2015

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

*Required information

***Recorded by:** Shannon Carmack, Rincon Consultants, Inc. ***Date:** 5/12/15 ☑ Continuation ☐Update

***P3a. Description:** The Lincoln statue, located in the central plaza area that separates the northern green space from the rooftop garden area was originally brought to the park in 1915 when the park was dedicated to the Veterans of the Civil War. It was designed as a replica of Augustus Saint-Gaudens's famous bronze, "Abraham Lincoln: The Man" (1877) that is located in Chicago's Lincoln Park. The Long Beach version was constructed locally by the Brittain Monument Works (Schipske 2014). The statue was returned to the park following the construction of the City Hall-Library Complex.

***B10. Significance: Continued**

Lincoln Park is not eligible for listing in the CRHR under any significance criteria as an individual resource or as a contributor to the Civic Center Historic District. Although the park dates to 1888, it retains none of the original landscaping elements from earlier periods of its history. The existing layout and landscaping are remnants from the 1964 period, however removal of park features have significantly diminished the historic integrity of the park (Criterion 3) and it does not warrant further evaluation under Criteria 1 or 2 because the park no longer retains integrity to convey its association with significant events or persons. No evidence was discovered to warrant consideration under Criterion 4. For the same reasons, the park also does not qualify for listing as a City of Long Beach Landmark or as a contributor to a landmark historic district (Criteria A-K). Lincoln Park should not be considered a historical resource under CEQA.

Although the park itself does not qualify for historic significance, the Lincoln Statue located at the southern border of the park has maintained a continued presence in the vicinity since 1915. While statue has been relocated over the years, it serves as the only remaining relic that dates to the city's first period of municipal growth and expansion. As an individual resource, the statue does not merit historic designation due to its relocation, however because of its age, excellent condition and history, the statue does warrant special consideration in local planning.

***B12. References:**

Sapphos Environmental, Inc. 2009. City of Long Beach Historic Context Statement. Prepared for City of Long Beach Department of Planning and Building Office of Historic Preservation. Sapphos Environmental, Inc. On file at the City of Long Beach, Department of Planning and Building.

Schipske, Gerry. 2014. "Time to Return Civil War Cannon to Proper Site." Long Beach History. 23 April 2014. Available at: http://www.longbeachhistory.com/2014/04/time-to-return-civil-war-cannon-to.html Accessed May 1, 2015.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** Broadway Parking Garage

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County: Los Angeles**

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** *Long Beach* **Date:** 2012 **T** 5S; **R** 13W; **¼ of ¼ of Sec** 1; S.B. **B.M.**

c. Address: n/a City: Long Beach Zip: 90802

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

A modern three-story parking garage, constructed ca. 1980s is located at the northern center of the Civic Center property. The modest structure is rectangular in plan, with a flat roof that provides a fourth level of parking. It has precast concrete walls that mirror the board-formed pattern that appears throughout the City Hall-Library Complex.

***P3b. Resource Attributes:** (List attributes and codes) HP14 Government Buildings

***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
View northeast, 5/12/15

***P6. Date Constructed/Age and Sources:** ☑Historic ☐Prehistoric ☐Both
1980s, City of Long Beach

***P7. Owner and Address:**
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Carmack
Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

***P9. Date Recorded:** 05/12/2015

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") City of Long Beach Civic Center Project, City of Long Beach, County of Los Angeles, California. Rincon Consultants, May 2015.

***Attachments:** ☐NONE ☑Location Map ☐Sketch Map ☑Continuation Sheet ☑Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

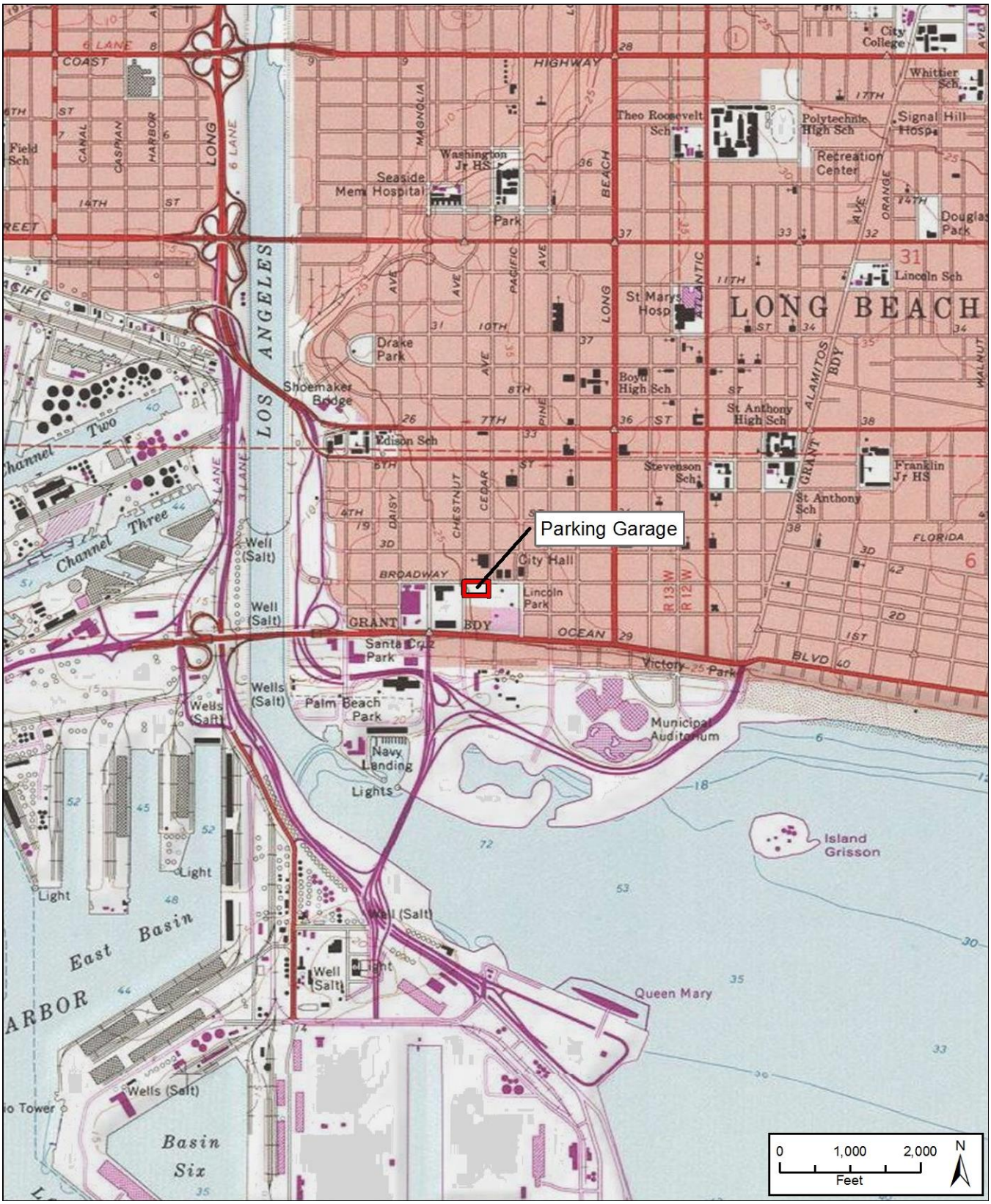
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** Broadway Parking Garage

***Map Name:** Long Beach, CA ***Scale:** 1: 24,000 ***Date of Map:** 2015 (electronic)



BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**

***Resource Name or #** (Assigned by recorder)Broadway Parking Garage

B1. Historic Name: Broadway Parking Garage
B2. Common Name:
B3. Original Use: Parking Garage B4. Present Use: Parking Garage
***B5. Architectural Style:** utilitarian
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Constructed in 1980s

***B7. Moved?** ☑No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:**
Other buildings, sites, and structures within Long Beach Civic Center- Long Beach Courthouse, Public Safety Building, Lincoln Park, and City Hall-Library Complex

B9a. Architect: b. Builder:
***B10. Significance: Theme:** **Area:**
Period of Significance: **Property Type:** Government building **Applicable Criteria:** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Constructed ca. 1980s the parking garage is a simple utilitarian structure. It does not appear eligible for listing in the CRHR, nor is it a contributor to a larger California Register-eligible historic district. The building is not directly associated with any specific events or trends that have contributed to history (Criteria 1). It was not directly associated with persons significant in our past (Criteria 2). As a simple utilitarian structure, the building does not exhibit any architectural quality or character and is not the work of a master or unique in its design (Criteria 3). There is no reason to believe that the property may yield important information about prehistory or history (Criteria 4). For the same reasons, the building also does not qualify for listing as a City of Long Beach Landmark or as a contributor to a landmark historic district (Criteria A-K). The Parking Garage should not be considered a historical resource under CEQA.

B11. Additional Resource Attributes: (List attributes and codes)

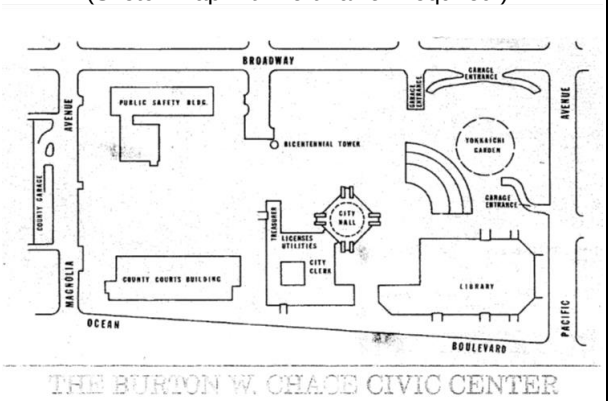
***B12. References:**

B13. Remarks:

***B14. Evaluator:** Shannon Carmack, Rincon Consultants Inc.,

***Date of Evaluation:** May, 15 2015

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

Appendix D

Noise Data and Calculations



File name	AU2_0101
File number	1
Data number	2
Frequency-weight	A
Time-weight	Fast
Filter	-
Center/High pass filter cutoff	-
Low pass filter cutoff	-
Time setting	15min
Start Time	5/20/2015 7:25
Stop Time	5/20/2015 7:40
Lx1	L10
Lx2	L33
Lx3	L50
Lx4	L90
Lx5	L95
Ly	Lppeak

Address	Time	Measurment Time	LAeq	LAE	LAmax	LAmin	LA10	LA33
1	5/20/2015 7:25	0:15:00	64.9	94.4	77.8	51	68.1	65.4

LA90	LA95	Lppeak	Over	Under	Pause
57.2	55.1	98.6	-	-	-

LA50

63.7

File name	AU2_0102
File number	1
Data number	2
Frequency-weight	A
Time-weight	Fast
Filter	-
Center/High pass filter cutoff	-
Low pass filter cutoff	-
Time setting	15min
Start Time	5/20/2015 8:00
Stop Time	5/20/2015 8:15
Lx1	L10
Lx2	L33
Lx3	L50
Lx4	L90
Lx5	L95
Ly	Lppeak

Address	Time	Measurment Time	LAeq	LAE	LAmax	LAmin	LA10	LA33
1	5/20/2015 8:00	0:15:00	70.8	100.3	87	52.1	74.8	70.6

LA90	LA95	Lppeak	Over	Under	Pause
56.5	55.4	107.9	-	-	-

LA50

66.6

File name	AU2_0103
File number	1
Data number	2
Frequency-weight	A
Time-weight	Fast
Filter	-
Center/High pass filter cutoff	-
Low pass filter cutoff	-
Time setting	15min
Start Time	5/20/2015 8:30
Stop Time	5/20/2015 8:45
Lx1	L10
Lx2	L33
Lx3	L50
Lx4	L90
Lx5	L95
Ly	Lppeak

Address	Time	Measurment Time	LAeq	LAE	LAmax	LAmin	LA10	LA33
1	5/20/2015 8:30	0:15:00	68.5	98.1	81.2	49.1	73	68.4

LA90	LA95	Lppeak	Over	Under	Pause
53.7	52.3	103.4	-	-	-

LA50

64.4

Rincon Consultants
Sarah Richman

1 July 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15-01260
RUN: Civic Center Existing Traffic
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 20 deg C, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Third St Noise Meas	1	1	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	8	-8.0
Broadway Noise Meas	2	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
Ocean Noise Meas	3	1	0.0	74.6	66	74.6	10	Snd Lvl	74.6	0.0	8	-8.0
Third St E of Pacific	14	1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	8	-8.0
Third St North of Third West of Pacific	15	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Third St NW Corner Third and Cedar	16	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
Third St SW Corner Third and Cedar	17	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Third St Btwn Cedar and Chestnut	18	1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	0.0	8	-8.0
Third St SE of Chestnut and Pacific Interse	19	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
Third St NW Corner Third and Chestnut	20	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
Third ST NW Corner Third and Magnolia	21	1	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
Pacific NE Corner Pacific and Broadway	23	1	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
Cedar Church Btwn Third and Broadway	24	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0
Third St btwn Magnolia and Chestnut	25	1	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0
Future Library on Broadway btwn Pacific a	26	1	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
Future Library on Pacific btwn Broadway a	27	1	0.0	68.8	66	68.8	10	Snd Lvl	68.8	0.0	8	-8.0
Future Park on Ocean	28	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0
Future Residence NE corner Broadway an	29	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Ocean NW Corner Ocean and Pacific	30	1	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
Ocean NW Corner Ocean and Cedar	31	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
Ocean NE Corner Ocean and Chestnut	32	1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	8	-8.0
Ocean btwn Chestnut and Magnolia	33	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
Third St NW Corner Third and Pacific	35	1	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
Third St NE Corner Pacific and Cedar	36	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0

Third St SW Corner Third and Chestnut	37	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
Chestnut btwn Third and Broadway	38	1	0.0	65.3	66	65.3	10	----	65.3	0.0	8	-8.0
Broadway NW corner Chestnut and Broad	39	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
Broadway btwn Chestnut and Magnolia	40	1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	0.0	8	-8.0
Broadway NE corner Chestnut and Magno	41	1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	8	-8.0
Magnolia btwn Third and Broadway	42	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0
Third St NE Corner Third and Magnolia	43	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
Chestnut E of Chestnut btwn Third and Bro	44	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Future Residential SE Corner Third and C	45	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
Future Residential SW Corner Third and P	46	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Future Residential W of Pacific btwn Third	47	1	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0
Future Residential NW corner Pacific and	48	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0
Future Residential north of Broadway btwn	49	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
Future Residential NE corner Broadway ar	50	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0
Future Residential E of Cedar btwn Broadv	51	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
Pacific E of Pacific btwn Third and Broadw	52	1	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0
Future Library NW corner Broadway and P	53	1	0.0	71.0	66	71.0	10	Snd Lvl	71.0	0.0	8	-8.0
Ocean btwn Cedar and Chestnut	55	1	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
Future Park at Pacific and 1st	57	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	43	0.0	0.0	0.0
All Impacted	39	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Rincon Consultants
Sarah Richman

1 July 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15-01260
RUN: Civic Center Existing Plus Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 20 deg C, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Third St Noise Meas	1	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0
Broadway Noise Meas	2	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Ocean Noise Meas	3	1	0.0	74.6	66	74.6	10	Snd Lvl	74.6	0.0	8	-8.0
Third St E of Pacific	14	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
Third St North of Third West of Pacific	15	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Third St NW Corner Third and Cedar	16	1	0.0	71.2	66	71.2	10	Snd Lvl	71.2	0.0	8	-8.0
Third St SW Corner Third and Cedar	17	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Third St Btwn Cedar and Chestnut	18	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Third St SE of Chestnut and Pacific Interse	19	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
Third St NW Corner Third and Chestnut	20	1	0.0	71.5	66	71.5	10	Snd Lvl	71.5	0.0	8	-8.0
Third ST NW Corner Third and Magnolia	21	1	0.0	71.6	66	71.6	10	Snd Lvl	71.6	0.0	8	-8.0
Pacific NE Corner Pacific and Broadway	23	1	0.0	71.5	66	71.5	10	Snd Lvl	71.5	0.0	8	-8.0
Cedar Church Btwn Third and Broadway	24	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Third St btwn Magnolia and Chestnut	25	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
Future Library on Broadway btwn Pacific a	26	1	0.0	72.4	66	72.4	10	Snd Lvl	72.4	0.0	8	-8.0
Future Library on Pacific btwn Broadway a	27	1	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	8	-8.0
Future Park on Ocean	28	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
Future Residence NE corner Broadway an	29	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
Ocean NW Corner Ocean and Pacific	30	1	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
Ocean NW Corner Ocean and Cedar	31	1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	0.0	8	-8.0
Ocean NE Corner Ocean and Chestnut	32	1	0.0	72.0	66	72.0	10	Snd Lvl	72.0	0.0	8	-8.0
Ocean btwn Chestnut and Magnolia	33	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
Third St NW Corner Third and Pacific	35	1	0.0	71.6	66	71.6	10	Snd Lvl	71.6	0.0	8	-8.0
Third St NE Corner Pacific and Cedar	36	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0

Third St SW Corner Third and Chestnut	37	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Chestnut btwn Third and Broadway	38	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
Broadway NW corner Chestnut and Broad	39	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Broadway btwn Chestnut and Magnolia	40	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
Broadway NE corner Chestnut and Magno	41	1	0.0	72.4	66	72.4	10	Snd Lvl	72.4	0.0	8	-8.0
Magnolia btwn Third and Broadway	42	1	0.0	70.7	66	70.7	10	Snd Lvl	70.7	0.0	8	-8.0
Third St NE Corner Third and Magnolia	43	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0
Chestnut E of Chestnut btwn Third and Bro	44	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
Future Residential SE Corner Third and C	45	1	0.0	68.7	66	68.7	10	Snd Lvl	68.7	0.0	8	-8.0
Future Residential SW Corner Third and P	46	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Future Residential W of Pacific btwn Third	47	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
Future Residential NW corner Pacific and	48	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Future Residential north of Broadway btwn	49	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Future Residential NE corner Broadway ar	50	1	0.0	72.0	66	72.0	10	Snd Lvl	72.0	0.0	8	-8.0
Future Residential E of Cedar btwn Broadv	51	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
Pacific E of Pacific btwn Third and Broadw	52	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
Future Library NW corner Broadway and P	53	1	0.0	71.6	66	71.6	10	Snd Lvl	71.6	0.0	8	-8.0
Ocean btwn Cedar and Chestnut	54	1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	8	-8.0
Future Park at Pacific and 1st	55	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	43	0.0	0.0	0.0
All Impacted	43	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Rincon Consultants
Sarah Richman

22 July 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15-01260
RUN: Civic Center Cumulative
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 20 deg C, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Third St Noise Meas	1	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
Broadway Noise Meas	2	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Ocean Noise Meas	3	1	0.0	75.0	66	75.0	10	Snd Lvl	75.0	0.0	8	-8.0
Third St E of Pacific	14	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
Third St North of Third West of Pacific	15	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0
Third St NW Corner Third and Cedar	16	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
Third St SW Corner Third and Cedar	17	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0
Third St Btwn Cedar and Chestnut	18	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0
Third St SE of Chestnut and Pacific Interse	19	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
Third St NW Corner Third and Chestnut	20	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Third ST NW Corner Third and Magnolia	21	1	0.0	71.2	66	71.2	10	Snd Lvl	71.2	0.0	8	-8.0
Pacific NE Corner Pacific and Broadway	23	1	0.0	71.6	66	71.6	10	Snd Lvl	71.6	0.0	8	-8.0
Cedar Church Btwn Third and Broadway	24	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
Third St btwn Magnolia and Chestnut	25	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
Future Library on Broadway btwn Pacific a	26	1	0.0	71.7	66	71.7	10	Snd Lvl	71.7	0.0	8	-8.0
Future Library on Pacific btwn Broadway a	27	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0
Future Park on Ocean	28	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
Future Residence NE corner Broadway an	29	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Ocean NW Corner Ocean and Pacific	30	1	0.0	72.5	66	72.5	10	Snd Lvl	72.5	0.0	8	-8.0
Ocean NW Corner Ocean and Cedar	31	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0
Ocean NE Corner Ocean and Chestnut	32	1	0.0	72.3	66	72.3	10	Snd Lvl	72.3	0.0	8	-8.0
Ocean btwn Chestnut and Magnolia	33	1	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
Third St NW Corner Third and Pacific	35	1	0.0	71.4	66	71.4	10	Snd Lvl	71.4	0.0	8	-8.0
Third St NE Corner Pacific and Cedar	36	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0

Third St SW Corner Third and Chestnut	37	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
Chestnut btwn Third and Broadway	38	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
Broadway NW corner Chestnut and Broad	39	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Broadway btwn Chestnut and Magnolia	40	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
Broadway NE corner Chestnut and Magno	41	1	0.0	72.4	66	72.4	10	Snd Lvl	72.4	0.0	8	-8.0
Magnolia btwn Third and Broadway	42	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Third St NE Corner Third and Magnolia	43	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Chestnut E of Chestnut btwn Third and Bro	44	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
Future Residential SE Corner Third and C	45	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
Future Residential SW Corner Third and P	46	1	0.0	70.6	66	70.6	10	Snd Lvl	70.6	0.0	8	-8.0
Future Residential W of Pacific btwn Third	47	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
Future Residential NW corner Pacific and	48	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
Future Residential north of Broadway btwn	49	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Future Residential NE corner Broadway ar	50	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Future Residential E of Cedar btwn Broadv	51	1	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
Pacific E of Pacific btwn Third and Broadw	52	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
Future Library NW corner Broadway and P	53	1	0.0	71.7	66	71.7	10	Snd Lvl	71.7	0.0	8	-8.0
Ocean btwn Cedar and Chestnut	54	1	0.0	72.2	66	72.2	10	Snd Lvl	72.2	0.0	8	-8.0
Future Park at Pacific and 1st	55	1	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	43	0.0	0.0	0.0
All Impacted	40	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Rincon Consultants
Sarah Richman
22 July 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15-01260
RUN: Civic Center Cumulative Plus Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 20 deg C, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Third St Noise Meas	1	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
Broadway Noise Meas	2	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Ocean Noise Meas	3	1	0.0	74.9	66	74.9	10	Snd Lvl	74.9	0.0	8	-8.0
Third St E of Pacific	14	1	0.0	68.8	66	68.8	10	Snd Lvl	68.8	0.0	8	-8.0
Third St North of Third West of Pacific	15	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Third St NW Corner Third and Cedar	16	1	0.0	71.6	66	71.6	10	Snd Lvl	71.6	0.0	8	-8.0
Third St SW Corner Third and Cedar	17	1	0.0	70.7	66	70.7	10	Snd Lvl	70.7	0.0	8	-8.0
Third St Btwn Cedar and Chestnut	18	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
Third St SE of Chestnut and Pacific Interse	19	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
Third St NW Corner Third and Chestnut	20	1	0.0	71.7	66	71.7	10	Snd Lvl	71.7	0.0	8	-8.0
Third ST NW Corner Third and Magnolia	21	1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	8	-8.0
Pacific NE Corner Pacific and Broadway	23	1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	8	-8.0
Cedar Church Btwn Third and Broadway	24	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Third St btwn Magnolia and Chestnut	25	1	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	8	-8.0
Future Library on Broadway btwn Pacific a	26	1	0.0	72.0	66	72.0	10	Snd Lvl	72.0	0.0	8	-8.0
Future Library on Pacific btwn Broadway a	27	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Future Park on Ocean	28	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
Future Residence NE corner Broadway an	29	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Ocean NW Corner Ocean and Pacific	30	1	0.0	72.5	66	72.5	10	Snd Lvl	72.5	0.0	8	-8.0
Ocean NW Corner Ocean and Cedar	31	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0
Ocean NE Corner Ocean and Chestnut	32	1	0.0	72.3	66	72.3	10	Snd Lvl	72.3	0.0	8	-8.0
Ocean btwn Chestnut and Magnolia	33	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Third St NW Corner Third and Pacific	35	1	0.0	72.0	66	72.0	10	Snd Lvl	72.0	0.0	8	-8.0
Third St NE Corner Pacific and Cedar	36	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0

Third St SW Corner Third and Chestnut	37	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Chestnut btwn Third and Broadway	38	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
Broadway NW corner Chestnut and Broad	39	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Broadway btwn Chestnut and Magnolia	40	1	0.0	71.0	66	71.0	10	Snd Lvl	71.0	0.0	8	-8.0
Broadway NE corner Chestnut and Magno	41	1	0.0	73.4	66	73.4	10	Snd Lvl	73.4	0.0	8	-8.0
Magnolia btwn Third and Broadway	42	1	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
Third St NE Corner Third and Magnolia	43	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Chestnut E of Chestnut btwn Third and Bro	44	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
Future Residential SE Corner Third and C	45	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
Future Residential SW Corner Third and P	46	1	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
Future Residential W of Pacific btwn Third	47	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
Future Residential NW corner Pacific and	48	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
Future Residential north of Broadway btwn	49	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
Future Residential NE corner Broadway ar	50	1	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
Future Residential E of Cedar btwn Broadv	51	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
Pacific E of Pacific btwn Third and Broadw	52	1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	0.0	8	-8.0
Future Library NW corner Broadway and P	53	1	0.0	71.7	66	71.7	10	Snd Lvl	71.7	0.0	8	-8.0
Ocean btwn Cedar and Chestnut	54	1	0.0	72.2	66	72.2	10	Snd Lvl	72.2	0.0	8	-8.0
Future Park at Pacific and 1st	55	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	43	0.0	0.0	0.0
All Impacted	42	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix E

Transportation Impact Analysis



LINSCOTT LAW & GREENSPAN engineers

TRAFFIC IMPACT ANALYSIS

NEW LONG BEACH CIVIC CENTER PROJECT

Long Beach, California

July 21, 2015

Engineers & Planners
Traffic
Transportation
Parking

LINSCOTT LAW & GREENSPAN engineers

TRAFFIC IMPACT ANALYSIS

NEW LONG BEACH CIVIC CENTER PROJECT

Long Beach, California
July 21, 2015

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APPENDIX

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TRAFFIC IMPACT ANALYSIS

NEW LONG BEACH CIVIC CENTER PROJECT

Long Beach, California
July 21, 2015

1.0 INTRODUCTION

This Traffic Impact Analysis report addresses the potential traffic impacts and circulation needs associated with the development of the New Long Beach Civic Center Project (hereinafter referred to as Project). The Project includes redevelopment of the 14.98 acre civic center block located north of Ocean Boulevard and south of Broadway, between Magnolia Avenue and Pacific Avenue, as well as a 0.89 acre parcel located south of 3rd Street, between Cedar Avenue and Pacific Avenue in downtown Long Beach. The current Long Beach Civic Center consists of the former 334,000 square-foot (SF) Los Angeles County Superior Courthouse, which is now vacant, the 283,000 SF City Hall office tower, the 138,000 SF Long Beach Main Library, Lincoln Park and associated parking structures.

This report documents the findings and recommendations of a traffic impact analysis, conducted by Linscott, Law & Greenspan, Engineers (LLG) to determine the potential impacts associated with the proposed Project.

1.1 Scope of Work

The traffic analysis evaluates the existing operating conditions at ten (10) key study intersections within the project vicinity, estimates the trip generation potential of the proposed Project, and forecasts future operating conditions without and with the Project. Where necessary, intersection improvements/mitigation measures are identified to offset the impact of the proposed Project. For comparison purposes, the Project's trip generation potential was compared to the traffic forecast associated with the development potential of the civic center block as evaluated in the *Long Beach Downtown Community Plan EIR Traffic Impact Analysis, dated February 4, 2010, prepared by Iteris,* and *Downtown Plan Draft Program Environmental Impact Report (Downtown Plan Draft PEIR), dated December 2010, prepared by AECOM.* A review of these two documents indicates that up to 800 residential units, 460,000 SF of office/commercial floor area, 64,000 SF of retail space and 16,000 SF of restaurant uses were assumed and assessed for the Civic Center area in the Downtown Community Plan traffic analysis.

This traffic report satisfies the traffic impact requirements of the City of Long Beach and is consistent with the requirements and procedures outlined in the most current *Congestion Management Program (CMP) for Los Angeles County.*

The Project site has been visited and an inventory of adjacent area roadways and intersections was performed. Existing peak hour traffic information has been collected at the ten (10) key study locations on a "typical" weekday for use in the preparation of intersection level of service calculations. Information concerning cumulative projects (planned and/or approved) in the vicinity

of the project has been researched at the City of Long Beach. Based on our research, twelve (12) cumulative projects were considered in the cumulative traffic analysis for this project.

Based on City of Long Beach requirement's, this traffic report analyzes existing and future (near-term) weekday AM and PM peak hour traffic conditions for existing and Year 2020 traffic conditions without and with the proposed Project. Peak hour traffic forecasts for the Year 2020 horizon year have been projected by increasing existing traffic volumes by an annual growth rate of one percent (1.0%) per year and adding traffic volumes generated by twelve (12) cumulative projects.

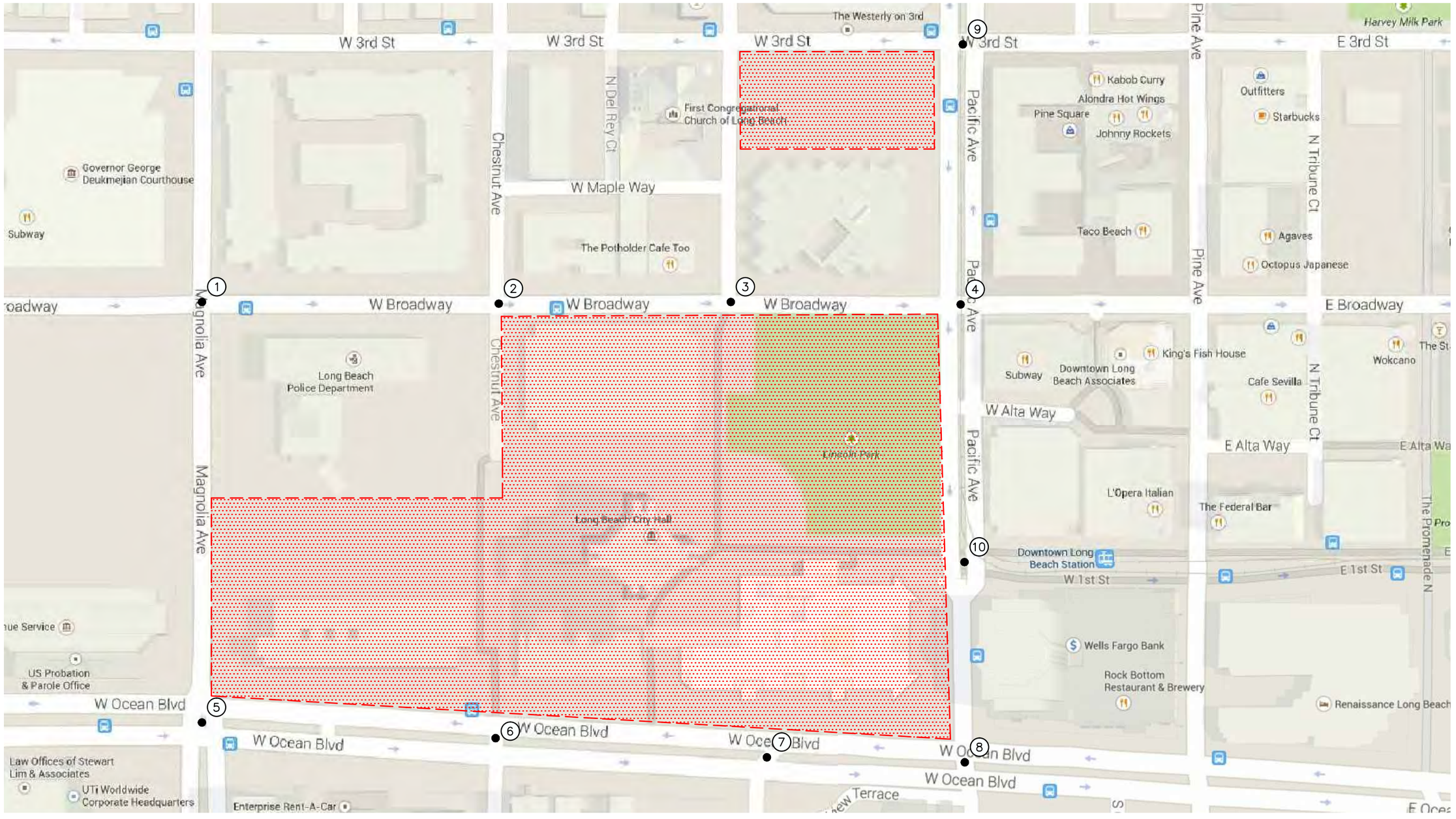
1.2 Study Area

The ten (10) key study intersections selected for evaluation in this report provide local access within the project study area. They consist of the following:

1. Magnolia Avenue at Broadway
2. Chestnut Avenue at Broadway
3. Cedar Avenue at Broadway
4. Pacific Avenue at Broadway
5. Magnolia Avenue at Ocean Boulevard
6. Chestnut Avenue at Ocean Boulevard
7. Cedar Avenue at Ocean Boulevard
8. Pacific Avenue at Ocean Boulevard
9. Pacific Avenue at 3rd Street
10. Pacific Avenue at 1st Street

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the project and depicts the study locations and surrounding street system. The Volume-Capacity (V/C) and Level of Service (LOS) investigations at these key locations were used to evaluate the potential traffic-related impacts associated with the proposed Project. Included in this traffic study report are:

- Existing traffic counts,
- Estimated project traffic generation/distribution/assignment,
- Estimated cumulative project traffic generation/distribution/assignment,
- AM and PM peak hour capacity analyses for existing conditions,
- AM and PM peak hour capacity analyses for existing plus project conditions,
- AM and PM peak hour capacity analyses for future (Year 2020) conditions without and with project traffic,
- Recommended Improvements, and
- Congestion Management Program Compliance Assessment.



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 1-1

VICINITY MAP

NEW LONG BEACH CIVIC CENTER, LONG BEACH

2.0 PROJECT DESCRIPTION

The Long Beach Civic Center is located north of Ocean Boulevard and south of Broadway, between Magnolia Avenue and Pacific Avenue in downtown Long Beach. The 0.89 acre parcel Third & Pacific site is currently a surface parking lot and is located south of 3rd Street, between Cedar Avenue and Pacific Avenue. The current Civic Center consists of the former 334,000 SF Los Angeles County Superior Courthouse, which is now vacant, the 283,000 SF City Hall office tower, the 138,000 SF Long Beach Main Library, 2.60 acre Lincoln Park and associated parking structures. ***Figure 2-1*** presents an existing aerial of the Project site.

The proposed New Long Beach Civic Center Project provides a New City Hall, a New Harbor Department administration building, a New Main Library, a relocated and redeveloped Lincoln Park and a vibrant commercial mixed use development. In total, six (6) new buildings, three (3) new parking garages, including a new subterranean garage below the New City Hall and Harbor Department buildings, and related infrastructure and landscaping are proposed. The major project elements include the following:

- Civic Block: development of a 270,000 SF, 11-story office building to house the New City Hall, a 240,000 SF, 11-story office building to house the New Harbor Department and a subterranean parking structure with approximately 510 spaces. Vehicular access to the subterranean parking structure will be provided from the proposed extension of Chestnut Avenue from Broadway to Ocean, and from Magnolia Avenue. Access to the existing Broadway garage will continue to be provided from Broadway and Chestnut Avenue.
- Center Block: Development of residential and commercial uses within a mixed-use setting to include up to 580 residential units and a 200-room boutique hotel, with approximately 40,000 SF of ground floor commercial space consisting of 32,000 SF of retail space and 8,000 SF restaurant uses. A new subterranean parking structure with approximately 725 spaces will serve the mixed use development in the Center Block. Primary vehicular access to the mixed-used development parking structure will be provided from the future extension of Cedar Avenue between Broadway and Ocean Boulevard.
- Lincoln Park Block: a New Main Library with 92,000 SF of floor area and a new 3.17 acre Lincoln Park will be constructed in place of the current development. Access to the existing Lincoln garage will continue to be provided from the Cedar Street and Pacific Avenue access ramps in the interim, but will ultimately be served by the "Lincoln Alley".
- Third & Pacific Block: Development of up to 200 residential units and parking garage in place of the existing surface parking lot. Primary vehicular access to this site's parking garage will be provided from Cedar Avenue.
- Street Extensions/Infrastructure Improvements: To facilitate vehicular, bicycle and pedestrian access within the New Civic Center, Chestnut Avenue and Cedar Avenue will be extended to connect Broadway to Ocean Boulevard. A traffic signal installation is now in place at the Ocean/Chestnut intersection with the latter forming the south leg. Project implementation should complete this as a four-legged intersection with necessary signal modifications to integrate the fourth leg. Additionally, an eastbound left turn lane should be added. It is recognized that its addition is also likely to use a "best fit" approach, and will require landscape modification/removal as well as the likely relocation of the existing sculpture at the center of the median. However, to provide a conservative assessment, it was assumed that an eastbound left-



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

= PROJECT SITE

FIGURE 2-1

EXISTING AERIAL

NEW LONG BEACH CIVIC CENTER, LONG BEACH

turn is not provided due to existing constraints. The extension of Cedar Avenue to Ocean Boulevard is expected to align with the existing southerly terminus, which now provides a median break and westbound left turn lane to service the existing street segment south of Ocean. The northbound approach of that segment to Ocean is STOP controlled and posted with a right-turn-only restriction (left turns are prohibited). Due to intersection spacing and current turn restrictions at this location, it was assumed that access to and from the future north leg of Cedar Avenue will be restricted to right-turn only movements at Ocean Boulevard. A section of First Street with non-traditional paving and a curb less design will be developed between Chestnut and Cedar as part of the Center Block development. First Street, between Cedar and Pacific as well as within the Civic Plaza area, will consist of pedestrian walkways.

Figure 2-2 presents the overall site plan for the proposed Project as prepared by Skidmore Owings & Merrill, LLP (SOM) dated April 2015. ***Figure 2-3*** presents overall vehicular access and service access for the Project, with a focus to the site's parking structures upon completion of the Project.



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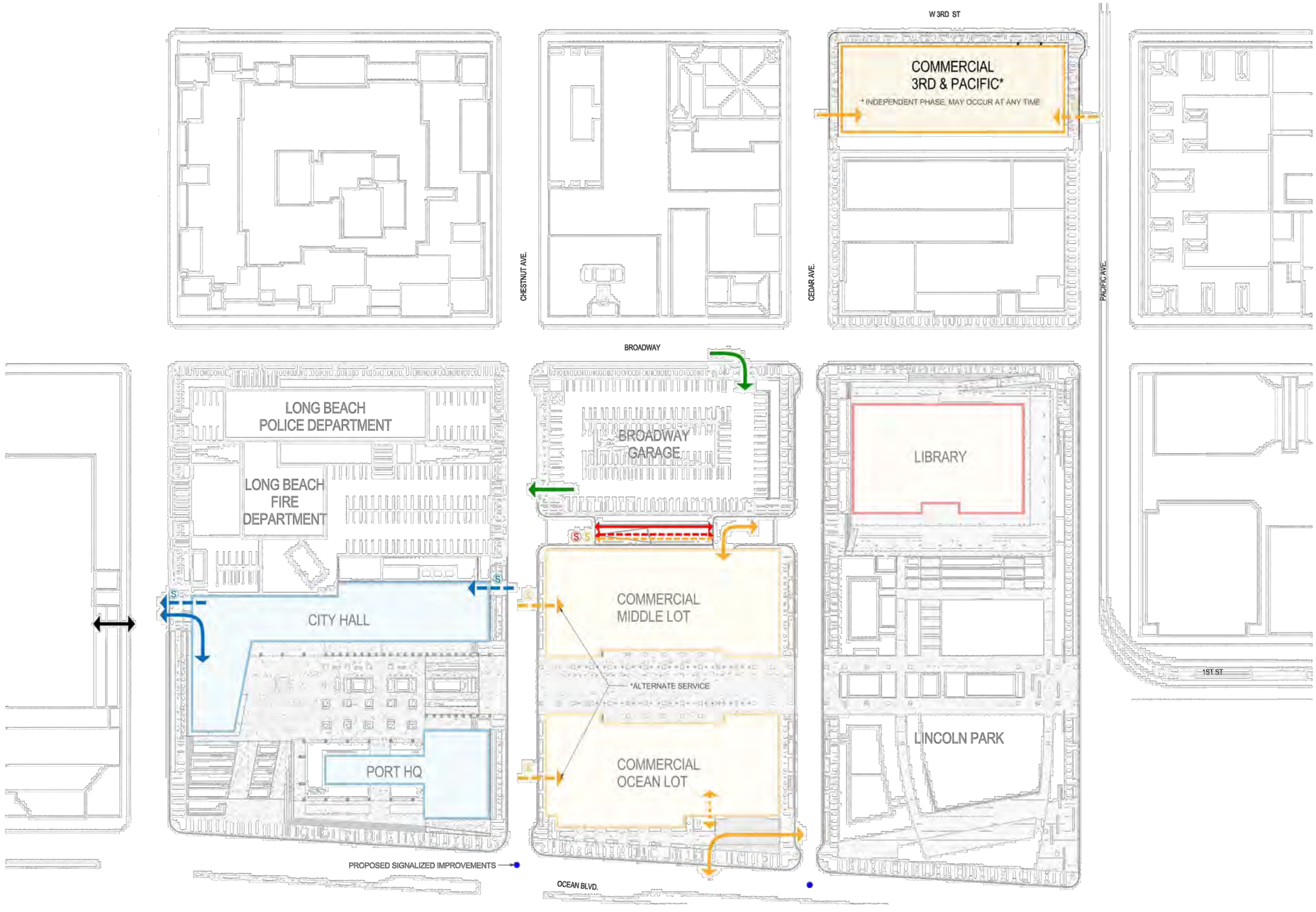
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SOURCE: SKIDMORE, OWINGS & MERRILL, LLP (SOM)

FIGURE 2-2

PROPOSED SITE PLAN

NEW LONG BEACH CIVIC CENTER, LONG BEACH



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LINSCOTT LAW & GREENSPAN engineers

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SOURCE: SKIDMORE, OWINGS & MERRILL, LLP (SOM)

FIGURE 2-3

VEHICULAR AND SERVICE ACCESS
NEW LONG BEACH CIVIC CENTER, LONG BEACH

3.0 EXISTING CONDITIONS

3.1 Existing Street System

The principal local network of streets serving the project site includes 3rd Street, Broadway, Ocean Boulevard, 1st Street, Magnolia Avenue, Chestnut Avenue, Cedar Avenue, and Pacific Avenue. The following discussion provides a brief synopsis of these key area streets. The descriptions are based on an inventory of existing roadway conditions.

3rd Street is a two-lane, one-way roadway (westbound travel only) oriented in the east-west direction. Parking is generally permitted on both sides of the roadway, except for a segment between Chestnut Avenue and Cedar Avenue. The posted speed limit is 25 mph. The intersection of 3rd Street and Pacific Avenue is controlled by a traffic signal.

Broadway is a two-lane, one-way divided roadway (eastbound travel only) oriented in the east-west direction. West of Magnolia Avenue, parking is restricted on both the north and south side of the roadway. West of Pine Avenue, parking is generally permitted on the north side of the roadway and restricted on the south side. East of Pine Avenue, parking is permitted on both sides of the roadway. The posted speed limit on Broadway is 30 mph. The intersections of Broadway at Magnolia Avenue, Chestnut Avenue, Cedar Avenue, and Pacific Avenue are controlled by traffic signals.

Ocean Boulevard is a primarily a six-lane, divided roadway oriented in the east-west direction. West of Magnolia Avenue, Ocean Boulevard is a seven-lane, divided roadway, with three travel lanes in the eastbound direction and four travel lanes in the westbound direction. Parking is permitted on both sides of the roadway. The posted speed limit on Ocean Boulevard is 30 mph. The intersections of Ocean Boulevard at Magnolia Avenue, Chestnut Avenue, and Pacific Avenue are controlled by traffic signals. The intersection of Ocean Boulevard at Cedar Avenue is controlled by a one-way stop.

1st Street is primarily is a two-lane, divided roadway oriented in the east-west direction. Parking is not permitted on both sides of the roadway. The posted speed limit on 1st Street is 25 mph. The intersection of Pacific Avenue at 1st Street is controlled by a traffic signal.

Magnolia Avenue is primarily a four-lane, divided roadway oriented in the north-south direction. South of Ocean Boulevard, Magnolia Avenue is a six-lane, divided roadway. North of 3rd Street, Magnolia Avenue is a two-lane, divided roadway. Parking is permitted on both sides of the roadway north of Broadway. South of Broadway, parking is generally not permitted on both sides of the roadway, except for a segment between Broadway and Ocean Avenue where parking is permitted on the west side of the roadway. North of Ocean Boulevard, the posted speed limit is 25 mph; south of Ocean Boulevard, the posted speed limit is 45 mph. The intersections of Magnolia Avenue at Broadway and Ocean Boulevard are controlled by traffic signals.

Chestnut Avenue is primarily a two-lane, undivided roadway oriented in the north-south direction. Between 3rd Street and Broadway, Chestnut is a two-lane, divided roadway. Between Broadway and Ocean Boulevard, Chestnut is a 3-lane, undivided roadway. Parking is permitted on both sides of

the roadway, north of Ocean Boulevard. Parking is not permitted on both sides of the roadway south of Ocean Boulevard. The posted speed limit on Chestnut Avenue is 25 mph. The intersections of Chestnut Avenue at Broadway and Ocean Boulevard are controlled by traffic signals.

Cedar Avenue is a primarily two-lane, undivided roadway oriented in the north-south direction. South of Broadway and north of Ocean Boulevard, Cedar Avenue is a two-lane, divided roadway. Parking is permitted on both sides of the roadway, north of Broadway. Parking is not permitted on both sides of the roadway, south of Broadway. The posted speed limit on Cedar Avenue is 25 mph. The intersection of Cedar Avenue at Broadway is controlled by a traffic signal. The intersection of Cedar Avenue at Ocean Boulevard is controlled by a one-way stop.

Pacific Avenue is primarily a four-lane, divided roadway oriented in the north-south direction. South of Ocean Boulevard, Pacific Avenue is a two-lane, undivided roadway. Parking is not permitted on either side of the roadway within the vicinity of the Project site. The posted speed limit on Pacific Avenue is 25 mph. The intersections of Pacific Avenue at 3rd Street, Broadway, 1st Street and Ocean Boulevard are controlled by traffic signals.

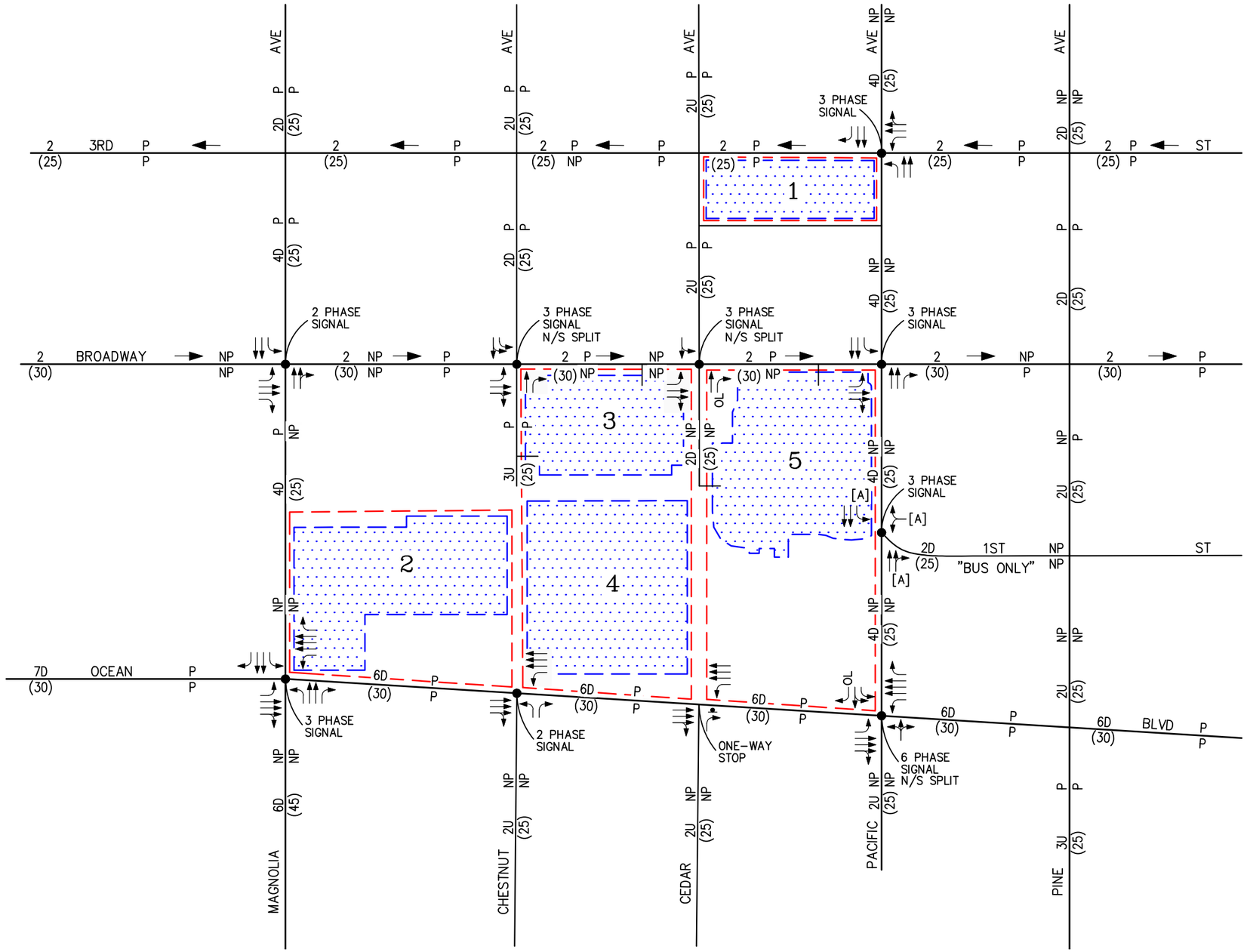
Figure 3-1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. The number of travel lanes and intersection controls for the key area intersections are identified.

3.2 Existing Traffic Volumes

Ten (10) key study intersections have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of potential project-related traffic will pass through each of these intersections, and their analysis will reveal the expected impact associated with the proposed Project.

Existing weekday peak hour traffic volumes for the ten (10) key study intersections evaluated in this report were obtained from manual turning movement counts conducted by National Data & Surveying Services (NDS) in March 2015.

Figures 3-2 and ***3-3*** illustrate the existing weekday AM and PM peak hour traffic volumes at the ten (10) key study intersections evaluated in this report, respectively. ***Appendix A*** contains the detailed peak hour count sheets for the key intersections evaluated in this report.



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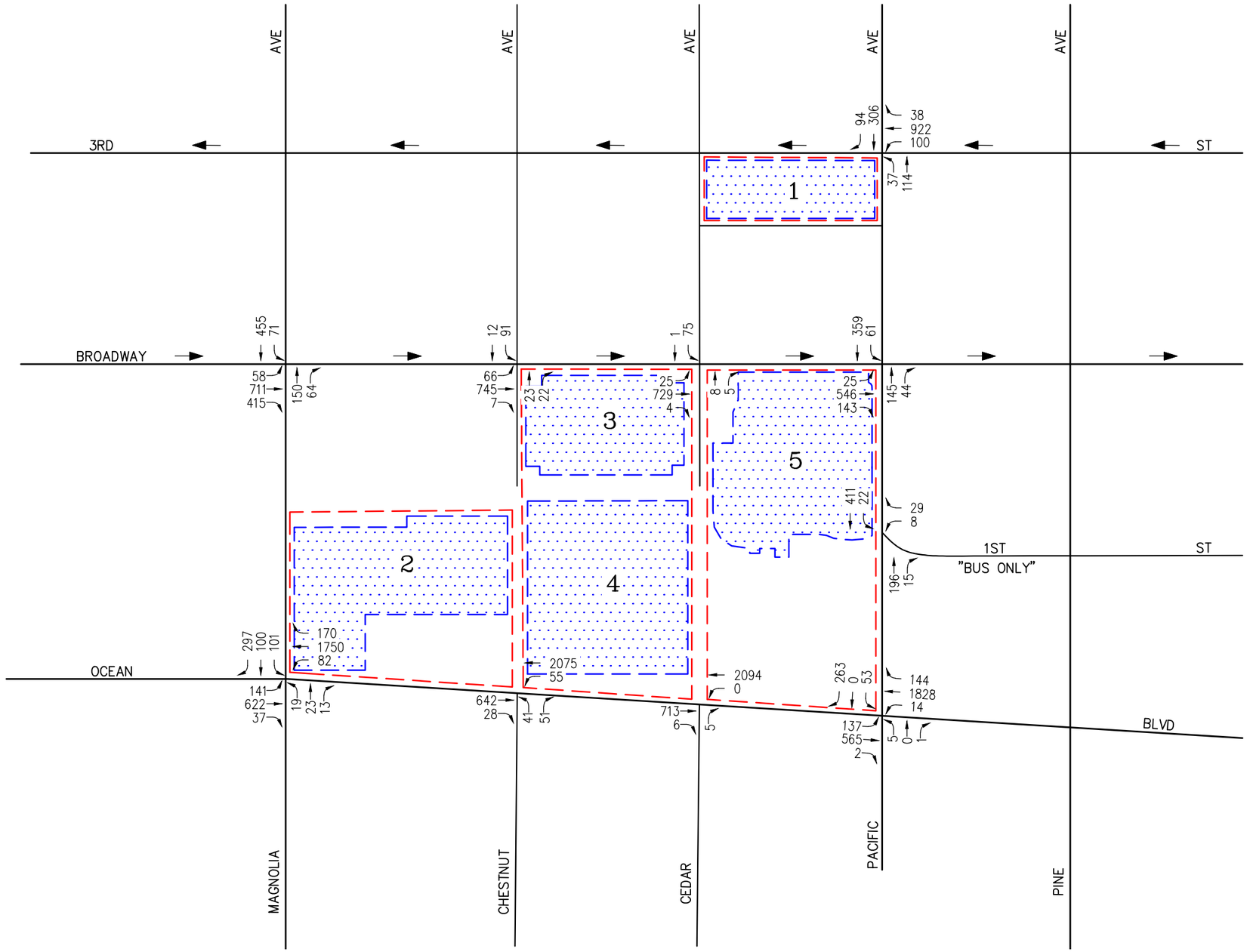
KEY

- = PROJECT AREA
- = PARKING LOCATIONS
- = APPROACH LANE ASSIGNMENT
- = TRAFFIC SIGNAL, = STOP SIGN
- [A] = NB RIGHT-TURN, SB LEFT-TURN AND EB SHARED LEFT-RIGHT ARE PERMITTED FOR BUSSES ONLY
- P = PARKING, NP = NO PARKING
- U = UNDIVIDED, D = DIVIDED
- 2 = NUMBER OF TRAVEL LANES
- (XX)= POSTED SPEED LIMIT (MPH)
- F = FREE-RIGHT
- 1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
- 2 = CIVIC CENTER BLOCK PARKING
- 3 = CENTER BLOCK BROADWAY PARKING GARAGE
- 4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
- 5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 3-1

EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

NEW LONG BEACH CIVIC CENTER, LONG BEACH



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KEY

= PROJECT AREA

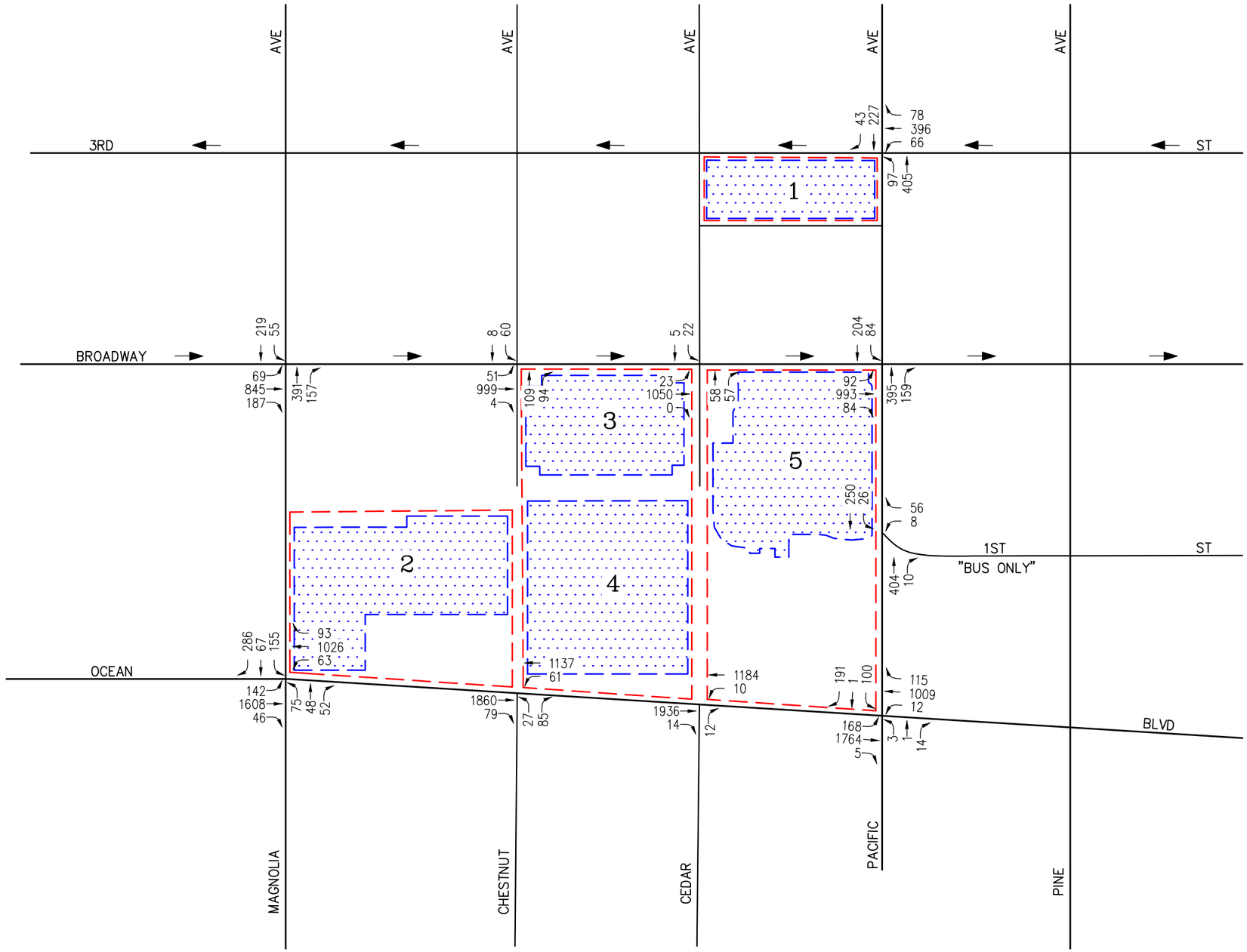
= PARKING LOCATIONS

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

= PROJECT AREA

= PARKING LOCATIONS

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 3-3

EXISTING PM PEAK HOUR TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH

3.3 Existing Public Transit

The Los Angeles County Metropolitan Transportation Authority and Long Beach Transit (LBT) provide public transit services in the vicinity of the proposed Project. In the vicinity of the Project, the Metro Blue Line currently serves Pacific Avenue. The Los Angeles Department of Transportation (LADOT) Commuter Express 142 currently serves Ocean Boulevard. In addition to the Metro routes, LBT Route 151 serves Broadway, 3rd Street, and Pacific Avenue; Route 121 serves Ocean Boulevard and Pacific Avenue; LBT Route 181, 191 and 192 serve Broadway, 3rd Street, and Magnolia Avenue; LBT Route 21, 22, 61, and Passport serve Pacific Avenue. ***Figure 3-4*** graphically illustrates the transit routes of Long Beach Transit within the vicinity of the Project site. ***Figure 3-5*** identifies the location of the existing LBT bus stops, including the downtown Long Beach Transit Mall on 1st Street between Pacific Avenue and Long Beach Boulevard, in proximity to the Project site. From the westerly edge of the Project site, the Long Beach Transit Mall that is located directly east of the civic center block across Pacific Avenue.

3.4 Existing Bicycle Master Plan

The City of Long Beach promotes bicycling as a means of mobility and a way in which to improve the quality of life within its community. The Bicycle Master Plan recognizes the needs of bicycle users and aims to create a complete and safe bicycle network throughout the City. The City of Long Beach Bicycle Facilities in the vicinity of the Project site (existing and proposed) is shown on ***Figure 3-6***.

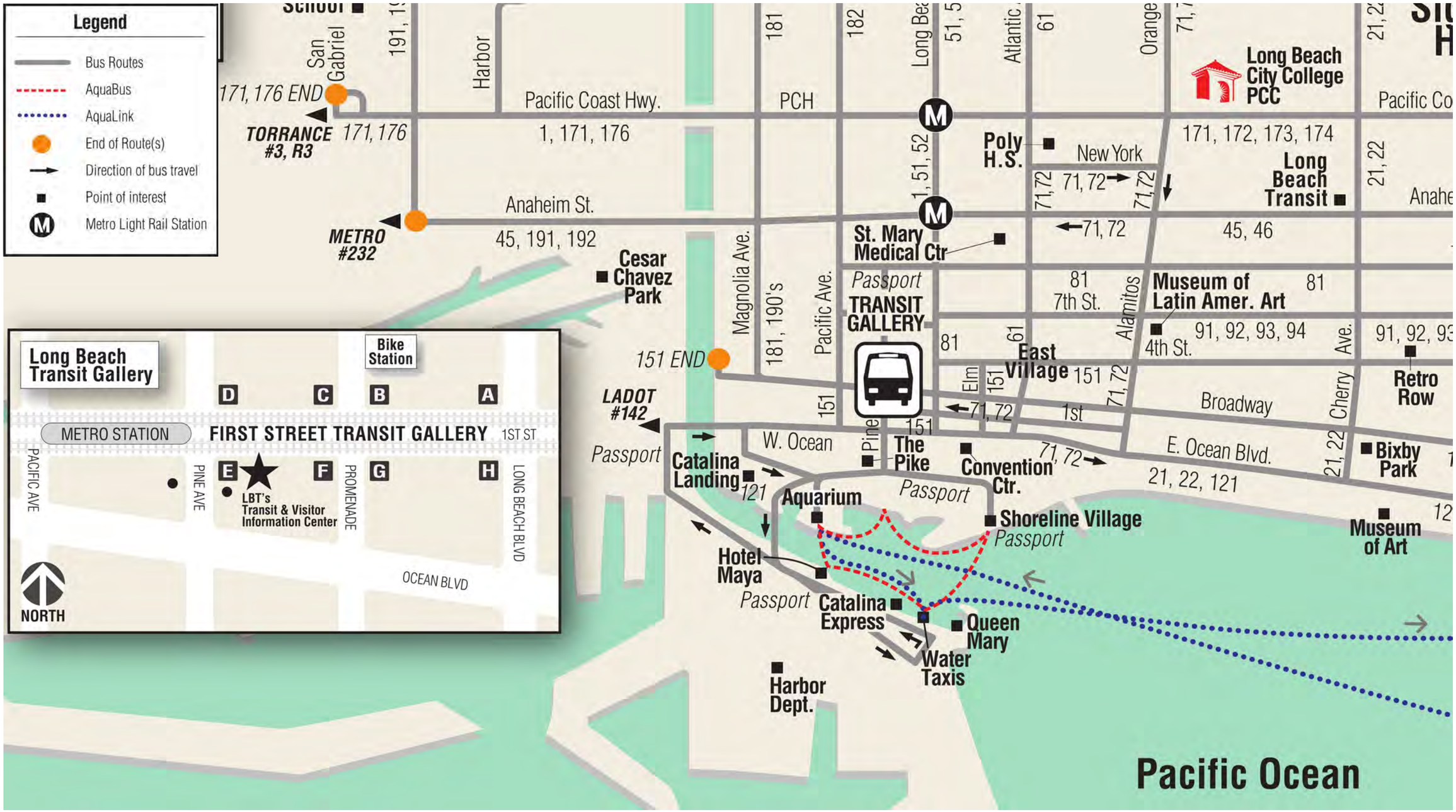
3.5 Existing Intersection Conditions

Existing AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the *Intersection Capacity Utilization* (ICU) methodology for signalized intersections.

3.5.1 *Intersection Capacity Utilization (ICU) Method of Analysis*

In conformance with City of Long Beach and LA County CMP requirements, existing weekday peak hour operating conditions for the key signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

Per LA County CMP requirements, the ICU calculations use a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and dual left turn capacity of 2,880 vph. A clearance interval is also added to each Level of Service calculation. Per City of Long Beach requirements, clearance intervals are based on the number of phases in the intersection and whether the left turning movements are all fully protected or whether some of them are permitted with other



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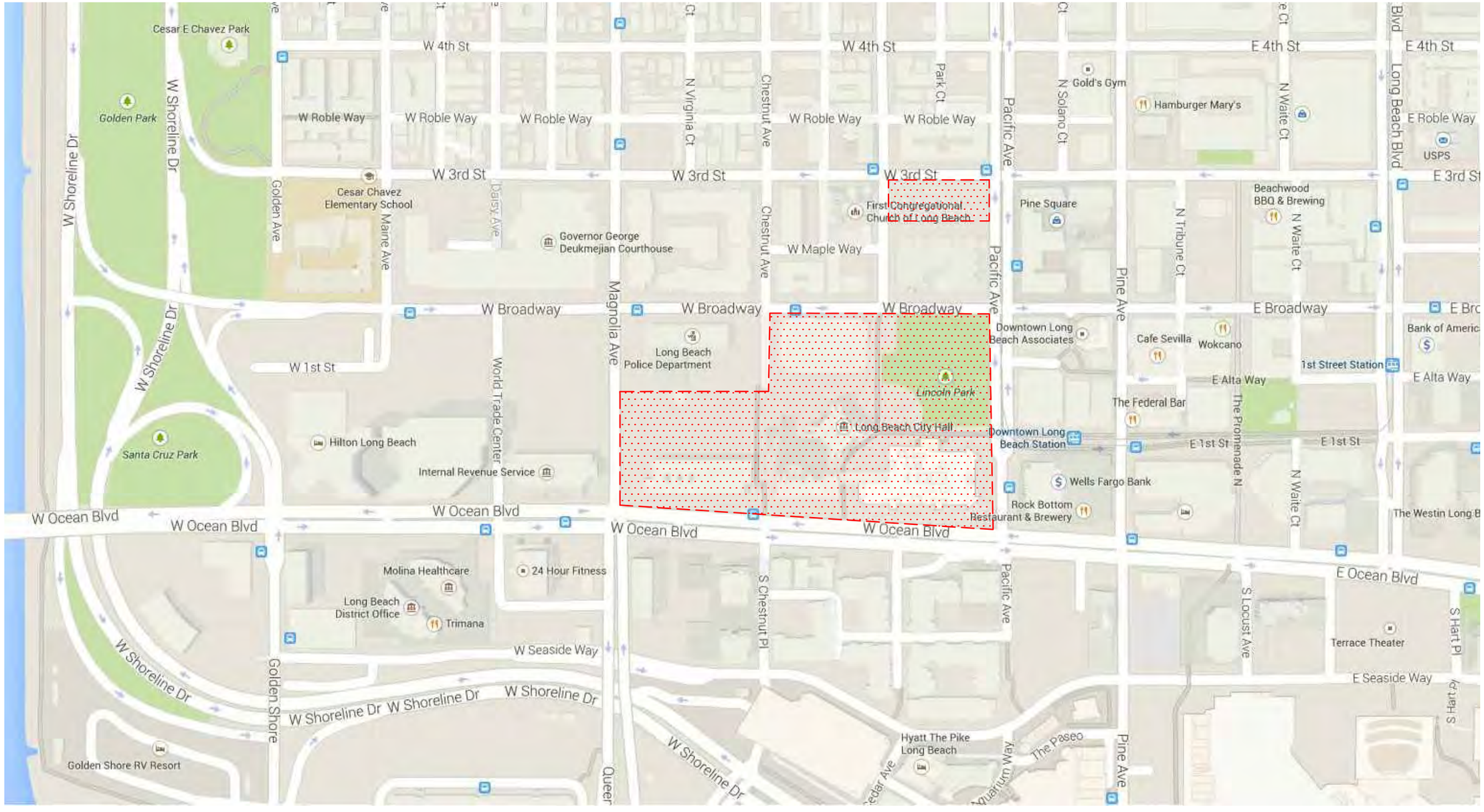
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SOURCE: LONG BEACH TRANSIT

FIGURE 3-4

LONG BEACH TRANSIT MAP
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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SOURCE: GOOGLE

KEY

= PROJECT SITE

= TRANSIT STOP

FIGURE 3-5

TRANSIT STOP LOCATIONS

NEW LONG BEACH CIVIC CENTER, LONG BEACH



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SOURCE: CITY OF LONG BEACH

KEY

= PROJECT SITE

FIGURE 3-6

LONG BEACH BIKEWAY FACILITIES

NEW LONG BEACH CIVIC CENTER, LONG BEACH

left-turn movements being protected. ***Table 3-1*** shows the clearance intervals used in the analysis of the key study intersections within the City of Long Beach.

The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding ICU value range and are shown in ***Table 3-2***. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements.

3.5.2 *Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)*

The 2000 HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the key unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding HCM control delay value range, as shown in ***Table 3-3***.

3.5.3 *Level of Service Criteria*

According to the City of Long Beach, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours, or the current LOS if the existing LOS is worse than LOS D (i.e. LOS E of F).

3.6 Existing Level of Service Results

Table 3-4 summarizes the existing peak hour service level calculations for the ten (10) key study intersections based on existing traffic volumes and current street geometrics. Review of *Table 3-4* indicates that all ten (10) key study intersections currently operate at LOS C or better during the weekday AM and PM peak hours.

Appendix B contains the detailed peak hour count sheets for the key intersections evaluated in this report

TABLE 3-1

CITY OF LONG BEACH CLEARANCE INTERVALS[1]

Number of Signal Phases	Left-turn Phasing Type	Clearance Interval (Percent)
2	Permitted	10%
3	Protected and Permitted	12%
3	Fully Protected	15%
4	Protected and Permitted	14%
4	Fully Protected	18%

[1] Source: *City of Long Beach Guidelines for Signalized Intersection Analysis, 2004.*

TABLE 3-2

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	Level of Service Description
A	≤ 0.600	EXCELLENT. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

TABLE 3-3

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

TABLE 3-4

EXISTING PEAK HOUR LEVELS OF SERVICE

	Key Intersections	Time Period	Control Type	ICU/HCM	LOS
1.	Magnolia Avenue at Broadway	AM PM	2∅ Traffic Signal	0.502 0.570	A A
2.	Chestnut Avenue at Broadway	AM PM	3∅ Traffic Signal	0.432 0.553	A A
3.	Cedar Avenue at Broadway	AM PM	3∅ Traffic Signal	0.432 0.531	A A
4.	Pacific Avenue at Broadway	AM PM	3∅ Traffic Signal	0.478 0.663	A B
5.	Magnolia Avenue at Ocean Boulevard	AM PM	3∅ Traffic Signal	0.770 0.730	C C
6.	Chestnut Avenue at Ocean Boulevard	AM PM	2∅ Traffic Signal	0.564 0.595	A A
7.	Cedar Avenue at Ocean Boulevard	AM PM	One- Way Stop	9.7 s/v 17.2 s/v	A C
8.	Pacific Avenue at Ocean Boulevard	AM PM	6∅ Traffic Signal	0.689 0.559	B A
9.	Pacific Avenue at 3rd Street	AM PM	3∅ Traffic Signal	0.569 0.430	A A
10.	Pacific Avenue at 1st Street	AM PM	3∅ Traffic Signal	0.302 0.336	A A

Notes:

- ICU = Intersection Capacity Utilization
- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 3-2* and *3-3* for the LOS definitions
- ∅ = Phase

4.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the proposed Project, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

5.0 PROJECT TRAFFIC CHARACTERISTICS

5.1 Project Traffic Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the Ninth Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2012].

Trip generation rates/equations for ITE Land Use 230: Residential Condominium/Townhouse, ITE Land Use 310: Hotel, ITE Land Use 411: City Park, ITE Land Use 590: Library, ITE Land Use 710: General Office Building, ITE Land Use 820: Shopping Center and ITE Land Use 932: High-Turnover (Sit Down) Restaurant have been applied appropriately to the existing development and proposed Project uses.

As shown in the upper half of ***Table 5-1***, the proposed Project is forecast to generate 18,582 daily trips, with 1,185 trips (795 inbound, 390 outbound) produced in the AM peak hour and 1,668 trips (693 inbound, 975 outbound) produced in the PM peak hour on a typical weekday.

For the existing land use, a review of lower portion of *Table 5-1* shows the existing trip generation potential of the current civic center (i.e. City Hall office tower, Main Library and Lincoln Park) totals 7,659 daily trips, with 514 trips (418 inbound, 96 outbound) produced in the AM peak hour and 1,116 trips (446 inbound, 670 outbound) produced in the PM peak hour.

Comparison of the trips generated by the proposed Project to the trip generation potential of the Existing Land Use shows that the implementation of the proposed Project will result in an additional 10,923 daily trips, 671 net AM peak hour trips and 552 net PM peak hour trips. The potential traffic impact of these added trips are assessed in this report.

5.2 Downtown Plan Land Use Trip Generation Comparison

As mentioned previously, the *Long Beach Downtown Community Plan EIR Traffic Impact Analysis, dated February 4, 2010, prepared by Iteris,* and *Downtown Plan Draft Program Environmental Impact Report (Downtown Plan Draft PEIR), dated December 2010, prepared by AECOM* assumed development of up to 800 residential units, 460,000 SF of office/commercial floor area, 64,000 SF of retail space and 16,000 SF of restaurant uses for the Civic Center area in the Downtown Community Plan traffic analysis.

As shown in ***Table 5-2***, the trip generation potential of mix of uses assumed for the Civic Center totals generate 16,998 daily trips, with 1,036 trips (623 inbound, 413 outbound) produced in the AM peak hour, and 1,132 trips (489 inbound, 643 outbound) produced in the PM peak hour.

A comparison of the trips generated by the proposed Project to the trips generated by the mix of uses assumed in the Downtown Plan shows that that the implementation of the proposed Project will result in 6,075 fewer daily trips, 365 fewer AM peak hour trips, and 580 fewer PM peak hour trips.

TABLE 5-1

PROJECT TRIP GENERATION FORECAST[2]

No.	Name	Description	Land Use	Sub Land Use	ITE Code	Units	Data Type	Size	Rates: Daily	Rates: AM Peak Hour Enter	Rates: AM Peak Hour Exit	Rates: AM Peak Hour Total	Rates: PM Peak Hour Enter	Rates: PM Peak Hour Exit	Rates: PM Peak Hour Total	Trips: Daily	Trips: AM Peak Hour Enter	Trips: AM Peak Hour Exit	Trips: AM Peak Hour Total	Trips: PM Peak Hour Enter	Trips: PM Peak Hour Exit	Trips: PM Peak Hour Total
Proposed Project Trip Generation																						
1	Third & Pacific Block	Apartment	Residential	Residential Condominium/Townhouse	230	Dwelling Units	Equation	200	5.88	17%	83%	0.45	67%	33%	0.53	1,176	15	75	90	71	35	106
							Reduction for Transit Trips (26%)					0.26			0.26	0	-4	-19	-23	-18	-10	-28
							Third & Pacific Block Sub-total									**1,176**	**11**	**56**	**67**	**53**	**25**	**78**
2	Civic Block	City Hall	Office	General Office Building	710	1000 Sq. Feet Gross Floor Area	Equation	270	10.34	88%	12%	1.57	17%	83%	1.41	2,793	373	51	424	65	316	381
		Port Administration	Office	General Office Building	710	1000 Sq. Feet Gross Floor Area	Equation	240	10.64	88%	12%	1.61	17%	83%	1.45	2,554	339	46	385	59	288	347
							Reduction for Transit Trips (26%)					0.26			0.26	0	-185	-25	-210	-32	-157	-189
							Civic Block Sub-total									**5,347**	**527**	**72**	**599**	**92**	**447**	**539**
3	Lincoln Park Block	Main Library	Institutional	Library	590	1000 Sq. Feet Gross Floor Area	Equation	92	38.41	71%	29%	1.26	48%	52%	6.13	3,533	82	34	116	271	293	564
		Lincoln Park [A]	Recreational	City Park	411	Acres	Rate	3.17	35.00	56%	44%	4.50	57%	43%	3.50	111	8	6	14	6	5	11
							Lincoln Park Block Sub-total									**3,644**	**90**	**40**	**130**	**277**	**298**	**575**
4	Center Block	Apartment	Residential	Residential Condominium/Townhouse	230	Dwelling Units	Equation	580	5.12	17%	83%	0.36	67%	33%	0.44	2,969	36	175	211	170	84	254
							Reduction for Internal Capture (5%)		0.05	0.05	0.05	0.05	0.05	0.05	0.05	-148	-2	-9	-11	-9	-4	-13
							Reduction for Transit Trips (26%)					0.26			0.26	0	-9	-43	-52	-42	-21	-63
							Apartment Sub-total									2,821	25	123	148	119	59	178
		Hotel	Lodging	Hotel	310	Rooms	Rate	200	8.17	59%	41%	0.53	51%	49%	0.60	1,634	63	43	106	61	59	120
							Reduction for Internal Capture (5%)		0.05	0.05	0.05	0.05	0.05	0.05	0.05	-82	-3	-2	-5	-3	-3	-6
							Hotel Sub-total									1,552	60	41	101	58	56	114
		Retail	Retail	Shopping Center	820	1000 Sq. Feet Gross Leasable Area	Equation	32	101.19	62%	38%	2.43	48%	52%	8.73	3,238	48	30	78	134	145	279
							Reduction for Internal Capture (5%)		0.05	0.05	0.05	0.05	0.05	0.05	0.05	-162	-2	-2	-4	-7	-7	-14
							Reduction for Pass-by Trips(50% PM)								0.50	0	0	0	0	-64	-69	-133
							Retail Sub-total									3,076	46	28	74	63	69	132
		Restaurant	Services	High-Turnover (Sit-Down) Restaurant	932	1000 Sq. Feet Gross Floor Area	Rate	8	127.15	55%	45%	10.81	60%	40%	9.85	1,017	47	39	86	47	32	79
							Reduction for Internal Capture (5%)		0.05	0.05	0.05	0.05	0.05	0.05	0.05	-51	-2	-2	-4	-2	-2	-4
							Reduction for Pass-by Trips(20% AM/20% PM)					0.20			0.20	0	-9	-7	-16	-9	-6	-15
							Reduction for Bike, Walk, Mixed-use(10% PM)								0.10	0	0	0	0	-5	-3	-8
							Restaurant Sub-total									966	36	30	66	31	21	52
							Center Block Sub-total									**8,415**	**167**	**222**	**389**	**271**	**205**	**476**
															A. Total Proposed Project Trips	**18,582**	**795**	**390**	**1,185**	**693**	**975**	**1,668**
Existing Land Use Trip Generation																						
1	Main Library	Library	Institutional	Library	590	1000 Sq. Feet Gross Floor Area	Equation	138	33.87	71%	29%	1.28	48%	52%	5.91	4,674	125	51	176	391	424	815
2	City Hall	Office	Office	General Office Building	710	1000 Sq. Feet Gross Floor Area	Equation	283	10.23	88%	12%	1.55	17%	83%	1.40	2,894	387	53	440	67	328	395
							Reduction for Transit Trips (26%)					0.26			0.26	0	-101	-13	-114	-17	-86	-103
							City Hall Sub-total									2,894	286	40	326	50	242	292
3	Lincoln Park [A]	Park	Recreational	City Park	411	Acres	Rate	2.6	35.00	56%	44%	4.50	57%	43%	3.50	91	7	5	12	5	4	9
															B. Total Existing Land Use Trips	**7,659**	**418**	**96**	**514**	**446**	**670**	**1,116**
															C. Net Project Trips (Project - Existing)	**10,923**	**377**	**294**	**671**	**247**	**305**	**552**

[A] Trip rates were calculated based on information provided by ITE Trip Generation Manual, 9th Edition for City Parks. Daily trip rate was assumed to be 10 times the rate for the PM peak hour.

[2] Source: *Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).*

TABLE 5-2

TRIP GENERATION FORECAST – DOWNTOWN PLAN CIVIC CENTER AREA[3]

No.	Name	Description	Land Use	Sub Land Use	ITE Code	Units	Data Type	Size	Daily	AM Peak Hour Enter	AM Peak Hour Exit	AM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit	PM Peak Hour Total	Daily	AM Peak Hour Enter	AM Peak Hour Exit	AM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit	PM Peak Hour Total
LB Downtown Plan 2010 EIR Project Trip Generation																						
1	LU Zone 8	Residential Condos	Residential	Residential Condominium/Townhouse	230	Dwelling Units	Equation	320	5.53	17%	83%	0.41	67%	33%	0.49	1,769	22	109	131	105	51	156
							Reduction for Transit Trips (26%)					0.26			0.26	*0*	*-6*	*-28*	*-34*	*-27*	*-14*	*-41*
							LU Zone 8 Sub-total									**1,769**	**16**	**81**	**97**	**78**	**37**	**115**
2	LU Zone 9	Residential Condos	Residential	Residential Condominium/Townhouse	230	Dwelling Units	Equation	800	4.91	17%	83%	0.34	67%	33%	0.41	3,927	46	227	273	222	109	331
							Reduction for Transit Trips (26%)					0.26			0.26	*0*	*-12*	*-59*	*-71*	*-58*	*-28*	*-86*
							Apartment Sub-total									*3,927*	*34*	*168*	*202*	*164*	*81*	*245*
		Office	Office	General Office Building	710	1000 Sq. Feet Gross Floor Area	Equation	460	9.10	88%	12%	1.41	17%	83%	1.29	4,187	571	78	649	101	493	594
							Reduction for Transit Trips (26%)					0.26			0.26	*0*	*-148*	*-21*	*-169*	*-26*	*-128*	*-154*
							Office Sub-total									*4,187*	*423*	*57*	*480*	*75*	*365*	*440*
		Shopping Center	Retail	Shopping Center	820	1000 Sq. Feet Gross Leasable Are	Equation	64	79.39	62%	38%	1.86	48%	52%	6.94	5,081	74	45	119	213	231	444
							Reduction for Pass-by Trips(50% PM)								0.50	*0*	*0*	*0*	*0*	*-107*	*-115*	*-222*
							Retail Sub-total									*5,081*	*74*	*45*	*119*	*106*	*116*	*222*
		Restaurant	Services	High-Turnover (Sit-Down) Restaurant	932	1000 Sq. Feet Gross Floor Area	Rate	16	127.15	55%	45%	10.81	60%	40%	9.85	2,034	95	78	173	95	63	158
							Reduction for Pass-by Trips(20% AM/20% PM)					0.20			0.20	*0*	*-19*	*-16*	*-35*	*-19*	*-13*	*-32*
							Reduction for Bike, Walk, Mixed-use(10% PM)								0.10	*0*	*0*	*0*	*0*	*-10*	*-6*	*-16*
							Restaurant Sub-total									*2,034*	*76*	*62*	*138*	*66*	*44*	*110*
							LU Zone 9 Sub-total									**15,229**	**607**	**332**	**939**	**411**	**606**	**1,017**
															LB Downtown Plan 2010 EIR Project Trips	**16,998**	**623**	**413**	**1,036**	**489**	**643**	**1,132**

[3] Source: *Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).* The trip forecast for the mix of uses assumed in the Downtown Plan for the civic center area was updated using the most current trip rates published in the *9th Edition, Trip Generation*. Based on information contained in the *Long Beach Downtown Community Plan EIR Traffic Impact Analysis*, which uses the *8th Edition, Trip Generation*, the mix of uses for the civic center area had a trip generation potential of 15,237 daily trips, 1,035 AM peak hour trips and 1,160 PM peak hour trips.

5.3 Project Traffic Distribution and Assignment

Figure 5-1 illustrates the general, directional traffic distribution pattern for the existing civic center uses, whereas ***Figure 5-2A, Figure 5-2B, Figure 5-2C, Figure 5-2D*** and ***Figure 5-2E*** present the trip distribution patterns for various components of the proposed Project. Project traffic volumes both entering and exiting the project site have been distributed and assigned to the adjacent street system based on the following considerations:

- location of site access points in relation to the surrounding street system,
- the site's proximity to major traffic carriers and regional access routes,
- physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns,
- presence of traffic congestion in the surrounding vicinity, and
- ingress/egress availability at the Project's parking structures, including turn restrictions to and from Ocean Boulevard.

The AM and PM peak hour traffic volumes associated with the current civic center uses are presented in ***Figures 5-3*** and ***5-4***, respectively. The anticipated AM and PM peak hour project traffic volumes associated with the proposed Project are presented in ***Figures 5-5*** and ***5-6***, respectively. The traffic volume assignments presented in *Figures 5-3* and *5-4* reflect the traffic distribution characteristics for the existing development as shown in *Figure 5-1* and the traffic generation potential presented in *Table 5-1 (Row B).*

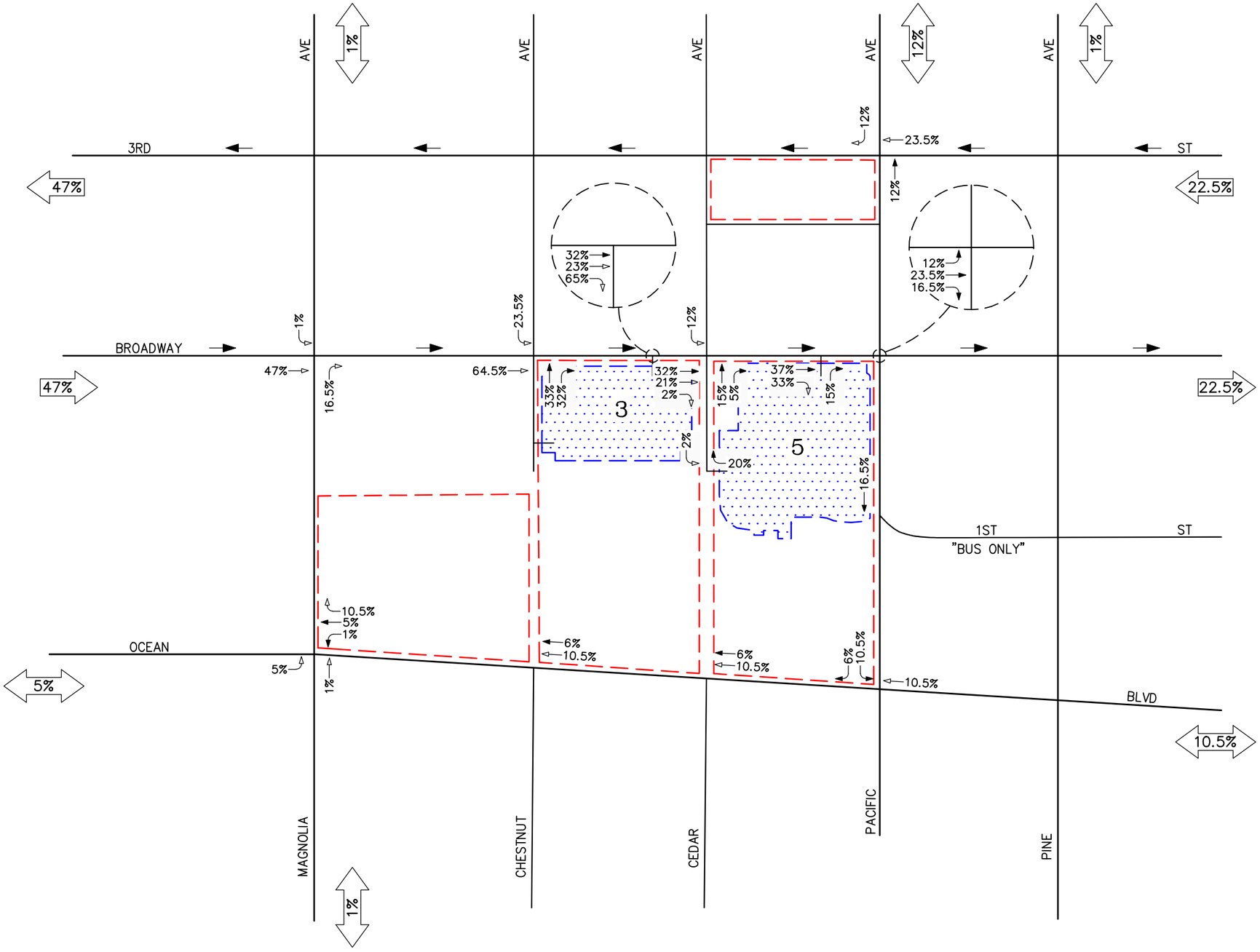
The Project's traffic volume forecasts illustrated in *Figures 5-5* and *5-6* reflect the traffic distribution characteristics of the proposed Project as shown in *Figures 5-2A through 5-2E* and the Project traffic generation potential presented in *Table 5-1 (Row C).*

It should be noted that the trip generation methodology and forecasts were approved by City staff prior to proceeding with further analyses.

5.4 Existing Plus Project Traffic Conditions

The existing plus project traffic conditions have been generated based upon existing conditions and the estimated project traffic. These forecast traffic conditions have been prepared pursuant to the California Environmental Quality Act (CEQA) guidelines, which require that the potential impacts of a Project be evaluated upon the circulation system as it currently exists. This traffic volume scenario and the related intersection capacity analyses will identify the roadway improvements necessary to mitigate the direct traffic impacts of the Project, if any.

Figures 5-7 and ***5-8*** present projected AM and PM peak hour traffic volumes at the ten (10) key study intersections with the addition of the trips generated by the proposed Project to existing traffic volumes, respectively.



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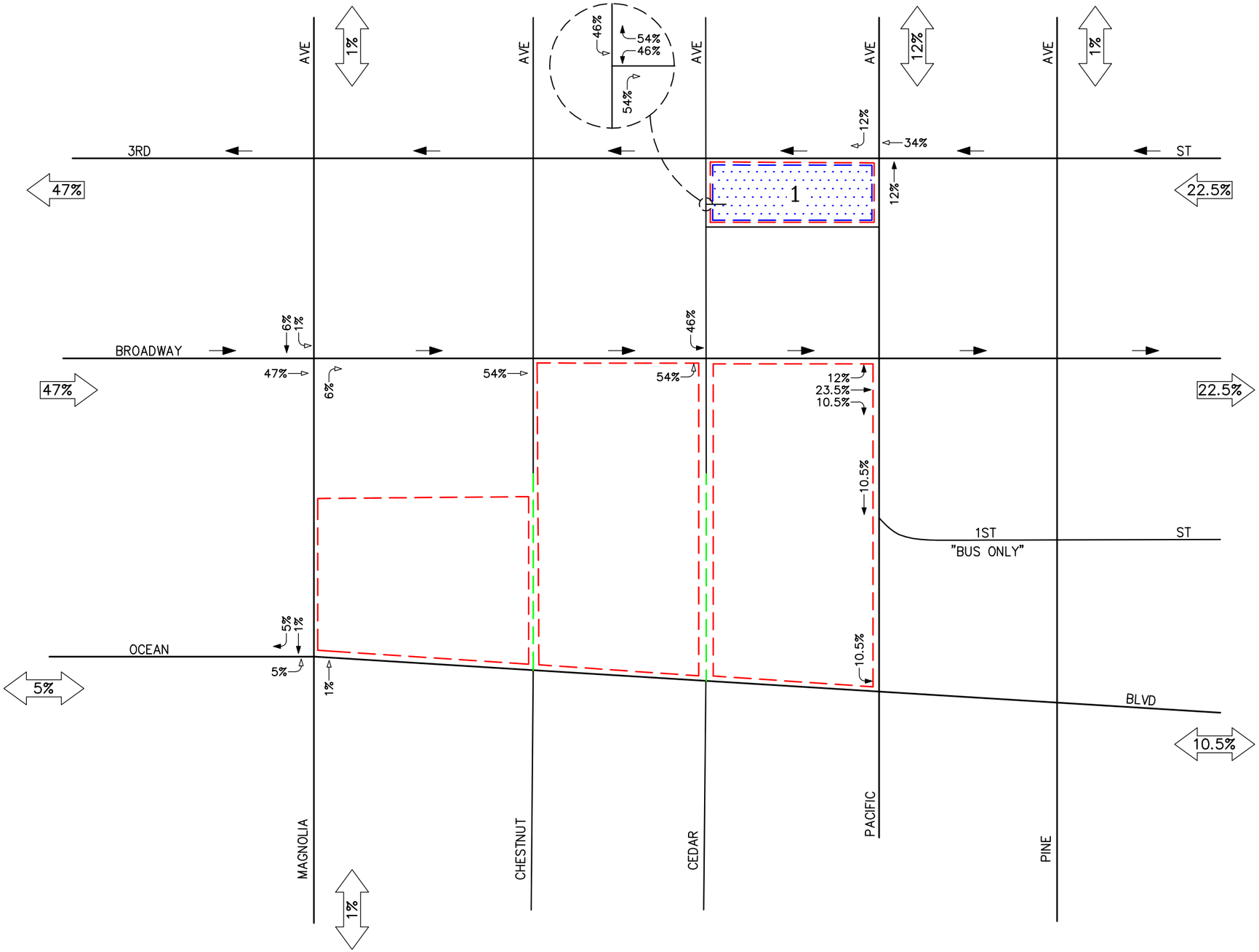
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N NO SCALE

KEY
= INBOUND PERCENTAGE
= OUTBOUND PERCENTAGE
= PROJECT SITE
= PROJECT AREA

FIGURE 5-1

EXISTING CIVIC CENTER
TRAFFIC DISTRIBUTION PATTERN
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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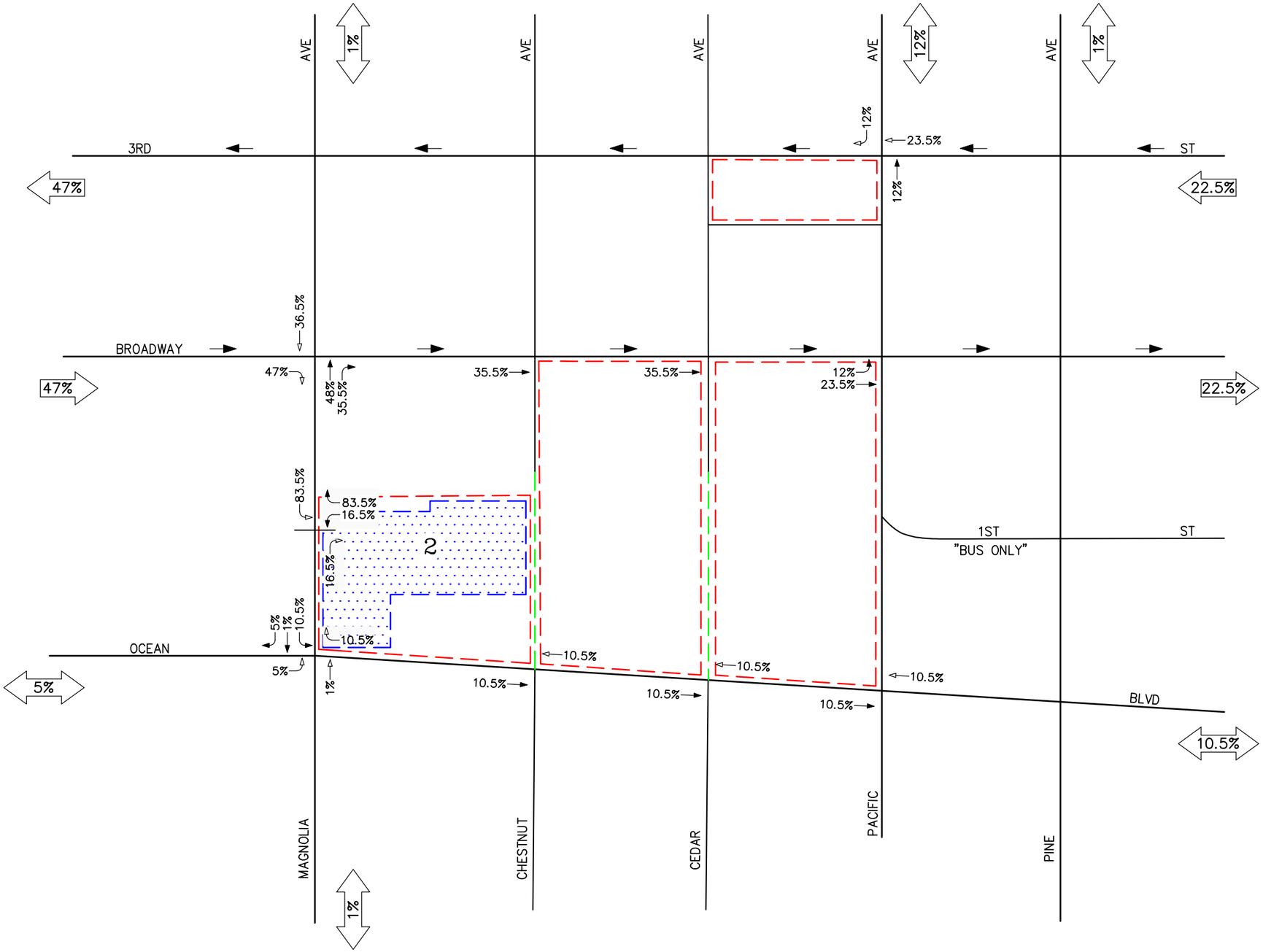
N NO SCALE

KEY

= INBOUND PERCENTAGE
= OUTBOUND PERCENTAGE
= PROJECT SITE
= PROJECT AREA
= FUTURE ROAD

FIGURE 5-2A

THIRD & PACIFIC BLOCK
PROJECT TRAFFIC DISTRIBUTION PATTERN
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

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= OUTBOUND PERCENTAGE

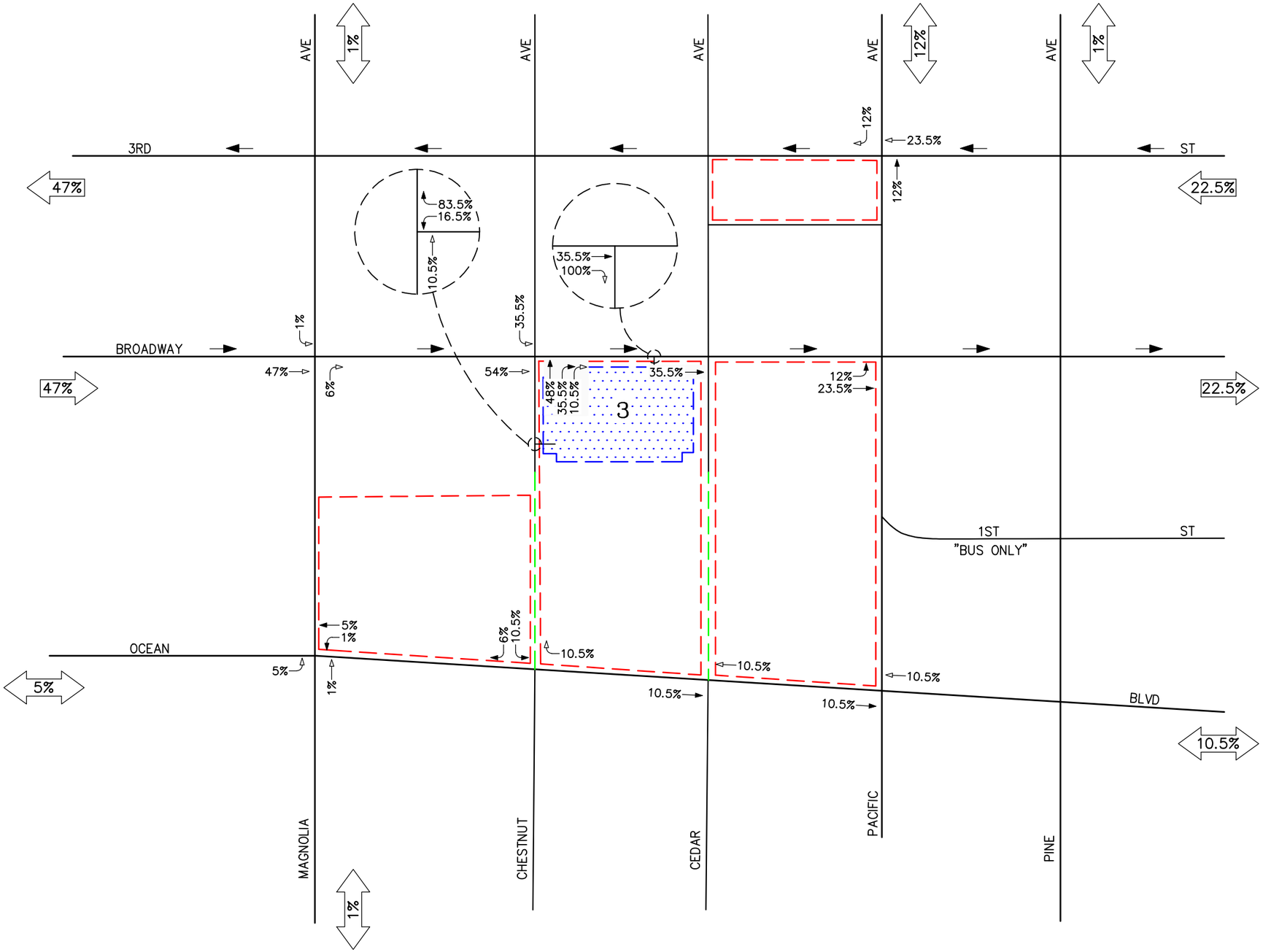
= PROJECT SITE

= PROJECT AREA

= FUTURE ROAD

FIGURE 5-2B

CIVIC BLOCK
PROJECT TRAFFIC DISTRIBUTION PATTERN
NEW LONG BEACH CIVIC CENTER, LONG BEACH



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

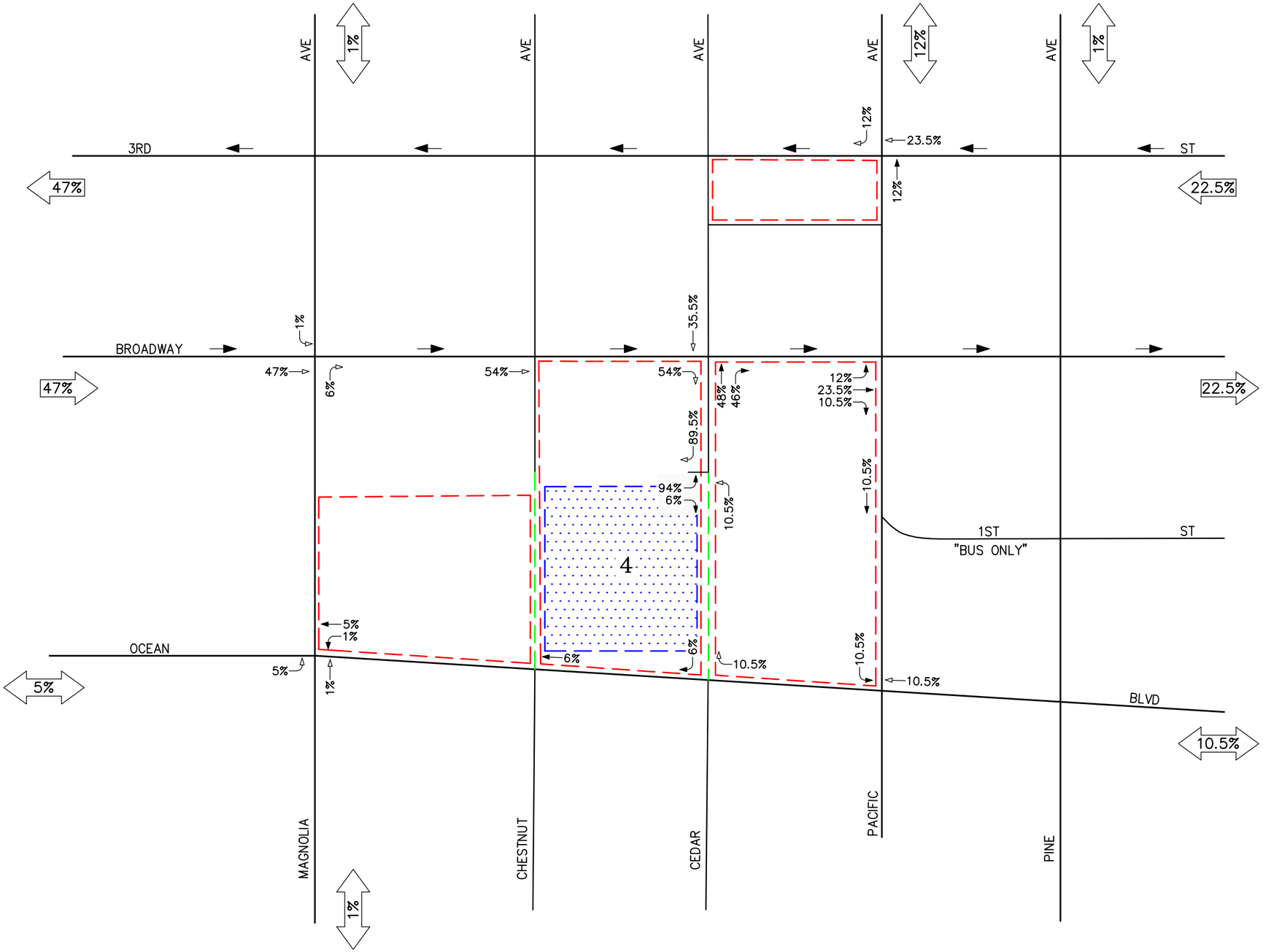
KEY

= INBOUND PERCENTAGE
= OUTBOUND PERCENTAGE
= PROJECT SITE
= PROJECT AREA
= FUTURE ROAD

FIGURE 5-2C

CENTER BLOCK BROADWAY GARAGE
PROJECT TRAFFIC DISTRIBUTION PATTERN
NEW LONG BEACH CIVIC CENTER, LONG BEACH

n:\3500\2153567 - new long beach civic center\dwg\3567f5-2c.dwg LDP 08:53:34 05-07-2015 lam



n:\3500\2153567 - new long beach civic center\dwg\3567f5-2d.dwg LDP 09:07:41 05-07-2015 lam

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

= INBOUND PERCENTAGE

= OUTBOUND PERCENTAGE

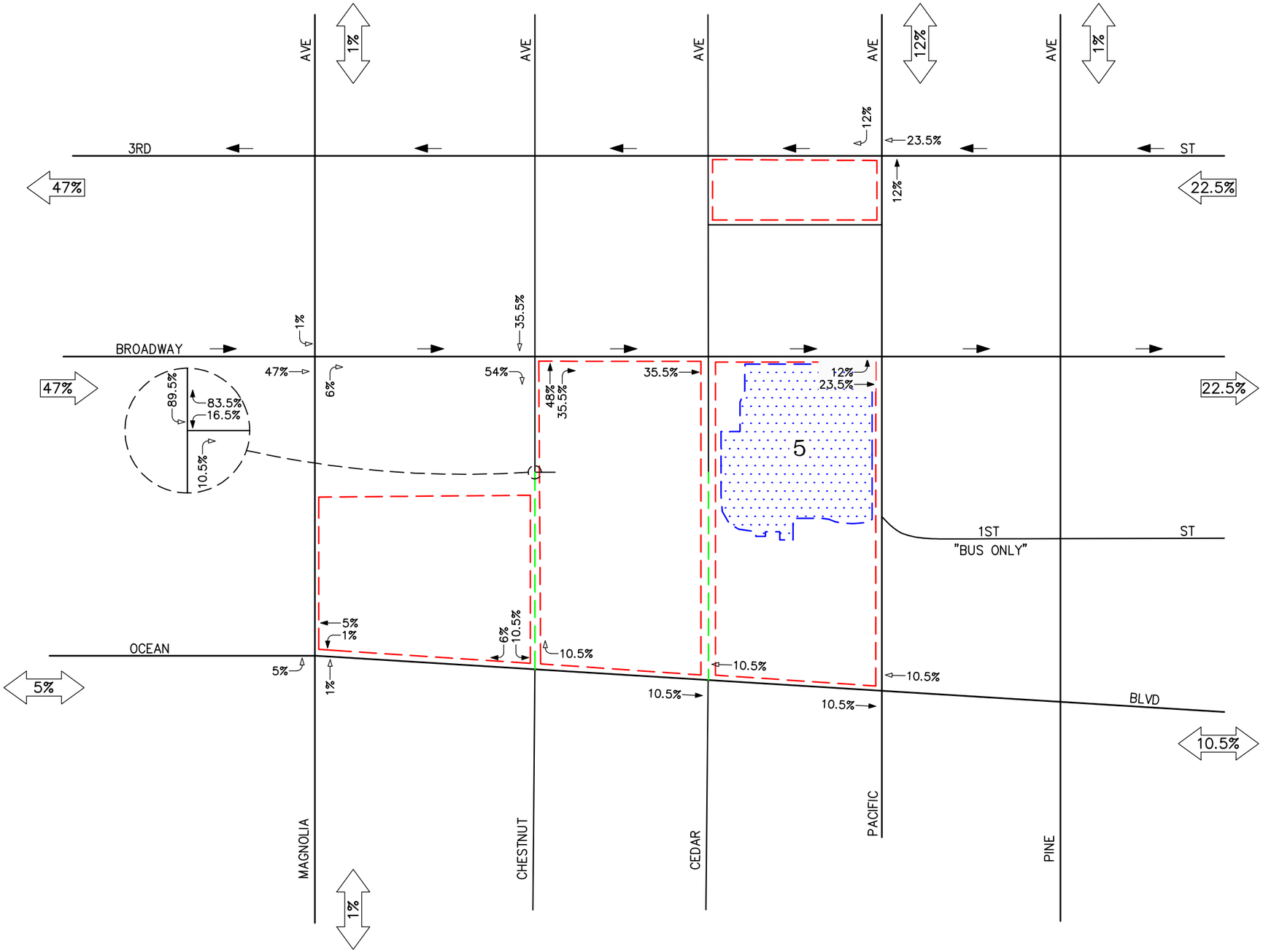
= PROJECT SITE

= PROJECT AREA

= FUTURE ROAD

FIGURE 5-2D

CENTER BLOCK COMMERCIAL GARAGE
PROJECT TRAFFIC DISTRIBUTION PATTERN
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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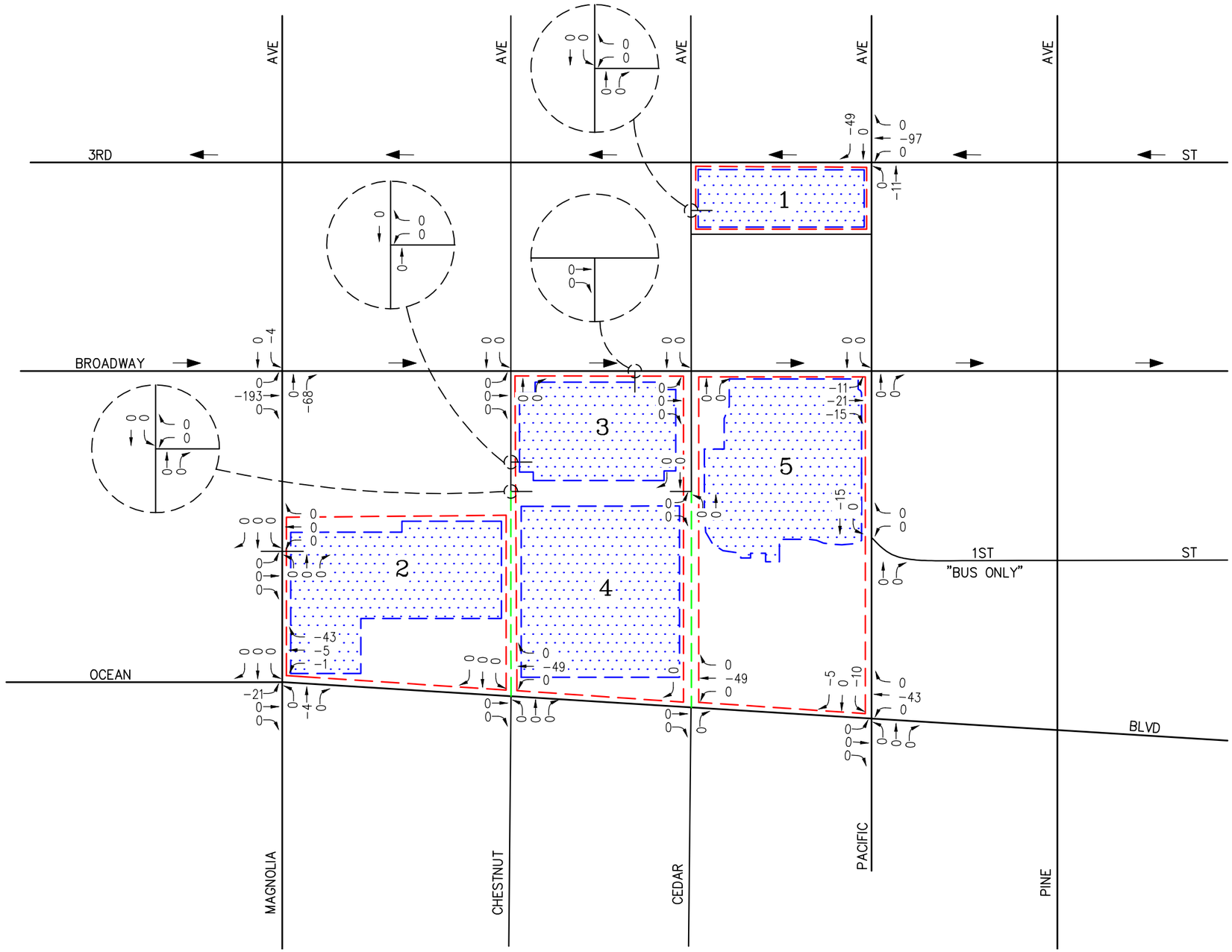
LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY
= INBOUND PERCENTAGE
= OUTBOUND PERCENTAGE
= PROJECT SITE
= PROJECT AREA
= FUTURE ROAD

FIGURE 5-2E

LINCOLN PARK BLOCK
PROJECT TRAFFIC DISTRIBUTION PATTERN
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

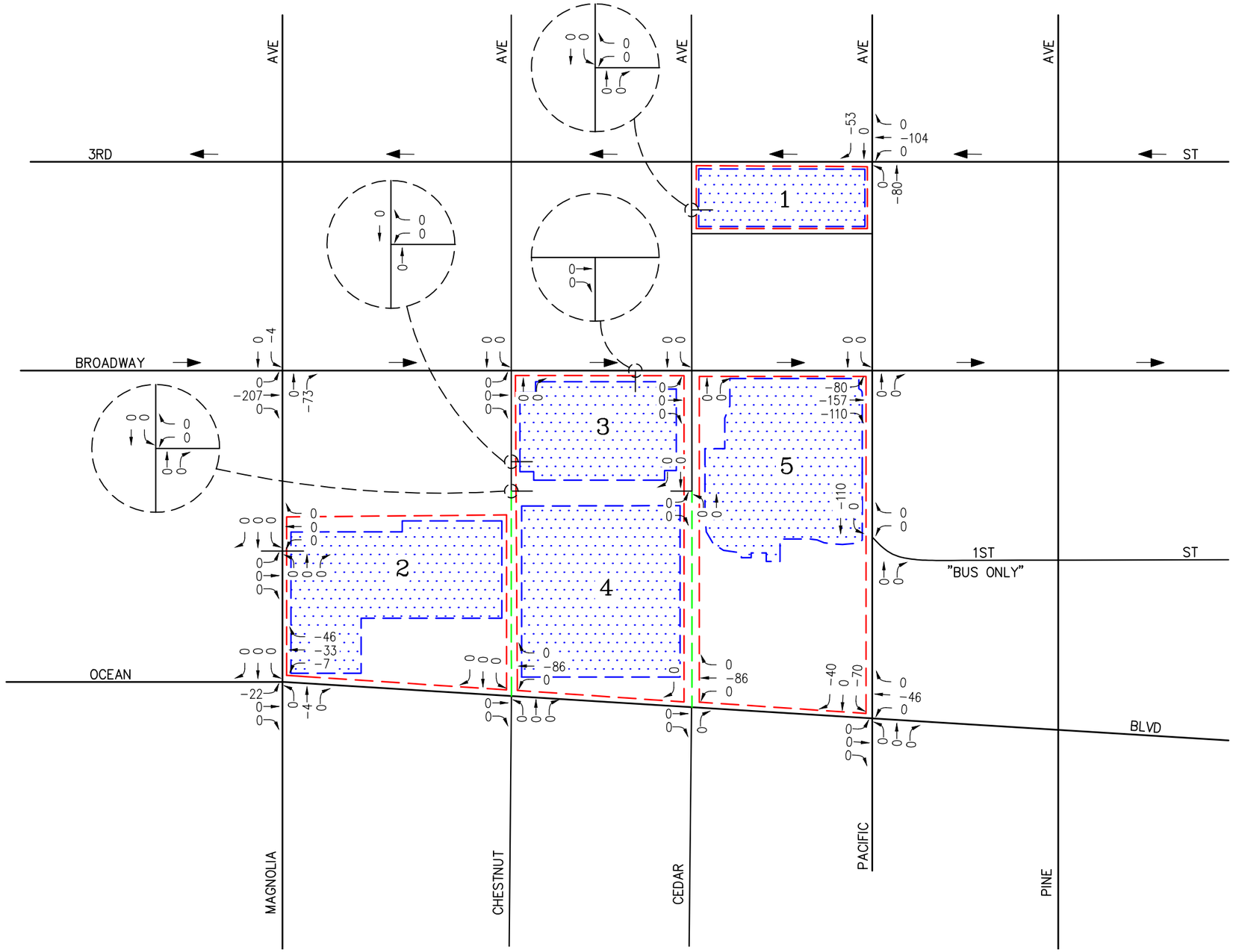
KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 5-3

AM PEAK HOUR
EXISTING CIVIC CENTER TRAFFIC VOLUMES
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

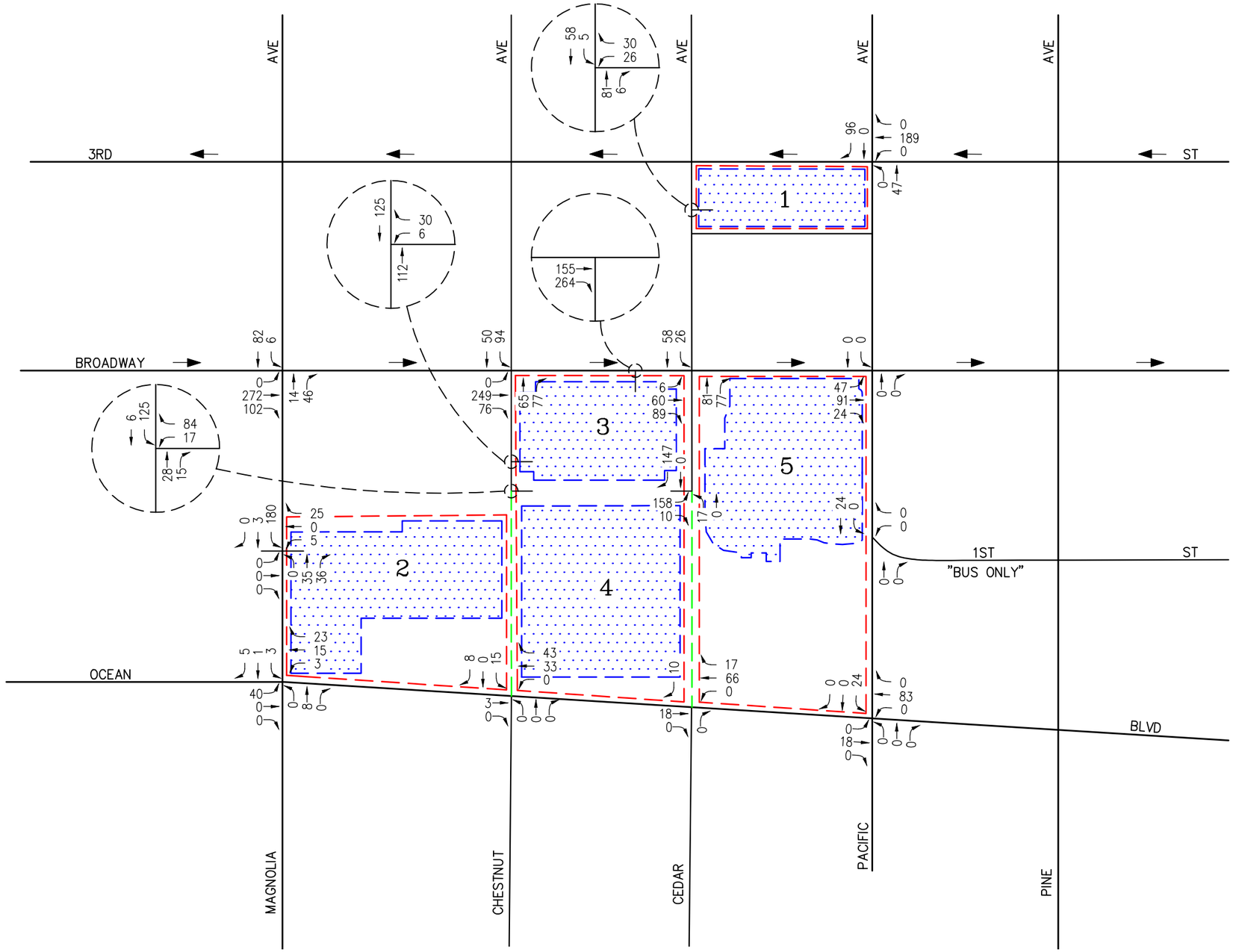
KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 5-4

PM PEAK HOUR
EXISTING CIVIC CENTER TRAFFIC VOLUMES
NEW LONG BEACH CIVIC CENTER, LONG BEACH



KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

LINSCOTT LAW & GREENSPAN engineers

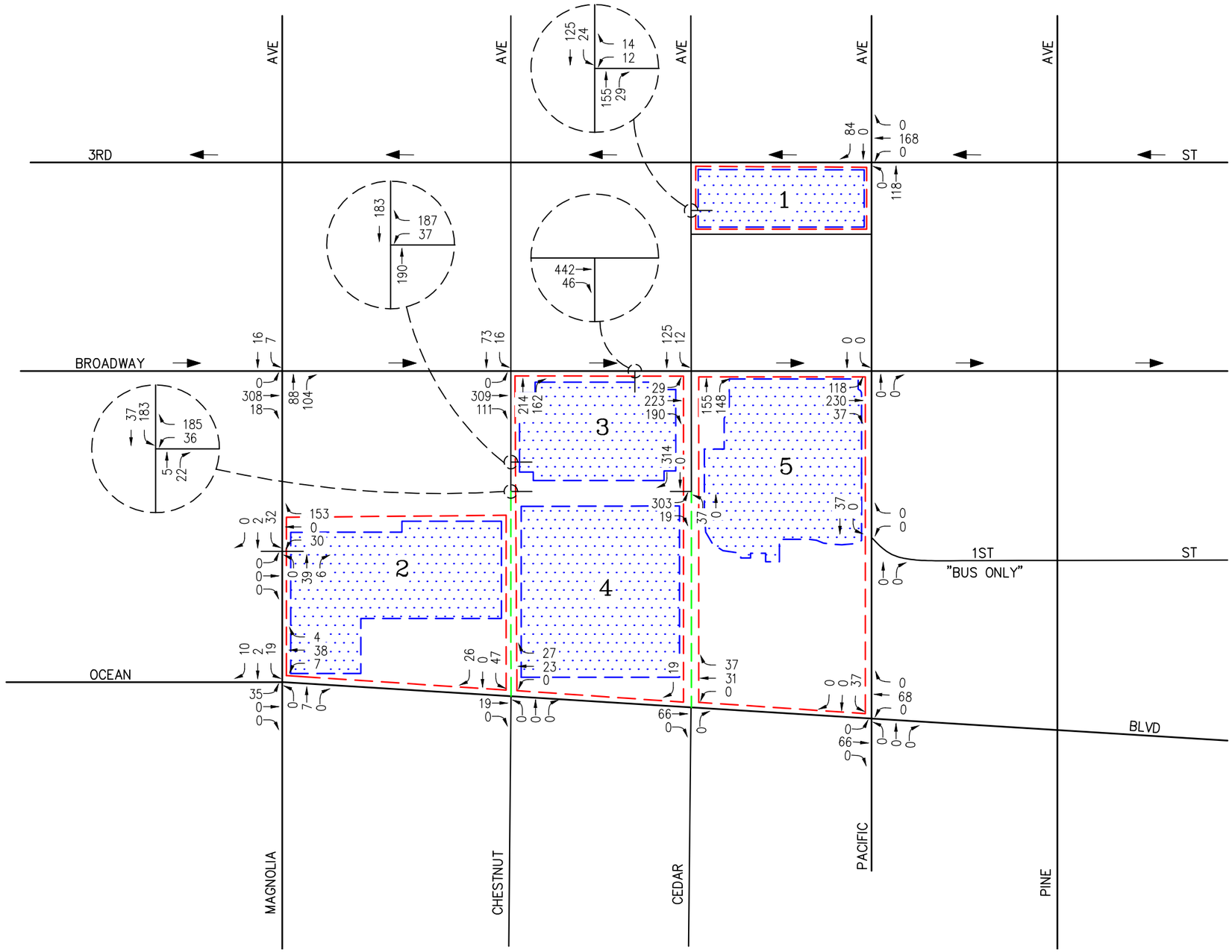
N NO SCALE

FIGURE 5-5

AM PEAK HOUR PROJECT TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH

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KEY

= PROJECT AREA

= PARKING LOCATIONS

= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

LINSCOTT LAW & GREENSPAN engineers

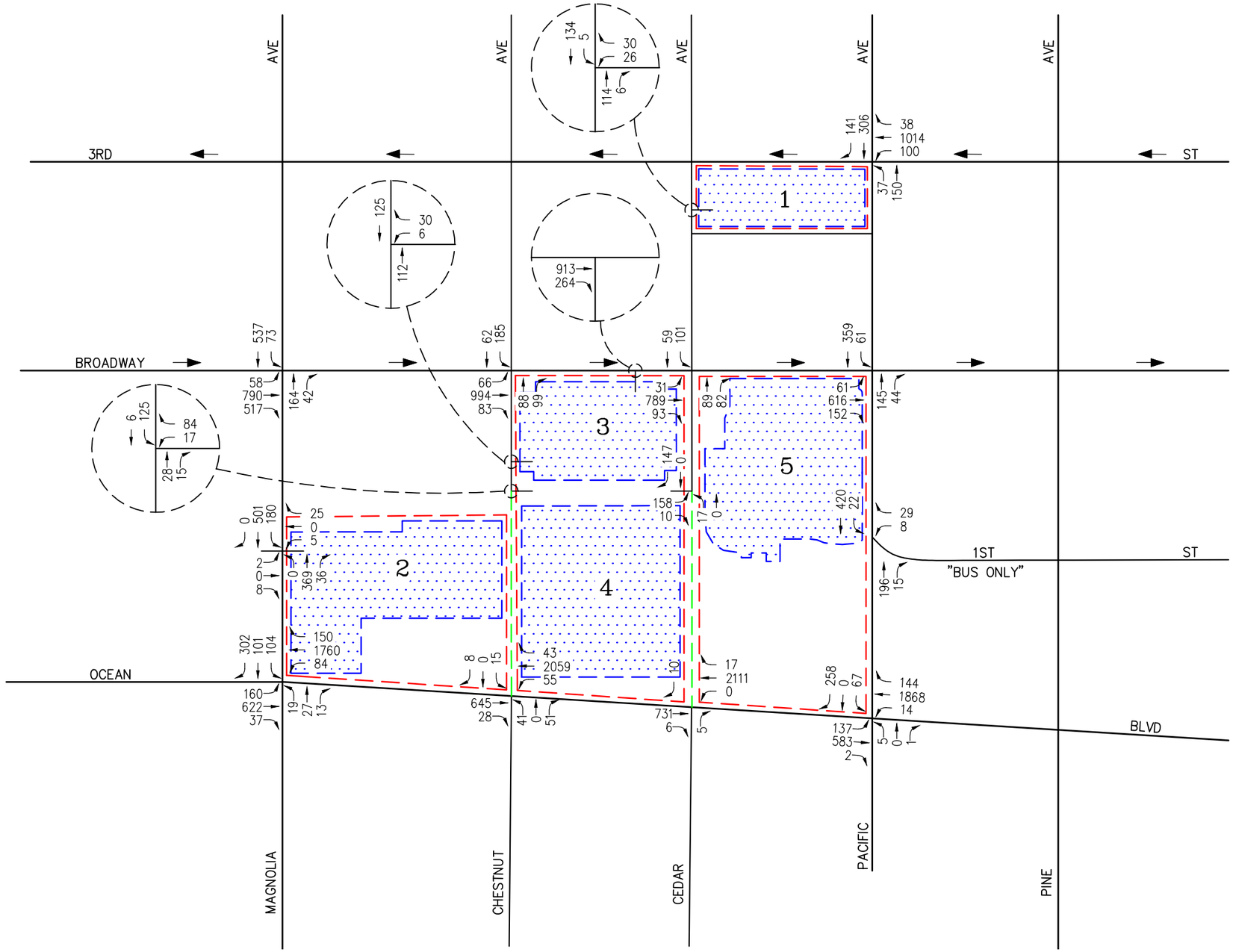
N NO SCALE

FIGURE 5-6

PM PEAK HOUR PROJECT TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

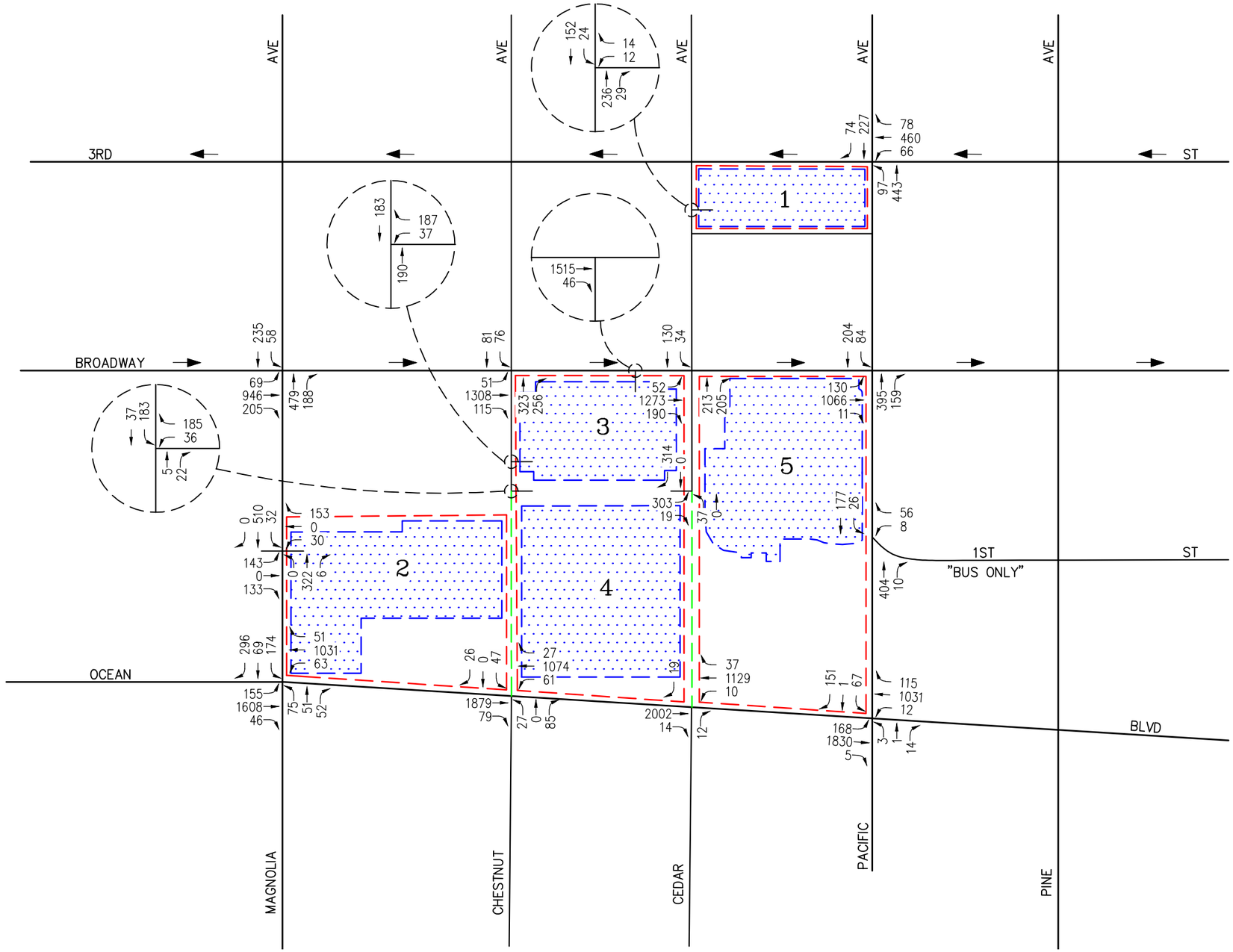
KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 5-7

EXISTING PLUS PROJECT
AM PEAK HOUR TRAFFIC VOLUMES
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 5-8

EXISTING PLUS PROJECT
PM PEAK HOUR TRAFFIC VOLUMES
NEW LONG BEACH CIVIC CENTER, LONG BEACH

6.0 FUTURE TRAFFIC CONDITIONS

6.1 Ambient Traffic Growth

Cumulative traffic growth estimates have been calculated using an ambient growth factor. The ambient traffic growth factor is intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent (1%) per year. Applied to existing Year 2015 traffic volumes results in a five percent (5%) increase of growth in existing volumes to horizon year 2020.

Please note that the recommended ambient growth factor is generally consistent with the background traffic growth estimates contained in the most current *Congestion Management Program for Los Angeles County*. It should be further noted that the 1.0% per year ambient growth factor was approved by City of Long Beach staff.

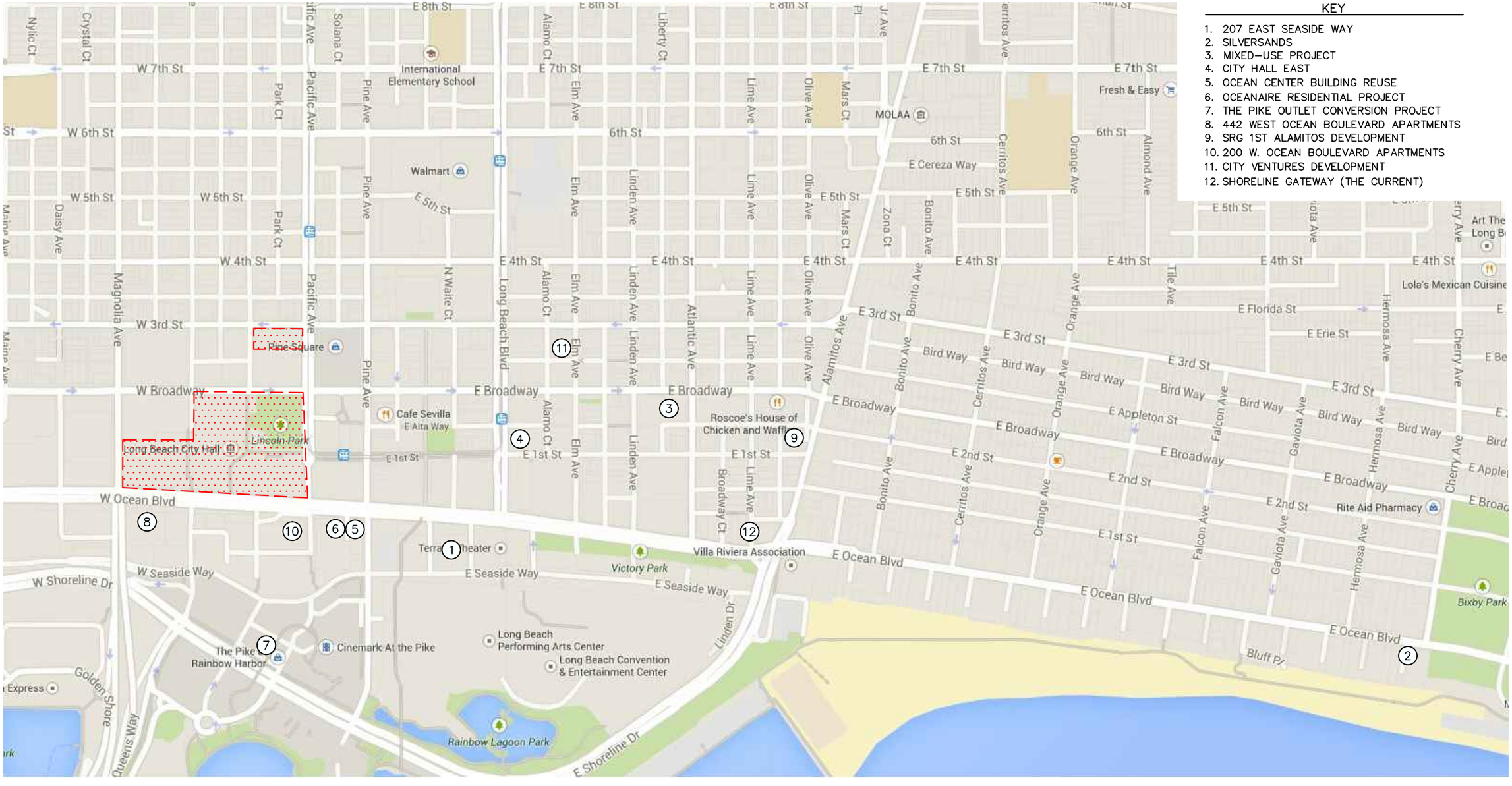
6.2 Cumulative Projects Traffic Characteristics

In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed Project, the status of other known development projects (cumulative projects) in the area has been researched. With this information, the potential impact of the proposed Project can be evaluated within the context of the cumulative impact of all ongoing development. Based on our research, there are twelve (12) cumulative projects within a two-mile radius of the project site that are located in the City of Long Beach. These cumulative projects have either been built, but not yet fully occupied, or are being processed for approval and have been included as part of the cumulative background setting.

Table 6-1 provides the location and a brief description for each of the twelve (12) cumulative projects. ***Figure 6-1*** graphically illustrates the location of the cumulative projects. These cumulative projects are expected to generate vehicular traffic, which may affect the operating conditions of the key study intersections.

Table 6-2 presents the development totals and resultant trip generation for the twelve (12) cumulative projects. As shown in *Table 6-2*, the twelve (12) cumulative projects are expected to generate a combined total of 14,732 daily trips, 891 AM peak hour trips (251 inbound and 640 outbound) and 1,306 PM peak hour trips (761 inbound and 545 outbound) on a typical weekday.

The AM and PM peak hour traffic volumes associated with the twelve (12) cumulative projects are presented in ***Figures 6-2*** and ***6-3*** respectively.



KEY

1. 207 EAST SEASIDE WAY
2. SILVERSANDS
3. MIXED–USE PROJECT
4. CITY HALL EAST
5. OCEAN CENTER BUILDING REUSE
6. OCEANAIRE RESIDENTIAL PROJECT
7. THE PIKE OUTLET CONVERSION PROJECT
8. 442 WEST OCEAN BOULEVARD APARTMENTS
9. SRG 1ST ALAMITOS DEVELOPMENT
10. 200 W. OCEAN BOULEVARD APARTMENTS
11. CITY VENTURES DEVELOPMENT
12. SHORELINE GATEWAY (THE CURRENT)

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N NO SCALE

SOURCE: GOOGLE

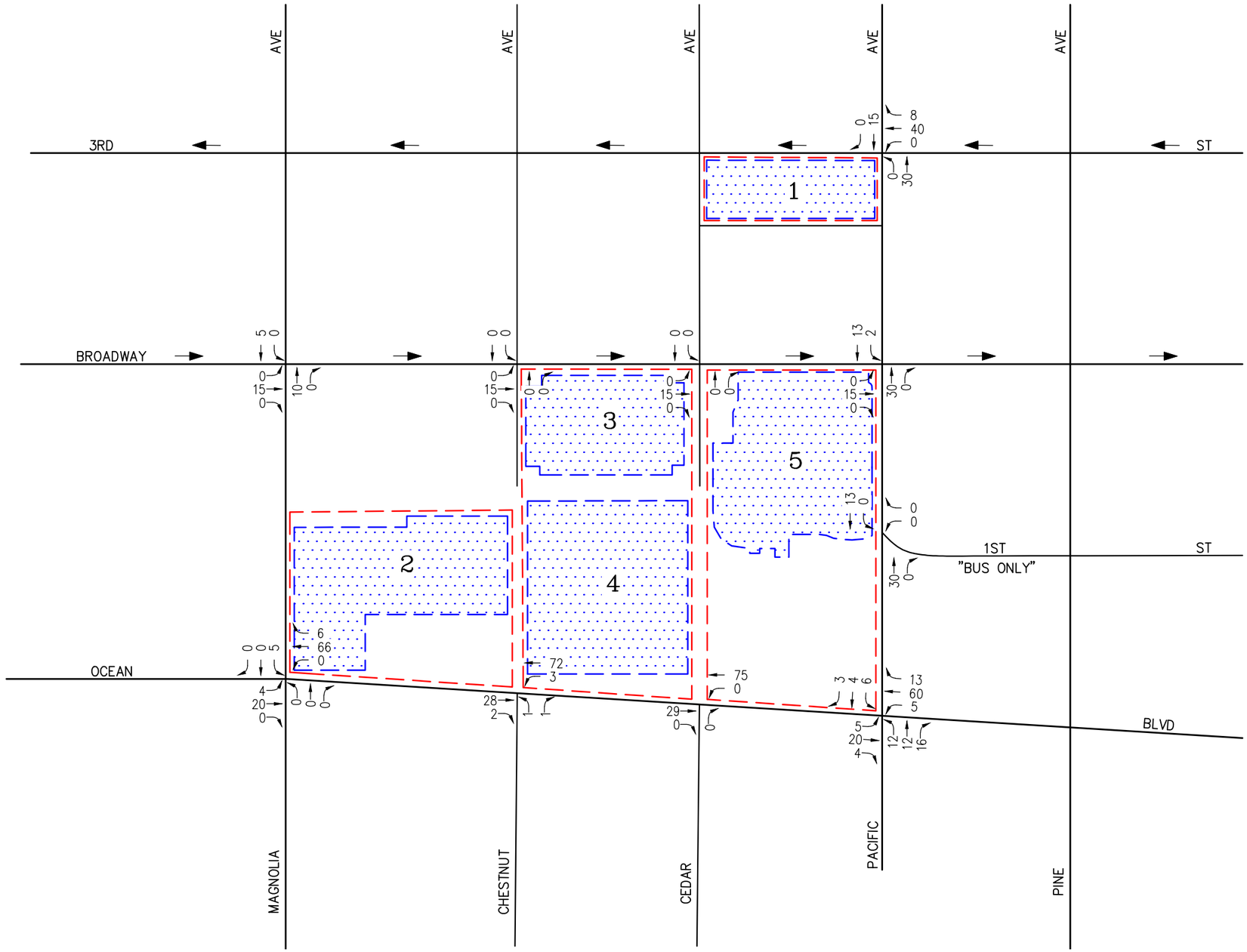
KEY

(#) = CUMULATIVE PROJECT LOCATION

= PROJECT SITE

FIGURE 6–1

LOCATION OF CUMULATIVE PROJECTS
NEW LONG BEACH CIVIC CENTER, LONG BEACH



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N NO SCALE

KEY

= PROJECT AREA

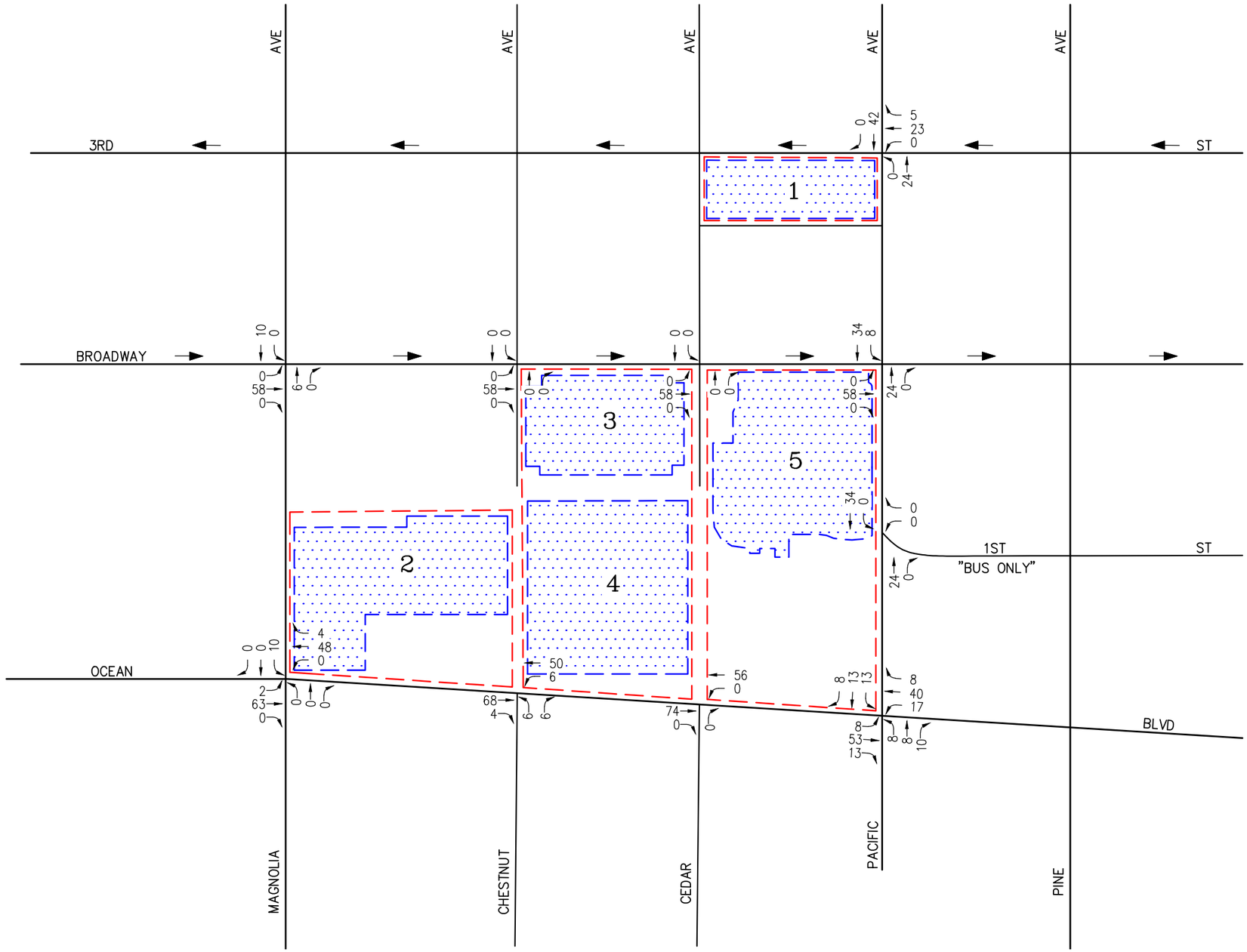
= PARKING LOCATIONS

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 6-2

AM PEAK HOUR CUMULATIVE PROJECT TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH



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N NO SCALE

KEY

= PROJECT AREA

= PARKING LOCATIONS

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 6-3

PM PEAK HOUR CUMULATIVE PROJECT TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH

TABLE 6-1

LOCATION AND DESCRIPTION OF CUMULATIVE PROJECTS[4]

No.	Cumulative Project	Location	Description
1.	207 East Seaside Way Apartments	207 East Seaside Way	113 Apartments
2.	Silversands	2010 East Ocean Boulevard	40 Hotel Rooms and 56 DU Condominiums
3.	Mixed-Use Project	125 Linden Avenue	25 Apartments and 1,257 SF Retail
4.	City Hall East	100 Long Beach Boulevard	156 Apartments and 3,621 SF Retail
5.	Ocean Center Building Reuse	110 West Ocean Boulevard	81 Apartments, 5,000 SF Restaurant and 5,400 SF Retail
6.	Oceanaire Residential Project	150 West Ocean Boulevard	216 Apartments
7.	The Pike Outlet Conversion Project	Generally south of Seaside Way between Cedar Ave and Pine Ave	Conversion of Retail/Entertainment Center to Retail Outlet Center and the Construction of 49,825 SF of New Retail Space
8.	442 West Ocean Boulevard Apartments	442 West Ocean Boulevard	95 DU Apartments
9.	SRG 1st Alamitos Development	101 Alamitos Avenue	141 DU Condominiums and 2,700 SF Commercial
10.	200 W. Ocean Boulevard Apartments	200 W. Ocean Boulevard	94 DU Apartments and 4,597 SF Commercial
11.	City Ventures Development	227 Elm Avenue	40 DU Townhomes
12.	Shoreline Gateway (The Current)	777 E. Ocean Boulevard, north of Ocean Boulevard and east of Alamitos Boulevard	445 residential condominium units and 15,549 SF retail

[4] Source: City of Long Beach Planning Department.

TABLE 6-2

CUMULATIVE PROJECTS TRAFFIC GENERATION FORECAST[5]

Cumulative Project Description	Daily 2-way	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1. 207 East Seaside Way Apartments[6]	751	11	47	58	45	25	70
2. Silversands	652	16	30	46	31	22	53
3. Mixed-Use Project	220	4	10	14	12	9	21
4. City Hall East	1,192	18	65	83	69	41	110
5. Ocean Center Building Reuse	1,247	41	59	100	60	38	98
6. Oceanaire Residential Project[7]	1,436	22	89	111	86	48	134
7. The Pike Outlet Conversion Project	2,266	41	22	63	85	124	209
8. 442 West Ocean Boulevard Apartments[8]	632	10	38	48	38	21	59
9. SRG 1st Alamitos Development	922	13	52	65	52	28	80
10. 200 W. Ocean Boulevard	801	12	40	52	43	26	69
11. City Ventures Development	232	3	15	18	14	7	21
12. Shoreline Gateway[9]	4,381	60	173	233	226	156	382
Total Cumulative Projects Trip Generation Potential	**14,732**	**251**	**640**	**891**	**761**	**545**	**1,306**

5 Source: *Trip Generation*, 9th Edition, Institute of Transportation Engineers (ITE) [Washington, D.C. (2012)].

6 Source: *207 East Seaside Way Apartments Project Traffic Impact Analysis*, prepared by LLG Irvine.

7 Source: *Oceanaire Apartments Traffic Impact Analysis*, prepared by Michael Baker International.

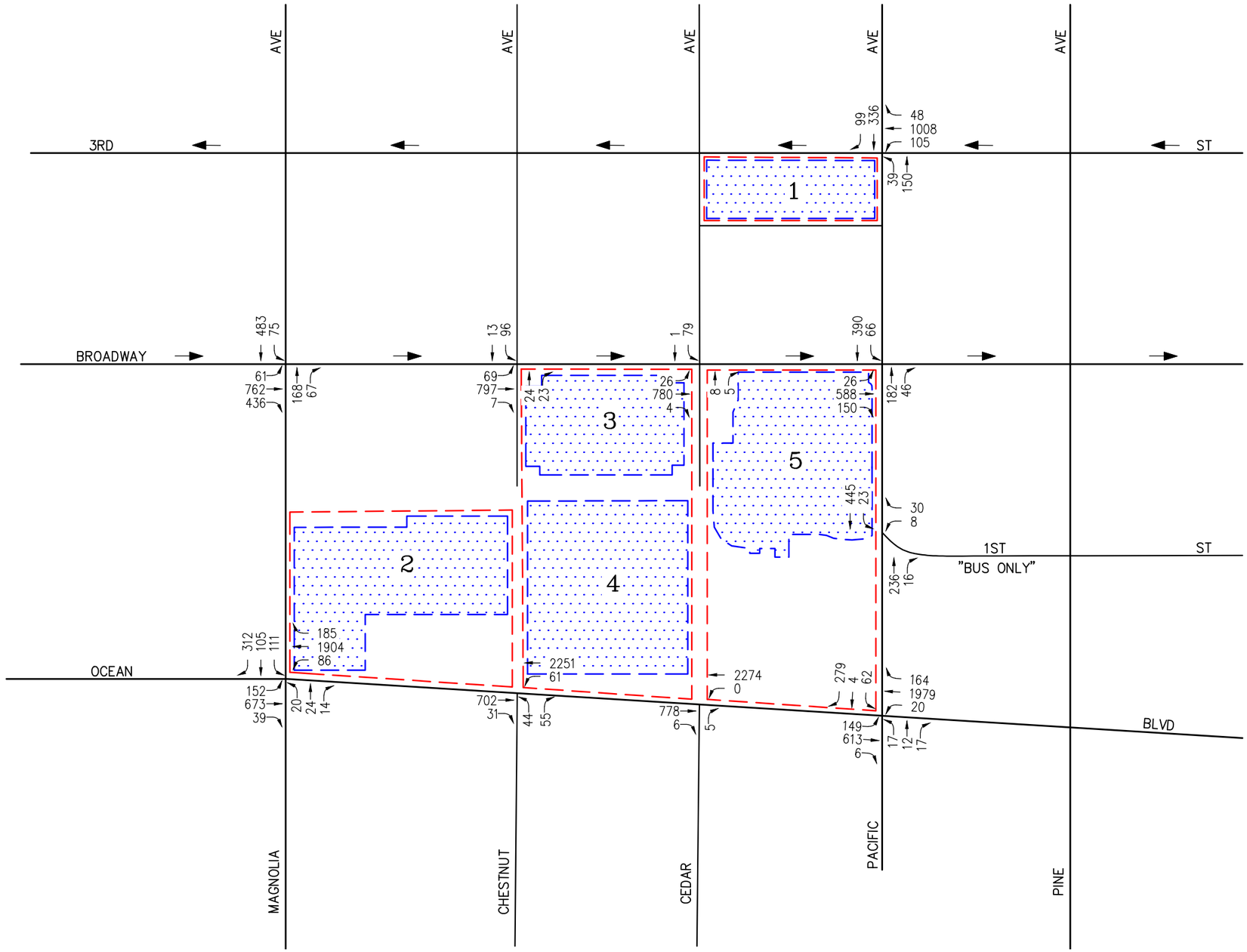
8 Source: *442 West Ocean Boulevard Apartments Project Traffic Impact Analysis*, prepared by LLG Irvine.

9 Trip Generation forecast based on the approach published in the *City of Long Beach Shoreline Gateway EIR Traffic Impact Study, June 2006, prepared by MMA.* Project Development Totals based on information provided by the City of Long Beach.

6.3 Year 2020 Traffic Volumes

Figures 6-4 and ***6-5*** present future AM and PM peak hour cumulative traffic volumes at the ten (10) key study intersections for the Year 2020, respectively. Please note that the cumulative traffic volumes represent the accumulation of existing traffic, ambient growth traffic and cumulative projects traffic.

Figures 6-6 and ***6-7*** illustrate Year 2020 forecast AM and PM peak hour traffic volumes with the inclusion of the trips generated by the proposed Project, respectively.



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N NO SCALE

KEY

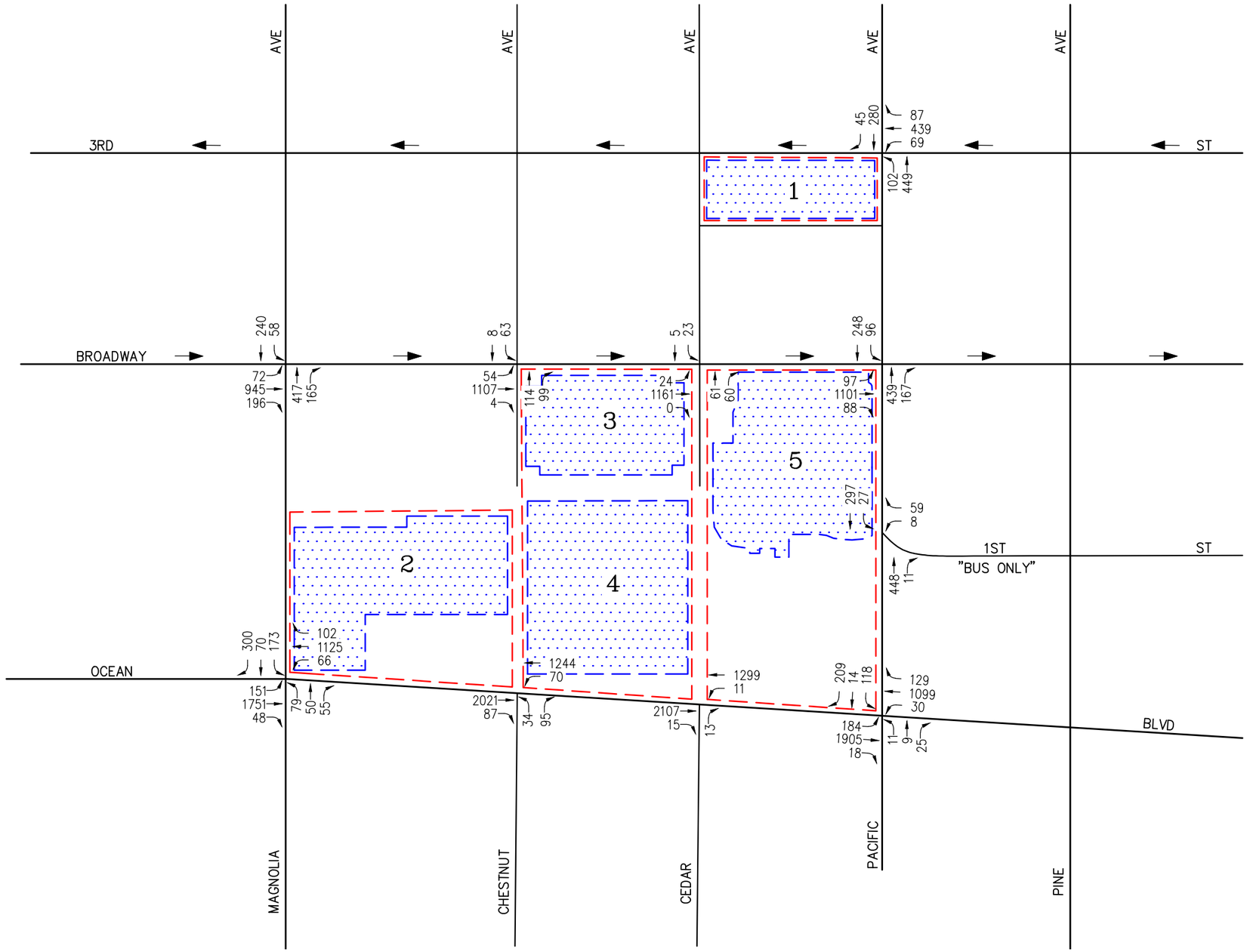
= PROJECT AREA

= PARKING LOCATIONS

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 6-4

YEAR 2020 CUMULATIVE
AM PEAK HOUR TRAFFIC VOLUMES
NEW LONG BEACH CIVIC CENTER, LONG BEACH



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

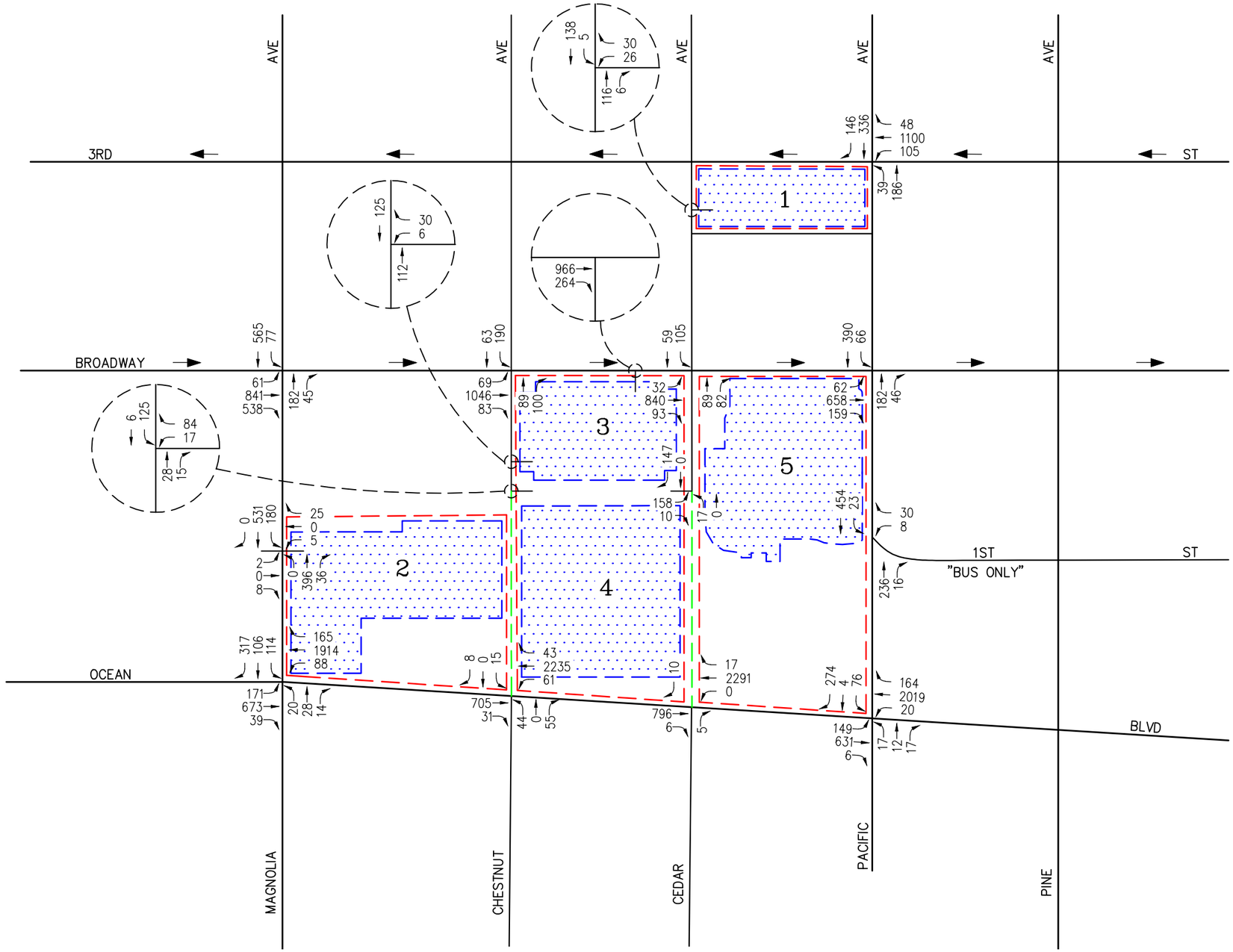
= PROJECT AREA

= PARKING LOCATIONS

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 6-5

YEAR 2020 CUMULATIVE
PM PEAK HOUR TRAFFIC VOLUMES
NEW LONG BEACH CIVIC CENTER, LONG BEACH



KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

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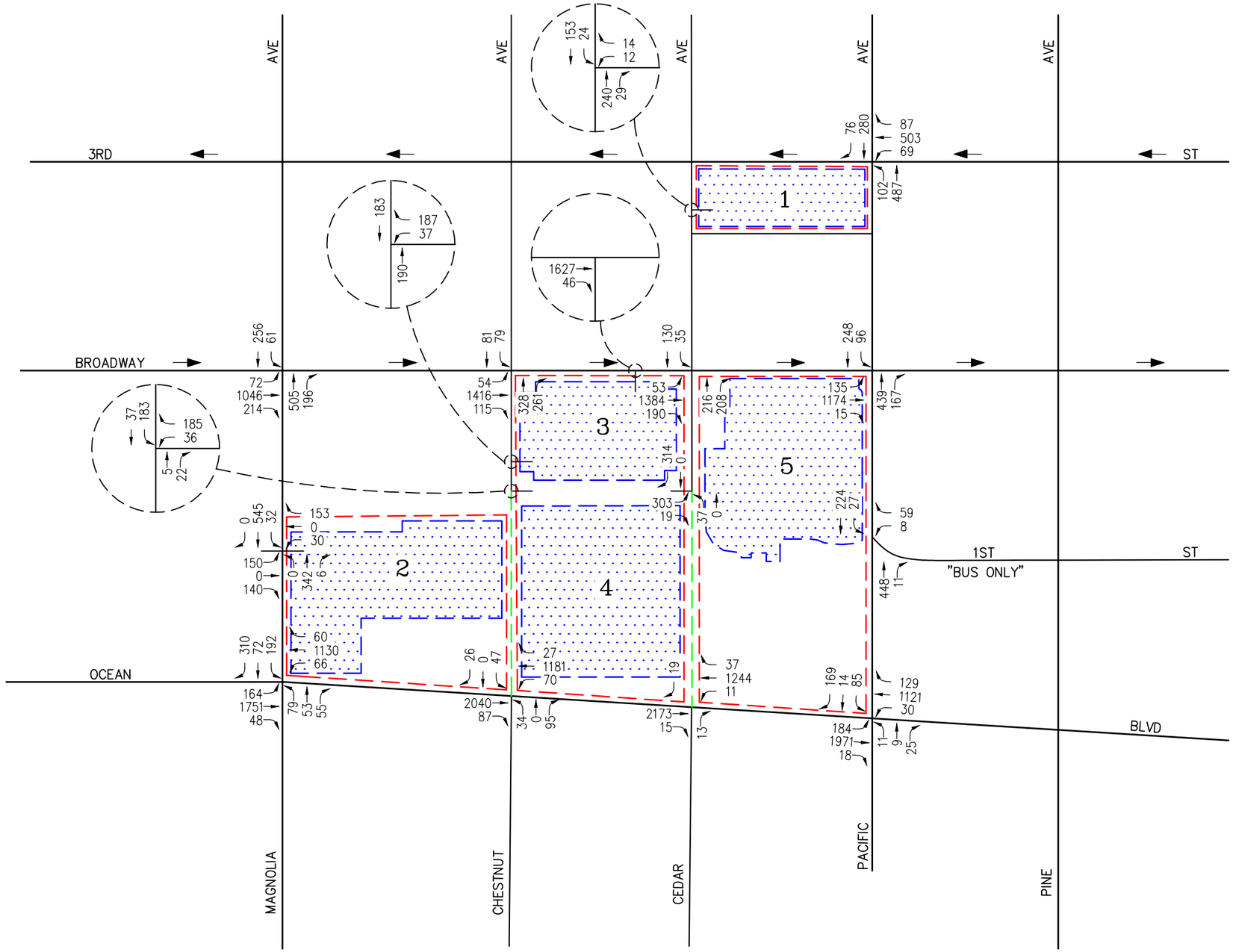
N NO SCALE

FIGURE 6-6

YEAR 2020 CUMULATIVE PLUS PROJECT AM PEAK HOUR TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

FIGURE 6-7

YEAR 2020 CUMULATIVE PLUS PROJECT PM PEAK HOUR TRAFFIC VOLUMES

NEW LONG BEACH CIVIC CENTER, LONG BEACH

7.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

7.1 Impact Criteria and Thresholds

The relative impact of the added project traffic volumes generated by the proposed Project during the weekday peak hours was evaluated based on analysis of future operating conditions at the ten (10) key study intersections, without, then with, the proposed Project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and service level characteristics at each study intersection. The significance of the potential impacts of the project at each key intersection was then evaluated using the following traffic impact criteria.

7.1.1 *City of Long Beach*

Impacts to local and regional transportation systems are considered significant if:

- An unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the key intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained; and

- The project increases traffic demand at the study intersection by 2% of capacity (ICU increase ≥ 0.020), causing or worsening LOS E or F (ICU > 0.901).

7.2 Traffic Impact Analysis Scenarios

The following scenarios are those for which volume/capacity calculations have been performed using the ICU/HCM methodologies:

A. Existing Traffic Conditions;
B. Existing Plus Project Traffic Conditions;
C. Scenario (B) with Improvements, if necessary;
D. Year 2020 Cumulative Traffic Conditions;
E. Year 2020 Cumulative Plus Project Traffic Conditions; and
F. Scenario (E) with Improvements, if necessary.

8.0 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

8.1 Existing Plus Project Traffic Conditions

Table 8-1 summarizes the peak hour Level of Service results at the ten (10) key study intersections for existing plus project traffic conditions. The first column (1) of ICU/LOS and HCM/LOS values in *Table 8-1* presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-4*). The second column (2) lists existing plus project traffic conditions. The third column (3) shows the increase in ICU/HCM value due to the added peak hour project trips and indicates whether the traffic associated with the Project will have a significant impact based on the significant impact criteria defined in this report.

8.1.1 *Existing Traffic Conditions*

Review of Column 1 of *Table 8-1* indicates that the ten (10) key study intersections will operate at acceptable LOS C or better during the AM and PM peak under existing conditions.

8.1.2 *Existing Plus Project Traffic Conditions*

Review of Columns 2 and 3 of *Table 8-1* indicates that the traffic associated with the proposed project ***will not*** significantly impact any of the ten (10) key study intersections. The ten (10) key study intersections will continue to operate at acceptable LOS D or better during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

Appendix B presents the existing plus project weekday ICU/LOS and HCM/LOS calculations for the ten (10) key study intersections.

TABLE 8-1

EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY[11]

Key Intersection	Control Type	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Significant Impact	
				ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1. Magnolia Avenue at Broadway	2∅ Traffic Signal	D	AM	0.502	A	0.591	A	0.089	No
			PM	0.570	A	0.640	B	0.070	No
2. Chestnut Avenue at Broadway	3∅ Traffic Signal	D	AM	0.432	A	0.626	B	0.194	No
			PM	0.553	A	0.847	D	0.294	No
3. Cedar Avenue at Broadway	3∅ Traffic Signal	D	AM	0.432	A	0.581	A	0.149	No
			PM	0.531	A	0.843	D	0.312	No
4. Pacific Avenue at Broadway	3∅ Traffic Signal	D	AM	0.478	A	0.502	A	0.024	No
			PM	0.663	B	0.663	B	0.000	No
5. Magnolia Avenue at Ocean Boulevard	3∅ Traffic Signal	D	AM	0.770	C	0.787	C	0.017	No
			PM	0.730	C	0.736	C	0.006	No
6. Chestnut Avenue at Ocean Boulevard	2∅ Traffic Signal	D	AM	0.564	A	0.584	A	0.020	No
			PM	0.595	A	0.645	B	0.050	No
7. Cedar Avenue at Ocean Boulevard	One-Way Stop	D	AM	9.7 s/v	A	14.7 s/v	B	5.0 s/v	No
			PM	17.2 s/v	C	18.0 s/v	C	0.8 s/v	No
8. Pacific Avenue at Ocean Boulevard	6∅ Traffic Signal	D	AM	0.689	B	0.694	B	0.005	No
			PM	0.559	A	0.562	A	0.003	No

Notes:

- LOS = Level of Service, please refer to *Tables 3-2* and *3-3* for the LOS definitions
- s/v = seconds per vehicle (delay)
- **Bold ICU/LOS and HCM/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[11] *Appendix B* contains the Existing plus Project ICU/LOS calculation worksheets for all study intersections.

TABLE 8-1 (CONTINUED)

EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY[12]

Key Intersection	Control Type	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Significant Impact	
				ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
9. Pacific Avenue at 3rd Street	3∅ Traffic Signal	D	AM	0.569	A	0.598	A	0.029	No
			PM	0.430	A	0.457	A	0.027	No
10. Pacific Avenue at 1st Street	3∅ Traffic Signal	D	AM	0.302	A	0.304	A	0.002	No
			PM	0.336	A	0.336	A	0.000	No

Notes:

- LOS = Level of Service, please refer to *Tables 3-2* and *3-3* for the LOS definitions
- s/v = seconds per vehicle (delay)
- **Bold ICU/LOS and HCM/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[12] *Appendix B* contains the Existing plus Project ICU/LOS calculation worksheets for all study intersections.

8.2 Year 2020 Traffic Conditions

Table 8-2 summarizes the peak hour Level of Service results at the ten (10) key study intersections for the Year 2020 horizon year. The first column (1) of ICU/LOS and HCM/LOS values in *Table 8-2* presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-4*). The second column (2) lists future Year 2020 cumulative traffic conditions (existing plus ambient growth traffic plus cumulative projects traffic) based on existing intersection geometry, but without any traffic generated by the proposed Project. The third column (3) presents future forecast traffic conditions with the addition of traffic generated by the proposed Project. The fourth column (4) shows the increase in ICU/HCM value due to the added peak hour project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report.

8.2.1 *Year 2020 Cumulative Traffic Conditions*

Review of Column 2 of *Table 8-2* indicates that all ten (10) key study intersections will operate at an acceptable LOS D or better during the AM and PM peak hour with the addition of ambient traffic growth and cumulative projects traffic, when compared to the LOS standards and significant impact criteria in this report.

8.2.2 *Year 2020 Cumulative Plus Project Conditions*

Review of Columns 3 and 4 of *Table 8-2* indicates that the traffic associated with the proposed project ***will not*** significantly impact any of the ten (10) key study intersections. The ten (10) key study intersections are forecast to continue to operate at acceptable LOS D or better during the AM and PM peak hours with the addition of project generated traffic in the Year 2020.

Appendix B presents the Year 2020 ICU/LOS and HCM/LOS calculations for the ten (10) key study intersections.

TABLE 8-2

YEAR 2020 CUMULATIVE PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY[13]

Key Intersection	Control Type	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2020 Cumulative Traffic Conditions		(3) Year 2020 Cumulative Plus Project Traffic Conditions		(4) Significant Impact	
				ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1. Magnolia Avenue at Broadway	2∅ Traffic Signal	D	AM	0.502	A	0.523	A	0.613	B	0.090	No
			PM	0.570	A	0.613	B	0.684	B	0.071	No
2. Chestnut Avenue at Broadway	3∅ Traffic Signal	D	AM	0.432	A	0.450	A	0.644	B	0.194	No
			PM	0.553	A	0.591	A	0.884	D	0.293	No
3. Cedar Avenue at Broadway	3∅ Traffic Signal	D	AM	0.432	A	0.450	A	0.600	A	0.150	No
			PM	0.531	A	0.568	A	0.880	D	0.312	No
4. Pacific Avenue at Broadway	3∅ Traffic Signal	D	AM	0.478	A	0.503	A	0.527	A	0.024	No
			PM	0.663	B	0.719	C	0.719	C	0.000	No
5. Magnolia Avenue at Ocean Boulevard	3∅ Traffic Signal	D	AM	0.770	C	0.819	D	0.836	D	0.017	No
			PM	0.730	C	0.773	C	0.779	C	0.006	No
6. Chestnut Avenue at Ocean Boulevard	2∅ Traffic Signal	D	AM	0.564	A	0.603	B	0.623	B	0.020	No
			PM	0.595	A	0.642	B	0.692	B	0.050	No
7. Cedar Avenue at Ocean Boulevard	One-Way Stop	D	AM	9.7 s/v	A	9.9 s/v	A	15.7 s/v	C	5.8 s/v	No
			PM	17.2 s/v	C	19.4 s/v	C	20.3 s/v	C	0.9 s/v	No
8. Pacific Avenue at Ocean Boulevard	6∅ Traffic Signal	D	AM	0.689	B	0.755	C	0.761	C	0.006	No
			PM	0.559	A	0.629	B	0.632	B	0.003	No

Notes:

- LOS = Level of Service, please refer to *Tables 3-2* and *3-3* for the LOS definitions
- s/v = seconds per vehicle (delay)
- **Bold ICU/LOS and HCM/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[13] *Appendix B* contains the Year 2020 Cumulative plus Project ICU/LOS and HCM/LOS calculation worksheets for all study intersections.

TABLE 8-2 (CONTINUED)

YEAR 2020 CUMULATIVE PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY[14]

Key Intersection	Control Type	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2020 Cumulative Traffic Conditions		(3) Year 2020 Cumulative Plus Project Traffic Conditions		(4) Significant Impact	
				ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
9. Pacific Avenue at 3rd Street	3∅ Traffic Signal	D	AM	0.569	A	0.609	B	0.638	B	0.029	No
			PM	0.430	A	0.466	A	0.486	A	0.020	No
10. Pacific Avenue at 1st Street	3∅ Traffic Signal	D	AM	0.302	A	0.313	A	0.316	A	0.003	No
			PM	0.336	A	0.352	A	0.352	A	0.000	No

Notes:

- LOS = Level of Service, please refer to *Tables 3-2* and *3-3* for the LOS definitions
- s/v = seconds per vehicle (delay)
- **Bold ICU/LOS and HCM/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

[14] *Appendix B* contains the Year 2020 Cumulative plus Project ICU/LOS and HCM/LOS calculation worksheets for all study intersections.

9.0 SITE ACCESS EVALUATION

9.1 Level of Service Analysis For Project Access Locations

The proposed Project will provide three (3) new parking garages which also includes a new subterranean garage below the New City Hall and Harbor Department buildings. Vehicular access for the proposed Project includes the following:

- Civic Block: Primary access to the Civic Block subterranean parking structure will be provided from Magnolia Avenue (Project Driveway F). Access to the existing Broadway garage will continue to be provided by an ingress-only driveway on Broadway (Project Driveway B) as well as an egress-only driveway along Chestnut (Project Driveway C).

- Center Block: A new subterranean parking structure will be constructed, with primary vehicular access provided by the future extension of Cedar Avenue between Broadway and Ocean Boulevard (Project Driveway E).

- Lincoln Park Block: Access to the existing Lincoln garage will continue to be provided from the Cedar Avenue and Pacific Avenue access ramps in the interim, but will ultimately be served by the "Lincoln Alley" (Project Driveway D).

- Third & Pacific Block: Access to the site's parking garage will be provided from Cedar Avenue (Project Driveway A).

Table 9-1 summarizes the Year 2020 Cumulative plus Project peak hour level of service results for the six (6) project driveways. Review of *Table 9-1* shows that the project driveways are forecast to operate at an acceptable LOS C or better during the AM and PM peak hours in the Year 2020. As such, motorists entering and exiting the Project site will be able to do so comfortably, safely, and without undue congestion.

Appendix C presents the Year 2020 plus project HCM/LOS calculations for the six (6) project driveways.

TABLE 9-1

YEAR 2020 CUMULATIVE PLUS PROJECT

DRIVEWAY PEAK HOUR LEVELS OF SERVICE SUMMARY

Driveway	Time Period	Intersection Control	Year 2020 Cumulative Plus Project	
			HCM	LOS
A. Cedar Avenue at Project Driveway A	AM	One-Way Stop	9.7 s/v	A
	PM		10.7 s/v	B
B. Project Driveway B[15] at Broadway	AM	Uncontrolled Ingress Only	--	--
	PM		--	--
C. Chestnut Avenue at Project Driveway C	AM	One-Way Stop	9.0 s/v	A
	PM		10.2 s/v	B
D. Chestnut Avenue at Project Driveway D	AM	One-Way Stop	9.2 s/v	A
	PM		10.1 s/v	B
E. Cedar Avenue at Project Driveway E	AM	One-Way Stop	9.4 s/v	A
	PM		11.0 s/v	B
F. Magnolia Avenue at Project Driveway F	AM	Two-Way Stop	12.0 s/v	B
	PM		21.4 s/v	C

Notes:

- **Bold Delay/LOS** values indicate adverse service levels based on City of Long Beach LOS standards
- s/v = seconds per vehicle

[15] Project Driveway B is a "right-turn in only" driveway and therefore no delay is expected.

10.0 RECOMMEND IMPROVEMENTS

10.1 Existing Plus Project Traffic Conditions

The results of the intersection capacity analysis presented previously in *Table 8-1* shows that the proposed Project will not significantly impact any of the ten (10) key study intersections under the "Existing Plus Project" traffic scenario. Given that there are no significant project impacts, no improvements are required under this traffic scenario.

10.2 Year 2020 Plus Project Traffic Conditions

The results of the intersection capacity analysis presented previously in *Table 8-2* shows that the proposed Project will not significantly impact any of the ten (10) key study intersections under the "Year 2020 Plus Project" traffic scenario. Given that there are no significant project impacts, no improvements are required under this traffic scenario.

11.0 SUMMARY OF FINDINGS AND CONCLUSIONS

- ***Project Description*** – The Long Beach Civic Center is located north of Ocean Boulevard and south of Broadway, between Magnolia Avenue and Pacific Avenue in downtown Long Beach. The 0.89 acre parcel Third & Pacific site is currently a surface parking lot and is located south of 3rd Street, between Cedar Avenue and Pacific Avenue. The current Civic Center consists of the former 334,000 SF Los Angeles County Superior Courthouse, which is now vacant, the 283,000 SF City Hall office tower, the 138,000 SF Long Beach Main Library, 2.60 acre Lincoln Park and associated parking structures.

  The proposed New Long Beach Civic Center Project provides a New City Hall, a New Harbor Department administration building, a New Main Library, a relocated and redeveloped Lincoln Park and a vibrant commercial mixed use development. In total six (6) new buildings, three (3) new parking garages, including a new subterranean garage below the New City Hall and Harbor Department buildings, and related infrastructure and landscaping are proposed. Please refer to Chapter 2.0 for more project description details.

- ***Study Scope*** – The ten (10) key study intersections selected for evaluation in this report provide local access within the project study area. They consist of the following:

  1. Magnolia Avenue at Broadway
  2. Chestnut Avenue at Broadway
  3. Cedar Avenue at Broadway
  4. Pacific Avenue at Broadway
  5. Magnolia Avenue at Ocean Boulevard
  6. Chestnut Avenue at Ocean Boulevard
  7. Cedar Avenue at Ocean Boulevard
  8. Pacific Avenue at Ocean Boulevard
  9. Pacific Avenue at 3rd Street
  10. Pacific Avenue at 1st Street

  The analysis is focused on assessing potential traffic impacts during the morning and evening commute peak hours on a typical weekday.

- ***Existing Traffic Conditions*** – All ten (10) key study intersections currently operate at LOS C or better during the weekday AM and PM peak hours.

- ***Project Trip Generation*** – The proposed Project is forecast to generate 18,582 daily trips, with 1,185 trips (795 inbound, 390 outbound) produced in the AM peak hour and 1,668 trips (693 inbound, 975 outbound) produced in the PM peak hour on a typical weekday.

  The existing trip generation potential of the current civic center (i.e. City Hall office tower and Main Library) totals 7,659 daily trips, with 514 trips (418 inbound, 96 outbound) produced in the AM peak hour and 1,116 trips (446inbound, 670 outbound) produced in the PM peak hour.

  Comparison of the trips generated by the proposed Project to the trip generation potential of the Existing Land Use shows that that the implementation of the proposed Project will result in an additional 10,923 daily trips, 671 net AM peak hour trips and 552 net PM peak hour trips. The potential traffic impact of these added trips are assessed in this report.

A comparison of the trips generated by the proposed Project to the trips generated by the mix of uses assumed in the Downtown Plan shows that that the implementation of the proposed Project will result in 6,075 fewer daily trips, 365 fewer AM peak hour trips, and 580 fewer PM peak hour trips.

- ***Cumulative Projects Traffic Characteristics*** – The twelve (12) cumulative projects are expected to generate a combined total of 14,732 daily trips, 891 AM peak hour trips (251 inbound and 640 outbound) and 1,306 PM peak hour trips (761 inbound and 545 outbound) on a typical weekday.

- ***Existing Plus Project Traffic Characteristics*** – The traffic associated with the proposed project ***will not*** significantly impact any of the ten (10) key study intersections. The ten (10) key study intersections will continue to operate at acceptable LOS D or better during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

- ***Year 2020 Cumulative Plus Project Traffic Characteristics*** – The traffic associated with the proposed project ***will not*** significantly impact any of the ten (10) key study intersections. The ten (10) key study intersections are forecast to continue to operate at acceptable LOS D or better during the AM and PM peak hours with the addition of project generated traffic in the Year 2020.

- ***Site Access Evaluation*** – The project driveways are forecast to operate at an acceptable LOS C or better during the AM and PM peak hours in the Year 2020. As such, motorists entering and exiting the Project site will be able to do so comfortably, safely, and without undue congestion.

APPENDIX A

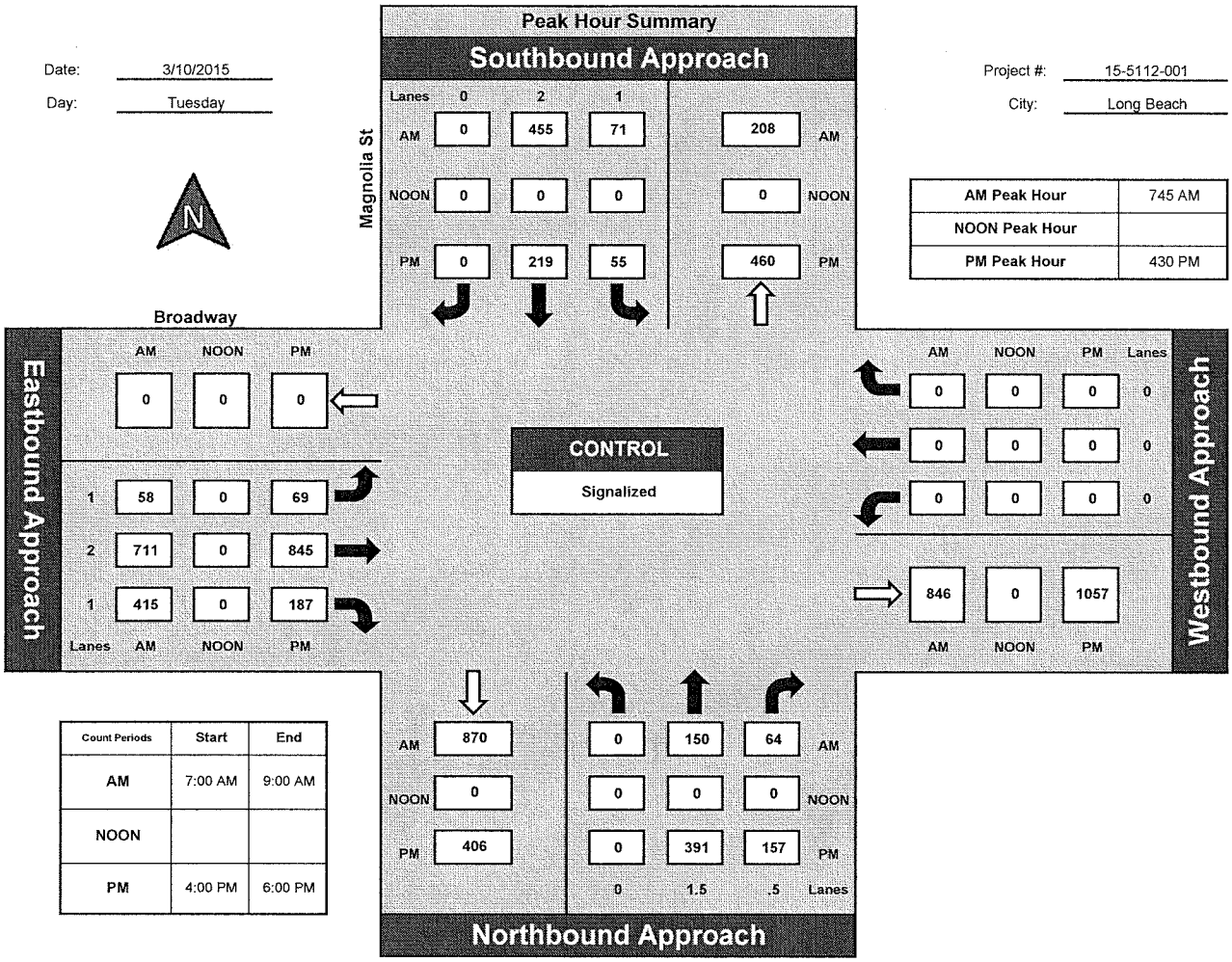
EXISTING TRAFFIC COUNT DATA

ITM Peak Hour Summary

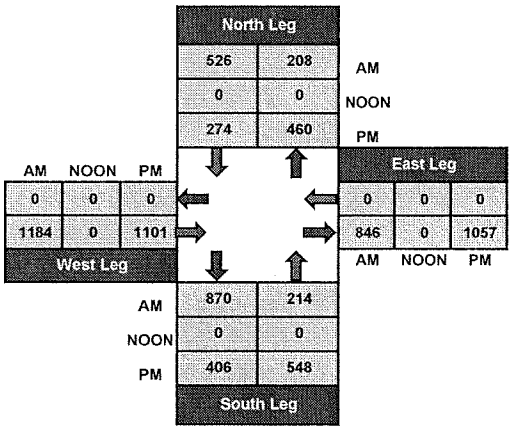
Prepared by:

National Data & Surveying Services

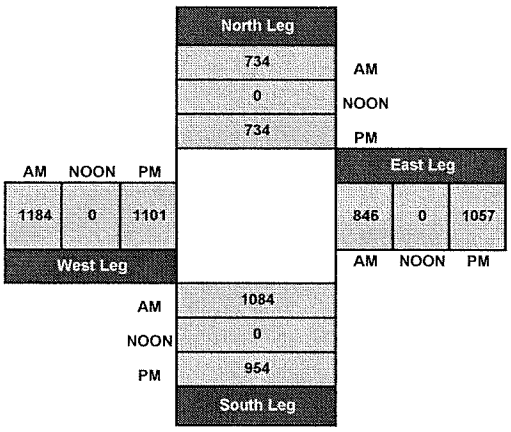
Magnolia St and Broadway , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-001 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Broadway			Broadway			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1.5	.5	1	2	0	1	2	1	0	0	0	
7:00 AM	0	18	15	15	93	0	7	132	57	0	0	0	337
7:15 AM	0	24	24	15	94	0	14	144	89	0	0	0	404
7:30 AM	0	33	14	7	108	0	12	137	69	0	0	0	380
7:45 AM	0	40	12	19	124	0	11	186	109	0	0	0	501
8:00 AM	0	52	17	17	114	0	14	168	92	0	0	0	474
8:15 AM	0	29	20	19	109	0	18	170	104	0	0	0	469
8:30 AM	0	29	15	16	108	0	15	187	110	0	0	0	480
8:45 AM	0	39	11	22	97	0	18	169	92	0	0	0	448
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	264	128	130	847	0	109	1293	722	0	0	0	3493
APPROACH %'s :	0.00%	67.35%	32.65%	13.31%	86.69%	0.00%	5.13%	60.88%	33.99%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	150	64	71	455	0	58	711	415	0	0	0	1924
PEAK HR FACTOR :		0.775			0.920			0.949			0.000		0.960

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	1	0	0
	0	0	0	0
	0	1	0	0
	0	1	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	4	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-001 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Broadway			Broadway				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	0	1.5	.5	1	2	0	1	2	1	0	0	0					
4:00 PM	0	72	28	11	52	0	15	170	41	0	0	0	389	0	0	0	0
4:15 PM	0	71	46	19	45	0	13	200	43	0	0	0	437	0	0	0	0
4:30 PM	0	106	54	15	64	0	17	192	51	0	0	0	499	0	0	0	0
4:45 PM	0	103	36	11	60	0	20	224	50	0	0	0	504	0	0	0	0
5:00 PM	0	119	33	13	49	0	14	207	39	0	0	0	474	0	3	0	0
5:15 PM	0	63	34	16	46	0	18	222	47	0	0	0	446	0	0	0	0
5:30 PM	0	58	27	8	42	0	12	218	43	0	0	0	408	0	0	0	0
5:45 PM	0	45	23	15	40	0	14	199	39	0	0	0	375	0	0	0	0
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	0	637	281	108	398	0	123	1632	353	0	0	0	3532	0	3	0	0
APPROACH %'s :	0.00%	69.39%	30.61%	21.34%	78.66%	0.00%	5.83%	77.42%	16.75%	#DIV/0!	#DIV/0!	#DIV/0!					
PEAK HR START TIME :	430 PM												TOTAL				
PEAK HR VOL :	0	391	157	55	219	0	69	845	187	0	0	0	1923				
PEAK HR FACTOR :		0.856			0.867			0.936			0.000		0.954				

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Chestnut Ave and Broadway , Long Beach

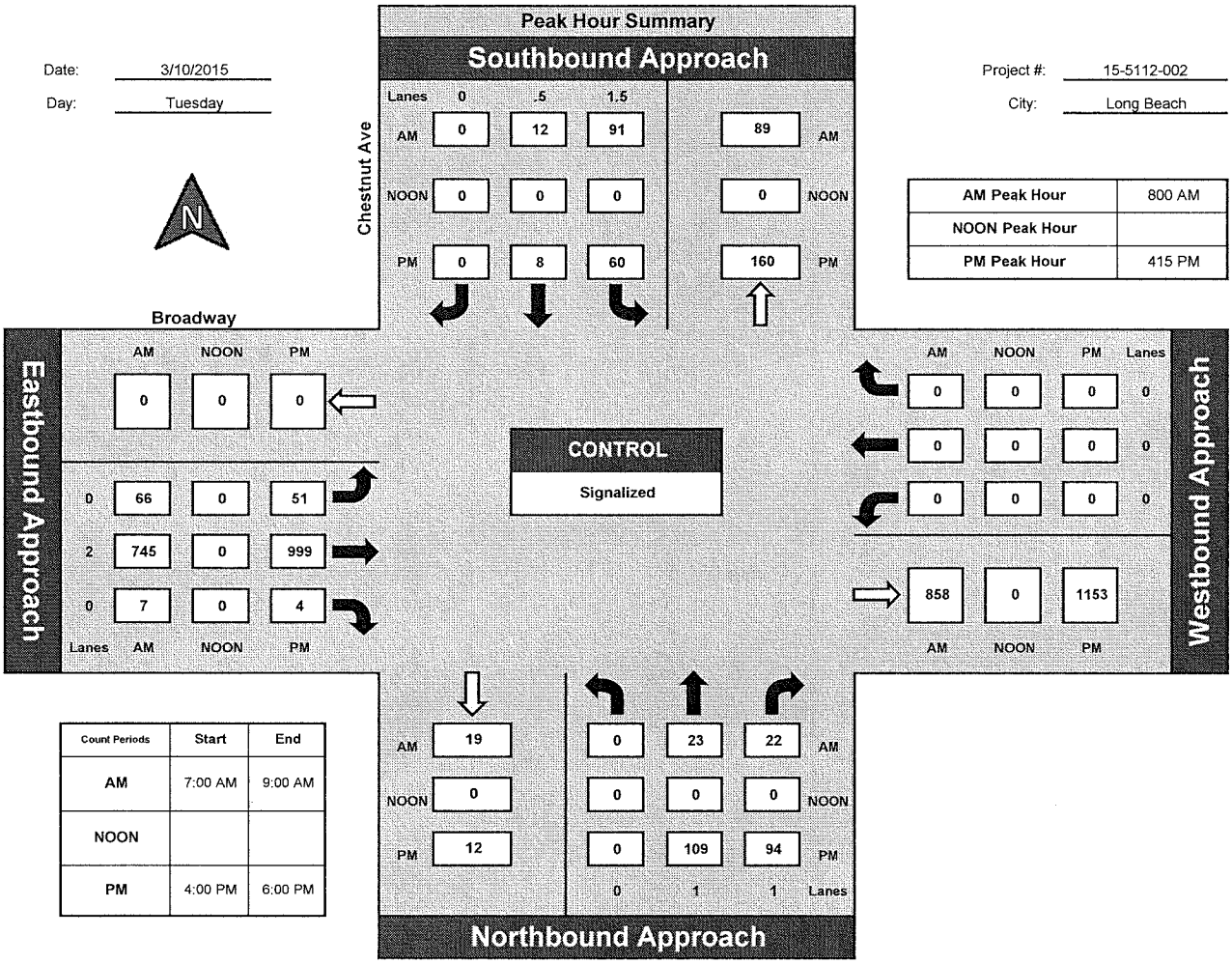
Date: 3/10/2015

Day: Tuesday

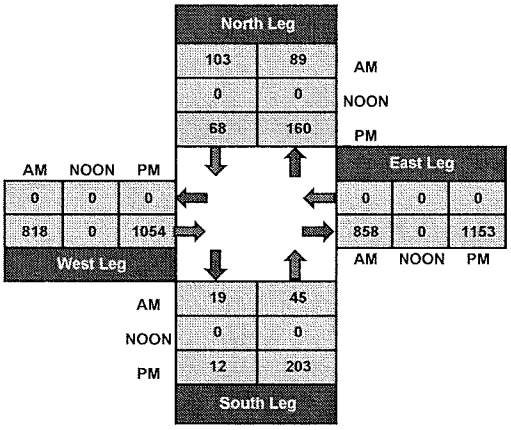
Project #: 15-5112-002

City: Long Beach

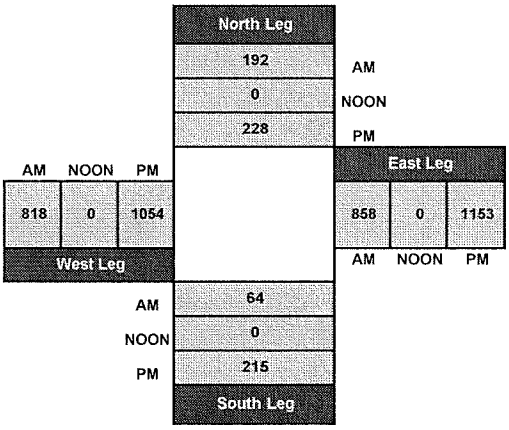
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	415 PM



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-002 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Chestnut Ave			Chestnut Ave			Broadway			Broadway			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	1.5	.5	0	0	2	0	0	0	0	
7:00 AM	0	9	0	15	2	0	3	153	1	0	0	0	183
7:15 AM	0	4	3	38	1	0	7	167	4	0	0	0	224
7:30 AM	0	4	3	24	2	0	5	154	0	0	0	0	192
7:45 AM	0	3	1	17	3	0	6	200	1	0	0	0	231
8:00 AM	0	4	9	22	3	0	13	189	1	0	0	0	241
8:15 AM	0	2	2	27	2	0	14	190	2	0	0	0	239
8:30 AM	0	7	4	23	2	0	15	194	0	0	0	0	245
8:45 AM	0	10	7	19	5	0	24	172	4	0	0	0	241
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	43	29	185	20	0	87	1419	13	0	0	0	1796
APPROACH %'s :	0.00%	59.72%	40.28%	90.24%	9.76%	0.00%	5.73%	93.42%	0.86%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	23	22	91	12	0	66	745	7	0	0	0	966
PEAK HR FACTOR :		0.662			0.888			0.978			0.000		0.986

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-002 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Chestnut Ave			Chestnut Ave			Broadway			Broadway			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	1.5	.5	0	0	2	0	0	0	0	
4:00 PM	0	21	29	9	1	0	6	200	0	0	0	0	266
4:15 PM	0	11	12	21	5	0	18	246	0	0	0	0	313
4:30 PM	0	44	37	19	1	0	11	257	1	0	0	0	370
4:45 PM	0	23	22	8	2	0	13	253	2	0	0	0	323
5:00 PM	0	31	23	12	0	0	9	243	1	0	0	0	319
5:15 PM	0	25	10	7	1	0	13	253	0	0	0	0	309
5:30 PM	0	22	18	10	1	0	10	245	1	0	0	0	307
5:45 PM	0	15	15	8	2	0	8	239	0	0	0	0	287
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	192	166	94	13	0	88	1936	5	0	0	0	2494
APPROACH %'s :	0.00%	53.63%	46.37%	87.85%	12.15%	0.00%	4.34%	95.42%	0.25%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	0	109	94	60	8	0	51	999	4	0	0	0	1325
PEAK HR FACTOR :		0.627			0.654			0.980			0.000		0.895

UTURNS				
NB	SB	EB	WB	
0	0	0	0	

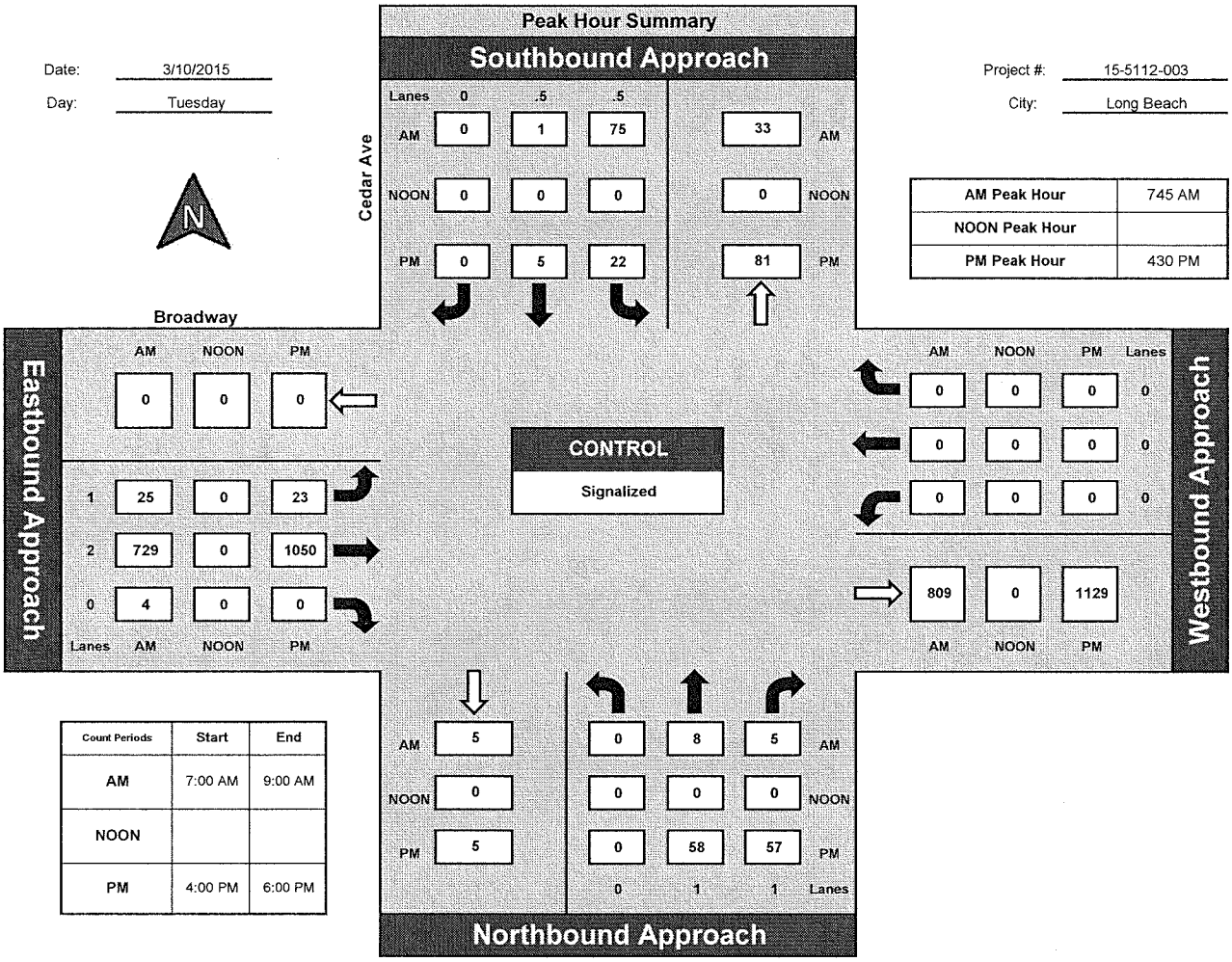
CONTROL : Signalized

ITM Peak Hour Summary

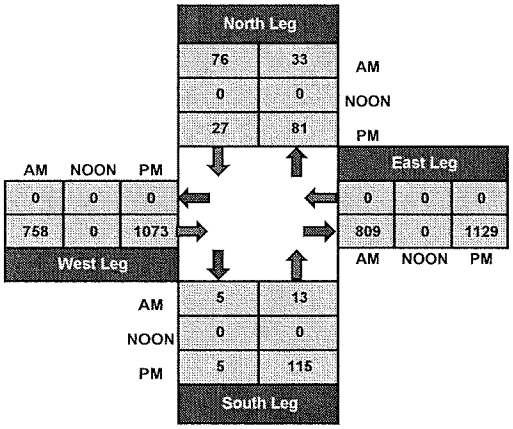
Prepared by:

National Data & Surveying Services

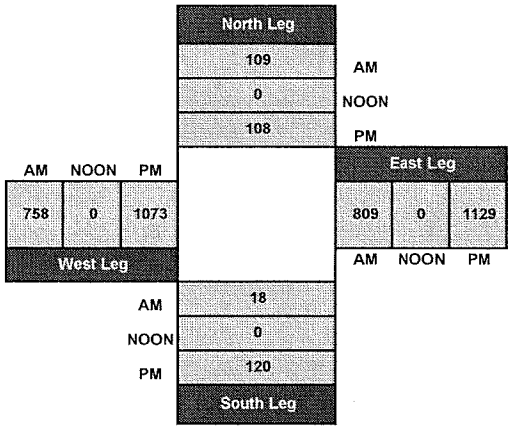
Cedar Ave and Broadway , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-003 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Cedar Ave			Cedar Ave			Broadway			Broadway			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	.5	.5	0	1	2	0	0	0	0	
7:00 AM	0	0	0	13	0	0	1	133	0	0	0	0	147
7:15 AM	0	0	0	33	1	0	1	150	0	0	0	0	185
7:30 AM	0	1	1	25	1	0	2	134	0	0	0	0	164
7:45 AM	0	2	1	23	0	0	5	180	1	0	0	0	212
8:00 AM	0	2	1	19	0	0	5	186	2	0	0	0	215
8:15 AM	0	3	2	14	0	0	8	175	0	0	0	0	202
8:30 AM	0	1	1	19	1	0	7	188	1	0	0	0	218
8:45 AM	0	1	0	13	3	0	9	173	1	0	0	0	200
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	10	6	159	6	0	38	1319	5	0	0	0	1543
APPROACH %'s :	0.00%	62.50%	37.50%	96.36%	3.64%	0.00%	2.79%	96.84%	0.37%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	8	5	75	1	0	25	729	4	0	0	0	847
PEAK HR FACTOR :		0.650			0.826			0.967			0.000		0.971

UTURNS				
NB	SB	EB	WB	
0	1	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	1	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	2	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-003 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Cedar Ave			Cedar Ave			Broadway			Broadway			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	.5	.5	0	1	2	0	0	0	0	
4:00 PM	0	9	8	6	2	0	10	215	0	0	0	0	250
4:15 PM	0	2	2	7	1	0	7	253	0	0	0	0	272
4:30 PM	0	15	16	9	0	0	5	281	0	0	0	0	326
4:45 PM	0	11	11	6	1	0	6	260	0	0	0	0	295
5:00 PM	0	19	20	3	4	0	4	255	0	0	0	0	305
5:15 PM	0	13	10	4	0	0	8	254	0	0	0	0	289
5:30 PM	0	9	14	6	0	0	5	258	0	0	0	0	292
5:45 PM	0	9	10	2	0	0	5	240	0	0	0	0	266
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	87	91	43	8	0	50	2016	0	0	0	0	2295
APPROACH %'s :	0.00%	48.88%	51.12%	84.31%	15.69%	0.00%	2.42%	97.58%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	58	57	22	5	0	23	1050	0	0	0	0	1215
PEAK HR FACTOR :		0.737			0.750			0.938			0.000		0.932

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	1	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	1	0	0	

CONTROL : Signalized

ITM Peak Hour Summary

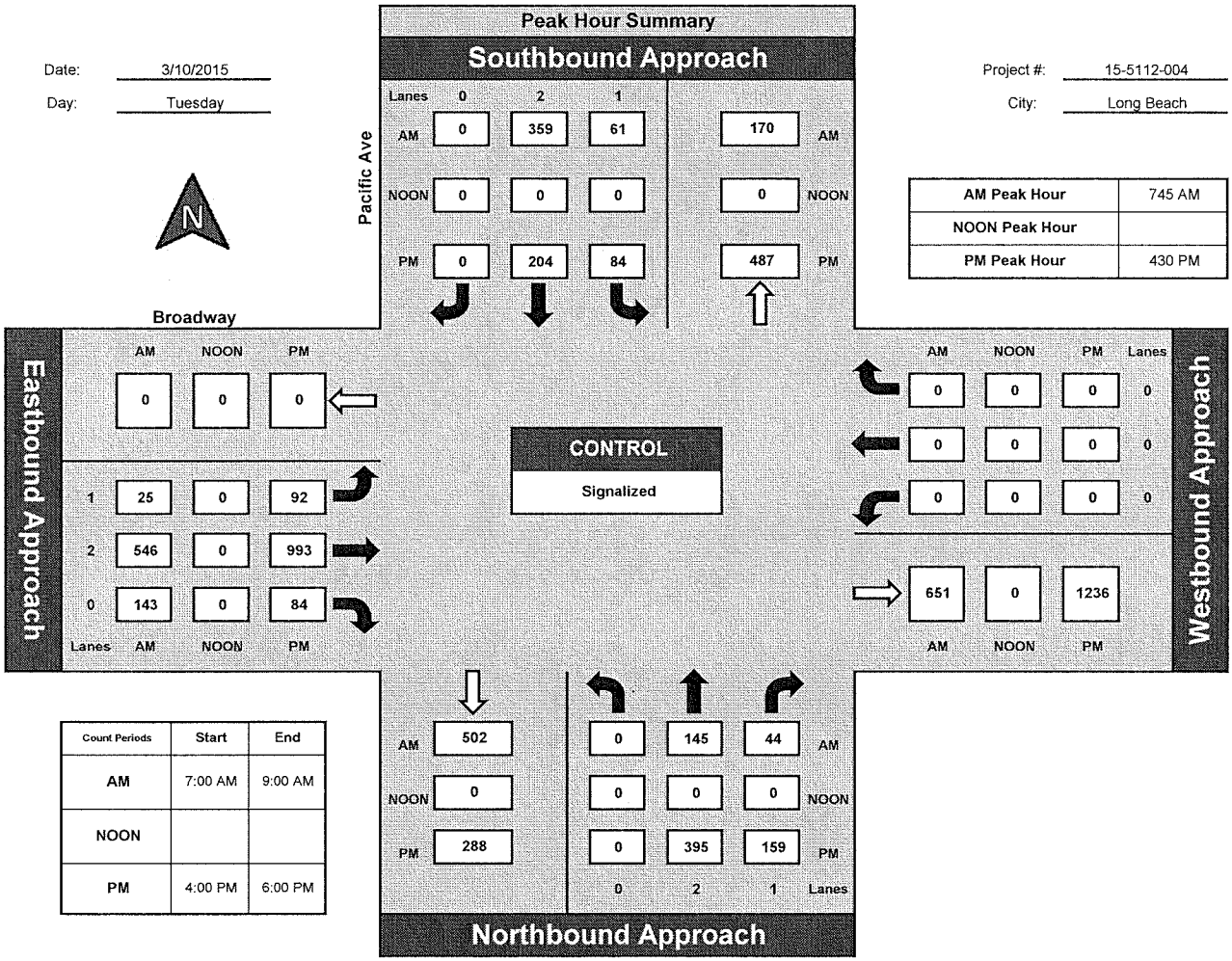
Prepared by:

National Data & Surveying Services

Pacific Ave and Broadway , Long Beach

Date: 3/10/2015
Day: Tuesday

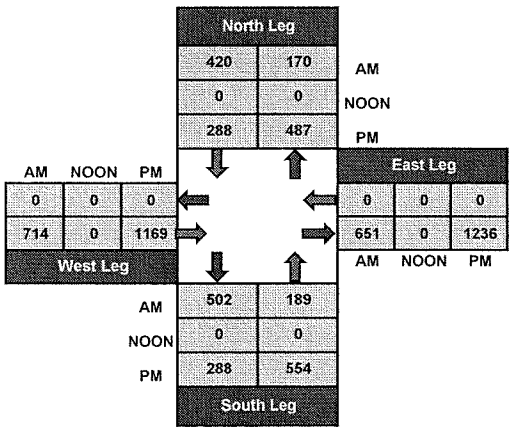
Project #: 15-5112-004
City: Long Beach



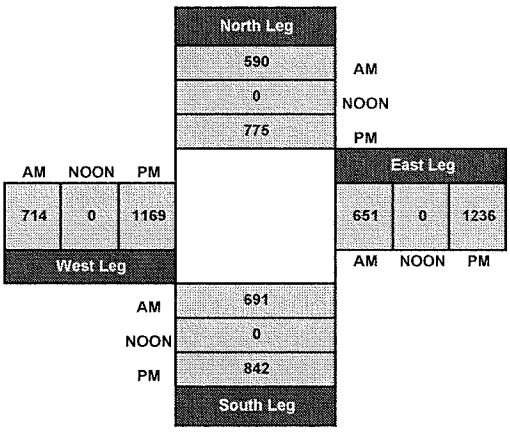
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-004 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Pacific Ave			Pacific Ave			Broadway			Broadway				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	0	2	1	1	2	0	1	2	0	0	0	0					
7:00 AM	0	21	9	10	64	0	7	96	12	0	0	0	219	0	1	0	0
7:15 AM	0	29	7	6	85	0	6	105	17	0	0	0	255	0	0	0	0
7:30 AM	0	19	5	15	82	0	11	87	17	0	0	0	236	0	1	0	0
7:45 AM	0	33	9	20	102	0	8	141	27	0	0	0	340	0	0	0	0
8:00 AM	0	40	6	10	93	0	5	139	35	0	0	0	328	0	0	0	0
8:15 AM	0	36	12	19	94	0	4	132	35	0	0	0	332	0	2	0	0
8:30 AM	0	36	17	12	70	0	8	134	46	0	0	0	323	0	2	0	0
8:45 AM	0	35	17	12	103	0	11	115	37	0	0	0	330	0	3	0	0
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	0	249	82	104	693	0	60	949	226	0	0	0	2363	0	9	0	0
APPROACH %'s :	0.00%	75.23%	24.77%	13.05%	86.95%	0.00%	4.86%	76.84%	18.30%	#DIV/0!	#DIV/0!	#DIV/0!					
PEAK HR START TIME :	745 AM												TOTAL				
PEAK HR VOL :	0	145	44	61	359	0	25	546	143	0	0	0	1323				
PEAK HR FACTOR :		0.892			0.861			0.949			0.000		0.973				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-004 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			Broadway			Broadway			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	1	1	2	0	1	2	0	0	0	0	
4:00 PM	0	83	32	17	50	0	14	210	22	0	0	0	428
4:15 PM	0	63	29	15	47	0	16	228	16	0	0	0	414
4:30 PM	0	94	35	22	52	0	23	261	19	0	0	0	506
4:45 PM	0	88	37	24	53	0	26	259	21	0	0	0	508
5:00 PM	0	117	43	22	51	0	23	222	25	0	0	0	503
5:15 PM	0	96	44	16	48	0	20	251	19	0	0	0	494
5:30 PM	0	89	34	12	46	0	26	256	11	0	0	0	474
5:45 PM	1	62	26	23	37	0	15	219	13	0	0	0	396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	692	280	151	384	0	163	1906	146	0	0	0	3723
APPROACH %'s :	0.10%	71.12%	28.78%	28.22%	71.78%	0.00%	7.36%	86.05%	6.59%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	395	159	84	204	0	92	993	84	0	0	0	2011
PEAK HR FACTOR :		0.866			0.935			0.955			0.000		0.990

UTURNS				
NB	SB	EB	WB	
0	1	0	0	
0	0	0	0	
0	0	0	0	
0	1	0	0	
0	0	0	0	
0	2	0	0	
0	2	0	0	
1	0	0	0	
NB	SB	EB	WB	
1	6	0	0	

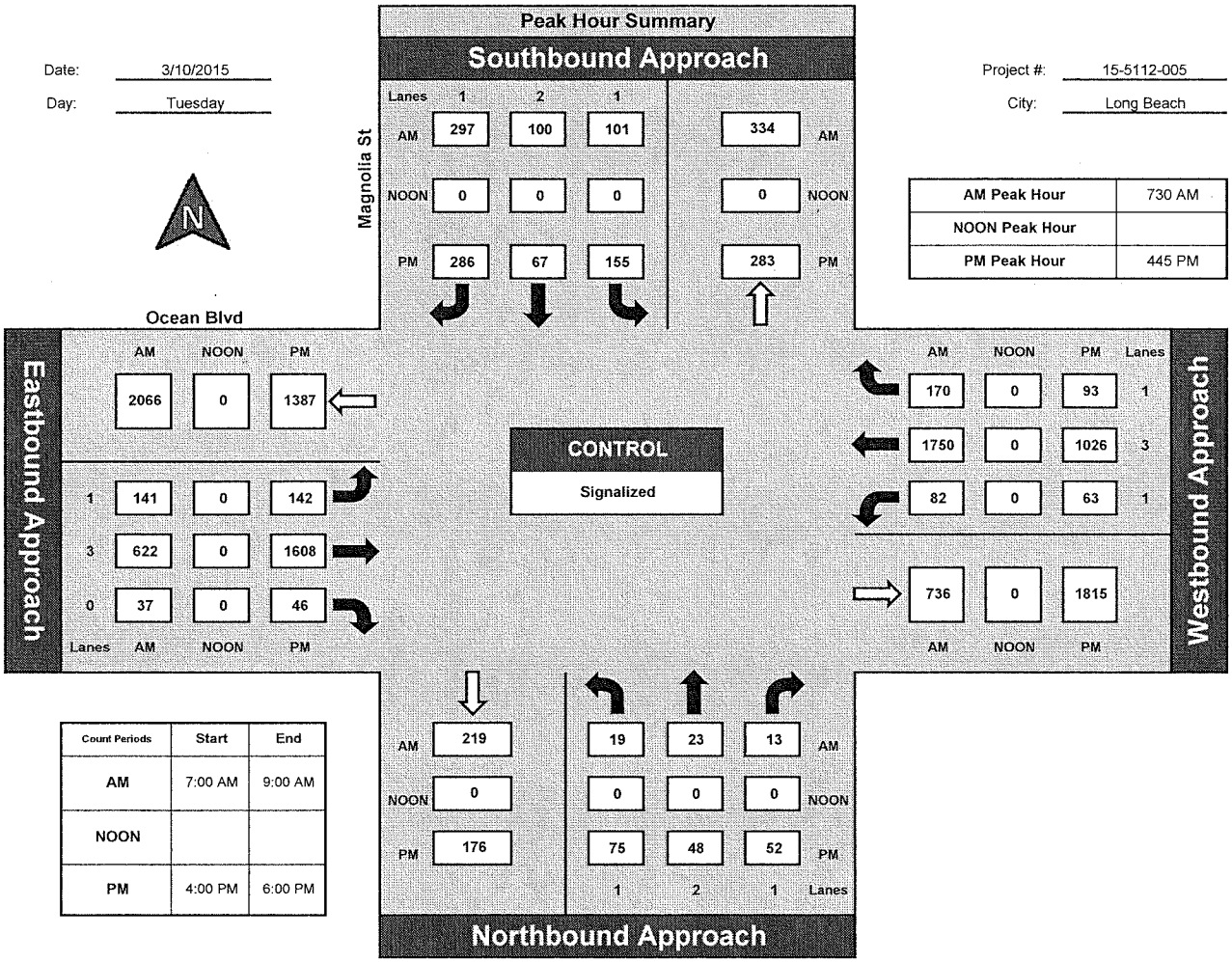
CONTROL : Signalized

ITM Peak Hour Summary

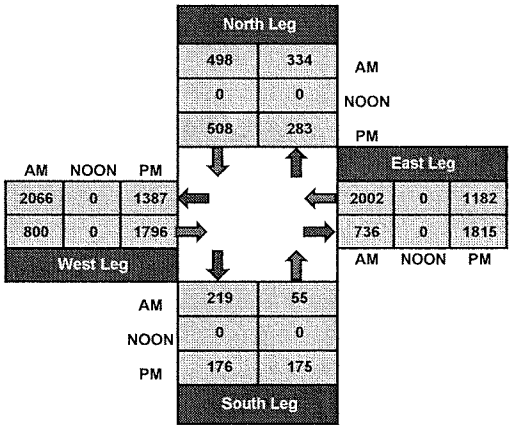
Prepared by:

National Data & Surveying Services

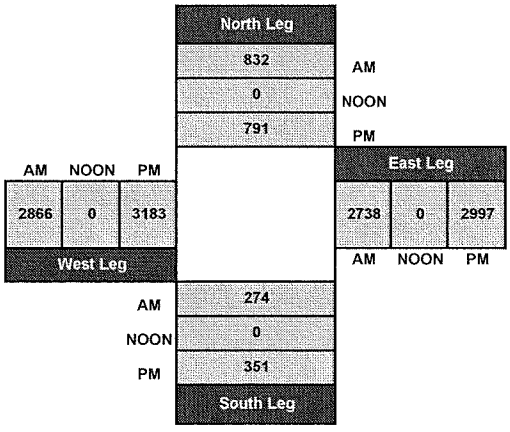
Magnolia St and Ocean Blvd , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-005 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	3	0	1	3	1	
7:00 AM	1	3	1	14	21	68	13	92	7	17	446	22	705
7:15 AM	4	1	4	23	23	78	23	130	9	21	436	43	795
7:30 AM	5	4	6	18	22	66	25	137	13	18	483	52	849
7:45 AM	5	9	1	29	30	86	36	138	9	26	425	30	824
8:00 AM	4	8	2	21	19	80	45	188	10	18	438	42	875
8:15 AM	5	2	4	33	29	65	35	159	5	20	404	46	807
8:30 AM	7	1	6	42	25	74	40	150	3	27	316	37	728
8:45 AM	4	5	6	36	25	76	29	134	6	24	321	35	701
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	35	33	30	216	194	593	246	1128	62	171	3269	307	6284
APPROACH %'s :	35.71%	33.67%	30.61%	21.54%	19.34%	59.12%	17.13%	78.55%	4.32%	4.56%	87.24%	8.19%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	19	23	13	101	100	297	141	622	37	82	1750	170	3355
PEAK HR FACTOR :		0.917			0.859			0.823			0.905		0.959

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	1	1
	0	0	0	0
	1	0	0	2
	1	0	0	0
	NB	SB	EB	WB
	2	0	1	3

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-005 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	3	0	1	3	1	
4:00 PM	7	9	13	44	17	74	39	313	7	15	211	22	771
4:15 PM	13	11	8	45	18	60	40	364	6	17	199	22	803
4:30 PM	12	26	16	49	16	98	30	316	5	17	216	36	837
4:45 PM	26	16	19	45	21	77	34	413	10	15	226	29	931
5:00 PM	25	15	14	29	16	84	35	426	10	15	308	31	1008
5:15 PM	12	9	10	46	17	58	33	384	13	13	240	15	850
5:30 PM	12	8	9	35	13	67	40	385	13	20	252	18	872
5:45 PM	7	3	14	30	11	47	37	342	7	10	200	14	722
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	114	97	103	323	129	565	288	2943	71	122	1852	187	6794
APPROACH %'s :	36.31%	30.89%	32.80%	31.76%	12.68%	55.56%	8.72%	89.13%	2.15%	5.65%	85.70%	8.65%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	75	48	52	155	67	286	142	1608	46	63	1026	93	3661
PEAK HR FACTOR :		0.717			0.888			0.953			0.835		0.908

UTURNS

	NB	SB	EB	WB
	0	0	0	0
	2	0	0	0
	0	0	0	0
	2	0	0	1
	1	0	0	0
	0	0	0	1
	1	0	0	1
	0	0	0	0
	NB	SB	EB	WB
	6	0	0	3

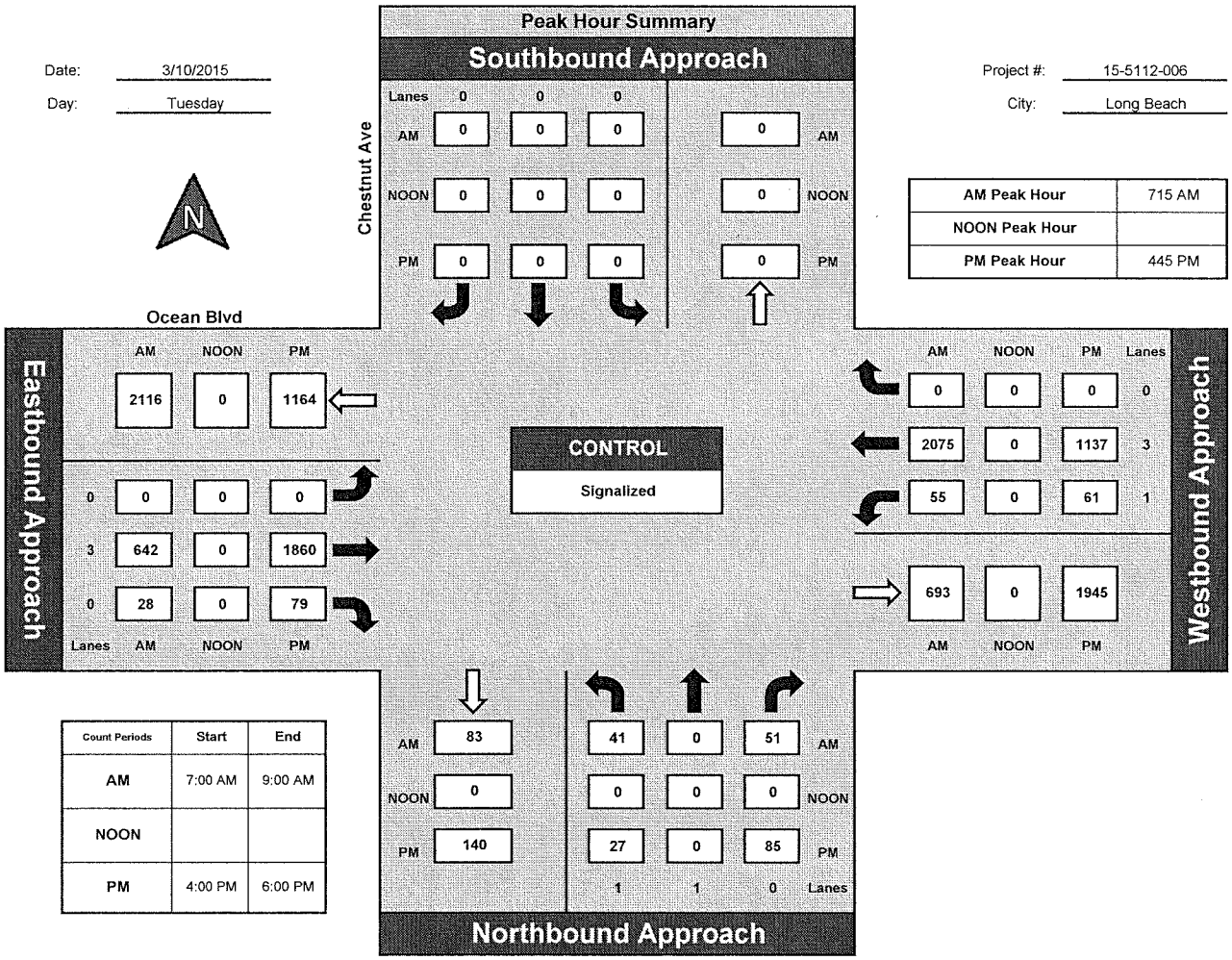
CONTROL : Signalized

ITM Peak Hour Summary

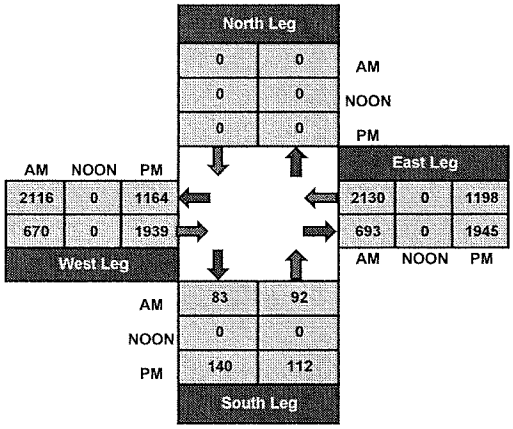
Prepared by:

National Data & Surveying Services

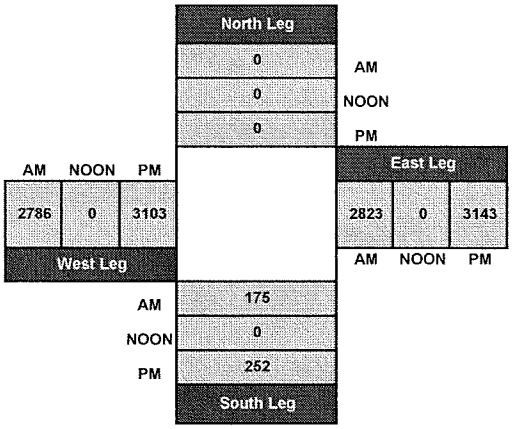
Chestnut Ave and Ocean Blvd , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-006 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Chestnut Ave			Chestnut Ave			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	0	0	0	0	3	0	1	3	0	
7:00 AM	5	0	7	0	0	0	0	100	3	8	500	0	623
7:15 AM	12	0	20	0	0	0	0	137	4	14	505	0	692
7:30 AM	9	0	15	0	0	0	0	151	8	10	557	0	750
7:45 AM	7	0	10	0	0	0	0	154	12	12	513	0	708
8:00 AM	13	0	6	0	0	0	0	200	4	19	500	0	742
8:15 AM	8	0	9	0	0	0	1	170	8	18	471	0	685
8:30 AM	12	0	11	0	0	0	0	185	6	15	386	0	615
8:45 AM	12	0	9	0	0	0	2	154	9	12	374	0	572
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	78	0	87	0	0	0	3	1251	54	108	3806	0	5387
APPROACH %'s :	47.27%	0.00%	52.73%	#DIV/0!	#DIV/0!	#DIV/0!	0.23%	95.64%	4.13%	2.76%	97.24%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	41	0	51	0	0	0	0	642	28	55	2075	0	2892
PEAK HR FACTOR :	0.719			0.000			0.821			0.939			0.964

UTURNS

	NB	SB	EB	WB
7:00 AM	0	0	0	2
7:15 AM	0	0	0	1
7:30 AM	0	0	0	0
7:45 AM	0	0	0	1
8:00 AM	0	0	0	2
8:15 AM	0	0	1	2
8:30 AM	0	0	0	0
8:45 AM	0	0	2	1
TOTAL VOLUMES :	0	0	3	9

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-006 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Chestnut Ave			Chestnut Ave			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	0	0	0	0	3	0	1	3	0	
4:00 PM	10	0	17	0	0	0	0	375	13	4	244	0	663
4:15 PM	3	0	18	0	0	0	0	391	16	8	248	0	684
4:30 PM	10	0	12	0	0	0	0	373	21	13	283	0	712
4:45 PM	2	0	18	0	0	0	0	470	25	21	257	0	793
5:00 PM	14	0	27	0	0	0	0	481	20	15	324	0	881
5:15 PM	6	0	24	0	0	0	0	461	14	13	278	0	796
5:30 PM	5	0	16	0	0	0	0	448	20	12	278	0	779
5:45 PM	7	0	20	0	0	0	0	391	14	9	209	0	650
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	57	0	152	0	0	0	0	3390	143	95	2121	0	5958
APPROACH %'s :	27.27%	0.00%	72.73%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	95.95%	4.05%	4.29%	95.71%	0.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	27	0	85	0	0	0	0	1860	79	61	1137	0	3249
PEAK HR FACTOR :		0.683			0.000			0.968			0.883		0.922

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	2	
0	0	1	0	
0	0	1	1	
0	0	1	1	
0	0	0	0	
0	0	2	0	
0	0	1	1	
NB	SB	EB	WB	
0	0	6	5	

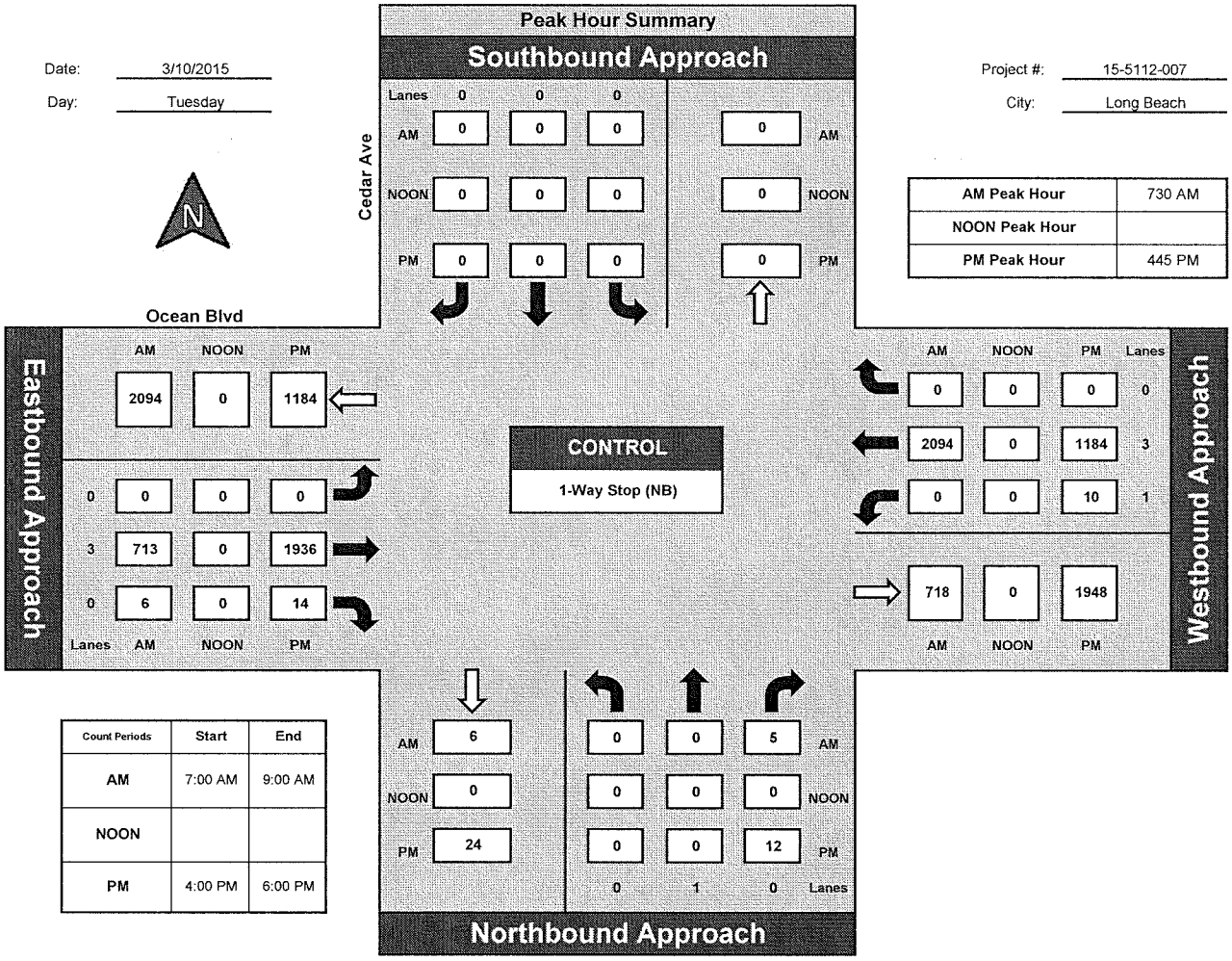
CONTROL : Signalized

ITM Peak Hour Summary

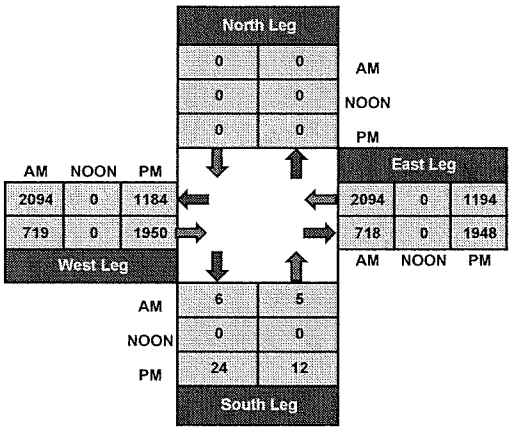
Prepared by:

National Data & Surveying Services

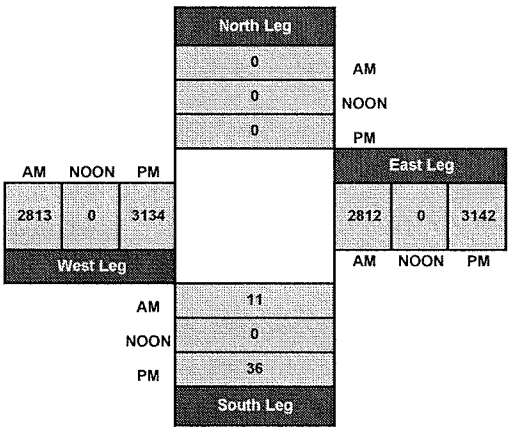
Cedar Ave and Ocean Blvd , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-007 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Cedar Ave			Cedar Ave			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	3	0	1	3	0	
7:00 AM	0	0	0	0	0	0	0	104	1	0	521	0	626
7:15 AM	0	0	1	0	0	0	0	154	4	3	526	0	688
7:30 AM	0	0	1	0	0	0	0	167	1	0	564	0	733
7:45 AM	0	0	0	0	0	0	0	157	0	0	519	0	676
8:00 AM	0	0	2	0	0	0	0	201	3	0	514	0	720
8:15 AM	0	0	2	0	0	0	0	188	2	0	497	0	689
8:30 AM	0	0	2	0	0	0	0	190	1	2	413	0	608
8:45 AM	0	0	0	0	0	0	0	156	2	1	379	0	538
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	8	0	0	0	0	1317	14	6	3933	0	5278
APPROACH %'s :	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	98.95%	1.05%	0.15%	99.85%	0.00%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	0	5	0	0	0	0	713	6	0	2094	0	2818
PEAK HR FACTOR :	0.625			0.000			0.881			0.928			0.961

CONTROL : 1-Way Stop (NB)

UTURNS			
NB	SB	EB	WB
0	0	0	0
0	0	0	3
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	2
0	0	0	0
NB	SB	EB	WB
0	0	0	5

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-007 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Cedar Ave			Cedar Ave			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	3	0	1	3	0	
4:00 PM	0	0	1	0	0	0	0	386	2	1	250	0	640
4:15 PM	0	0	2	0	0	0	0	400	4	3	255	0	664
4:30 PM	0	0	4	0	0	0	0	391	2	4	308	0	709
4:45 PM	0	0	4	0	0	0	0	488	4	2	268	0	766
5:00 PM	0	0	3	0	0	0	0	495	2	3	333	0	836
5:15 PM	0	0	3	0	0	0	0	485	5	3	309	0	805
5:30 PM	0	0	2	0	0	0	0	468	3	2	274	0	749
5:45 PM	0	0	0	0	0	0	0	401	4	1	221	0	627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	19	0	0	0	0	3514	26	19	2218	0	5796
APPROACH %'s :	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.27%	0.73%	0.85%	99.15%	0.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	0	12	0	0	0	0	1936	14	10	1184	0	3156
PEAK HR FACTOR :	0.750			0.000			0.981			0.888			0.944

UTURNS			
NB	SB	EB	WB
0	0	0	0
0	0	0	1
0	0	0	1
0	0	0	1
0	0	0	0
0	0	0	1
0	0	0	2
0	0	0	0
NB	SB	EB	WB
0	0	0	6

CONTROL : 1-Way Stop (NB)

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Ave and Ocean Blvd , Long Beach

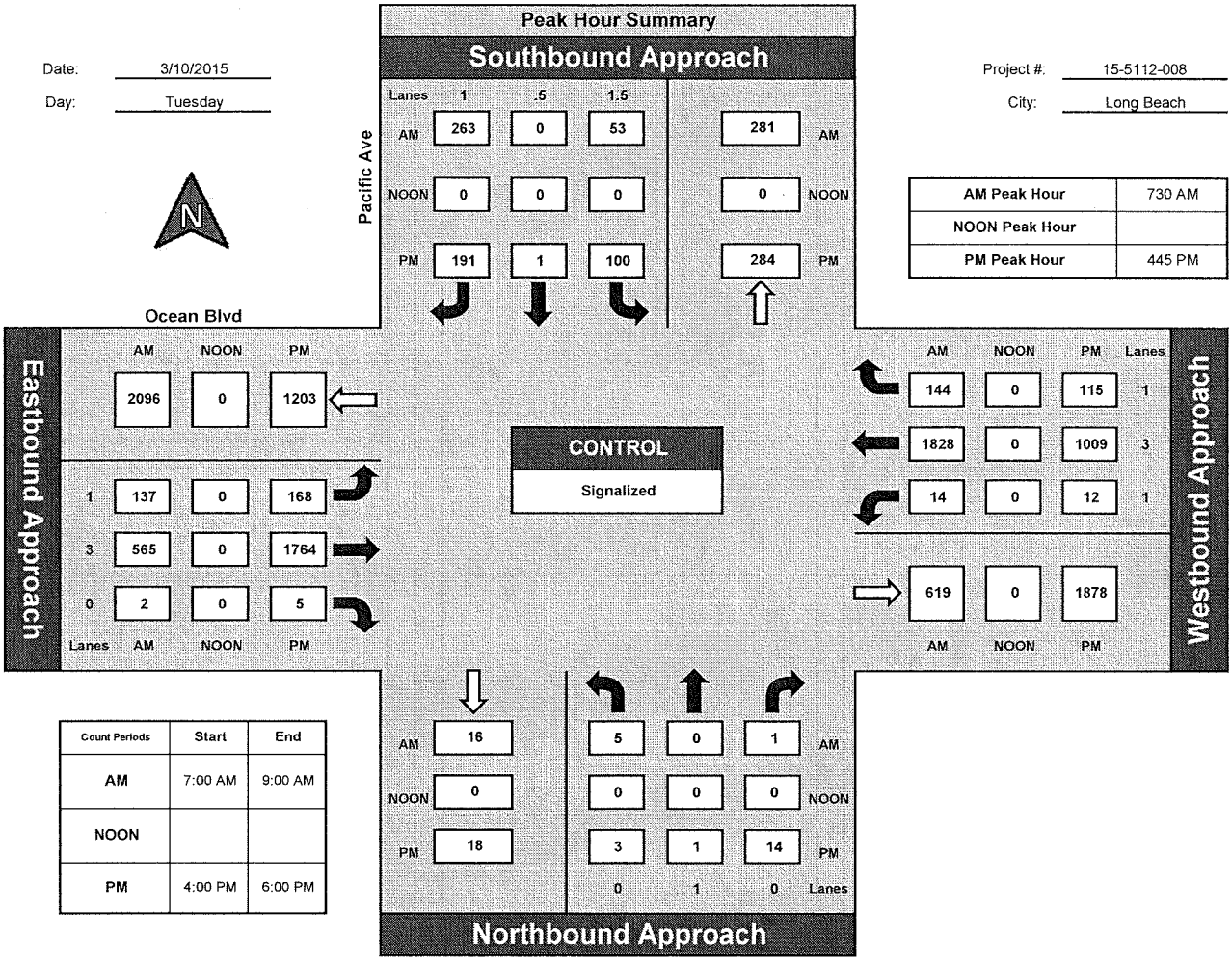
Date: 3/10/2015

Day: Tuesday

Project #: 15-5112-008

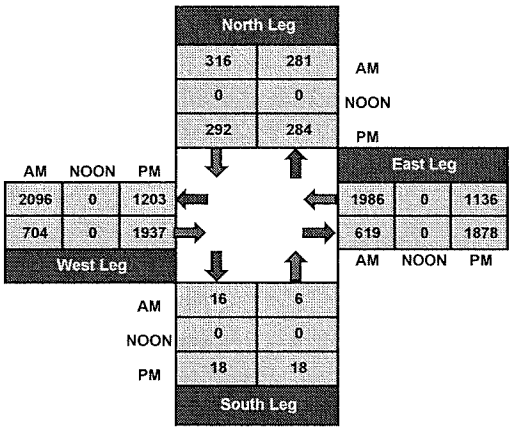
City: Long Beach

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	445 PM

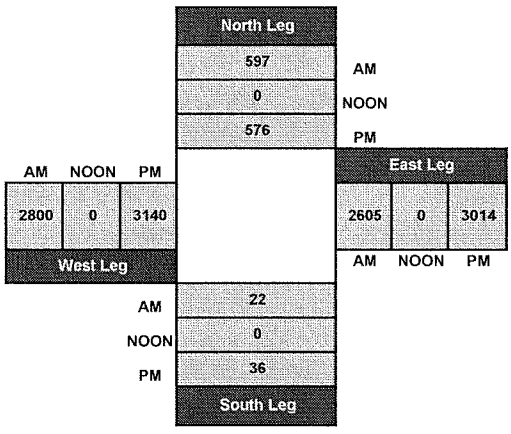


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-008 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Pacific Ave			Pacific Ave			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	.5	1	1	3	0	1	3	1	
7:00 AM	2	0	0	9	0	40	14	87	0	3	486	21	662
7:15 AM	2	1	0	16	0	63	24	135	0	1	457	26	725
7:30 AM	1	0	0	13	0	68	16	142	1	0	500	23	764
7:45 AM	2	0	0	18	0	71	30	133	1	4	454	42	755
8:00 AM	0	0	0	8	0	69	46	152	0	4	437	43	759
8:15 AM	2	0	1	14	0	55	45	138	0	6	437	36	734
8:30 AM	0	1	0	15	0	57	54	148	0	4	368	36	683
8:45 AM	0	0	0	19	0	59	30	128	0	2	310	33	581
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	2	1	112	0	482	259	1063	2	24	3449	260	5663
APPROACH %'s :	75.00%	16.67%	8.33%	18.86%	0.00%	81.14%	19.56%	80.29%	0.15%	0.64%	92.39%	6.96%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	5	0	1	53	0	263	137	565	2	14	1828	144	3012
PEAK HR FACTOR :	0.500			0.888			0.889			0.949			0.986

UTURNS			
NB	SB	EB	WB
0	0	0	3
0	0	1	1
0	0	0	0
0	0	0	2
0	0	1	4
0	0	0	4
0	0	1	4
0	0	0	2
NB	SB	EB	WB
0	0	3	20

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-008 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			Ocean Blvd			Ocean Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	.5	1	1	3	0	1	3	1	
4:00 PM	1	0	2	24	1	36	42	359	1	4	222	20	712
4:15 PM	1	1	3	25	0	46	32	349	3	1	206	29	696
4:30 PM	1	0	0	23	0	42	37	376	0	6	262	31	778
4:45 PM	0	0	6	30	0	38	42	451	0	4	232	31	834
5:00 PM	1	0	4	28	0	64	34	441	2	2	280	34	890
5:15 PM	1	0	1	24	0	52	46	457	1	2	265	20	869
5:30 PM	1	1	3	18	1	37	46	415	2	4	232	30	790
5:45 PM	2	0	1	26	0	31	24	372	0	2	194	23	675
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	2	20	198	2	346	303	3220	9	25	1893	218	6244
APPROACH %'s :	26.67%	6.67%	66.67%	36.26%	0.37%	63.37%	8.58%	91.17%	0.25%	1.17%	88.62%	10.21%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	3	1	14	100	1	191	168	1764	5	12	1009	115	3383
PEAK HR FACTOR :		0.750			0.793			0.961			0.899		0.950

UTURNS				
NB	SB	EB	WB	
0	0	0	3	
0	0	0	1	
0	0	1	4	
0	0	0	4	
0	0	0	1	
0	0	0	2	
0	0	0	4	
0	0	0	2	
NB	SB	EB	WB	
0	0	1	21	

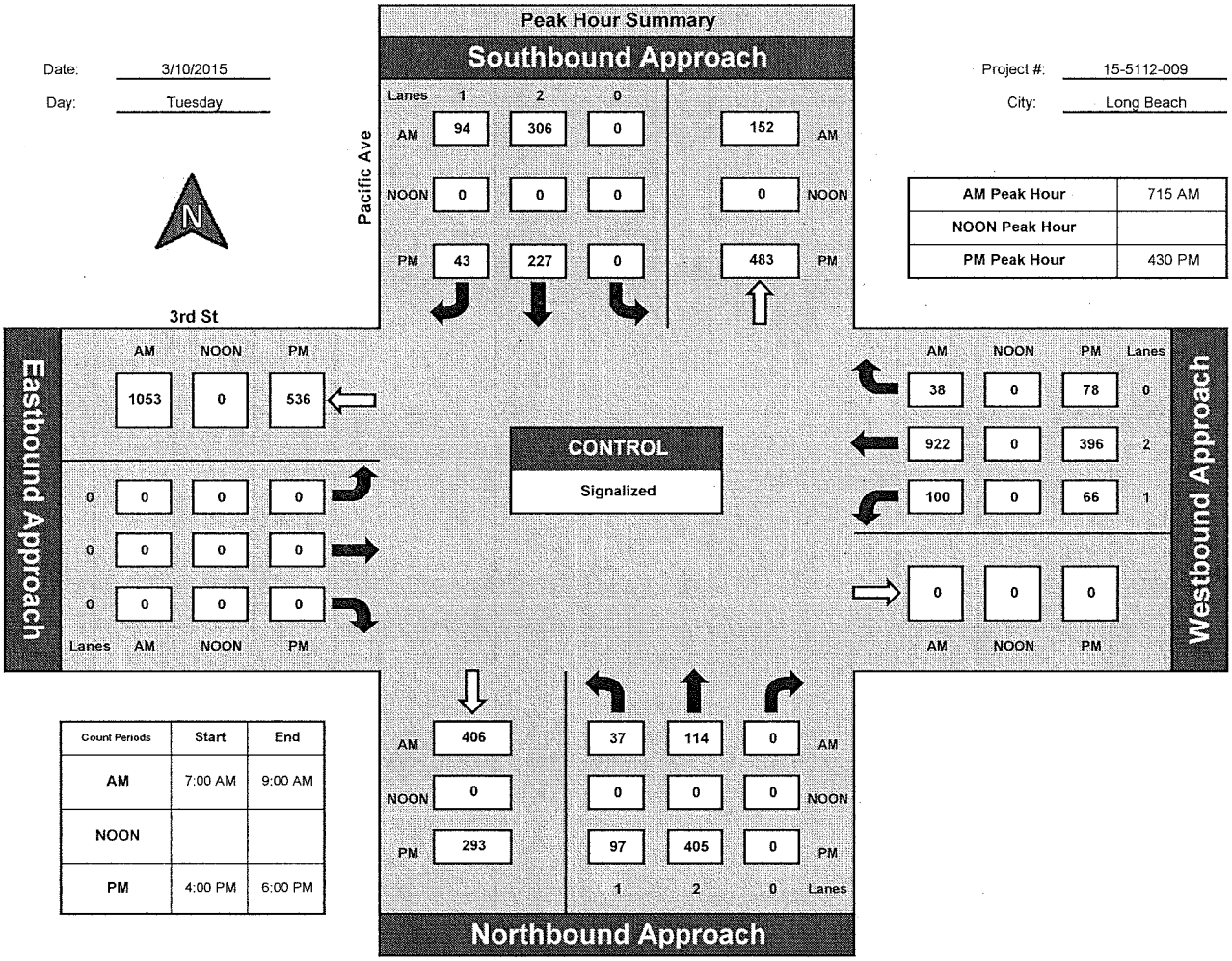
CONTROL : Signalized

ITM Peak Hour Summary

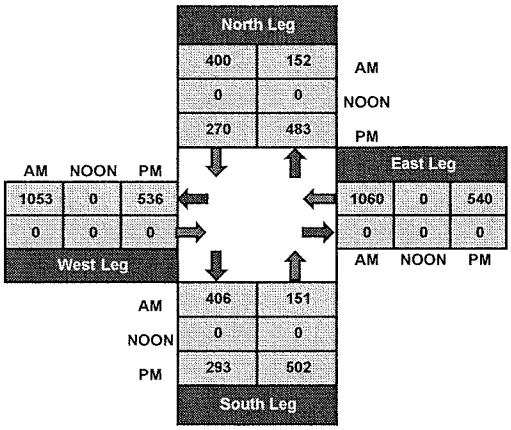
Prepared by:

National Data & Surveying Services

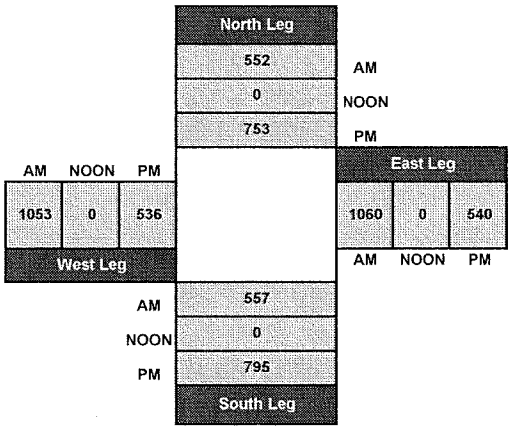
Pacific Ave and 3rd St , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-009 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Pacific Ave			Pacific Ave			3rd St			3rd St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	1	0	0	0	1	2	0	
7:00 AM	7	17	0	0	64	16	0	0	0	16	235	10	365
7:15 AM	8	32	0	0	65	32	0	0	0	23	245	6	411
7:30 AM	4	19	0	0	71	11	0	0	0	35	239	12	391
7:45 AM	10	35	0	0	93	36	0	0	0	24	221	10	429
8:00 AM	15	28	0	0	77	15	0	0	0	18	217	10	380
8:15 AM	12	32	0	0	100	29	0	0	0	16	200	9	398
8:30 AM	6	38	0	0	68	28	0	0	0	12	176	11	339
8:45 AM	8	31	0	0	96	12	0	0	0	27	148	6	328
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	70	232	0	0	634	179	0	0	0	171	1681	74	3041
APPROACH %'s :	23.18%	76.82%	0.00%	0.00%	77.98%	22.02%	#DIV/0!	#DIV/0!	#DIV/0!	8.88%	87.28%	3.84%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	37	114	0	0	306	94	0	0	0	100	922	38	1611
PEAK HR FACTOR :		0.839			0.775			0.000			0.927		0.939

UTURNS	NB	SB	EB	WB
	1	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	1	0	0	0
	NB	SB	EB	WB
	2	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-009 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			3rd St			3rd St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	1	0	0	0	1	2	0	
4:00 PM	23	75	0	0	54	18	0	0	0	7	112	21	310
4:15 PM	16	60	0	0	53	15	0	0	0	9	99	12	264
4:30 PM	31	87	0	0	58	10	0	0	0	18	102	21	327
4:45 PM	18	89	0	0	69	14	0	0	0	15	90	18	313
5:00 PM	28	138	0	0	44	10	0	0	0	17	114	23	374
5:15 PM	20	91	0	0	56	9	0	0	0	16	90	16	298
5:30 PM	18	101	0	0	49	9	0	0	0	12	109	11	309
5:45 PM	21	58	0	0	42	15	0	0	0	10	94	20	260
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	175	699	0	0	425	100	0	0	0	104	810	142	2455
APPROACH %'s :	20.02%	79.98%	0.00%	0.00%	80.95%	19.05%	#DIV/0!	#DIV/0!	#DIV/0!	9.85%	76.70%	13.45%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	97	405	0	0	227	43	0	0	0	66	396	78	1312
PEAK HR FACTOR :		0.756			0.813			0.000			0.877		0.877

UTURNS

	NB	SB	EB	WB
	2	0	0	0
	0	0	0	0
	2	0	0	0
	0	0	0	0
	3	0	0	0
	2	0	0	0
	3	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	12	0	0	0

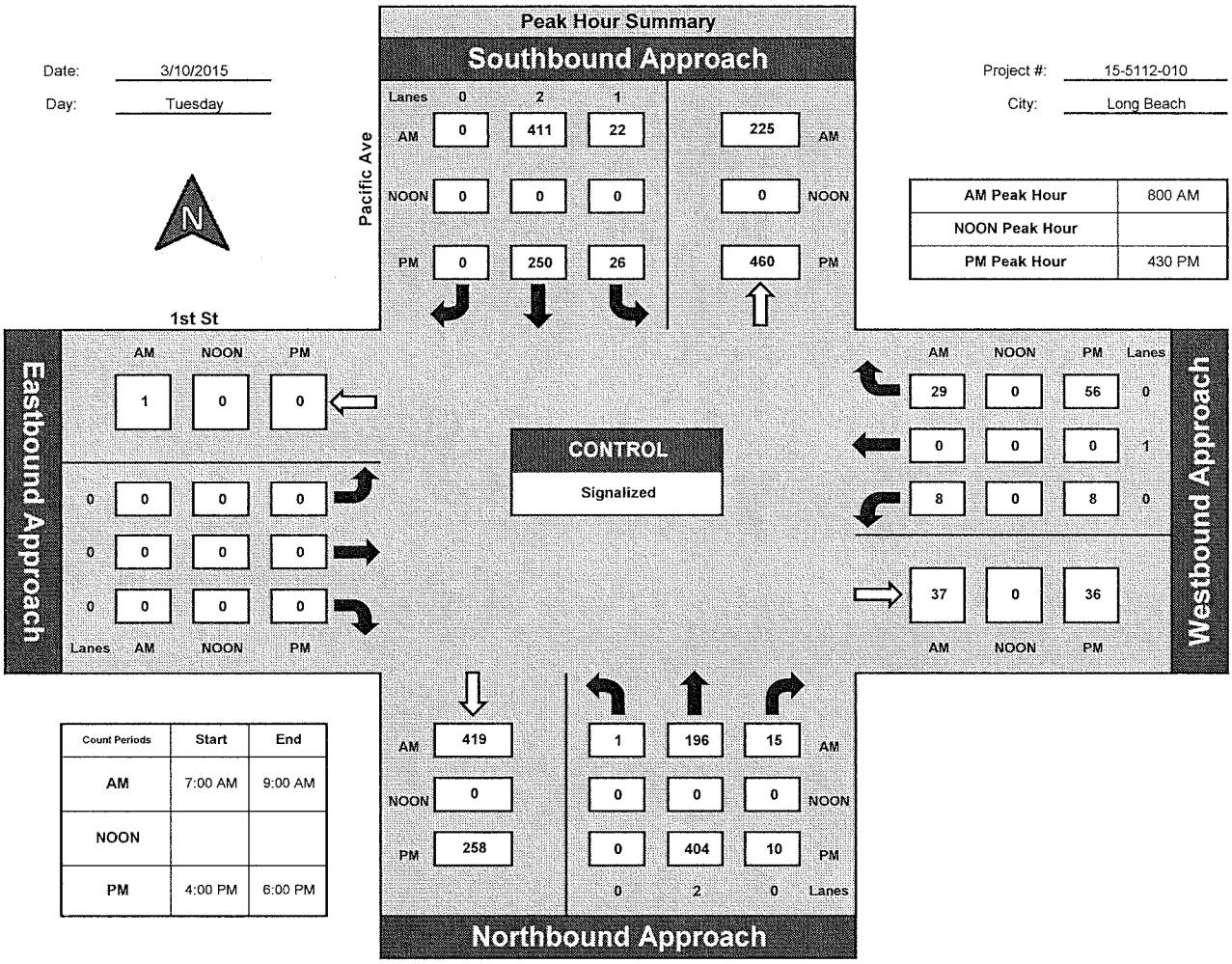
CONTROL : Signalized

ITM Peak Hour Summary

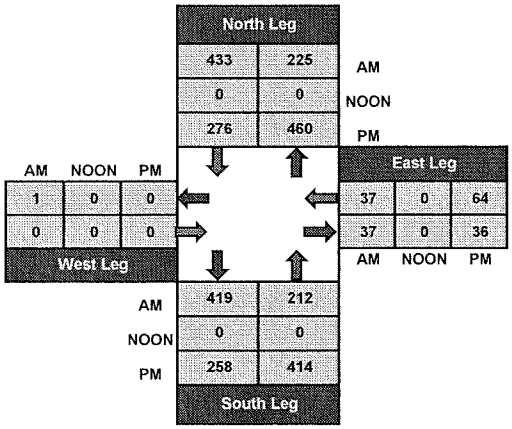
Prepared by:

National Data & Surveying Services

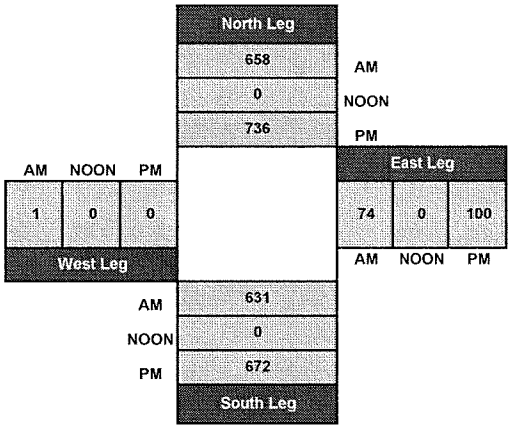
Pacific Ave and 1st St , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-010 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

AM

NS/EW Streets:	Pacific Ave			Pacific Ave			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	0	1	0	
7:00 AM	0	24	3	4	67	0	0	0	0	2	0	10	110
7:15 AM	0	35	3	7	89	0	0	0	0	2	0	12	148
7:30 AM	0	17	5	7	82	0	0	0	0	1	0	8	120
7:45 AM	0	42	6	5	101	0	0	0	0	3	0	9	166
8:00 AM	1	47	5	6	106	0	0	0	0	2	0	8	175
8:15 AM	0	47	2	7	102	0	0	0	0	2	0	5	165
8:30 AM	0	59	3	7	95	0	0	0	0	3	0	8	175
8:45 AM	0	43	5	2	108	0	0	0	0	1	0	8	167
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	314	32	45	750	0	0	0	0	16	0	68	1226
APPROACH %'s :	0.29%	90.49%	9.22%	5.66%	94.34%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	19.05%	0.00%	80.95%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	1	196	15	22	411	0	0	0	0	8	0	29	682
PEAK HR FACTOR :	0.855			0.967			0.000			0.841			0.974

CONTROL : Signalized

UTURNS

NB	SB	EB	WB
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
2	0	0	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-5112-010 **Day:** Tuesday

City: Long Beach **Date:** 3/10/2015

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	0	1	0	
4:00 PM	0	87	3	9	63	0	0	0	0	1	0	13	176
4:15 PM	0	62	3	4	51	0	0	0	0	3	0	10	133
4:30 PM	0	105	0	8	53	0	0	0	0	2	0	18	186
4:45 PM	0	95	4	7	63	0	0	0	0	0	0	9	178
5:00 PM	0	108	3	4	76	0	0	0	0	3	0	19	213
5:15 PM	0	96	3	7	58	0	0	0	0	3	0	10	177
5:30 PM	1	90	5	5	48	0	0	0	0	2	0	8	159
5:45 PM	0	64	3	4	42	0	0	0	0	3	0	17	133
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	707	24	48	454	0	0	0	0	17	0	104	1355
APPROACH %'s :	0.14%	96.58%	3.28%	9.56%	90.44%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	14.05%	0.00%	85.95%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	404	10	26	250	0	0	0	0	8	0	56	754
PEAK HR FACTOR :		0.932			0.863			0.000			0.727		0.885

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
1	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
1	0	0	0	

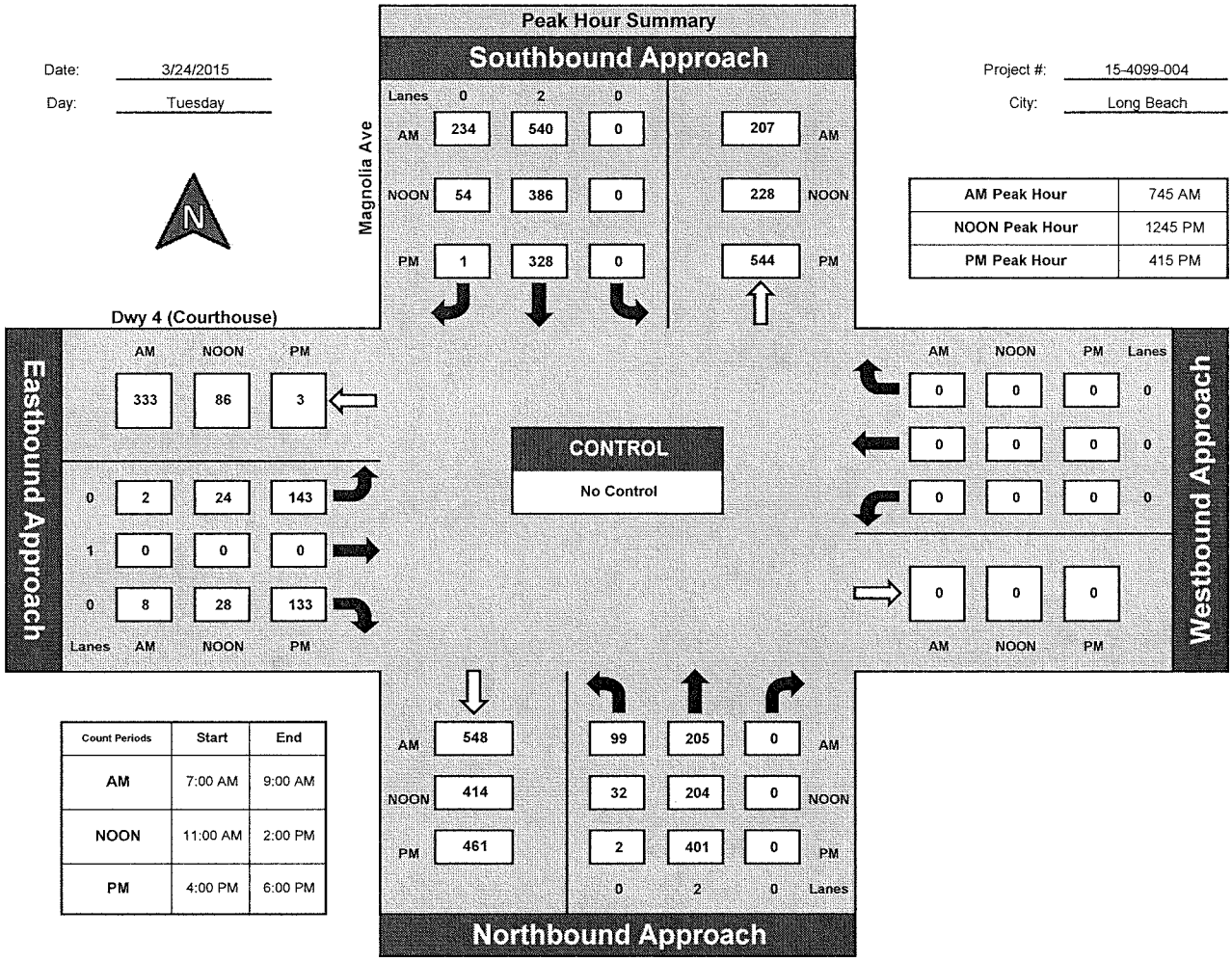
CONTROL : Signalized

ITM Peak Hour Summary

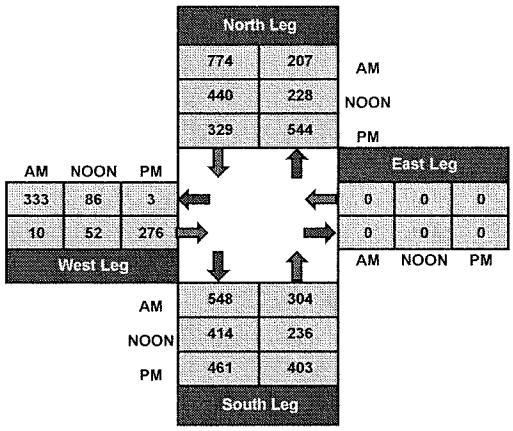
Prepared by:

National Data & Surveying Services

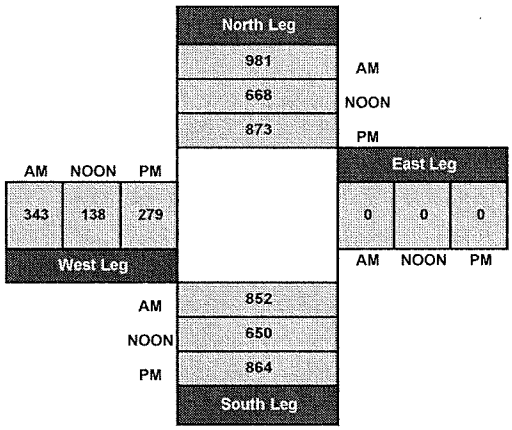
Magnolia Ave and Dwy 4 (Courthouse) , Long Beach



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4099-004 **Day:** Tuesday

City: Long Beach **Date:** 3/24/2015

AM

NS/EW Streets:	Magnolia Ave			Magnolia Ave			Dwy 4 (Courthouse)			Dwy 4 (Courthouse)			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	0	1	0	0	0	0	
7:00 AM	8	17	0	0	117	18	0	0	0	0	0	0	160
7:15 AM	13	33	0	0	120	39	0	0	0	0	0	0	205
7:30 AM	18	45	0	0	122	49	1	0	0	0	0	0	235
7:45 AM	23	51	0	0	153	63	1	0	0	0	0	0	291
8:00 AM	22	41	0	0	122	61	1	0	3	0	0	0	250
8:15 AM	34	69	0	0	132	56	0	0	3	0	0	0	294
8:30 AM	20	44	0	0	133	54	0	0	2	0	0	0	253
8:45 AM	19	51	0	0	127	48	0	0	3	0	0	0	248
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	351	0	0	1026	388	3	0	11	0	0	0	1936
APPROACH %'s :	30.91%	69.09%	0.00%	0.00%	72.56%	27.44%	21.43%	0.00%	78.57%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	99	205	0	0	540	234	2	0	8	0	0	0	1088
PEAK HR FACTOR :	0.738			0.896			0.625			0.000			0.925

UTURNS			
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4099-004 **Day:** Tuesday

City: Long Beach **Date:** 3/24/2015

PM

NS/EW Streets:	Magnolia Ave			Magnolia Ave			Dwy 4 (Courthouse)			Dwy 4 (Courthouse)			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	0	1	0	0	0	0	
4:00 PM	2	83	0	0	67	0	14	0	21	0	0	0	187
4:15 PM	0	95	0	0	85	0	22	0	26	0	0	0	228
4:30 PM	1	115	0	0	76	1	41	0	40	0	0	0	274
4:45 PM	1	113	0	0	85	0	29	0	33	0	0	0	261
5:00 PM	0	78	0	0	82	0	51	0	34	0	0	0	245
5:15 PM	0	79	0	0	97	0	20	0	15	0	0	0	211
5:30 PM	0	64	0	0	91	0	18	0	12	0	0	0	185
5:45 PM	0	74	0	0	57	0	4	0	7	0	0	0	142
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	4	701	0	0	640	1	199	0	188	0	0	0	1733
APPROACH %'s :	0.57%	99.43%	0.00%	0.00%	99.84%	0.16%	51.42%	0.00%	48.58%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	2	401	0	0	328	1	143	0	133	0	0	0	1008
PEAK HR FACTOR :		0.869			0.968			0.812			0.000		0.920

UTURNS			
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

APPENDIX B

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX B-I

EXISTING TRAFFIC CONDITIONS

AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.502
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	150	64	71	455	0	58	711	415	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	150	64	71	455	0	58	711	415	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	150	64	71	455	0	58	711	415	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	150	64	71	455	0	58	711	415	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	150	64	71	455	0	58	711	415	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	150	64	71	455	0	58	711	415	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.40	0.60	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2243	957	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.04	0.14	0.00	0.04	0.22	0.26	0.00	0.00	0.00
Crit Moves:	****				****				****			

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	23	22	91	12	0	66	745	7	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	23	22	91	12	0	66	745	7	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	23	22	91	12	0	66	745	7	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	23	22	91	12	0	66	745	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	23	22	91	12	0	66	745	7	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	23	22	91	12	0	66	745	7	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.77	0.23	0.00	1.00	1.98	0.02	0.00	0.00	0.00
Final Sat.:	0	1600	1600	2827	373	0	1600	3170	30	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.03	0.03	0.00	0.04	0.23	0.24	0.00	0.00	0.00
Crit Moves:		****			****				****			

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	8	5	75	1	0	25	729	4	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	8	5	75	1	0	25	729	4	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	8	5	75	1	0	25	729	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	8	5	75	1	0	25	729	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	8	5	75	1	0	25	729	4	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	8	5	75	1	0	25	729	4	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.99	0.01	0.00	1.00	1.99	0.01	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1579	21	0	1600	3183	17	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.00	0.05	0.05	0.00	0.02	0.23	0.23	0.00	0.00	0.00
Crit Moves:		****			****				****			

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.478
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	1 0	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	145	44	61	359	0	25	546	143	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	145	44	61	359	0	25	546	143	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	145	44	61	359	0	25	546	143	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	145	44	61	359	0	25	546	143	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	145	44	61	359	0	25	546	143	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	145	44	61	359	0	25	546	143	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.58	0.42	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	2536	664	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.03	0.04	0.11	0.00	0.02	0.22	0.22	0.00	0.00	0.00
Crit Moves:					****				****			

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.770
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	19	23	13	101	100	297	141	622	37	82	1750	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	23	13	101	100	297	141	622	37	82	1750	170
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	23	13	101	100	297	141	622	37	82	1750	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	23	13	101	100	297	141	622	37	82	1750	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	23	13	101	100	297	141	622	37	82	1750	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	23	13	101	100	297	141	622	37	82	1750	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.83	0.17	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4531	269	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.06	0.03	0.19	0.09	0.14	0.14	0.05	0.36	0.11
Crit Moves:	****					****	****				****	

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	2	1 0	1 0	3	0 0
Volume Module:												
Base Vol:	41	0	51	0	0	0	0	642	28	55	2075	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	0	51	0	0	0	0	642	28	55	2075	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	0	51	0	0	0	0	642	28	55	2075	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	0	51	0	0	0	0	642	28	55	2075	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	0	51	0	0	0	0	642	28	55	2075	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	0	51	0	0	0	0	642	28	55	2075	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.87	0.13	1.00	3.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	4599	201	1600	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.14	0.14	0.03	0.43	0.00
Crit Moves:			****				****				****	

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Cedar Avenue at Ocean Blvd

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[9.7]

Street Name:	Cedar Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 1		0 0 0	0 0		0 0 2	1 0		1 0 3	0 0	
Volume Module:												
Base Vol:	0	0	5	0	0	0	0	713	6	0	2094	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	5	0	0	0	0	713	6	0	2094	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	5	0	0	0	0	713	6	0	2094	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	5	0	0	0	0	713	6	0	2094	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	5	0	0	0	0	713	6	0	2094	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	241	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	766	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	766	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		9.7			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		A			*			*			*	

Note: Queue reported is the number of cars per lane.

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AM Existing Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	1 0	0 1	1	0 2	1 0	1	0 3
Volume Module:												
Base Vol:	5	0	1	53	0	263	137	565	2	14	1828	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	1	53	0	263	137	565	2	14	1828	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	1	53	0	263	137	565	2	14	1828	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	0	1	53	0	263	137	565	2	14	1828	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	1	53	0	263	137	565	2	14	1828	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	0	1	53	0	263	137	565	2	14	1828	144
OvlAdjVol:						126						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	2.00	0.00	1.00	1.00	2.99	0.01	1.00	3.00	1.00
Final Sat.:	1333	0	267	3200	0	1600	1600	4783	17	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.16	0.09	0.12	0.12	0.01	0.38	0.09
OvlAdjV/S:						0.08						
Crit Moves:	****					****	****				****	

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.569
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 1	0
Volume Module:												
Base Vol:	37	114	0	0	306	94	0	0	0	100	922	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	114	0	0	306	94	0	0	0	100	922	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	114	0	0	306	94	0	0	0	100	922	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	114	0	0	306	94	0	0	0	100	922	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	114	0	0	306	94	0	0	0	100	922	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	114	0	0	306	94	0	0	0	100	922	38
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.92	0.08
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	3073	127
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.00	0.00	0.10	0.06	0.00	0.00	0.00	0.06	0.30	0.30
Crit Moves:	****				****						****	

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AM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.302
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	196	15	22	411	0	0	0	0	8	0	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	196	15	22	411	0	0	0	0	8	0	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	196	15	22	411	0	0	0	0	8	0	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	196	15	22	411	0	0	0	0	8	0	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	196	15	22	411	0	0	0	0	8	0	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	196	15	22	411	0	0	0	0	8	0	29
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	1.00	2.00	0.00	0.00	0.00	0.00	0.22	0.00	0.78
Final Sat.:	0	2973	227	1600	3200	0	0	0	0	346	0	1254
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.01	0.13	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:					****							****

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PM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.570
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	391	157	55	219	0	69	845	187	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	391	157	55	219	0	69	845	187	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	391	157	55	219	0	69	845	187	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	391	157	55	219	0	69	845	187	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	391	157	55	219	0	69	845	187	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	391	157	55	219	0	69	845	187	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.43	0.57	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2283	917	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.03	0.07	0.00	0.04	0.26	0.12	0.00	0.00	0.00
Crit Moves:		****		****				****				

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PM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	109	94	60	8	0	51	999	4	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	109	94	60	8	0	51	999	4	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	109	94	60	8	0	51	999	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	109	94	60	8	0	51	999	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	109	94	60	8	0	51	999	4	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	109	94	60	8	0	51	999	4	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.76	0.24	0.00	1.00	1.99	0.01	0.00	0.00	0.00
Final Sat.:	0	1600	1600	2824	376	0	1600	3187	13	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.06	0.02	0.02	0.00	0.03	0.31	0.31	0.00	0.00	0.00
Crit Moves:		****		****					****			

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PM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0 1	0 0	0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	58	57	22	5	0	23	1050	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	58	57	22	5	0	23	1050	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	58	57	22	5	0	23	1050	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	58	57	22	5	0	23	1050	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	58	57	22	5	0	23	1050	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	58	57	22	5	0	23	1050	0	0	0	0
OvlAdjVol:			57									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.81	0.19	0.00	1.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1304	296	0	1600	3200	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.04	0.02	0.02	0.00	0.01	0.33	0.00	0.00	0.00	0.00
Crit Moves:		****		****				****				

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PM Existing Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	1 0	1 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	395	159	84	204	0	92	993	84	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	395	159	84	204	0	92	993	84	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	395	159	84	204	0	92	993	84	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	395	159	84	204	0	92	993	84	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	395	159	84	204	0	92	993	84	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	395	159	84	204	0	92	993	84	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.84	0.16	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	2950	250	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.10	0.05	0.06	0.00	0.06	0.34	0.34	0.00	0.00	0.00
Crit Moves:		****		****					****			

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PM Existing Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	75	48	52	155	67	286	142	1608	46	63	1026	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	48	52	155	67	286	142	1608	46	63	1026	93
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	75	48	52	155	67	286	142	1608	46	63	1026	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	48	52	155	67	286	142	1608	46	63	1026	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	48	52	155	67	286	142	1608	46	63	1026	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	48	52	155	67	286	142	1608	46	63	1026	93
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.92	0.08	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4667	133	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.03	0.10	0.02	0.18	0.09	0.34	0.34	0.04	0.21	0.06
Crit Moves:	****					****		****		****		

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PM Existing Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	2	1 0	1 0	3	0 0
Volume Module:												
Base Vol:	27	0	85	0	0	0	0	1860	79	61	1137	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	0	85	0	0	0	0	1860	79	61	1137	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	0	85	0	0	0	0	1860	79	61	1137	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	0	85	0	0	0	0	1860	79	61	1137	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	0	85	0	0	0	0	1860	79	61	1137	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	0	85	0	0	0	0	1860	79	61	1137	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.88	0.12	1.00	3.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	4604	196	1600	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.00	0.00	0.00	0.00	0.40	0.40	0.04	0.24	0.00
Crit Moves:			****					****		****		

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PM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #7 Cedar Avenue at Ocean Blvd

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[17.2]

****

Street Name:	Cedar Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	12	0	0	0	0	1936	14	10	1184	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	12	0	0	0	0	1936	14	10	1184	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	12	0	0	0	0	1936	14	10	1184	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	12	0	0	0	0	1936	14	10	1184	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	12	0	0	0	0	1936	14	10	1184	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	652	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1950	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	415	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	304	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	415	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	304	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	13.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17.2	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	C	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	13.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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PM Existing Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.559
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 1	0 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	3	1	14	100	1	191	168	1764	5	12	1009	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	1	14	100	1	191	168	1764	5	12	1009	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	1	14	100	1	191	168	1764	5	12	1009	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	1	14	100	1	191	168	1764	5	12	1009	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	1	14	100	1	191	168	1764	5	12	1009	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	1	14	100	1	191	168	1764	5	12	1009	115
OvlAdjVol:						23						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.05	0.78	1.98	0.02	1.00	1.00	2.99	0.01	1.00	3.00	1.00
Final Sat.:	267	89	1244	3168	32	1600	1600	4786	14	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.03	0.03	0.12	0.11	0.37	0.37	0.01	0.21	0.07
OvlAdjV/S:						0.01						
Crit Moves:			****	****				****		****		

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PM Existing Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.430
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 1	0
Volume Module:												
Base Vol:	97	405	0	0	227	43	0	0	0	66	396	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	405	0	0	227	43	0	0	0	66	396	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	405	0	0	227	43	0	0	0	66	396	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	405	0	0	227	43	0	0	0	66	396	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	405	0	0	227	43	0	0	0	66	396	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	405	0	0	227	43	0	0	0	66	396	78
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.67	0.33
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	2673	527
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.00	0.00	0.07	0.03	0.00	0.00	0.00	0.04	0.15	0.15
Crit Moves:	****				****						****	

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PM Existing Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.336
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	404	10	26	250	0	0	0	0	8	0	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	404	10	26	250	0	0	0	0	8	0	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	404	10	26	250	0	0	0	0	8	0	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	404	10	26	250	0	0	0	0	8	0	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	404	10	26	250	0	0	0	0	8	0	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	404	10	26	250	0	0	0	0	8	0	56
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.95	0.05	1.00	2.00	0.00	0.00	0.00	0.00	0.12	0.00	0.88
Final Sat.:	0	3123	77	1600	3200	0	0	0	0	200	0	1400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.02	0.08	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:		****		****						****		

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APPENDIX B-II

EXISTING PLUS PROJECT TRAFFIC CONDITIONS

AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	164	42	73	537	0	58	790	517	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	164	42	73	537	0	58	790	517	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	164	42	73	537	0	58	790	517	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	164	42	73	537	0	58	790	517	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	164	42	73	537	0	58	790	517	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	164	42	73	537	0	58	790	517	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.59	0.41	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2548	652	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.05	0.17	0.00	0.04	0.25	0.32	0.00	0.00	0.00
Crit Moves:	****				****				****			

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AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	B

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	88	99	185	62	0	66	994	83	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	88	99	185	62	0	66	994	83	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	88	99	185	62	0	66	994	83	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	88	99	185	62	0	66	994	83	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	88	99	185	62	0	66	994	83	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	88	99	185	62	0	66	994	83	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.50	0.50	0.00	1.00	1.85	0.15	0.00	0.00	0.00
Final Sat.:	0	1600	1600	2397	803	0	1600	2953	247	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.08	0.08	0.00	0.04	0.34	0.34	0.00	0.00	0.00
Crit Moves:			****	****				****				

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AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1 0	0 0	1	0 1	1 0	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	89	82	101	59	0	31	789	93	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	89	82	101	59	0	31	789	93	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	89	82	101	59	0	31	789	93	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	89	82	101	59	0	31	789	93	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	89	82	101	59	0	31	789	93	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	89	82	101	59	0	31	789	93	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.63	0.37	0.00	1.00	1.79	0.21	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1010	590	0	1600	2863	337	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.05	0.10	0.10	0.00	0.02	0.28	0.28	0.00	0.00	0.00
Crit Moves:		****			****			****				

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AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.502
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	145	44	61	359	0	61	616	152	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	145	44	61	359	0	61	616	152	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	145	44	61	359	0	61	616	152	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	145	44	61	359	0	61	616	152	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	145	44	61	359	0	61	616	152	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	145	44	61	359	0	61	616	152	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.60	0.40	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	2567	633	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.03	0.04	0.11	0.00	0.04	0.24	0.24	0.00	0.00	0.00
Crit Moves:					****				****			

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AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	C

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	19	27	13	104	101	302	160	622	37	84	1760	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	27	13	104	101	302	160	622	37	84	1760	150
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	27	13	104	101	302	160	622	37	84	1760	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	27	13	104	101	302	160	622	37	84	1760	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	27	13	104	101	302	160	622	37	84	1760	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	27	13	104	101	302	160	622	37	84	1760	150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.83	0.17	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4531	269	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.07	0.03	0.19	0.10	0.14	0.14	0.05	0.37	0.09
Crit Moves:	****					****	****				****	

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AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0	1! 0	0	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	41	0	51	15	0	8	0	645	28	55	2059	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	0	51	15	0	8	0	645	28	55	2059	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	0	51	15	0	8	0	645	28	55	2059	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	0	51	15	0	8	0	645	28	55	2059	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	0	51	15	0	8	0	645	28	55	2059	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	0	51	15	0	8	0	645	28	55	2059	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.65	0.00	0.35	0.00	2.88	0.12	1.00	2.94	0.06
Final Sat.:	1600	0	1600	1043	0	557	0	4600	200	1600	4702	98
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.01	0.00	0.01	0.00	0.14	0.14	0.03	0.44	0.44
Crit Moves:			****	****			****				****	

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AM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #7 Cedar Avenue at Ocean Blvd

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.7]

****

Street Name:	Cedar Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0	1	0 0 0	0	1	0 0 2	1	0	1 0 2	1	0
Volume Module:												
Base Vol:	0	0	5	0	0	10	0	731	6	0	2111	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	5	0	0	10	0	731	6	0	2111	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	5	0	0	10	0	731	6	0	2111	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	5	0	0	10	0	731	6	0	2111	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	5	0	0	10	0	731	6	0	2111	17
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	247	xxxx	xxxx	712	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	760	xxxx	xxxx	379	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	760	xxxx	xxxx	379	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.8	xxxxx	xxxx	14.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	9.8			14.7			xxxxxx			xxxxxx		
ApproachLOS:	A			B			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	1 0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	5	0	1	67	0	258	137	583	2	14	1868	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	1	67	0	258	137	583	2	14	1868	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	1	67	0	258	137	583	2	14	1868	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	0	1	67	0	258	137	583	2	14	1868	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	1	67	0	258	137	583	2	14	1868	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	0	1	67	0	258	137	583	2	14	1868	144
OvlAdjVol:						121						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	2.00	0.00	1.00	1.00	2.99	0.01	1.00	3.00	1.00
Final Sat.:	1333	0	267	3200	0	1600	1600	4784	16	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.16	0.09	0.12	0.12	0.01	0.39	0.09
OvlAdjV/S:						0.08						
Crit Moves:	****					****	****				****	

AM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 1	0
Volume Module:												
Base Vol:	37	150	0	0	306	141	0	0	0	100	1014	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	150	0	0	306	141	0	0	0	100	1014	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	150	0	0	306	141	0	0	0	100	1014	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	150	0	0	306	141	0	0	0	100	1014	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	150	0	0	306	141	0	0	0	100	1014	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	150	0	0	306	141	0	0	0	100	1014	38
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.93	0.07
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	3084	116
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.00	0.00	0.10	0.09	0.00	0.00	0.00	0.06	0.33	0.33
Crit Moves:	****				****							****

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AM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.304
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	196	15	22	420	0	0	0	0	8	0	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	196	15	22	420	0	0	0	0	8	0	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	196	15	22	420	0	0	0	0	8	0	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	196	15	22	420	0	0	0	0	8	0	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	196	15	22	420	0	0	0	0	8	0	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	196	15	22	420	0	0	0	0	8	0	29
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	1.00	2.00	0.00	0.00	0.00	0.00	0.22	0.00	0.78
Final Sat.:	0	2973	227	1600	3200	0	0	0	0	346	0	1254
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.01	0.13	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:					****							****

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PM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	479	188	58	235	0	69	946	205	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	479	188	58	235	0	69	946	205	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	479	188	58	235	0	69	946	205	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	479	188	58	235	0	69	946	205	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	479	188	58	235	0	69	946	205	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	479	188	58	235	0	69	946	205	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.44	0.56	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2298	902	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.04	0.07	0.00	0.04	0.30	0.13	0.00	0.00	0.00
Crit Moves:		****		****				****				

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PM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	D

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	323	256	76	81	0	51	1308	115	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	323	256	76	81	0	51	1308	115	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	323	256	76	81	0	51	1308	115	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	323	256	76	81	0	51	1308	115	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	323	256	76	81	0	51	1308	115	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	323	256	76	81	0	51	1308	115	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.84	0.16	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1600	1600	0	1600	2941	259	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.16	0.05	0.05	0.00	0.03	0.44	0.44	0.00	0.00	0.00
Crit Moves:		****			****				****			

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PM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.843
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	D

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	213	205	34	130	0	52	1273	190	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	213	205	34	130	0	52	1273	190	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	213	205	34	130	0	52	1273	190	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	213	205	34	130	0	52	1273	190	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	213	205	34	130	0	52	1273	190	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	213	205	34	130	0	52	1273	190	0	0	0
OvlAdjVol:			205									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.21	0.79	0.00	1.00	1.74	0.26	0.00	0.00	0.00
Final Sat.:	0	1600	1600	332	1268	0	1600	2784	416	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.10	0.10	0.00	0.03	0.46	0.46	0.00	0.00	0.00
Crit Moves:		****			****			****				

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PM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	395	159	84	204	0	130	1066	11	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	395	159	84	204	0	130	1066	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	395	159	84	204	0	130	1066	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	395	159	84	204	0	130	1066	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	395	159	84	204	0	130	1066	11	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	395	159	84	204	0	130	1066	11	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.98	0.02	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	3167	33	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.10	0.05	0.06	0.00	0.08	0.34	0.34	0.00	0.00	0.00
Crit Moves:		****		****				****				

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PM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	75	51	52	174	69	296	155	1608	46	63	1031	51
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	51	52	174	69	296	155	1608	46	63	1031	51
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	75	51	52	174	69	296	155	1608	46	63	1031	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	51	52	174	69	296	155	1608	46	63	1031	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	51	52	174	69	296	155	1608	46	63	1031	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	51	52	174	69	296	155	1608	46	63	1031	51
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.92	0.08	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4667	133	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.03	0.11	0.02	0.19	0.10	0.34	0.34	0.04	0.21	0.03
Crit Moves:	****					****		****			****	

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PM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.645
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0	1! 0	0	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	27	0	85	47	0	26	0	1879	79	61	1074	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	0	85	47	0	26	0	1879	79	61	1074	27
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	0	85	47	0	26	0	1879	79	61	1074	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	0	85	47	0	26	0	1879	79	61	1074	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	0	85	47	0	26	0	1879	79	61	1074	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	0	85	47	0	26	0	1879	79	61	1074	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.64	0.00	0.36	0.00	2.88	0.12	1.00	2.93	0.07
Final Sat.:	1600	0	1600	1030	0	570	0	4606	194	1600	4682	118
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.05	0.00	0.05	0.00	0.41	0.41	0.04	0.23	0.23
Crit Moves:			****			****		****		****		

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PM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #7 Cedar Avenue at Ocean Blvd

****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[18.0]

****

Street Name:	Cedar Ave									Ocean Blvd									
Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	0	0	1	0	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	0	0	12			0	0	19			0	2002	14			10	1129	37		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	12			0	0	19			0	2002	14			10	1129	37		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	12			0	0	19			0	2002	14			10	1129	37		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Volume:	0	0	12			0	0	19			0	2002	14			10	1129	37		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	0	0	12			0	0	19			0	2002	14			10	1129	37		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.9			xxxxx	xxxx	6.9			xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3			xxxxx	xxxx	3.3			xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	674			xxxx	xxxx	395			xxxx	xxxx	xxxxx		2016	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	402			xxxx	xxxx	610			xxxx	xxxx	xxxxx		287	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	402			xxxx	xxxx	610			xxxx	xxxx	xxxxx		287	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.03			xxxx	xxxx	0.03			xxxx	xxxx	xxxx		0.03	xxxx	xxxx			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.1			xxxx	xxxx	0.1			xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	14.2			xxxxx	xxxx	11.1			xxxxx	xxxx	xxxxx		18.0	xxxx	xxxxx			
LOS by Move:	*	*	B			*	*	B			*	*	*		C	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:	14.2					11.1					xxxxxx					xxxxxx				
ApproachLOS:	B					B					*					*				

****

Note: Queue reported is the number of cars per lane.

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PM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.562
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 1	0 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	3	1	14	67	1	151	168	1830	5	12	1031	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	1	14	67	1	151	168	1830	5	12	1031	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	1	14	67	1	151	168	1830	5	12	1031	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	1	14	67	1	151	168	1830	5	12	1031	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	1	14	67	1	151	168	1830	5	12	1031	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	1	14	67	1	151	168	1830	5	12	1031	115
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.05	0.78	1.97	0.03	1.00	1.00	2.99	0.01	1.00	3.00	1.00
Final Sat.:	267	89	1244	3153	47	1600	1600	4787	13	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.02	0.02	0.09	0.11	0.38	0.38	0.01	0.21	0.07
OvlAdjV/S:						0.00						
Crit Moves:			****		****			****		****		

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PM Existing Plus Project Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 1	0
Volume Module:												
Base Vol:	97	443	0	0	227	74	0	0	0	66	460	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	443	0	0	227	74	0	0	0	66	460	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	443	0	0	227	74	0	0	0	66	460	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	443	0	0	227	74	0	0	0	66	460	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	443	0	0	227	74	0	0	0	66	460	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	443	0	0	227	74	0	0	0	66	460	78
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.71	0.29
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	2736	464
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.00	0.00	0.07	0.05	0.00	0.00	0.00	0.04	0.17	0.17
Crit Moves:		****										****

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PM Existing Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.336
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	404	10	26	177	0	0	0	0	8	0	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	404	10	26	177	0	0	0	0	8	0	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	404	10	26	177	0	0	0	0	8	0	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	404	10	26	177	0	0	0	0	8	0	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	404	10	26	177	0	0	0	0	8	0	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	404	10	26	177	0	0	0	0	8	0	56
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.95	0.05	1.00	2.00	0.00	0.00	0.00	0.00	0.12	0.00	0.88
Final Sat.:	0	3123	77	1600	3200	0	0	0	0	200	0	1400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.02	0.06	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:		****		****						****		

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APPENDIX B-III

YEAR 2020 CUMULATIVE TRAFFIC CONDITIONS

AM Year 2020 Cumulative Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.523
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	168	67	75	483	0	61	762	436	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	168	67	75	483	0	61	762	436	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	168	67	75	483	0	61	762	436	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	168	67	75	483	0	61	762	436	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	168	67	75	483	0	61	762	436	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	168	67	75	483	0	61	762	436	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.43	0.57	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2288	912	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.05	0.15	0.00	0.04	0.24	0.27	0.00	0.00	0.00
Crit Moves:	****				****				****			

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AM Year 2020 Cumulative Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.450
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1	0 1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	24	23	96	13	0	69	797	7	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	24	23	96	13	0	69	797	7	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	24	23	96	13	0	69	797	7	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	24	23	96	13	0	69	797	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	24	23	96	13	0	69	797	7	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	24	23	96	13	0	69	797	7	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.76	0.24	0.00	1.00	1.98	0.02	0.00	0.00	0.00
Final Sat.:	0	1600	1600	2818	382	0	1600	3172	28	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.02	0.01	0.03	0.03	0.00	0.04	0.25	0.25	0.00	0.00	0.00
Crit Moves:		****		****				****				

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AM Year 2020 Cumulative Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.450
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1	0 1	0	1 0	0 0	1	0 1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	8	5	79	1	0	26	780	4	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	8	5	79	1	0	26	780	4	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	8	5	79	1	0	26	780	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	8	5	79	1	0	26	780	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	8	5	79	1	0	26	780	4	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	8	5	79	1	0	26	780	4	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.99	0.01	0.00	1.00	1.99	0.01	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1580	20	0	1600	3184	16	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.00	0.05	0.05	0.00	0.02	0.24	0.25	0.00	0.00	0.00
Crit Moves:		****			****				****			

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AM Year 2020 Cumulative Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.503
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	182	46	66	390	0	26	588	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	182	46	66	390	0	26	588	150	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	182	46	66	390	0	26	588	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	182	46	66	390	0	26	588	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	182	46	66	390	0	26	588	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	182	46	66	390	0	26	588	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.59	0.41	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	2550	650	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.03	0.04	0.12	0.00	0.02	0.23	0.23	0.00	0.00	0.00
Crit Moves:					****				****			

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AM Year 2020 Cumulative Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.819
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	1	0	1 0 3	0	1
Volume Module:												
Base Vol:	20	24	14	111	105	312	152	673	39	86	1904	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	24	14	111	105	312	152	673	39	86	1904	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	24	14	111	105	312	152	673	39	86	1904	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	24	14	111	105	312	152	673	39	86	1904	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	24	14	111	105	312	152	673	39	86	1904	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	24	14	111	105	312	152	673	39	86	1904	185
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.84	0.16	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4537	263	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.07	0.03	0.20	0.10	0.15	0.15	0.05	0.40	0.12
Crit Moves:	****					****	****				****	

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AM Year 2020 Cumulative Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	0	1	0	0	0	0	0	2	1	0	1	0	3	0	0
Volume Module:																		
Base Vol:	44	0	55	0	0	0	0	702	31	61	2251	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	0	55	0	0	0	0	702	31	61	2251	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	0	55	0	0	0	0	702	31	61	2251	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	0	55	0	0	0	0	702	31	61	2251	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	0	55	0	0	0	0	702	31	61	2251	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	0	55	0	0	0	0	702	31	61	2251	0
Saturation Flow Module:																		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.87	0.13	1.00	3.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	4597	203	1600	4800	0
Capacity Analysis Module:																		
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.15	0.15	0.04	0.47	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #7 Cedar Avenue at Ocean Blvd

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[9.9]

****

Street Name:	Cedar Ave							Ocean Blvd						
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 1	0	0	0	0 0	0	0	2	1 0	1	0	3	0 0
Volume Module:																
Base Vol:	0	0	5		0	0	0		0	778	6		0	2274	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	5		0	0	0		0	778	6		0	2274	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	5		0	0	0		0	778	6		0	2274	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	5		0	0	0		0	778	6		0	2274	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	5		0	0	0		0	778	6		0	2274	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	6.9		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	262		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	742		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	742		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	0.01		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	0.0		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	9.9		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	A		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:		9.9				xxxxxx				xxxxxx				xxxxxx		
ApproachLOS:		A				*				*				*		

****

Note: Queue reported is the number of cars per lane.

****

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AM Year 2020 Cumulative Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	C

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 1	0 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	17	12	17	62	4	279	149	613	6	20	1979	164
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	12	17	62	4	279	149	613	6	20	1979	164
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	12	17	62	4	279	149	613	6	20	1979	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	12	17	62	4	279	149	613	6	20	1979	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	12	17	62	4	279	149	613	6	20	1979	164
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	12	17	62	4	279	149	613	6	20	1979	164
OvlAdjVol:						130						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.37	0.26	0.37	1.88	0.12	1.00	1.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	591	417	591	3006	194	1600	1600	4753	47	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.02	0.02	0.17	0.09	0.13	0.13	0.01	0.41	0.10
OvlAdjV/S:						0.08						
Crit Moves:		****				****	****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 1	0
Volume Module:												
Base Vol:	39	150	0	0	336	99	0	0	0	105	1008	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	150	0	0	336	99	0	0	0	105	1008	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	150	0	0	336	99	0	0	0	105	1008	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	150	0	0	336	99	0	0	0	105	1008	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	150	0	0	336	99	0	0	0	105	1008	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	150	0	0	336	99	0	0	0	105	1008	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.91	0.09
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	3055	145
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.00	0.00	0.11	0.06	0.00	0.00	0.00	0.07	0.33	0.33
Crit Moves:	****				****						****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.313
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	236	16	23	445	0	0	0	0	8	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	236	16	23	445	0	0	0	0	8	0	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	236	16	23	445	0	0	0	0	8	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	236	16	23	445	0	0	0	0	8	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	236	16	23	445	0	0	0	0	8	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	236	16	23	445	0	0	0	0	8	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.87	0.13	1.00	2.00	0.00	0.00	0.00	0.00	0.21	0.00	0.79
Final Sat.:	0	2997	203	1600	3200	0	0	0	0	337	0	1263
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.08	0.01	0.14	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:					****							****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	417	165	58	240	0	72	945	196	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	417	165	58	240	0	72	945	196	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	417	165	58	240	0	72	945	196	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	417	165	58	240	0	72	945	196	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	417	165	58	240	0	72	945	196	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	417	165	58	240	0	72	945	196	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.43	0.57	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2293	907	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.04	0.08	0.00	0.05	0.30	0.12	0.00	0.00	0.00
Crit Moves:		****		****				****				

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PM Year 2020 Cumulative Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	A

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	114	99	63	8	0	54	1107	4	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	114	99	63	8	0	54	1107	4	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	114	99	63	8	0	54	1107	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	114	99	63	8	0	54	1107	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	114	99	63	8	0	54	1107	4	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	114	99	63	8	0	54	1107	4	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.77	0.23	0.00	1.00	1.99	0.01	0.00	0.00	0.00
Final Sat.:	0	1600	1600	2839	361	0	1600	3188	12	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.06	0.02	0.02	0.00	0.03	0.35	0.35	0.00	0.00	0.00
Crit Moves:		****			****				****			

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.568
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1 0	0 0	1	0 1	1 0	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	61	60	23	5	0	24	1161	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	60	23	5	0	24	1161	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	61	60	23	5	0	24	1161	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	60	23	5	0	24	1161	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	60	23	5	0	24	1161	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	60	23	5	0	24	1161	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.82	0.18	0.00	1.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1314	286	0	1600	3200	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.04	0.02	0.02	0.00	0.02	0.36	0.00	0.00	0.00	0.00
Crit Moves:		****		****				****				

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	439	167	96	248	0	97	1101	88	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	439	167	96	248	0	97	1101	88	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	439	167	96	248	0	97	1101	88	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	439	167	96	248	0	97	1101	88	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	439	167	96	248	0	97	1101	88	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	439	167	96	248	0	97	1101	88	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.85	0.15	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	2963	237	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.10	0.06	0.08	0.00	0.06	0.37	0.37	0.00	0.00	0.00
Crit Moves:		****		****				****				

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.773
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	79	50	55	173	70	300	151	1751	48	66	1125	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	50	55	173	70	300	151	1751	48	66	1125	102
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	50	55	173	70	300	151	1751	48	66	1125	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	50	55	173	70	300	151	1751	48	66	1125	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	50	55	173	70	300	151	1751	48	66	1125	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	50	55	173	70	300	151	1751	48	66	1125	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.92	0.08	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4672	128	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.03	0.11	0.02	0.19	0.09	0.37	0.37	0.04	0.23	0.06
Crit Moves:	****					****		****			****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 2	1 0	1	0 3	0 0
Volume Module:												
Base Vol:	34	0	95	0	0	0	0	2021	87	70	1244	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	0	95	0	0	0	0	2021	87	70	1244	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	0	95	0	0	0	0	2021	87	70	1244	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	0	95	0	0	0	0	2021	87	70	1244	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	0	95	0	0	0	0	2021	87	70	1244	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	0	95	0	0	0	0	2021	87	70	1244	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.88	0.12	1.00	3.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	4602	198	1600	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.44	0.44	0.04	0.26	0.00
Crit Moves:			****					****		****		

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #7 Cedar Avenue at Ocean Blvd

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[19.4]

****

Street Name:	Cedar Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	13	0	0	0	0	2107	15	11	1299	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	13	0	0	0	0	2107	15	11	1299	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	13	0	0	0	0	2107	15	11	1299	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	13	0	0	0	0	2107	15	11	1299	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	13	0	0	0	0	2107	15	11	1299	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	710	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2122	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	381	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	261	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	381	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	261	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	19.4	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	C	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	14.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

****

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 1	0	0 1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	11	9	25	118	14	209	184	1905	18	30	1099	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	9	25	118	14	209	184	1905	18	30	1099	129
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	9	25	118	14	209	184	1905	18	30	1099	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	9	25	118	14	209	184	1905	18	30	1099	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	9	25	118	14	209	184	1905	18	30	1099	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	9	25	118	14	209	184	1905	18	30	1099	129
OvlAdjVol:						25						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.20	0.56	1.79	0.21	1.00	1.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	391	320	889	2861	339	1600	1600	4755	45	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.04	0.04	0.13	0.12	0.40	0.40	0.02	0.23	0.08
OvlAdjV/S:						0.02						
Crit Moves:	****			****				****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 1	0
Volume Module:												
Base Vol:	102	449	0	0	280	45	0	0	0	69	439	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	449	0	0	280	45	0	0	0	69	439	87
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	449	0	0	280	45	0	0	0	69	439	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	449	0	0	280	45	0	0	0	69	439	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	449	0	0	280	45	0	0	0	69	439	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	449	0	0	280	45	0	0	0	69	439	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.67	0.33
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	2671	529
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.00	0.00	0.09	0.03	0.00	0.00	0.00	0.04	0.16	0.16
Crit Moves:	****				****						****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.352
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	448	11	27	297	0	0	0	0	8	0	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	448	11	27	297	0	0	0	0	8	0	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	448	11	27	297	0	0	0	0	8	0	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	448	11	27	297	0	0	0	0	8	0	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	448	11	27	297	0	0	0	0	8	0	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	448	11	27	297	0	0	0	0	8	0	59
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.95	0.05	1.00	2.00	0.00	0.00	0.00	0.00	0.12	0.00	0.88
Final Sat.:	0	3123	77	1600	3200	0	0	0	0	191	0	1409
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.02	0.09	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:		****		****								****

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APPENDIX B-IV

YEAR 2020 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	182	45	77	565	0	61	841	538	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	182	45	77	565	0	61	841	538	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	182	45	77	565	0	61	841	538	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	182	45	77	565	0	61	841	538	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	182	45	77	565	0	61	841	538	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	182	45	77	565	0	61	841	538	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.60	0.40	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2566	634	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.05	0.18	0.00	0.04	0.26	0.34	0.00	0.00	0.00
Crit Moves:	****				****				****			

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AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.644
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	B

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1	0 1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	89	100	190	63	0	69	1046	83	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	89	100	190	63	0	69	1046	83	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	89	100	190	63	0	69	1046	83	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	89	100	190	63	0	69	1046	83	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	89	100	190	63	0	69	1046	83	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	89	100	190	63	0	69	1046	83	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.50	0.50	0.00	1.00	1.85	0.15	0.00	0.00	0.00
Final Sat.:	0	1600	1600	2403	797	0	1600	2965	235	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.08	0.08	0.00	0.04	0.35	0.35	0.00	0.00	0.00
Crit Moves:			****		****			****				

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AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1	0 0 0	1	0 1	1 0	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	89	82	105	59	0	32	840	93	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	89	82	105	59	0	32	840	93	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	89	82	105	59	0	32	840	93	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	89	82	105	59	0	32	840	93	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	89	82	105	59	0	32	840	93	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	89	82	105	59	0	32	840	93	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.64	0.36	0.00	1.00	1.80	0.20	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1024	576	0	1600	2881	319	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.05	0.10	0.10	0.00	0.02	0.29	0.29	0.00	0.00	0.00
Crit Moves:		****		****					****			

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AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.527
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	A

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	182	46	66	390	0	62	658	159	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	182	46	66	390	0	62	658	159	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	182	46	66	390	0	62	658	159	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	182	46	66	390	0	62	658	159	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	182	46	66	390	0	62	658	159	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	182	46	66	390	0	62	658	159	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.61	0.39	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	2577	623	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.03	0.04	0.12	0.00	0.04	0.26	0.26	0.00	0.00	0.00
Crit Moves:					****			****				

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AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	20	28	14	114	106	317	171	673	39	88	1914	165
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	28	14	114	106	317	171	673	39	88	1914	165
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	28	14	114	106	317	171	673	39	88	1914	165
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	28	14	114	106	317	171	673	39	88	1914	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	28	14	114	106	317	171	673	39	88	1914	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	28	14	114	106	317	171	673	39	88	1914	165
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.84	0.16	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4537	263	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.07	0.03	0.20	0.11	0.15	0.15	0.06	0.40	0.10
Crit Moves:	****					****	****				****	

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AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0	1! 0	0	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	44	0	55	15	0	8	0	705	31	61	2235	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	0	55	15	0	8	0	705	31	61	2235	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	0	55	15	0	8	0	705	31	61	2235	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	0	55	15	0	8	0	705	31	61	2235	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	0	55	15	0	8	0	705	31	61	2235	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	0	55	15	0	8	0	705	31	61	2235	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.65	0.00	0.35	0.00	2.87	0.13	1.00	2.94	0.06
Final Sat.:	1600	0	1600	1043	0	557	0	4598	202	1600	4709	91
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.01	0.00	0.01	0.00	0.15	0.15	0.04	0.47	0.47
Crit Moves:			****	****			****				****	

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Cedar Avenue at Ocean Blvd

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.7]

Street Name:	Cedar Ave									Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled					
Rights:	Include			Include			Include			Include					
Lanes:	0	0 0	0 1	0	0 0	0 1	0	0 2	1 0	1	0 2	1 0			
Volume Module:															
Base Vol:	0	0	5	0	0	10	0	796	6	0	2291	17			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	0	0	5	0	0	10	0	796	6	0	2291	17			
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	0	0	5	0	0	10	0	796	6	0	2291	17			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	0	0	5	0	0	10	0	796	6	0	2291	17			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	0	0	5	0	0	10	0	796	6	0	2291	17			
Critical Gap Module:															
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:															
Cnflict Vol:	xxxx	xxxx	268	xxxx	xxxx	772	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	736	xxxx	xxxx	347	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	736	xxxx	xxxx	347	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.01	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			
Level Of Service Module:															
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	9.9	xxxxx	xxxx	15.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	A	*	*	C	*	*	*	*	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	9.9			15.7			xxxxxx			xxxxxx					
ApproachLOS:	A			C			*			*					

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	C

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	1 0	0	1	1	0	2	1 0
Volume Module:												
Base Vol:	17	12	17	76	4	274	149	631	6	20	2019	164
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	12	17	76	4	274	149	631	6	20	2019	164
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	12	17	76	4	274	149	631	6	20	2019	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	12	17	76	4	274	149	631	6	20	2019	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	12	17	76	4	274	149	631	6	20	2019	164
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	12	17	76	4	274	149	631	6	20	2019	164
OvlAdjVol:						125						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.37	0.26	0.37	1.90	0.10	1.00	1.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	591	417	591	3040	160	1600	1600	4755	45	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.03	0.17	0.09	0.13	0.13	0.01	0.42	0.10
OvlAdjV/S:						0.08						
Crit Moves:		****				****	****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	B

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 1	0
Volume Module:												
Base Vol:	39	186	0	0	336	146	0	0	0	105	1100	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	186	0	0	336	146	0	0	0	105	1100	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	186	0	0	336	146	0	0	0	105	1100	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	186	0	0	336	146	0	0	0	105	1100	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	186	0	0	336	146	0	0	0	105	1100	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	186	0	0	336	146	0	0	0	105	1100	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.92	0.08
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	3066	134
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.00	0.00	0.11	0.09	0.00	0.00	0.00	0.07	0.36	0.36
Crit Moves:	****				****						****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.316
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	236	16	23	454	0	0	0	0	8	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	236	16	23	454	0	0	0	0	8	0	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	236	16	23	454	0	0	0	0	8	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	236	16	23	454	0	0	0	0	8	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	236	16	23	454	0	0	0	0	8	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	236	16	23	454	0	0	0	0	8	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.87	0.13	1.00	2.00	0.00	0.00	0.00	0.00	0.21	0.00	0.79
Final Sat.:	0	2997	203	1600	3200	0	0	0	0	337	0	1263
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.08	0.01	0.14	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:					****							****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Magnolia Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Street Name:	Magnolia Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	2 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	505	196	61	256	0	72	1046	214	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	505	196	61	256	0	72	1046	214	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	505	196	61	256	0	72	1046	214	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	505	196	61	256	0	72	1046	214	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	505	196	61	256	0	72	1046	214	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	505	196	61	256	0	72	1046	214	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.44	0.56	1.00	2.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2305	895	1600	3200	0	1600	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.04	0.08	0.00	0.05	0.33	0.13	0.00	0.00	0.00
Crit Moves:		****		****				****				

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Chestnut Ave at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.884
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	102	Level Of Service:	D

Street Name:	Chestnut Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	328	261	79	81	0	54	1416	115	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	328	261	79	81	0	54	1416	115	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	328	261	79	81	0	54	1416	115	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	328	261	79	81	0	54	1416	115	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	328	261	79	81	0	54	1416	115	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	328	261	79	81	0	54	1416	115	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.85	0.15	0.00	0.00	0.00
Final Sat.:	0	1600	1600	1600	1600	0	1600	2960	240	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.16	0.05	0.05	0.00	0.03	0.48	0.48	0.00	0.00	0.00
Crit Moves:		****			****				****			

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Cedar Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Cedar Ave						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1 0	0 0	1 0	1	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	216	208	35	130	0	53	1384	190	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	216	208	35	130	0	53	1384	190	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	216	208	35	130	0	53	1384	190	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	216	208	35	130	0	53	1384	190	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	216	208	35	130	0	53	1384	190	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	216	208	35	130	0	53	1384	190	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.21	0.79	0.00	1.00	1.76	0.24	0.00	0.00	0.00
Final Sat.:	0	1600	1600	339	1261	0	1600	2814	386	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.13	0.10	0.10	0.00	0.03	0.49	0.49	0.00	0.00	0.00
Crit Moves:		****			****				****			

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pacific Avenue at Broadway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Street Name:	Pacific Avenue						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	439	167	96	248	0	135	1174	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	439	167	96	248	0	135	1174	15	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	439	167	96	248	0	135	1174	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	439	167	96	248	0	135	1174	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	439	167	96	248	0	135	1174	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	439	167	96	248	0	135	1174	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.97	0.03	0.00	0.00	0.00
Final Sat.:	0	3200	1600	1600	3200	0	1600	3160	40	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.10	0.06	0.08	0.00	0.08	0.37	0.37	0.00	0.00	0.00
Crit Moves:		****		****				****				

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Magnolia Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	12	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	C

Street Name:	Magnolia Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	79	53	55	192	72	310	164	1751	48	66	1130	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	53	55	192	72	310	164	1751	48	66	1130	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	53	55	192	72	310	164	1751	48	66	1130	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	53	55	192	72	310	164	1751	48	66	1130	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	53	55	192	72	310	164	1751	48	66	1130	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	53	55	192	72	310	164	1751	48	66	1130	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.92	0.08	1.00	3.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4672	128	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.03	0.12	0.02	0.19	0.10	0.37	0.37	0.04	0.24	0.04
Crit Moves:	****					****		****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Chestnut Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Street Name:	Chestnut Avenue						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0	1! 0	0	0	2 1 0	1	0	2 1 0
Volume Module:												
Base Vol:	34	0	95	47	0	26	0	2040	87	70	1181	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	0	95	47	0	26	0	2040	87	70	1181	27
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	0	95	47	0	26	0	2040	87	70	1181	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	0	95	47	0	26	0	2040	87	70	1181	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	0	95	47	0	26	0	2040	87	70	1181	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	0	95	47	0	26	0	2040	87	70	1181	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.64	0.00	0.36	0.00	2.88	0.12	1.00	2.93	0.07
Final Sat.:	1600	0	1600	1030	0	570	0	4604	196	1600	4693	107
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.05	0.00	0.05	0.00	0.44	0.44	0.04	0.25	0.25
Crit Moves:			****			****		****		****		

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Cedar Avenue at Ocean Blvd

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[20.3]

Street Name:	Cedar Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 1			0 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	13	0	0	19	0	2173	15	11	1244	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	13	0	0	19	0	2173	15	11	1244	37
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	13	0	0	19	0	2173	15	11	1244	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	13	0	0	19	0	2173	15	11	1244	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	13	0	0	19	0	2173	15	11	1244	37
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	732	xxxx	xxxx	433	xxxx	xxxx	xxxxx	2188	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	368	xxxx	xxxx	576	xxxx	xxxx	xxxxx	246	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	368	xxxx	xxxx	576	xxxx	xxxx	xxxxx	246	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.04	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	15.1	xxxxx	xxxx	11.5	xxxxx	xxxx	xxxxx	20.3	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	B	*	*	*	C	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.1			11.5			xxxxxx			xxxxxx		
ApproachLOS:	C			B			*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pacific Avenue at Ocean Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	14	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Street Name:	Pacific Ave						Ocean Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 1	0	0 1	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	11	9	25	85	14	169	184	1971	18	30	1121	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	9	25	85	14	169	184	1971	18	30	1121	129
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	9	25	85	14	169	184	1971	18	30	1121	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	9	25	85	14	169	184	1971	18	30	1121	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	9	25	85	14	169	184	1971	18	30	1121	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	9	25	85	14	169	184	1971	18	30	1121	129
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.20	0.56	1.72	0.28	1.00	1.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	391	320	889	2747	453	1600	1600	4757	43	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.03	0.11	0.12	0.41	0.41	0.02	0.23	0.08
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Pacific Ave at 3rd Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Street Name:	Pacific Ave						3rd Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 2	0 1	0	0 0	0 0	1	0 1	1 0
Volume Module:												
Base Vol:	102	487	0	0	280	76	0	0	0	69	503	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	487	0	0	280	76	0	0	0	69	503	87
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	487	0	0	280	76	0	0	0	69	503	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	487	0	0	280	76	0	0	0	69	503	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	487	0	0	280	76	0	0	0	69	503	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	487	0	0	280	76	0	0	0	69	503	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.71	0.29
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	2728	472
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.00	0.00	0.09	0.05	0.00	0.00	0.00	0.04	0.18	0.18
Crit Moves:	****				****						****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Pacific Avenue at 1st Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.352
Loss Time (sec):	15	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Street Name:	Pacific Ave						1st Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	448	11	27	224	0	0	0	0	8	0	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	448	11	27	224	0	0	0	0	8	0	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	448	11	27	224	0	0	0	0	8	0	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	448	11	27	224	0	0	0	0	8	0	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	448	11	27	224	0	0	0	0	8	0	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	448	11	27	224	0	0	0	0	8	0	59
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.95	0.05	1.00	2.00	0.00	0.00	0.00	0.00	0.12	0.00	0.88
Final Sat.:	0	3123	77	1600	3200	0	0	0	0	191	0	1409
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.02	0.07	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:		****		****								****

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APPENDIX C

PROJECT DRIVEWAY HCM/LOS CALCULATION WORKSHEETS

APPENDIX C-I

YEAR 2020 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Cedar Ave at Dwy A

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: A[9.7]

Street Name:	Cedar Ave						Dwy A					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	116	6	5	138	0	0	0	0	26	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	116	6	5	138	0	0	0	0	26	0	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	116	6	5	138	0	0	0	0	26	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	116	6	5	138	0	0	0	0	26	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	116	6	5	138	0	0	0	0	26	0	30
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	122	xxxx	xxxxx	xxxx	xxxx	xxxxx	267	267	119
Potent Cap.:	xxxx	xxxx	xxxxx	1478	xxxx	xxxxx	xxxx	xxxx	xxxxx	727	642	938
Move Cap.:	xxxx	xxxx	xxxxx	1478	xxxx	xxxxx	xxxx	xxxx	xxxxx	725	640	938
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	825	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.7		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

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AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Dwy B at Broadway

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Dwy B						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 0	0 0		0 0 2	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	966	264	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	966	264	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	966	264	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	966	264	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	966	264	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

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AM Year 2020 Cumulative Plus Project Traffic Conditions
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 Chestnut Ave at Dwy C

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[9.0]

Street Name:	Chestnut Ave						Dwy C					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 1	0	0	0 0 0	0	0	0 0 1!	0	1
Volume Module:												
Base Vol:	0	112	0	0	125	0	0	0	0	6	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	112	0	0	125	0	0	0	0	6	0	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	112	0	0	125	0	0	0	0	6	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	112	0	0	125	0	0	0	0	6	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	112	0	0	125	0	0	0	0	6	0	30
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	237	237	112
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	756	667	947
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	756	667	947
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.03
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	A
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	883	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.0		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Chestnut Ave at Dwy D

Average Delay (sec/veh): 6.8 Worst Case Level Of Service: A[9.2]

Street Name:	Chestnut Ave									Dwy D					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	28	15	125	6	0	0	0	0	17	0	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	28	15	125	6	0	0	0	0	17	0	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	28	15	125	6	0	0	0	0	17	0	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	28	15	125	6	0	0	0	0	17	0	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	28	15	125	6	0	0	0	0	17	0	84
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	43	xxxx	xxxxx	xxxx	xxxx	xxxxx	292	292	36
Potent Cap.:	xxxx	xxxx	xxxxx	1579	xxxx	xxxxx	xxxx	xxxx	xxxxx	703	622	1043
Move Cap.:	xxxx	xxxx	xxxxx	1579	xxxx	xxxxx	xxxx	xxxx	xxxxx	658	569	1043
Volume/Cap:	xxxx	xxxx	xxxx	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.08
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	949	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.2		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

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AM Year 2020 Cumulative Plus Project Traffic Conditions
2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Cedar Ave at Dwy E

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: A[9.4]

Street Name:	Cedar Ave						Dwy E					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 0		0 0 0 0 1			0 0 1! 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	17	0	0	0	0	147	158	0	10	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	0	0	0	0	147	158	0	10	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	0	0	0	0	147	158	0	10	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	0	0	0	0	147	158	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	0	0	0	0	147	158	0	10	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	147	xxxx	xxxxx	xxxx	xxxx	xxxxx	34	34	0	xxxx	xxxx	xxxxx
Potent Cap.:	1447	xxxx	xxxxx	xxxx	xxxx	xxxxx	984	863	1091	xxxx	xxxx	xxxxx
Move Cap.:	1447	xxxx	xxxxx	xxxx	xxxx	xxxxx	976	852	1091	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.16	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	982	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.4			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

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2-15-3567-1 New Long Beach Civic Center, Long Beach

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Magnolia Ave at Dwy F

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[12.0]

Street Name:	Magnolia Ave						Dwy F					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 1!	0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	0 396	36		180 531	0		2	0	8	5	0	25
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 396	36		180 531	0		2	0	8	5	0	25
Added Vol:	0 0	0		0 0	0		0	0	0	0	0	0
PasserByVol:	0 0	0		0 0	0		0	0	0	0	0	0
Initial Fut:	0 396	36		180 531	0		2	0	8	5	0	25
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0 396	36		180 531	0		2	0	8	5	0	25
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
FinalVolume:	0 396	36		180 531	0		2	0	8	5	0	25
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx		4.1 xxxx	xxxxx		7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	xxxxx xxxx	xxxxx		2.2 xxxx	xxxxx		3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx		432 xxxx	xxxxx		1089	1323	266	1040	1305	216
Potent Cap.:	xxxx xxxx	xxxxx		1138 xxxx	xxxxx		172	158	739	187	162	795
Move Cap.:	xxxx xxxx	xxxxx		1138 xxxx	xxxxx		147	133	739	163	136	795
Total Cap:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		241	258	xxxxx	324	276	xxxxx
Volume/Cap:	xxxx xxxx	xxxx		0.16 xxxx	xxxx		0.01	0.00	0.01	0.02	0.00	0.03
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx		0.6 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx		8.8 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	* *	*		A *	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	522	xxxxx	xxxx	640	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	12.0	xxxxx	xxxxx	10.9	xxxxx
Shared LOS:	* *	*		* *	*		*	B	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			12.0			10.9		
ApproachLOS:	*			*			B			B		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Cedar Ave at Dwy A

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[10.7]

Street Name:	Cedar Ave									Dwy A					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	240	29	24	153	0	0	0	0	12	0	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	240	29	24	153	0	0	0	0	12	0	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	240	29	24	153	0	0	0	0	12	0	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	240	29	24	153	0	0	0	0	12	0	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	240	29	24	153	0	0	0	0	12	0	14
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	269	xxxx	xxxxx	xxxx	xxxx	xxxxx	456	456	255
Potent Cap.:	xxxx	xxxx	xxxxx	1306	xxxx	xxxxx	xxxx	xxxx	xxxxx	566	504	789
Move Cap.:	xxxx	xxxx	xxxxx	1306	xxxx	xxxxx	xxxx	xxxx	xxxxx	558	495	789
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.02
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	663	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.7		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Dwy B at Broadway

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Dwy B						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0 0	0 0	0	0 0 2	0 1		0 0 0	0 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	1627	46	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	1627	46	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	1627	46	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	1627	46	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	1627	46	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

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2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 Chestnut Ave at Dwy C

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: B[10.2]

Street Name:	Chestnut Ave						Dwy C					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 1	0	0	0 0 0	0	0	0 0 1!	0	1
Volume Module:												
Base Vol:	0	190	0	0	183	0	0	0	0	37	0	187
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	190	0	0	183	0	0	0	0	37	0	187
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	190	0	0	183	0	0	0	0	37	0	187
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	190	0	0	183	0	0	0	0	37	0	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	190	0	0	183	0	0	0	0	37	0	187
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	373	373	190
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	632	561	857
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	632	561	857
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.22
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.4
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	778	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.2		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #14 Chestnut Ave at Dwy D

****

Average Delay (sec/veh): 7.7 Worst Case Level Of Service: B[10.1]

****

Street Name:	Chestnut Ave						Dwy D					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	5	22	183	37	0	0	0	0	36	0	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	5	22	183	37	0	0	0	0	36	0	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	5	22	183	37	0	0	0	0	36	0	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	5	22	183	37	0	0	0	0	36	0	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	5	22	183	37	0	0	0	0	36	0	185
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	27	xxxx	xxxxx	xxxx	xxxx	xxxxx	419	419	16
Potent Cap.:	xxxx	xxxx	xxxxx	1600	xxxx	xxxxx	xxxx	xxxx	xxxxx	595	528	1069
Move Cap.:	xxxx	xxxx	xxxxx	1600	xxxx	xxxxx	xxxx	xxxx	xxxxx	537	461	1069
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.17
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	920	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.1		
ApproachLOS:	*			*			*			B		

****

Note: Queue reported is the number of cars per lane.

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2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Cedar Ave at Dwy E

Average Delay (sec/veh): 5.7 Worst Case Level Of Service: B[11.0]

Street Name:	Cedar Ave						Dwy E					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 0		0 0 0 0 1			0 0 1! 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	37	0	0	0	0	314	303	0	19	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	0	0	0	0	314	303	0	19	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	0	0	0	0	314	303	0	19	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	0	0	0	0	314	303	0	19	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	37	0	0	0	0	314	303	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	314	xxxx	xxxxx	xxxx	xxxx	xxxxx	74	74	0	xxxx	xxxx	xxxxx
Potent Cap.:	1258	xxxx	xxxxx	xxxx	xxxx	xxxxx	935	820	1091	xxxx	xxxx	xxxxx
Move Cap.:	1258	xxxx	xxxxx	xxxx	xxxx	xxxxx	914	796	1091	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.33	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	922	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.0			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Magnolia Ave at Dwy F

Average Delay (sec/veh): 6.1 Worst Case Level Of Service: C[21.4]

Street Name:	Magnolia Ave						Dwy F					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 1!	0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	0 342	6		32 545	0		150	0	140	30	0	153
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 342	6		32 545	0		150	0	140	30	0	153
Added Vol:	0 0	0		0 0	0		0	0	0	0	0	0
PasserByVol:	0 0	0		0 0	0		0	0	0	0	0	0
Initial Fut:	0 342	6		32 545	0		150	0	140	30	0	153
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0 342	6		32 545	0		150	0	140	30	0	153
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
FinalVolume:	0 342	6		32 545	0		150	0	140	30	0	153
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx		4.1 xxxx	xxxxx		7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	xxxxx xxxx	xxxxx		2.2 xxxx	xxxxx		3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx		348 xxxx	xxxxx		780	957	273	682	954	174
Potent Cap.:	xxxx xxxx	xxxxx		1222 xxxx	xxxxx		289	260	731	340	261	846
Move Cap.:	xxxx xxxx	xxxxx		1222 xxxx	xxxxx		232	253	731	269	254	846
Total Cap:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		390	410	xxxxx	443	415	xxxxx
Volume/Cap:	xxxx xxxx	xxxx		0.03 xxxx	xxxx		0.38	0.00	0.19	0.07	0.00	0.18
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx		0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx		8.0 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	* *	*		A *	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	503	xxxxx	xxxx	736	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	3.6	xxxxx	xxxxx	1.0	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	21.4	xxxxx	xxxxx	11.5	xxxxx
Shared LOS:	* *	*		* *	*		*	C	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			21.4			11.5		
ApproachLOS:	*			*			C			B		

Note: Queue reported is the number of cars per lane.

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