

Phase II Long Beach Airport Terminal Area Improvements Project

Addendum to Final Environmental Impact Report 37-03

(State Clearinghouse No. 200309112)

Prepared for | City of Long Beach
Long Beach Airport
4100 East Donald Douglas Drive
Long Beach, California 90806

Prepared by | Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707

March 2018

Phase II Long Beach Airport Terminal Improvements

**Addendum to Final Environmental Impact Report 37-03
(State Clearinghouse No. 200309112)**

Long Beach Airport Terminal Area Improvements Project

Prepared for:

City of Long Beach
Long Beach Airport
4100 East Donald Douglas Drive
Long Beach, California 90806

Prepared by:

Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707

March 2018

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
Section 1.0	Purpose of Addendum.....	1-1
1.1	Overview	1-1
1.2	Use of an Addendum.....	1-2
Section 2.0	Environmental Setting and Project Background	2-1
2.1	Environmental Setting	2-1
2.2	Regulatory Setting	2-1
2.3	Project History	2-2
2.3.1	<i>Background</i>	<i>2-2</i>
2.3.2	<i>Project Scoping.....</i>	<i>2-2</i>
2.3.3	<i>Environmental Impact Report 37-03.....</i>	<i>2-3</i>
2.3.4	<i>Project Approval</i>	<i>2-4</i>
2.3.5	<i>Implementation of Improvements</i>	<i>2-7</i>
Section 3.0	Project Description	3-1
3.1	Project Description	3-1
3.1.1	<i>Ticketing Facilities/Airlines Operation Offices.....</i>	<i>3-2</i>
3.1.2	<i>Outbound Baggage Make-Up Carousel</i>	<i>3-3</i>
3.1.3	<i>Transportation Security Administration Baggage Security Screening</i>	<i>3-3</i>
3.1.4	<i>Baggage Claim</i>	<i>3-4</i>
3.1.5	<i>Landside (Pre-Security) Restrooms</i>	<i>3-4</i>
3.1.6	<i>Landside (Pre-Security) Concessions</i>	<i>3-5</i>
3.1.7	<i>Meeter/Greeter Courtyard and Historic Terminal.....</i>	<i>3-5</i>
3.1.8	<i>Rental Car Facilities.....</i>	<i>3-6</i>
3.1.9	<i>Ground Transportation Plaza.....</i>	<i>3-7</i>
3.1.10	<i>Curbfront and Sidewalk Improvements</i>	<i>3-7</i>
3.2	Phase II Implementation Phasing	3-8
3.3	Project Modifications Since Certification of FEIR 37-03	3-8
3.4	Intended Uses of this Addendum.....	3-12
Section 4.0	Environmental Analysis	4-1
4.1	Aesthetics.....	4-1
4.2	Agriculture and Forestry Resources	4-5
4.3	Air Quality.....	4-5
4.4	Biological Resources	4-19
4.5	Cultural Resources.....	4-20
4.6	Geology and Soils	4-24
4.7	Greenhouse Gas Emissions	4-25
4.8	Hazards and Hazardous Materials.....	4-28

4.9	Hydrology and Water Quality.....	4-32
4.10	Land Use and Planning	4-33
4.11	Mineral Resources	4-35
4.12	Noise.....	4-36
4.13	Population and Housing	4-37
4.14	Public Services.....	4-38
4.15	Recreation.....	4-40
4.16	Transportation/Traffic	4-41
4.17	Tribal Cultural Resources	4-43
4.18	Utilities and Service Systems	4-44
4.19	Mandatory Findings of Significance	4-45
Section 5.0	Conclusions	5-1
Section 6.0	Report Preparers and Contributors	6-1
Section 7.0	References	7-1

TABLES

<u>Table</u>		<u>Page</u>
1	Terminal Area Space Allocation by Use Evaluated in FEIR 37-03 and City Council Approvals	2-5
2	Long Beach Airport Terminal Area Improvements Program Space Allocation.....	2-7
3	Long Beach Airport Space Allocation by Phase.....	3-2
4	Space Allocation Above the City Council April 2007 Adjusted Space Allocation	3-9
5	Terminal Area Space Allocation By Use	3-10
6	South Coast Air Quality Management District Air Quality Significance Thresholds	4-7
7	Estimated Maximum Daily Regional Construction Emissions	4-8
8	Construction Phase Localized Significance Threshold Emissions.....	4-9
9	Peak Daily Operational Emissions for Full buildout.....	4-10
10	Operations Phase Localized Significance Threshold Emissions	4-10
11	Construction-Related Greenhouse Gas Emissions.....	4-27
12	Project-Related Greenhouse Gas Emissions.....	4-27

EXHIBITS

<u>Exhibit</u>	<u>Follows Page</u>
1	Aerial Photograph of Existing Terminal Area Facilities..... 2-1
2	Proposed Phase II Terminal Area Improvements 3-1
3	Proposed Improvements and Demolition in Terminal Area 3-1
4	Proposed Terminal Area Improvements 3-1
5	Concept Floor Plan from FEIR 37-03..... 3-3
6	View Simulation of Proposed Ticketing Facility and Passenger Security Screening 4-2
7	View Simulation of Proposed Concessions Building and Consolidated Baggage Claim 4-2
8	View Simulation of Consolidated Baggage Claim and Meeter/Greeter Courtyard 4-2
9	View Simulation of the West View of the Historic Terminal Building..... 4-3
10	View Simulation Looking South West of the Historic Terminal Building..... 4-3

ATTACHMENTS

- A Mitigation Monitoring and Reporting Program
- B April 24, 2007 Recommendation to the Honorable Mayor and City Council from
Christina F. Andersen, Director of Public Works
- C CalEEMod Computer Output for Air Quality and Greenhouse Gas Emissions

This page intentionally left blank

SECTION 1.0 PURPOSE OF ADDENDUM

1.1 OVERVIEW

In 2006, the City of Long Beach prepared the *Long Beach Airport Terminal Area Improvement Project Final Environmental Impact Report No. 37-03* (State Clearinghouse No. 2003091112) (hereinafter referred to as “FEIR” or “FEIR 37-03”) pursuant to the requirements of the California Environmental Quality Act (CEQA) (Sections 21000, et seq. of the *California Public Resources Code*). The Long Beach City Council certified the document on June 20, 2006, with the adoption of Resolution No. Res-06-0056 (City of Long Beach 2006a, 2006b).

The EIR was prepared consistent with Section 15161 of the State CEQA Guidelines (Title 14 *California Code of Regulations* Sections 15000, et seq.) and addressed all phases of the project. FEIR 37-03 addressed multiple improvements to the Long Beach Airport (hereinafter referred to as “Airport” or “LGB”) terminal and ramp area. The FEIR identified that improvements would be phased based on service priorities and funding availability (Section 2.6, page 2-17).¹ To date, only the first phase of improvements have been implemented.

Section 15162 of the State CEQA Guidelines, states:

- (a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
 - (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
 - (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the

¹ Though not identified as a Program EIR, FEIR 37-03 identified that the phasing of the terminal area improvements would be based on availability of funding and service priorities. Construction was to be phased in an effort to minimize impacts to operations at the Airport. In *Citizens for a Sustainable Treasure Island v. City and County of San Francisco, et al.*, the courts found that “All EIRs must cover the same general content (CEQA Guidelines, §§15120–15232), and that the level of specificity of an EIR is determined by the nature of the project and the ‘rule of reason,’ rather than any semantic label accorded to the EIR”. Citing *California Oak Foundation v. Regents of University of California* (2010), the decision indicated that the fact that an “EIR is labeled a “project” rather than a “program” EIR matters little . . . for purposes of its sufficiency as an informative document”. The question, therefore, as reframed by the court, is not whether a program EIR should have been prepared for the Project, but instead, whether the EIR that was prepared addressed the environmental impacts of the Project to a degree of specificity consistent with the underlying activity being approved through the EIR. In certifying FEIR 37-03, the Long Beach City Council found that the EIR adequately addressed the impacts of the improvements proposed, which were identified as being phased improvements. The courts upheld FEIR 37-03 as being adequate for the Terminal Area improvements.

previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

- (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.
- (b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.
- (c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.
- (d) A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.

1.2 USE OF AN ADDENDUM

The Airport is proposing improvements, which would mostly complete the level of development approved in conjunction with the certification of FEIR 37-03. These improvements have been identified as "the Project" or the Phase II LGB Terminal Area Improvements. Based on the evaluation of the proposed Phase II LGB Terminal Area Improvements, in light of the provisions in Section 15162 of the State CEQA Guidelines, preparation of an Addendum to FEIR 37-03 is appropriate. Section 15164(a) of the State CEQA Guidelines states that "the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred".

The FEIR evaluated 102,850 square feet of terminal facilities and up to 14 aircraft parking positions. However, when certifying FEIR 37-03, the City Council initially approved 97,545 square

feet of terminal improvements with a maximum of 12 aircraft parking positions together with a 4,000-space vehicle parking structure. Subsequently in April 2007, the City Council provided staff with further direction for an adjusted space allocation for the terminal area improvements. The proposed Project is within the scope of improvements evaluated in FEIR 37-03, as well as the 89,995 square feet cap provided as part of the City Council adjusted space allocation. This is further discussed below.

The purpose of this Addendum is to analyze the potential differences between the impacts evaluated in FEIR 37-03 and those that would be associated with the development of the currently proposed Phase II Terminal Area Improvements. The improvements identified as part of the Project are discussed in Section 3.0 of this Addendum. As the CEQA lead agency, it is beneficial for the City of Long Beach to document the minor changes to the Project through the use of an Addendum to ensure a complete and updated record of all actions is maintained.

As described in detail herein, there are no new significant impacts resulting from the proposed changes, nor would there be any substantial increase in the severity of any previously identified environmental impacts. The potential impacts associated with these proposed changes would either be the same or less than the anticipated levels described in the approved FEIR 37-03. In addition, there are no substantial changes to the circumstances under which the proposed improvements would be undertaken. Therefore, in accordance with Section 15164 of the State CEQA Guidelines, this Addendum to the previously approved FEIR 37-03 serves as the appropriate environmental documentation for construction-level approvals associated with development of the Phase II LGB Terminal Area Improvements. In taking action on any of the approvals outlined in Section 3.0, Project Description, the decision-making body must consider the whole of the data presented in FEIR 37-03 and this Addendum. The FEIR includes the Findings of Fact and Statement of Overriding Considerations and Mitigation Monitoring and Reporting Program (MMRP) approved by the City Council in 2006 (City of Long Beach 2006c).

Section 2.0 of this Addendum provides information on environmental setting and background on the Terminal Area Improvements Project and FEIR 37-03. Section 3.0 provides a description of the proposed improvements associated with the Project. Section 4.0 presents an environmental analysis of the proposed Project. The current CEQA Environmental Checklist questions, contained in the State CEQA Guidelines (Appendix G) have been used as the basis for the analysis in this Addendum. It should be noted that the Environmental Checklist has been updated since FEIR 37-03 was certified.

This evaluation assumes implementation of applicable project design features, standard conditions, and mitigation measures from FEIR 37-03. To support this analysis, the Mitigation Monitoring and Reporting Program (MMRP) approved in conjunction with the certification of FEIR 37-03 is provided in Attachment A of this Addendum. Some of the measures in the MMRP apply only to specific improvements addressed as part of FEIR 37-03. For example, there are measures that are specific to the design of the air carrier ramp. These measures would not be applicable to the proposed Phase II Terminal Area Improvements because no modifications to the air carrier ramp are proposed. The elements of the MMRP adopted as part of the FEIR 37-03 that were found not to be for the applicable to the Project have been shown in light gray font. This allows the reader to see all the mitigation measures even if they have been determined to not be applicable. The analysis in Section 4.0 provides the rationale as to why certain measures were deemed not to be applicable to the Project.

This page intentionally left blank

SECTION 2.0 ENVIRONMENTAL SETTING AND PROJECT BACKGROUND

2.1 ENVIRONMENTAL SETTING

Presently, the Airport covers 1,166 acres and has three runways, the longest being 10,000 feet. The Airport serves commercial carriers, general aviation, and air cargo. The area surrounding the Airport is a mix of commercial, industrial and residential development. I-405 and several arterials surround the Airport; however, public access to the terminal area is gained only from Lakewood Boulevard at Donald Douglas Drive on the east side of the Airport.

FEIR 37-03 evaluated the construction of improvements between the Gulfstream building and the Million Air lease site on the Airport. Uses in this area at the time FEIR 37-03 was approved included the Historic Terminal Building, a permanent holdroom, temporary holdrooms, security screening of passengers and baggage, a baggage claim area, a parking structure, and surface parking facilities. On the airfield side, uses include aircraft parking positions for the commercial and commuter carriers and a general aviation tie-down area on the Million Air site. In addition, the project as addressed in FEIR 37-03 also provided for the use of Parcel O for possible temporary vehicular parking and for replacement tie-downs for general aviation aircraft that would be displaced by improvements addressed as part of the original 2006 approvals. Parcel O is located on the southern portion of the Airport in the vicinity of Clark Avenue and Willow Street.

Phase I improvements have been implemented, which included the construction of an additional parking structure with an adjoining surface lot; a new passenger concourse with consolidated passenger screening; and a new aircraft parking ramp. The concourse opened to the public on December 12, 2012. Parcel O remains undeveloped and no improvements are proposed for this location. Exhibit 1 provides an Aerial Photograph of Existing Terminal Area Facilities. The area identified in FEIR 37-03 as the location of the terminal area improvements is also shown on this exhibit. The FEIR 37-03 study area also included improvements to the existing parking structure (Parking Structure A, the construction of Parking Structure B, and improvements to Parcel O at the southern end of the Airport. The Phase II Terminal Area Improvements do not propose changes to the parking structures or Parcel O.

2.2 REGULATORY SETTING

The City's Airport Noise Compatibility Ordinance, which was enacted as Chapter 16.43 of the Municipal Code includes three major components. The first establishes Single Event Noise Exposure Level (SENEL) for aircraft operating into and out of the Airport. The second establishes a curfew requiring all commercial flights to be scheduled between 7:00 AM and 10:00 PM. Finally, the third component identifies a noise budget for five categories of aircraft operators at the Airport (i.e., Air Carrier, Commuters, Industrial, Charter, and General Aviation users). The Airport Noise Compatibility Ordinance requires that the permitted number of flights per day be increased in each operator flight restriction category as long as the flights operate below the Community Noise Equivalent Level (CNEL) budgets for that category. For commercial aircraft, the Airport Noise Ordinance had provisions for a minimum of 41 flights per day. In order for the number of flights to be increased and still comply with the Airport Noise Compatibility Ordinance, the airlines had to adjust their flight operations to reduce the noise footprint. This was done through the use of quieter aircraft and reducing the number of late night operations. This was achieved and, in late 2015, additional flights were allocated. The flights were initiated in 2016. It should be noted that, if the

D:\Projects\3JAC001100\MXD\lex_Aerial_20170829.mxd



Aerial Source: ESRI 2016

Aerial Photograph of Existing Terminal Area Facilities

Exhibit 1

Phase II Terminal Area Improvements



350 175 0 350
Feet



(Rev: 02/22/2018 MMD) R:\Projects\JAC_Jacobs\3JAC001100\Graphics\lex_Aerial.pdf

noise budgets are exceeded, the number of flights would be reduced to ensure compliance with the City's Airport Noise Compatibility Ordinance.²

In 1990, Congress passed the Airport Noise and Capacity Act (ANCA), which limited an Airport operator's right to control Stage 3 aircraft. ANCA's specific objective was to stop local municipalities from imposing new restrictions on aircraft operations without complying with significant procedural requirements and obtaining federal approval. Included within the ANCA legislation is a "grandfather" provision, which permits Long Beach Airport to continue to enforce the flight and noise restrictions that are contained in the Airport Noise Compatibility Ordinance (Chapter 16.43). In 2003, 2015, and again in 2016, the FAA reaffirmed the "grandfather" status of the City's Airport Noise Compatibility Ordinance under ANCA.

2.3 PROJECT HISTORY

2.3.1 BACKGROUND

The Long Beach Airport has been in existence since 1923. The now Historic Airport Terminal Building was built in 1941 for DC-3 aircraft and served approximately 25,000 annual commercial airline passengers. Between August 2001 and 2003, the number of passengers using the Airport increased from 600,000 to almost 3.0 million air passengers (MAP). In 2017, approximately 3,783,805 MAP were served at the Airport.³ This increase was predominately due to an increase in the number of commercial flights; however, the aircraft size and load factors have also increased over the past two decades. Because existing facilities were not adequate to accommodate this level of activity, the Airport constructed a temporary holdroom, a temporary remote parking lot, and a new baggage claim area in 2002. A second temporary holdroom was added in 2003.

With the approval of the Aviation and Transportation Security Act (ATSA), the Transportation Security Administration (TSA) was created and had a responsibility for conducting security screening of both passengers and baggage. On January 1, 2003, TSA initiated the screening of baggage at the Airport. This added additional facilities demand to house the Explosive Trace Detection (ETD) machines needed for screening luggage and the ETD stations for screening passengers' carry-on luggage.

2.3.2 PROJECT SCOPING

In June 2003, the City of Long Beach approved a scope of work for the preparation of an EIR to analyze the potential environmental impacts of possible improvements to the Airport's terminal area to accommodate passenger and cargo activity provided for under the existing Airport Noise Compatibility Ordinance. The project would also provide for required provisions for new security measures. The City prepared a Notice of Preparation (NOP) requesting input from agencies and the public regarding the appropriate scope of the EIR. Public scoping meetings were held to solicit public.

² In response to a growing number of curfew violations, the City is evaluating amending the fine structure in the Airport Noise Compatibility Ordinance associated with repeat violators. The intent is to have the fines more in line with the fines imposed at other airports in the region. The potential revisions to the Ordinance are not associated with the terminal area improvements. A precise timing for amending the Airport Noise Compatibility Ordinance has not been established; however, it is anticipated that the issue will be presented to the City Council by the first quarter of 2018.

³ A passenger is counted for either a takeoff or landing. A person taking a round trip would count as two passengers.

Though not part of the formal EIR scoping process, the Airport Advisory Committee (AAC) held 15 meetings, open to the public, from November 2003 through July 2004 to consider recommendations on possible Airport improvements and to advise on certain issues regarding scoping of the EIR. The AAC made recommendations regarding the project and technical studies to be prepared for the EIR. The City Council considered these recommendations in 2005. The original 2003 scope of work focused just on impacts associated with construction of the facilities (i.e., a “bricks and mortar” project). Key changes to the EIR scope of work, as a result of the AAC process and City Council action, include preparing a health risk assessment and providing a discussion of the environmental impacts associated with the operational environment at the Airport that could be accommodated within the existing Airport Noise Compatibility Ordinance. A new NOP, reflecting the project as defined by the City Council, was prepared to solicit input on the scope of the EIR in April 2005. Additional public scoping meetings were conducted.⁴

2.3.3 ENVIRONMENTAL IMPACT REPORT 37-03

The study area for the Terminal Area Improvements evaluated in FEIR 37-03 included the area surrounding the existing Historic Terminal Building. FEIR 37-03 evaluated the construction of improvements between the Gulfstream building and the Million Air lease site on the Long Beach Airport (Airport or LGB) property. Uses in this area included the Historic Terminal Building, a permanent holdroom, temporary holdrooms, security screening of passengers and baggage, a baggage claim area, a parking structure, and surface parking facilities. On the airfield side, uses include aircraft parking positions for the commercial and commuter carriers and a general aviation tie-down area on the Million Air site.

The FEIR 37-03 addresses environmental impacts of the facility improvements, as well as the impacts associated with additional commercial flights and the allowed commuter flights.⁵ At the direction of the City Council, the FEIR evaluated 102,850 square feet of terminal facilities and up to 14 aircraft parking positions. The Terminal Area Improvement Project included construction of, or alteration to, the following facilities at the Airport:

- Holdrooms
- Concession Area
- Passenger Security Screening
- Baggage Security Screening
- Baggage Claim Devices
- Baggage Service Office
- Restrooms
- Office Space
- Ticketing Facilities

⁴ A copy of the 2003 and 2005 NOPs, transcripts from the scoping meetings, and the written responses received on the NOPs are included in FEIR 37-03.

⁵ At the time FEIR 37-03 was prepared the City had allocated the minimum 41 flights per day. As noted above under Regulatory Setting, the Airport Noise Compatibility Ordinance has provisions for increasing the number of flights provided the noise footprint from flight operations does not exceed the allocation in the Airport Noise Compatibility Ordinance. FEIR 37-03 evaluated the addition of an additional 11 commercial carrier flights, which was identified in the FEIR as “Optimized Flights”. The additional flights were tied to the requirements of the Airport Noise Compatibility Ordinance and not as a result of facilities improvements. In late 2015, the City Council allocated nine additional commercial carrier flights.

- Airline Gates
- Aircraft Parking Positions
- Vehicular Parking
- Traffic and Pedestrian Circulation

2.3.4 PROJECT APPROVAL

On June 20, 2006, when certifying FEIR 37-03, the City Council approved 97,545 square feet of terminal improvements with a maximum of 12 aircraft parking positions together with a 4,000-space vehicle parking structure (City of Long Beach 2006a, 2006b). It should be noted that the reduction of 5,305 square feet of terminal area improvements from what was evaluated in the FEIR was not required to reduce potential significant impacts, but instead was approved due to the intense public interest⁶ in the proposed terminal improvements and related facilities. The FEIR identified only one significant, unavoidable impact, for which the City Council adopted Findings of Fact and a Statement of Overriding Considerations. The impact was a Project related and cumulative short-term air quality impact during construction, specifically, Oxides of Nitrogen (NOx) and Volatile Organic Compounds (VOC) emissions would exceed the established standard. Additionally, the incremental emissions resulting from aviation operations under the Optimized Flights scenario would exceed South Coast Air Quality Management District (SCAQMD) thresholds of significance for carbon monoxide (CO) and NOx.

On April 17, 2007, a workshop was conducted with the City Council to review the results of a detailed space needs analysis completed by the City's architectural consultant for the Airport Terminal Improvement Project. Based on the direction provided at this workshop, staff reported back to the City Council on April 24, 2007, and received authorization to prepare final plans, specifications, cost estimates, and a financing plan for the construction of a terminal improvement project. The City Council established a cap on the terminal area improvements of 89,995 square feet without returning to the City Council for approval. The City Manager was directed to proceed with the preparation of final plans, specifications, cost estimates, and financing plan for the construction of an Airport Terminal Improvement Project consistent with the project identified as part of the certification of FEIR 37-03 and requires that any changes to the Council-approved post-screening areas within the terminal building not be designed and/or constructed without formal council review and approval (Long Beach 2007). Table 1 provides allocation of square footage for each of the various uses. This table includes the allocation of square footage as evaluated for the proposed project in FEIR 37-03, as well as the allocation associated with the 97,545 square feet approval⁷ and the reduced 89,995-square-foot space allocation. The letter to the City Council, dated April 24, 2007, pertaining to the adjusted space allocation is provided as Attachment B to this Addendum.

⁶ An extensive public outreach program was conducted in conjunction with the preparation of FEIR 37-03. There were two public scoping meetings in 2003 as part of the Notice of Preparation (NOP) process, with 100 and 200 people in attendance. The City received 251 responses to the NOP. Fifteen meetings, which were open to the public, were conducted with the Airport Advisory Commission to determine the scope of the EIR. The City Council considered the scope recommendations at two council meetings in 2005. An updated NOP was circulated in 2005, and two additional public meetings were conducted. The EIR was circulated for an 84-day public review period. A series of public meetings were held during the public review period and included a an overview of the findings of the Draft EIR; there was also a joint workshop with the Long Beach Planning Commission and the Long Beach Cultural Heritage Commission. During the public review period, a total of 215 written comments were received (a combination of letters, comment cards, and emails) on the Draft EIR.

⁷ This was evaluated as Alternative A in FEIR 37-03.

TABLE 1
TERMINAL AREA SPACE ALLOCATION BY USE
EVALUATED IN FEIR 37-03 AND CITY COUNCIL APPROVALS

Description	FEIR 37-03 Proposed Project	Council Approved (Alternative A)	Adjusted Space Allocation
Holdrooms			
Permanent Space ^a	6,500 sf	6,500 sf	0 sf
Temporary Space ^b	0 sf	0 sf	0 sf
Proposed Additional Space ^c	<u>21,171 sf</u>	<u>20,000 sf</u>	<u>26,500 sf</u>
<i>Subtotal</i>	<i>27,671 sf</i>	<i>26,500 sf</i>	<i>26,500 sf</i>
Passenger Security Screening			
Existing	3,900 sf	3,900 sf	0 sf
Proposed Additional Space	<u>7,000 sf</u>	<u>6,000 sf</u>	<u>8,940 sf</u>
<i>Subtotal</i>	<i>10,900 sf</i>	<i>9,900 sf</i>	<i>8,940 sf</i>
Concession Area			
Permanent Space ^a	5,460 sf	5,460 sf	5,210 sf
Proposed Additional Space ^c	<u>9,541 sf</u>	<u>8,000 sf</u>	<u>8,250 sf</u>
<i>Subtotal</i>	<i>15,001 sf</i>	<i>13,460 sf</i>	<i>13,460 sf</i>
Baggage Security Screening			
Baggage Security Screening	7,000 sf ^d	7,000 sf ^d	6,200 sf
Baggage Claim Devices			
Passenger Side	510 lf	380 lf	380 lf
Airline Loading Side	<u>310 lf</u>	<u>250 lf</u>	<u>250 lf</u>
<i>Subtotal</i>	<i>820 lf</i>	<i>630 lf</i>	<i>630 lf</i>
Baggage Claim Office Support			
Baggage Service Office	900 sf	825 sf	825 sf
Multi-Purpose Rooms	<u>300 sf</u>	<u>300 sf</u>	<u>300 sf</u>
<i>Subtotal</i>	<i>1,200 sf</i>	<i>1,125 sf</i>	<i>1,125 sf</i>
Restrooms (non-secure)			
Permanent Space ^a	1,330 sf	1,330 sf	1,330 sf
Temporary Space ^b	0 sf	0 sf	0 sf
Proposed Additional Space ^c	<u>2,000 sf</u>	<u>850 sf</u>	<u>850 sf</u>
<i>Subtotal</i>	<i>3,330 sf</i>	<i>2,180 sf</i>	<i>2,180 sf</i>
Office Space			
TSA			
Temporary Space	3,600 sf	3,600 sf	0 sf
Proposed Additional Space	<u>1,591 sf</u>	<u>1,400 sf</u>	<u>5,000 sf</u>
<i>Subtotal</i>	<i>5,191 sf</i>	<i>5,000 sf</i>	<i>5,000 sf</i>
Airlines (Operations Offices)			
Permanent Space	2,000 sf	2,000 sf	2,000 sf
Temporary Space	0 sf	0 sf	0 sf
Proposed Additional Space	<u>3,754 sf</u>	<u>5,000 sf</u>	<u>4,930 sf</u>
<i>Subtotal</i>	<i>5,754 sf</i>	<i>7,000 sf</i>	<i>6,930 sf</i>

TABLE 1
TERMINAL AREA SPACE ALLOCATION BY USE
EVALUATED IN FEIR 37-03 AND CITY COUNCIL APPROVALS

Description	FEIR 37-03 Proposed Project	Council Approved (Alternative A)	Adjusted Space Allocation
Airport (Office & Conference)			
Permanent Space	6,970 sf	6,970 sf	6,970 sf
Temporary Space	0 sf	0 sf	0 sf
Proposed Additional Space	<u>5,000 sf</u>	<u>10,000 sf</u>	<u>4,330 sf</u>
<i>Subtotal</i>	<i>11,970 sf</i>	<i>16,970 sf</i>	<i>11,300 sf</i>
Total Office Space	22,915 sf	28,970 sf	23,230 sf
Ticketing Facilities			
Ticket Counter Area (Existing)	1,250 sf	1,250 sf	1,250 sf
Proposed Additional Space	<u>680 sf</u>	<u>0 sf</u>	<u>0 sf</u>
<i>Subtotal</i>	<i>1,930 sf</i>	<i>1,250 sf</i>	<i>1,250 sf</i>
Ticket Counter Queuing (Existing)	1,400 sf	1,400 sf	1,400 sf
Proposed Additional Space	<u>1,400 sf</u>	<u>0 sf</u>	<u>0 sf</u>
<i>Subtotal</i>	<i>2,800 sf</i>	<i>1,400 sf</i>	<i>1,400 sf</i>
Airline Ticket Office (Existing)	4,360 sf	4,360 sf	4,360 sf
Proposed Additional Space	<u>243 sf</u>	<u>0 sf</u>	<u>-50 sf</u>
<i>Subtotal</i>	<i>4,603 sf</i>	<i>4,360 sf</i>	<i>4,310 sf</i>
Circulation – Ticketing (Existing)	1,400 sf	1,400 sf	1,400 sf
Proposed Additional Space	<u>4,100 sf</u>	<u>0 sf</u>	<u>0 sf</u>
<i>Subtotal</i>	<i>5,500 sf</i>	<i>1,400 sf</i>	<i>1,400 sf</i>
Total for Ticketing Facilities	14,833 sf	8,410 sf	8,360 sf
Total Terminal Area Improvements	102,850 sf	97,545 sf	89,995 sf
Airline Gates and Parking Positions			
Airline Gates	11	11	11
Aircraft Parking Positions	12 to 14	12 to 14 ^e	12
Vehicular Parking			
Permanent Non-Leased Spaces	2,835	2,835	2,835
Leased Spaces	0	0	0
Proposed Additional Spaces	<u>3,451^f</u>	<u>3,451^f</u>	<u>3,451^f</u>
Total Vehicle Parking	6,286	6,286	6,286
FEIR: Final Environmental Impact Report; sf: square feet; lf: linear feet; TSA: Transportation Security Administration; NOP: Notice of Preparation ^a Permanent floor space in Historic Terminal Building and permanent 1984 holdroom building. ^b Temporary floor space in modular. ^c Temporary (modular) space would be replaced with permanent facilities. ^d The February 8, 2005, City Council action reflected a range of square footage for these areas. The lower end is presented here. Up to 3,000 square feet may be added for a total of 10,000 square feet of new space. ^e The September 22, 2003, NOP identified 16 aircraft parking positions. This number was reduced to 12 to 14 by City Council action on February 8, 2005. ^f The existing leased spaces would be replaced with the new parking structure Note: Subsequent to the approval of the alternatives definition by the City Council in February 2005, the Airport leased office space from Million Air and there are plans to add an additional temporary trailer for security staff. Source: City of Long Beach 2006a (FEIR 37-03) and 2007 (Council Action)			

2.3.5 IMPLEMENTATION OF IMPROVEMENTS

As previously noted, FEIR 37-03 identified that the Terminal Area Improvements would be phased based on service priorities and funding availability. Only the first phase of improvements have been implemented. Phase I included the construction of an additional parking structure with an adjoining surface lot; a new passenger concourse with consolidated passenger screening; and a new aircraft parking ramp. The concourse opened to the public on December 12, 2012. The improvements identified in this Addendum represent Phase II Terminal Area Improvements. It is anticipated that the design phase for the improvements would be initiated in mid-2018 with construction starting in late 2018. The Project is expected to take approximately three years to complete.

Table 2 provides a summary of the improvement program approved by the City Council on April 24, 2007; the size of the terminal area facilities with the implementation of the Phase I improvements; and the amount of terminal area improvements allocated for future construction pursuant to the City Council direction. It should be noted, that FEIR 37-03 evaluated an additional 12,855 square feet of terminal area improvements (i.e., the delta between what was environmentally cleared in FEIR 37-03 [102,850 square feet] and what has been authorized by the City Council [89,995 square feet]).

**TABLE 2
LONG BEACH AIRPORT
TERMINAL AREA IMPROVEMENTS PROGRAM SPACE ALLOCATION**

Function	Terminal Improvements Program Approved by City Council April 24, 2007	Terminal Improvements Post-Phase I Improvements ^a	Terminal Improvements Future Construction per April 24, 2007 Authorization
Total Square Footage ^b	89,995 sf	70,169 sf ^c	19,826 sf ^e
Airline Gates	11	11	0
Aircraft Parking Positions	12	11	1
Total Parking Spaces	5,586	3,836	1,750 ^d
FEIR: Final Environmental Impact Report; sf: square foot; lf: linear feet; TSA: Transportation Security Administration ^a Phase I Constructed Areas listed provided by Architect of Record D. Holloway from HOK on February 11, 2014. ^b Exterior covered space or terminal support functions such as mechanical, electrical, kitchen equipment and food preparation areas, janitorial, and maintenance areas are exempt from Total Area. ^c Total reflects the demolition of 27,450 square feet resulting in a net of 70,169 square feet of terminal area. ^d Rental Car Parking was relocated from Lot A or Lot B Parking Structures to Million Air Leasehold during the May 6, 2008, City Council Site Plan Review Approval. ^e Total reflects the net allowable construction. Source: Jacobs 2018			

This page intentionally left blank

SECTION 3.0 PROJECT DESCRIPTION

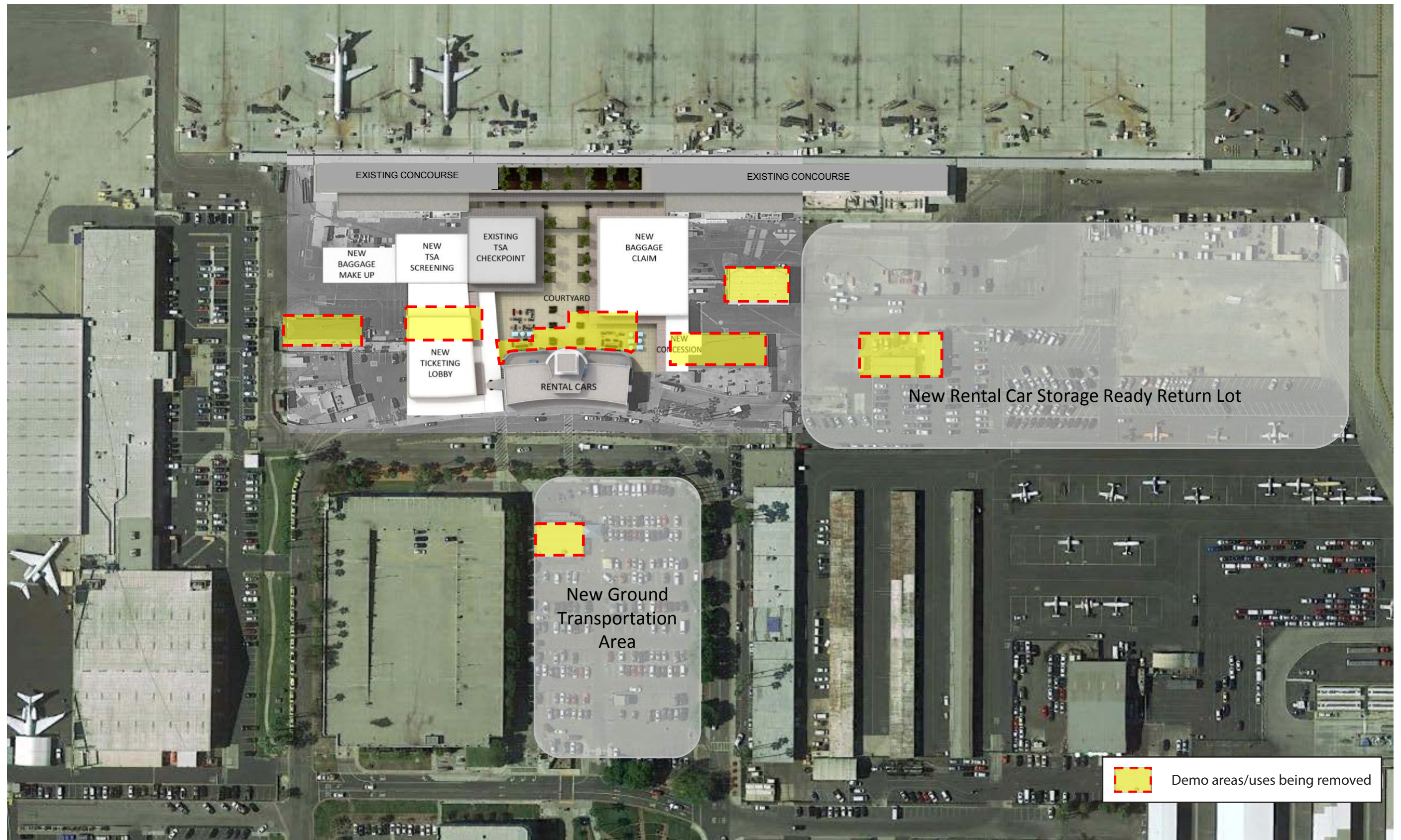
3.1 PROJECT DESCRIPTION

As part of the next phase of Terminal Area Improvements, the Airport intends to implement planned improvements to the terminal area that were not included in first phase of the terminal development program. These improvements are focused on enhancing customer service and replacing existing equipment that has well exceeded its useful life include the following:

- Ticketing Facilities/Airlines Operation Offices
- Outbound Baggage Make-Up Carousel
- Transportation Security Administration (TSA) Baggage Security Screening
- Baggage Claim
- Landside (Pre-Security) Restrooms
- Landside (Pre-Security) Concessions Area
- Meeter/Greeter Courtyard and Historic Terminal
- Rental Car Customer Service Counters
- Curbfront and Sidewalk Improvements

To facilitate the review of the improvements proposed as part of the Project, Exhibit 1 is an aerial photograph of the Airport, which shows the current facilities. Exhibit 2 identifies the locations proposed terminal area improvements and those existing uses that would be demolished to provide the space for the Phase II Terminal Area Improvements. Exhibits 3 and 4 provide a focused view of demolition areas and proposed improvements in the immediate vicinity of the terminal area, respectively. Each of the improvements are described below. As part of the description of the facilities improvements, the assumptions from FEIR 37-03 for each use are also provided. This information is relevant for the subsequent evaluation of consistency with the FEIR and compliance with CEQA.

With the implementation of these improvements, the total terminal area square footage would be 89,929 square feet. The breakdown of the square footage by phase is presented in Table 3 below. The total square footage allocated for the terminal facilities would be slightly less than the space allocated by the City Council in April 2007 and less than what was evaluated in FEIR 37-03 and what the City Council approved in Resolution No. Res-06-0056. Additionally, the direction by the City Council in April 2007 was if there are changes to the Council-approved post-screening areas within the terminal building, that the City Council would have the opportunity to review and approval these changes. Although the proposed Phase II Terminal Area Improvements are primarily pre-screening, the City Council will have an opportunity to review these assumptions prior to authorizing the design and, ultimately, the construction of the facilities.



Source: Long Beach Airport; Aerial Source: Google Earth

Proposed Phase II Terminal Area Improvements

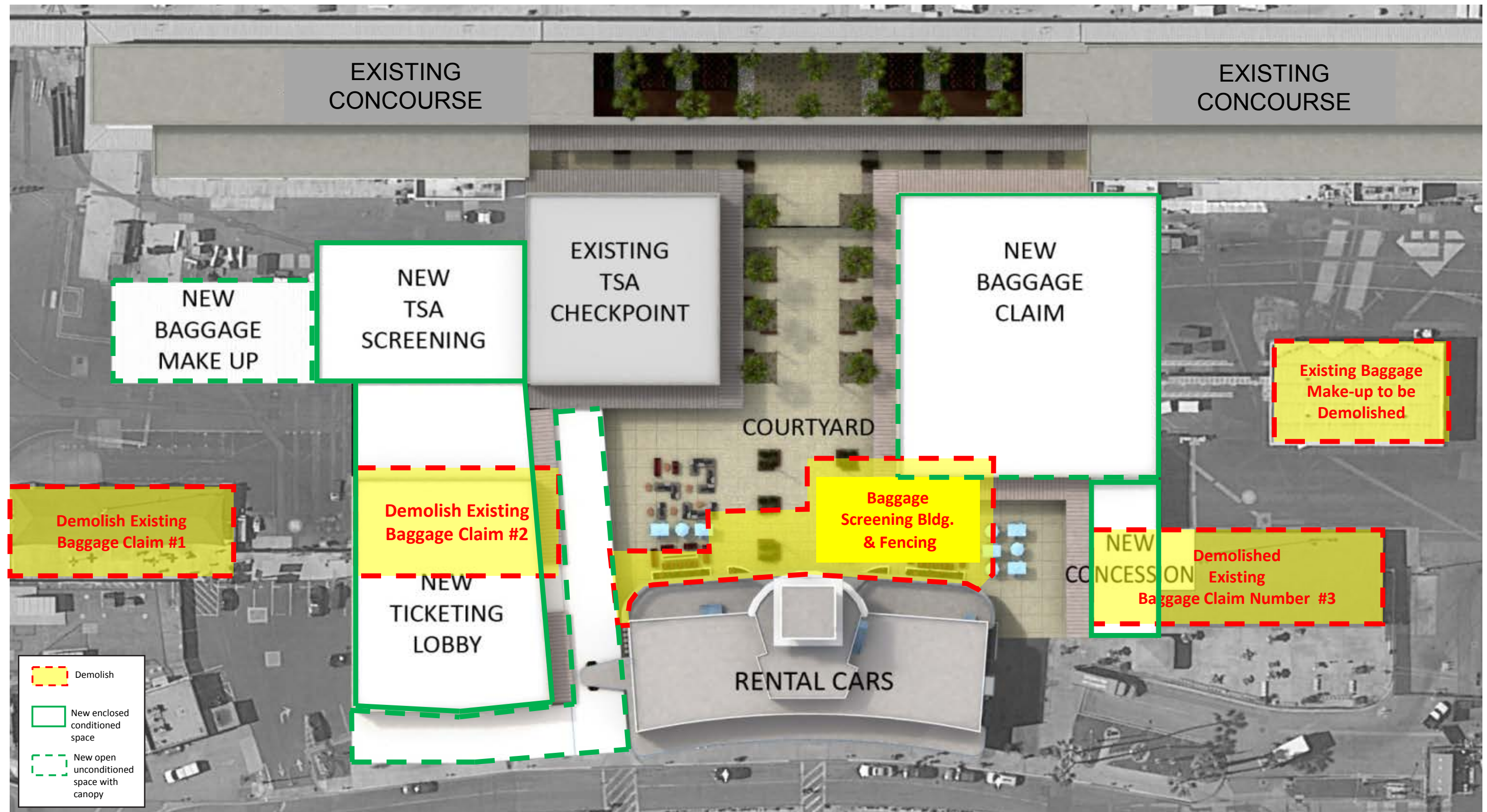
Phase II Terminal Area Improvements



Exhibit 2



D:\Projects\3\JAC\001100\Graphics\ex_Proposed_Improvements_Demo1_20180222.ai



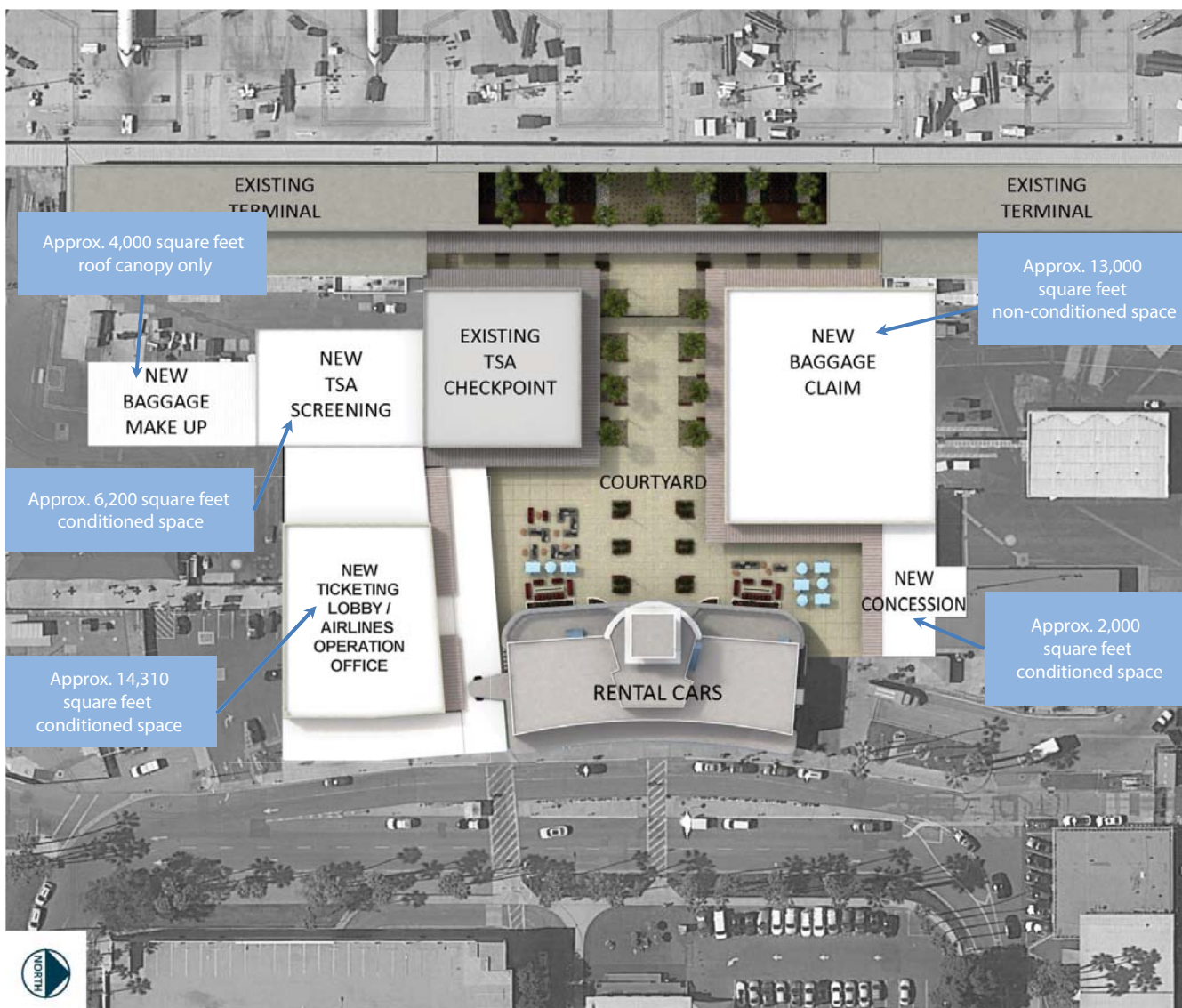
Source: Long Beach Airport

Proposed Improvements and Demolition in Terminal Area

Exhibit 3

Phase II Terminal Area Improvements





Source: Long Beach Airport

Proposed Improvements and Demolition in Terminal Area

Exhibit 4

Phase II Terminal Area Improvements



**TABLE 3
LONG BEACH AIRPORT
SPACE ALLOCATION BY PHASE**

Baseline Terminal Building Facilities ^a	56,320 square feet
Phase I Terminal Area Improvements	13,849 net new square feet ^b
Proposed Phase II LGB Terminal Area Improvements	19,760 net new square feet ^c
Total Square Footage of Terminal Area Post-Improvements	89,929 square feet
^a At the time FEIR 37-03 was prepared, the terminal building was identified as being 34,570 square feet without the modular buildings. The 56,320 square feet represents the total amount of terminal area facilities in use at the time FEIR 37-03 was prepared.	
^b As part of the Phase I Improvements, as planned, a number of the modular buildings were removed. The 13,849 represents the net increase (i.e., new construction less the square footage of the modular building removed). Specifically, 41,299 square feet of new facilities were constructed and 27,450 square feet of existing facilities were demolished or removed. The Phase I Improvements also included construction of a new parking structure. This table is identifying square footage of building improvements.	
^c Phase II proposes the construction of 24,760 square feet but provides for the removal of 5,000 square feet (the TSA building) and the removal of the modular building being used by the rental car companies. The modular building used by the rental car companies was not included in the 89,995 square feet approved by the City Council; therefore, no additional space has been included as a result of the removal of this facility.	

3.1.1 TICKETING FACILITIES/AIRLINES OPERATION OFFICES

The ticketing facilities are currently located within the Historic Terminal Building and provide a total of 22 check-in positions and 13 self-service check-in kiosks. The proposed improvements would remove ticketing from the Historic Terminal Building and provide new ticketing facilities south of the Historic Terminal Building and southeast of the existing TSA Security Checkpoint. The facility would be approximately 14,310 square feet of new construction. The current concept would collocate Ticketing Facilities/Airlines Operation Offices. Approximately 12,310 square feet of enclosed area would be allocated for Ticketing Facilities and 2,000 square feet would be for the Airlines Operation Offices. Collocating these uses would enhance operational efficiency. This new facility would be a pre-security screening facility. As a standalone ticketing facility, this structure would incorporate all the ticketing functions in one location. The space allocation identified ticketing counter space, ticketing queueing area, airlines ticketing office, and ticketing circulation area as components of the ticketing use. These improvements would decrease the amount of square footage of airline operation offices compared to what was approved and is equivalent to what the airlines are currently using in Historic Terminal Building.

The square footage allocated to these uses is less than the assumption evaluated in FEIR 37-03 (14,833 square feet for ticketing and 5,754 square feet for the airline operations offices). However, the total exceeds the terminal space allocation for ticketing identified as part of the April 2007 City Council guidance for the adjusted space allocation (8,360 square feet). The space allocated for the airline operation offices is less than what was allocated by the City Council (a combined (existing and new space) total 4,000 square feet proposed versus the 6,930 square feet allocated by the City Council). When evaluated as a combined function, the total square footage is less

than what was approved by the City Council.⁸ There are several factors that influence this function.

- The Concept Floor Plan in FEIR 37-03 identified additional ticketing and queueing area outside the Historic Terminal Building in the location of the proposed building. This area was identified as a covered area but not enclosed. The uses identified in FEIR 37-03 as being covered but not enclosed did not have a square footage allocation. The Concept Floor Plan, which was provided as Exhibit 2-5 in FEIR 37-03, is included in this Addendum as Exhibit 5 to facilitate the review of the proposed Phase II Terminal Area Improvements.
- The guidance provided by the City Council was to return to the City Council if post-screening areas within the terminal building exceeded the space allocation given in April 2007. Ticketing and the airline operation offices are pre-security functions.
- Since the certification of FEIR 37-03, additional airlines are serving the Airport, which has increased the demand for ticketing space).
- Increasing the space allocation for the ticketing facilities has resulted in a reduction in other areas, which are discussed below in Section 3.3. Additionally, the 26,500 square feet allocated by the City Council for the holdrooms (post-security) was not fully developed. A total of 1,039 square feet allocated for holdroom area has not been utilized.

The proposed improvements would extend the existing covered walkway between the proposed ticketing facilities and Historic Terminal Building and would also be located along the eastside of the ticketing facility. It should be noted that the as part of the action taken by City Council in April 2007 (i.e., approving the Adjusted Space Allocation) the direction was that the space allocation “does not include exterior covered space or terminal support functions such as mechanical, electrical, kitchen equipment and food prep, janitorial and maintenance” (City 2007 [page 3]).

3.1.2 OUTBOUND BAGGAGE MAKE-UP CAROUSEL

The current outbound baggage facility is located northwest of the Historic Terminal Building in the Airline Operations Area (AOA). To facilitate the operations at the Airport, the outbound baggage facility would be relocated in close proximity to the TSA screening facility. The facility would be southwest of the Historic Terminal Building and adjacent to the TSA Baggage Security Screening area. The improvements would not be an enclosed facility, but covered with an approximately 4,000 square foot roof canopy. The current facility is a covered but not enclosed area; therefore, there is not a square footage allocation identified by the City Council. The facilities would be similar in design to the existing facilities.

3.1.3 TRANSPORTATION SECURITY ADMINISTRATION BAGGAGE SECURITY SCREENING

The existing Transportation Security Administration (TSA) baggage security screening facility is approximately 5,000 square feet and does not meet the current operational and space needs and is not consistent with the current TSA standards. As part of this Project, the existing facility would be redeveloped and expanded to provide a 6,200-square-foot enclosed facility. This size facility would be less than the size of the facility evaluated in FEIR 37-03 and would be consistent with the adjusted space allocation of square footage recommended by the City Council in April 2007. The facility would be located in proximity of the ticketing building for operational purposes.

⁸ The Phase II Terminal Area Improvement would collocate the ticketing facilities and airline operation offices into a single 14,310 square foot facility. This space is less than the 8,360 square feet for ticketing function and 6,930 feet airlines operation office space approved by the City Council. Further, the original plan identified ticketing functions in a covered but not enclosed area. The covered area was not counted toward the totals in FEIR 37-03.



Adjacent to the TSA Baggage Screening Area would be the outbound Baggage Make Up carousel, area as described in Section 3.1.2, above. This 4,000 square foot open area would have a roof canopy and would replace the existing system. These improvements would provide an integrated system that would provide for more efficient screening of checked baggage.

3.1.4 BAGGAGE CLAIM

As shown in Table 1, facilities pertaining to baggage handling were addressed in several categories. Within this category, there were the baggage claim devices (both passenger side and airline side) and a Baggage Service Office. At this time, improvements to the passenger side and airline side baggage claim devices are proposed, including a baggage service office not to exceed 500 square feet in size. The baggage service office would be a new enclosed facility located proximate to the baggage claim area. The precise location will be determined in collaboration with the Airlines.

The proposed improvements would provide a total of 380 linear feet of baggage claim devices for the passenger side. These facilities would be located slightly northwest of the Historic Terminal and north of the Meeter/Greet Courtyard and west of the TSA passenger screening facility. The baggage claim would be covered but open air and would encompass approximately 13,000 square feet. Square footage for the baggage claim area was not identified because it was shown to be open air and covered with a roof or canopy. Currently, the canopies covering the three baggage claim locations are approximately 11,000 square feet. The proposed passenger side baggage claim area would be less than the total evaluated in FEIR 37-03 and would be consistent with the adjusted space allocation of 380 lineal feet approved by the City Council in April 2007.

The airline side baggage claim devices would be a function of the location and design of the passenger side baggage claim devices. A total of 250 linear feet of airline side baggage claim devices are proposed. The proposed airline side baggage claim area would be less than the 310 linear feet evaluated in FEIR 37-03 and would be consistent with the adjusted space allocation square footage approved by the City Council in April 2007.

3.1.5 LANDSIDE (PRE-SECURITY) RESTROOMS

The new plan proposes improvements to the public restrooms in the pre-secured area of the Airport. Currently, the restrooms total approximately 1,330 square feet. The proposed improvements would increase this total by 1,750 square feet. Due to the proposed configuration plan (i.e., location of ticketing and baggage claim) and to facilitate passenger pedestrian flows, it is recommended that new restrooms be provided in close proximity to the new ticketing and baggage claim facilities.⁹ While the existing restrooms in the Historic Terminal Building will no longer be the primary restroom facilities and could be removed, a future evaluation should be conducted to determine the practicality of doing so. Maintaining the existing restrooms in place would provide a higher level of service to the customers who utilize the Rental Car facility as well as the employees of the rental car companies. If those restrooms were to remain, the terminal facilities would comprise of a total of 3,080 square feet of restroom area; this is below the 3,330 square feet evaluated in FEIR 37-03 but above the 2,180-square-foot allocated by the City Council in April 2007.

⁹ Per the 2016 California Plumbing Code, each building or structure shall be provided with toilet facilities for employees and customers.

3.1.6 LANDSIDE (PRE-SECURITY) CONCESSIONS

Enhancements to the pre-security concessions area are proposed. The Project proposes to provide up to 2,000 square feet of new concessions area available prior to the security screening areas. The concessions area would be located north of the Historic Terminal and in proximity to the Meeter/Greeter Courtyard and the new Baggage Claim area. The concessions area would be located approximately 50 feet north of the Historic Terminal Building. The Phase II Terminal Area Improvements would include construction of the core and shell for new pre-security concessions; however, the interior would be completed as a tenant improvement by the selected concessionaire.

The FEIR evaluated expanding the concession areas by adding 9,541 square feet, resulting in a total of 15,001 square feet for concessions. The additional concessions area was identified in both the baggage claim area/public circulation areas (pre-security) and as an adjunct to the new holdroom area. The City Council allocation provided for 13,460 square feet of concessions area. This use was specified in the square footage allocation table, but there was not a defined breakdown of the square footage that would be pre-security versus post-security screening (i.e., in the holdroom area).

After completion of Phase I of the Terminal Area Improvements, a total 12,813 square feet of concession existed at the terminal. In the time subsequent to opening of the new concourse, changing passenger behavior has rendered the second floor concession areas in the Historic Terminal Building to be non-viable. This space has not been utilized for concession services since 2014.¹⁰ Therefore, currently operating there are 10,391 square feet of concessions area at the Airport (i.e., the 12,813 square feet less the 2,422 square feet of second floor concession space). It is recommended that an additional 2,000 square feet be allocated for first floor concessions, resulting in a total of 14,813 square feet of concession area. This would represent an increase of 1,353 square feet in total concession area compared to what the City Council approved.

3.1.7 MEETER/GREETER COURTYARD AND HISTORIC TERMINAL

As a part of the Phase I Terminal development program, a Meeter/Greeter Courtyard was developed and located immediately north of the new passenger screening area and west of the Historic Terminal Building. The Meeter/Greeter Courtyard also serves as the circulation element for arriving passengers who have exited the secure portion of the concourse and are going to the baggage claim area and ultimately to the terminal curbside. As a component of the upgrade, the courtyard will be reconfigured to incorporate additional space that will become available as a result of relocating the TSA baggage screening facility. The current TSA baggage screening area is comprised of approximately 5,000 square feet of building area. The associated existing exterior baggage conveyors and security fence encompass an additional 4,300 square feet of area. When the new TSA Baggage Screening facility becomes operational, this portion of building and fencing will be removed and the 9,300 square feet of area will be incorporated into the existing courtyard area. This new area will be a combination of landscaping and public circulation. The removal of the current TSA baggage screening facility will restore an unencumbered view of the west elevation of the Historic Terminal Building currently blocked by the security fencing.

¹⁰ The lease with SSP Americas, which operated the restaurant, ended July 31, 2014. This represents a loss of 2,422 square feet of pre-security concession area. This area in the Historic Terminal Building is currently unoccupied.

Similar to the ticketing facilities, the Concept Floor Plan in FEIR 37-03 identified a covered meeters/greeters area to the north of the Historic Terminal Building. This area was identified as a covered area but not enclosed; and therefore did not have a square footage allocation. The location for this function on the Concept Floor Plan was dictated by the remaining open area available. However, the design of the Phase I improvements resulted in a more open concept than originally anticipated. Incorporating the space made available by the relocation of the TSA and outbound baggage carousel enhance the open space attribute of the terminal area.

The Phase II Terminal Area Improvements would also result in modifications to interior of the Historic Terminal Building. Modifications would be required to place the Rental Car Service counters in place of the existing Airline Ticket counters. In addition the area currently occupied by the airline ticket offices could be reconfigured to place public seating areas for parties coming to meet passengers. Proposed work would include window repairs, automatic door upgrades, lighting improvements, electrical improvements, restroom upgrades, heating, ventilation, and air conditioning (HVAC) upgrades, building envelope enhancements, seismic upgrade, and other miscellaneous repairs and improvements.

The most substantial change would be to allow access from the back of the terminal to the Meeter/Greeter courtyard. These modifications would bring the uses in the Historic Terminal Building back more closely to the configuration and aesthetic of the original structure. The rental car companies currently operate out of a modular facilities in the surface parking lot directly in front of the Historic Terminal Building. Although FEIR 37-03 assumed such modifications, a certificate of appropriateness by the Cultural Heritage Commission is required.

3.1.8 RENTAL CAR FACILITIES

As part of these Phase II improvements, relocation of the rental car facilities are proposed. The rental car companies currently operate out of a modular facility directly in front of the existing ticketing building. The proposed improvements would consolidate and move the rental car counters back into the Historic Terminal Building. The concept assumes approximately 5,600 square feet would be allocated to this use. This is slightly larger than the approximately 3,000 square feet in the modular building; however, these would be internal improvements to the existing Historic Terminal Building and no additional square footage would be constructed. This is merely a shift in the location of the facilities (i.e., not a change in function or overall capacity of these facilities). The square footage of the proposed improvements is accounted for in Table 5 as repurposed former ticketing area.

The existing Rental Car Ready Return Lot is located directly to the east of the Historic Terminal Building. The current 88,000 square foot facility does not accommodate the entire rental car fleet and rental cars are also stored in Parking Structure B and other locations on and off Airport property. FEIR 37-03 assumed with the construction of the new 4,000 space parking structure that all rental cars, including offices and public counters for the car rental agencies, along with vehicle preparation and return vehicle parking areas would be consolidated in the parking structure. As noted in Table 2, the full allocation of parking spaces in Parking Structure B have not been constructed. Post-Phase I improvements, there are 1,750 parking spaces that remain unbuilt.

As part of the Phase II improvements, a new consolidated rental car location is proposed. The new location (as shown on Exhibit 2) would be north of the Historic Terminal Building and encompass approximately 200,000 square feet. Improvements would include the reconstruction/resurfacing of this area and installations of canopies and small exit kiosk to accommodate rental car staff available to assist customers. However, as noted above, the rental car counters would be located in the Historic Terminal Building.

This area has been previously used for parking of general aviation aircraft and valet parking of automobiles. Currently, there are approximately 41 tie-down spaces, of which between 18 and 22 are currently occupied with functioning and non-function general aviation aircraft. The Project would require removal of one row of tie-down spaces (approximately 10 to 12 tie-down). These aircraft can be accommodated in other unoccupied tie-down locations north of the Historic Terminal Building. FEIR 37-03 assumed the reconstruction of this area for the commercial aircraft parking positions.¹¹ Locating the rental cars in this underutilized area would be more cost effective and have less construction impacts than expanding the Parking Structure B to the approved capacity. Additionally, the relocation of rental cars to this location (Million Air Leasehold) is consistent with the May 6, 2008 direction by the City Council as part of the Phase I Site Plan Review approval. With the reduction of general aviation activity at the Airport this area has been underutilized and no longer needed for general aviation aircraft parking.

3.1.9 GROUND TRANSPORTATION PLAZA

Once the existing Rental Car Ready Return Lot located directly to the east of the Historic Terminal Building is relocated, a new Ground Transportation Plaza would be developed in its place. This facility would serve the various commercial Ground Transportation activities including Charter Buses, Shuttles, Taxis and the various Transportation Network Companies (TNC's) such as Uber and Lift. Users of these services would no longer utilize the pickup and drop off areas directly in front of the terminal building curbside, and instead would need to cross the terminal roadway to the appropriate pick up/ drop off area. This area would also include a new valet stand, surface vehicular parking for valet, and new skycap stands. These improvements would enhance pedestrian safety with improvements to existing signage and installation of new traffic signals. The location of the new Ground Transportation Plaza is also shown on Exhibit 2.

FEIR 37-03 assumed modifications to remaining surface lot would include modified access points, resurfacing, refencing, restriping, and signage. The improvements for the Ground Transportation Plaza would generally be consistent with these assumptions; however, based on the poor quality of the asphalt and existing drainage problems in this lot, the asphalt may need to be replaced and reconstructed rather than just resurfaced.

3.1.10 CURBFRONT AND SIDEWALK IMPROVEMENTS

As part of the new ticketing facility to be constructed there will also be minor modifications to the existing terminal curbside area to provide additional passenger drop off areas and a widened sidewalk area leading to the ticketing facility. In addition, the entrance to the existing Gulfstream leasehold would be relocated to Barbara London Drive in order to minimize non-terminal related vehicular activity in front of the terminal building.

¹¹ FEIR 37-03 identified with the construction of the aircraft parking positions, approximately 70 general aviation aircraft would be displaced, as well as the removal of a small building currently used for office space, TSA, and general aviation support. The general aviation aircraft displaced from the Million Air site were assumed to be relocated to a new tie-down area south of Runway 12-30, known as Parcel O.

3.2 PHASE II IMPLEMENTATION PHASING

The improvements identified in this Addendum represent Phase II Terminal Area Improvements. It is anticipated that the design phase for the improvements would be initiated in mid-2018 with construction starting in late 2018. The Project is expected to take approximately three years to complete. To minimize operational disruption the construction improvements would be phased. The contractor and the Airport would determine the precise staging of the improvements. However, general sequencing would be the main terminal area improvements (i.e., ticketing building, restrooms, baggage handling related improvements, TSA baggage security screening, concessions, and courtyard) as part of the initial stage, followed by the modifications to the Historic Terminal Building, the rental car, ground transportation plaza, and curb front improvements. The demolition and site preparation for the initial improvements is expected to occur in early 2019. Construction of the buildings would occur in mid-2019 to mid-2020.

3.3 PROJECT MODIFICATIONS SINCE CERTIFICATION OF FEIR 37-03

As noted above, the current Project identifies several modifications to the Terminal Area Improvements Project from what was evaluated in FEIR 37-03. None of these improvements would exceed the size of the facilities addressed in FEIR 37-03; however, configuration of the facilities would be slightly different. The Concept Floor Plan in FEIR 37-03 identified all the new space allocation being located in a new larger terminal facility that was envisioned as being attached to the Historic Terminal Building. The design approved for the Phase I improvements provided for a detached holdroom area, thereby avoiding potential impacts to the Historic Terminal Building. This resulted in a more open design; however, providing all the approved new space in a single building is no longer feasible due to the extent of the design modifications to the holdrooms that would be required. Though the improvements would result in a new building the overall scope, scale, and location of the improvements are generally consistent with the concept evaluated in FEIR 37-03. These changes do not represent substantial revisions to the project evaluated in FEIR 37-03, rather it is a design variation based on more detailed information and in light of the design of the Phase I improvements. Those use categories where the final space allocation would exceed the City Council's adjusted space allocation are summarized in Table 4. These increases are offset by the reduction to space allocations for other uses. The total size of the terminal area improvements would be 89,929 square feet, which is below the 89,995 approved by the City Council in April 2007. To facilitate a comparison by each of the use categories, Table 5 provides a breakdown of the square footages allocated to each use. The table identifies the space allocation as defined by: (1) FEIR 37-03; (2) the April 2007 City Council Adjusted Space Allocation; (3) the status of development with the completion of the Phase I Terminal Area Improvements; and (4) the Proposed Phase II Terminal Area Improvement; (5) the combined Phase I and Phase II In-Use Facilities; and (6) the delta between the combined Phase I and Phase II In-Use Facilities and the April 2007 City Council Adjusted Space Allocation.

TABLE 4
SPACE ALLOCATION ABOVE THE CITY COUNCIL
APRIL 2007 ADJUSTED SPACE ALLOCATION

	FEIR 37-03 (square feet)	Council Approved (square feet)	Total Phase I, Phase II and Existing Terminal Area (square feet)	Notes
Concessions	15,001	13,460	14,813	Reflects closure of second floor restaurant and construction of 2,000 additional square feet of new pre-security concessions. Combined, the space for concessions would exceed the City Council adjusted space allocation by 1,353 square feet.
Restrooms	3,330	2,180	3,080	Provides for new restroom facilities in the ticketing area, while still maintaining the facilities in the Historic Terminal Building. Combined, the amount of restrooms would exceed the City Council adjusted space allocation by 900 square feet.
Ticketing Facilities	14,833	8,360	12,310	Provides a consolidated ticketing facility collocated with the airlines operation offices, whereas FEIR 37-03 assumed ticketing would remain in the Historic Terminal Building and additional space for ticketing would be provided in a covered area outside of the terminal. The combined enclosed space for ticketing would exceed the City Council allocation by 3,950 square feet. A space allocation for covered ticketing space was not quantified.

**TABLE 5
TERMINAL AREA SPACE ALLOCATION BY USE**

Description	Existing Terminal Areas	Terminal Improvements Program Approved by City Council 24-Apr-07	Phase I Constructed Improvements	Phase II Proposed Improvements	Phase I + Phase II and Existing In-Use Facilities ^a	Unused Approved Space
Holdrooms						
Existing Permanent Space ^a	6,500 sf		(6,500) sf	0 sf		
Existing Temporary Space ^b	13,150 sf		(13,150) sf	0 sf		
Proposed Additional Space ^c		<u>26,500 sf</u>	<u>25,461 sf</u>	<u>0 sf</u>		
<i>Subtotal</i>	<i>19,650 sf</i>	<i>26,500 sf</i>	<i>5,811 sf</i>	<i>0 sf</i>	<i>25,461 sf</i>	<i>1,039 sf</i>
Passenger Security Screening						
Existing	3,900 sf		(3,900) sf	0 sf		
Proposed Additional Space		<u>8,940 sf</u>	<u>7,988 sf</u>	<u>0 sf</u>		
<i>Subtotal</i>	<i>3,900 sf</i>	<i>8,940 sf</i>	<i>4,088 sf</i>	<i>0 sf</i>	<i>7,988 sf</i>	<i>952 sf</i>
Concession Area						
Existing Permanent Space ^a	5,460 sf	5,210 sf	(250) sf	0 sf		
Proposed Additional Space ^c	-	<u>8,250 sf</u>	<u>7,603 sf</u>	<u>2,000 sf</u>		
<i>Subtotal</i>	<i>5,460 sf</i>	<i>13,460 sf</i>	<i>7,353 sf</i>	<i>2,000 sf</i>	<i>14,813 sf</i>	<i>(1,353) sf</i>
Baggage Security Screening						
Existing	5,000 sf	0 sf	0 sf	(5,000) sf		
Baggage Security Screening	-	<u>6,200 sf</u>	<u>0 sf</u>	<u>6,200 sf</u>		
<i>Subtotal</i>	<i>5,000 sf</i>	<i>6,200 sf</i>	<i>0 sf</i>	<i>1,200 sf</i>	<i>6,200 sf</i>	<i>0 lf</i>
Baggage Claim Devices						
Existing Passenger Side	226 lf		0 lf	(226) lf		0 lf
Existing Airline Loading Side	180 lf		0 lf	(180) lf		0 lf
Proposed Passenger Side		380 lf	0 lf	380 lf		0 lf
Proposed Airline Loading Side	-	<u>250 lf</u>	<u>0 lf</u>	<u>250 lf</u>		<u>0 lf</u>
<i>Subtotal</i>	<i>406 lf</i>	<i>630 lf</i>	<i>0 lf</i>	<i>224 lf</i>	<i>630 lf</i>	<i>0 lf</i>
Baggage Service Office Area						
Existing Baggage Service Office Area	0 sf	0 sf	0 sf	0 sf		
Proposed Baggage Service Office		825 sf	0 sf	500 sf		
Proposed Multi-Purpose Rooms	-	<u>300 sf</u>	<u>0 sf</u>	<u>0 sf</u>		
<i>Subtotal</i>	<i>0 sf</i>	<i>1,125 sf</i>	<i>0 sf</i>	<i>500 sf</i>	<i>500 sf</i>	<i>625 sf</i>
Restrooms (non-secure)						
Existing Permanent Space ^a	1,330 sf	1,330 sf	0 sf	0 sf		
Existing Temporary Space ^b	-	0 sf	0 sf	0 sf		
Proposed Additional Space ^c	-	<u>850 sf</u>	<u>0 sf</u>	<u>1,750 sf</u>		
<i>Subtotal</i>	<i>1,330 sf</i>	<i>2,180 sf</i>	<i>0 sf</i>	<i>1,750 sf</i>	<i>3,080 sf</i>	<i>(900) sf</i>
Office Space						
TSA						
Existing Temporary Space	3,600 sf		(3,600) sf	0 sf		
Proposed Additional Space	-	<u>5,000 sf</u>	<u>247 sf</u>	<u>0 sf</u>		
<i>Subtotal</i>	<i>3,600 sf</i>	<i>5,000 sf</i>	<i>(3,353) sf</i>	<i>0 sf</i>	<i>247 sf</i>	<i>4,753 sf</i>

TABLE 5
TERMINAL AREA SPACE ALLOCATION BY USE

Description	Existing Terminal Areas	Terminal Improvements Program Approved by City Council 24-Apr-07	Phase I Constructed Improvements	Phase II Proposed Improvements	Phase I + Phase II and Existing In-Use Facilities ^a	Unused Approved Space
Airlines (Operations Offices)						
Existing Permanent Space	2,000 sf	2,000 sf	0 sf	0 sf		
Existing Temporary Space	0 sf	0 sf	0 sf	0 sf		
Proposed Additional Space	-	<u>4,930 sf</u>	<u>0 sf</u>	<u>2,000 sf</u>		
<i>Subtotal</i>	<i>2,000 sf</i>	<i>6,930 sf</i>	<i>0 sf</i>	<i>2,000 sf</i>	<i>4,000 sf</i>	<i>2,930 sf</i>
Airport (Office & Conference)						
Existing Permanent Space	6,970 sf	6,970 sf	0 sf	0 sf		
Existing Temporary Space		0 sf	0 sf	0 sf		
Proposed Additional Space	-	<u>4,330 sf</u>	<u>0 sf</u>	<u>0 sf</u>		
<i>Subtotal</i>	<i>6,970 sf</i>	<i>11,300 sf</i>	<i>0 sf</i>	<i>0 sf</i>	<i>6,970 sf</i>	<i>4,330 sf</i>
Total Office Space	12,570 sf	23,230 sf	(3,353) sf	2,000 sf	11,217 sf	12,013 sf
Ticketing Facilities						
Existing Ticket Counter Area	1,250 sf	1,250 sf	0 sf	(1,250) sf		
Proposed Additional Space	-	<u>0 sf</u>	<u>0 sf</u>	<u>1,250 sf</u>		
<i>Subtotal</i>	<i>1,250 sf</i>	<i>1,250 sf</i>	<i>0 sf</i>	<i>0 sf</i>	<i>1,250 sf</i>	<i>0 sf</i>
Existing Ticket Counter Queuing	1,400 sf	1,400 sf	0 sf	(1,400) sf		
Proposed Additional Space	-	<u>0 sf</u>	<u>0 sf</u>	<u>3,750 sf</u>		
<i>Subtotal</i>	<i>1,400 sf</i>	<i>1,400 sf</i>	<i>0 sf</i>	<i>2,350 sf</i>	<i>3,750 sf</i>	<i>(2,350) sf</i>
Existing Airline Ticket Office	4,360 sf	4,360 sf	(50) sf	(4,310) sf		
Proposed Additional Space	-	<u>(50) sf</u>	<u>-</u>	<u>4,310 sf</u>		
<i>Subtotal</i>	<i>4,360 sf</i>	<i>4,310 sf</i>	<i>(50) sf</i>	<i>0 sf</i>	<i>4,310 sf</i>	<i>0 sf</i>
Existing Circulation – Ticketing	1,400 sf	1,400 sf	0 sf	(1,400) sf		
Proposed Additional Space	-	<u>0 sf</u>	<u>0 sf</u>	<u>3,000 sf</u>		
<i>Subtotal</i>	<i>1,400 sf</i>	<i>1,400 sf</i>	<i>0 sf</i>	<i>1,600 sf</i>	<i>3,000 sf</i>	<i>(3,000) sf</i>
<i>Proposed Combined Ticketing Facilities</i>					<i>12,310 sf</i>	
Repurposed Former Ticketing Area				<u>8,360 sf</u>		
<i>Subtotal</i>				<i>8,360 sf</i>	<i>8,360 sf</i>	<i>8,360 sf</i>
Total for Ticketing Facilities	8,410 sf	8,360 sf	(50) sf	3,950 sf	20,670 sf	(12,310) sf
Summary						
<i>Existing Space</i>	<i>56,320 sf</i>	<i>56,320 sf</i>	<i>56,320 sf</i>	<i>70,169 sf</i>		
<i>Existing Space Removed/Demolished</i>		<i>(32,400) sf</i>	<i>(27,450) sf</i>	<i>(5,000) sf</i>		
<i>Proposed Additional Space</i>	<i>-</i>	<i>66,075 sf</i>	<i>41,299 sf</i>	<i>24,760 sf</i>		
Total Programmed Area	56,320 sf	89,995 sf	70,169 sf	89,929 sf	89,929 sf	66 sf
^a The values in this table are calculated by adding the square footage shown for Existing Terminal Area, Phase I Constructed Improvements, and the Proposed Phase II Improvements.						
Source: Jacobs 2018 (developed using as-built information for Phase I Improvements)						

3.4 INTENDED USES OF THIS ADDENDUM

This Addendum, together with FEIR 37-03 would be used by the Long Beach City Council to approve the design and construction of the Phase II LGB Terminal Area Improvements. Additionally, the Planning Commission would use the Addendum together with FEIR 37-03 as CEQA documentation as part of their site plan review process.

SECTION 4.0 ENVIRONMENTAL ANALYSIS

The analysis in this Addendum evaluates whether the potential impacts associated with these Phase II LGB Terminal Area Improvements, as outlined in Section 3.0, Project Description, are substantially the same as those addressed in FEIR 37-03. This evaluation includes a determination as to whether the implementation of the development would result in any new significant impacts or a substantial increase in a previously identified significant impact.

Although Section 15164 of the State CEQA Guidelines does not stipulate the format or content of an Addendum, the topical areas identified in the Environmental Checklist provided in Appendix G of the State CEQA Guidelines (Checklist) were used as guidance for this Addendum. The responses consider the totality of the improvements identified above as being part of the Terminal Area Improvement Program. All the proposed improvements are located in the immediate vicinity of the Airport terminal and therefore, are within the study area evaluated in FEIR 37-03.

This comparative analysis provides the City of Long Beach with the factual basis for determining whether any changes in the Project, any changes in circumstances, or any new information since FEIR 37-03 was certified that would require additional environmental review or preparation of a supplemental or subsequent EIR.

Pursuant to Section 15162 of the State CEQA Guidelines, the City of Long Beach has determined, on the basis of substantial evidence in the light of the whole record, that (1) implementation of the Phase II LGB Terminal Area Improvements does not propose substantial changes to the facility improvements identified in FEIR 37-03; (2) no substantial changes in circumstances would occur that would require major revisions to FEIR 37-03; and (3) no new information of substantial importance has been revealed since the certification of FEIR 37-03.

A mitigation program with a MMRP was adopted by the City Council as a part of FEIR 37-03 that minimized impacts associated with implementation of the Long Beach Airport Terminal Improvements. This evaluation assumes implementation of applicable components of the MMRP would be applicable to the Project improvements. As noted in the subsequent evaluation, elements of the MMRP were found not to be for the applicable to the Project. The analysis clearly identifies those measures deemed not to be applicable. The MMRP is contained in Attachment A.

4.1 AESTHETICS

Summary of Previous Findings

FEIR 37-03 did not identify significant aesthetic impacts after mitigation associated with the Terminal Area Improvement Project. Potential significant impacts were identified during construction and associated with potential light and glare. Mitigation measures requiring screening of construction areas and use of low-intensity street lighting and low-intensity exterior lighting reduced these potential impacts to less than significant. Additionally, the Planned Development zoning regulations and design guidelines establish standards for improvements at the Airport that address potential visual impacts. The design of the Terminal Area Improvement would comply with applicable design standards for development at the Airport. The FEIR Concept design assumed the improvements would be attached to the Historic Terminal Building. Confirmation by the Cultural Heritage Commission that any new construction proposed adjacent to the Terminal building or attached complies with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings, and more specifically, the Secretary of the Interior's Standards

for Rehabilitation (Standards) were deemed sufficient to minimize any potential visual impacts to the Historic Terminal Building.

Project Impact Analysis

- 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?***
- 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 Airport is not located in the viewshed of a designated scenic vista or state scenic highway. Views of the improvements would be limited to the area surrounding the Airport terminal area and would have minimal effect outside the immediate area. This portion of the Airport site does not have trees or rock outcroppings that would be affected by any of the proposed improvements.

Though not located along a State scenic highway, the original terminal building is a notable local historic landmark to the residents of the City of Long Beach. Protection of the views of the terminal building was a point of concern during the preparation of FEIR 37-03. As part of the design considerations of the terminal improvements, views of the Historic Terminal Building were preserved on Donald Douglas Drive. As shown in Exhibit 4, the proposed improvements are setback or behind the Historic Terminal Building. None of the improvements would impede views of the Historic Terminal Building. The views of the terminal area from Lakewood Boulevard or Donald Douglas Drive would not be substantially different from existing conditions. The proposed relocation of the rental car facilities would eliminate the modular building currently located across the street from the Historic Terminal Building. This would improve the views from this vantage point.

The largest of the new facilities (the ticketing/AOA area) is approximately 14,310 square feet. The location of the ticketing facilities is consistent with the location identified in the Concept Floor Plan in FEIR 37-03 for ticketing facilities; however, in FEIR 37-03, the ticketing area was identified as a covered, open air facility. The massing of the proposed improvements would not be out of scale with the existing setting and the facility would not be attached to the Historic Terminal Building. The building would be single-story and between 12 and 15 feet tall. There would be an approximate 40-foot separation between the Historic Terminal Building and the Ticketing Facility. Exhibit 6 provides a simulation of the change in viewshed adjacent to the Historic Terminal Building with the Ticketing Facility. From Lakewood Boulevard the ticketing building would not be visible because it would be shielded from the views of motorists by the existing parking structures.

When approaching the terminal on Donald Douglas Drive, the new facilities with the greatest visibility will be the landside concessions. This is a relatively small building (2,000 square feet) and would be located in the vicinity of the existing AOA. Exhibits 7 and 8 provide simulations of views of the proposed concessions, the consolidated baggage claim area, and Meeter/Greeter Courtyard. Though the baggage claim area is open air, the concept assumes a raised “parapet” wall to match the existing TSA passenger screening checkpoint building on the other side of the courtyard.¹²

¹² The parapet wall on the TSA building is designed to block the view of the HVAC system on the roof of the building. The baggage claim area would not have conditioned air.



Existing view of Terminal and breezeway toward Passenger Security Screening building



Proposed view of new Ticketing Facility toward Passenger Security Screening building

Source: Long Beach Airport

View Simulation of Proposed Ticketing Facility and Passenger Security Screening

Phase II Terminal Area Improvements

Exhibit 6





Existing view of canopy from west of existing Baggage Claim #3



Proposed view of new Concessions and Bag Claim area

Source: Long Beach Airport

View Simulation of Proposed Concessions Building and Consolidated Baggage Claim

Phase II Terminal Area Improvements

Exhibit 7





Existing view of Passenger Concourse exit and Meeter-and-Greeter courtyard



Proposed view of new Consolidated Baggage Claim and Meeter-and-Greeter Courtyard

Source: Long Beach Airport

View Simulation of Consolidated Baggage Claim and Meeter/Greeter Plaza

Phase II Terminal Area Improvements

Exhibit 8



As noted, the Phase II Terminal Area Improvements propose to modify the Historic Terminal Building to allow access from the back of the terminal to the Meeter/Greeter Courtyard. This would change the visual characteristics compared to existing conditions but would return more closely to the original building design. Exhibits 9 and 10 provide simulations from two different perspectives showing the modifications to the Historic Terminal Building from the west (rear of the building). These modifications would open up the area and provide better views of the Historic Terminal Buildings and expanded courtyard area. These views are similar to what was evaluated in FEIR 37-03, which assumed the rear of the building would be opened; however, the courtyard area is larger providing a more open feel to the area (see Exhibit 5 for the concept evaluated in FEIR 37-03).

Additionally, the mitigation measures adopted in conjunction with FEIR 37-03 require improvement plans to be reviewed by the Cultural Heritage Commission (see MM 3.3-6 under Cultural Resources). This would ensure that the final design of the ticketing facility and the concessions will be compatible with the Historic Terminal Building, and improvements would not degrade the existing visual character or quality of the site.

The improvements would require lighting. The ticketing building would be new construction; however, there would potentially be lower levels of ambient light levels than with an open air ticketing facility because the facilities would be enclosed, thereby diffusing the ambient light outside of the building. Additionally, the improvements would be in proximity to in the Terminal area, which has been developed with similar uses. Design would be required to comply with applicable regulations associated with light and glare, as set forth in the zoning ordinance and FAA regulations. Lighting from the facilities would not extend beyond the terminal area.

Mitigation Program

The following project design feature, standard conditions, and mitigation measures pertaining to aesthetics identified in FEIR-37-03 would be applicable to the Phase II LGB Terminal Area Improvement Program:

Project Design Feature

PDF 3.1-1 The Guiding Principles have been used in the development of the conceptual design plan. As part of final design, the requirements outlined in these documents, which are named below, would provide guidance to protect the historic integrity of the existing terminal. This also serves to ensure a unified appearance and enhance the aesthetics of the terminal area. The Guiding Principles include: (1) May 7, 1990, memorandum of understanding (MOU) by the Neighborhood and Historic Preservation Officer for the City of Long Beach providing guidelines for future environmental review of the Airport Terminal Building; (2) Secretary of the Interior's standards for rehabilitation of historic buildings; (3) Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan Ordinance adopted by the City Council on September 2, 1997; (4) the City's Cultural Heritage Ordinance (Chapter 2.63 of the Municipal Code); and (5) a memorandum on considerations for new construction prepared by PCR Services Corporation (June 22, 2005). These documents all provide guidance on development standards for terminal area improvements and are included in Appendix B of the EIR.



Existing view of Historic Terminal Building from Passenger Concourse Exit (West)



Proposed unobstructed view of Historic Terminal Building from Concourse Exit (West)

Source: Long Beach Airport

View Simulation of the West View of the Historic Terminal Building

Phase II Terminal Area Improvements

Exhibit 9





Existing view of Historic Terminal Building (back side)



Proposed view of new Meter-and-Greeter courtyard from new Concessions and Baggage Claim area

Source: Long Beach Airport

View Simulation Looking South West of the Historic Terminal Building

Phase II Terminal Area Improvements

Exhibit 10



Standard Conditions (SC)

- SC 3.1-1 Prior to building plan approval, the Planning Commission shall ensure that all development complies with the development standards and design guidelines contained in Ordinance No. C-7496, *Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan (PD-12)*.
- SC 3.1-2 Prior to building plan approval, the Cultural Heritage Commission shall ensure that any new construction proposed adjacent to the Terminal Building or attached onto it shall comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings, and more specifically, the Secretary of the Interior's Standards for Rehabilitation (Standards).
- SC 3.1-3 Prior to building plan approval, the Cultural Heritage Commission shall ensure that all development shall comply with the May 7, 1990 MOU adopted by the City Council and Cultural Heritage Commission providing guidelines for future environmental review of the Airport Terminal Building (the MOU is contained in Appendix B).

Mitigation Measures

- MM 3.1-1 During construction activities, the construction contractor shall ensure that construction materials and equipment staging areas be located away from existing residential uses and, when feasible, appropriate screening (i.e., temporary fencing with opaque material) shall be used to buffer views of the construction site.
- MM 3.1-2 During construction activities, the construction contractor shall ensure that temporary construction-related security lighting shall be arranged so that direct rays will not shine on or produce glare for adjacent street traffic and residential uses. The light fixtures specified for the Project design must comply with the standard of the Illuminating Engineering Society for full cutoff capability.
- MM 3.1-3 Prior to building plan approval, the Planning Commission shall ensure that all exterior lighting be designed and located as to avoid intrusive effects on the runway operations, so as not to result in an air safety hazard. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary to prevent spill lighting on adjacent off-site uses.
- MM 3.1-4 Prior to building plan approval, the Planning Commission shall ensure that all development projects use reflective glass that is less than 20 percent and all other materials used on exterior buildings and structures shall be selected with attention to minimizing reflective glare.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Summary of Previous Findings

Impacts to agricultural resources were focused out of FEIR 37-03 based on the 2002 Los Angeles County Important Farmland Map prepared by the Department of Conservation.

Project Impact Analysis

- a) Would the project convert Prime Farmland, Unique Farmland, or 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 or conversion forest land to no-forest use?*

Based on the 2014 Los Angeles County Important Farmland Map prepared by the Department of Conservation, there would be no impacts to farmlands listed as “Prime”, “Unique”, or of “Statewide Importance” due to lack of resources in the area. No part of the Airport property is under a Williamson Act Contract. Additionally, there are no forestland or timberland resources in the vicinity of the Airport; therefore, there would be no direct or indirect (i.e., pressure for conversion) impacts on these resources.

Mitigation Program

Since analysis of agricultural resources was focused out of FEIR 37-03, there is no applicable Mitigation Program for this topical area. Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.3 AIR QUALITY

Summary of Previous Findings

FEIR 37-03 identified that Project related construction activities would result in significant short-term construction related air quality impact for NO_x and VOC. Additionally, the Project would contribute to potentially significant cumulative air quality impacts associated with construction activities. In conjunction with certification of FEIR 37-03, the Long Beach City Council adopted a Finding of Fact and a Statement of Overriding Considerations for construction air quality impacts.

FEIR 37-03 did not identify a significant impact associated with long term use of the terminal facility. Additionally, a Project Design Feature was that the building would be constructed to meet

LEED standards. Though no significant Project-related air quality impacts were identified, in addition to incorporation of standard conditions of approval, the City Council adopted measures to require higher levels of energy saving design, upgrades as part of air carrier ramp design, and upgrades to ground service equipment (GSE), all which would reduce the operational air emissions of the Airport.

Project Impact Analysis

- 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)?***
- d) Would the project expose sensitive receptors to substantial pollutant concentrations?***
- e) Would the project create objectionable odors affecting a substantial number of people?***

The proposed improvements would not require any modifications to the 2016 Air Quality Management Plan (AQMP) adopted by the SCAQMD on March 3, 2017. The AQMP utilizes the growth assumptions in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which was adopted by the Southern California Association of Governments (SCAG) in April 2016. These regional planning documents assume current number of allocated flights operating at the Airport. All the improvements are landside and would not provide any improvements that would increase flights, passenger loads, or operational procedures; therefore, there would be no conflict with the AQMP.

Land uses that are identified by the SCAQMD as major odor sources include wastewater treatment plants, agricultural operations, landfills, composting facilities, food processing plants, chemical plants, or refineries. The long term operation of the improvements would not result in the creation of odors that would affect a substantial number of people. The SCAQMD does not identify construction activities as creating an odor nuisance pursuant to SCAQMD's Rule 402.

The Phase II LGB Terminal Area Improvement Program would have air quality impacts associated with construction and long-term operation of the improvements. Construction related air emissions would be associated with air pollutants emitted by construction equipment and construction worker vehicles. Fugitive dust would be generated during site preparation and grading. The long-term operational impacts would be associated with utility usage associated with expanded facilities (i.e., heating and cooling requirements) and an incremental increase in employees at the Airport related to the increased concessions opportunities.

FEIR 37-03 identified a significant unavoidable construction air quality impact for NO_x and VOC emissions. These are precursors for ozone (O₃), a photochemical oxidant. The analysis conducted as part of FEIR 37-03 evaluated substantially more development than is being considered as part of the combined Phase I and Phase II Terminal Area Improvement Program. Construction activities for the analysis in FEIR 37-03 were assumed to include demolition of several existing structures, construction of new permanent terminal facilities and a parking structure, the grading and paving of Parcel O, and the addition of aircraft parking positions. The

improvements associated with the proposed Phase II LGB Terminal Area Improvement Program require limited grading because the site has been previously graded and paved. The design of the outbound baggage area and the baggage claim area is as covered open-air facilities, thereby reducing the amount of construction activities. Demolition is assumed for the TSA Baggage Screening building, removal of the modular building for the rental cars facility, and removal of paving in all locations where improvements are proposed.

A quantitative evaluation of the construction emissions was conducted to substantiate that the emissions would be less what was evaluated in FEIR 37-03. Emissions were calculated by using California Emissions Estimator Model (CalEEMod) version 2016.3.2 (CAPCOA 2016). CalEEMod is a computer program accepted by the SCAQMD that can be used to estimate anticipated emissions associated with land development projects in California. CalEEMod has separate databases for specific counties and air districts.¹³

Table 6 provides the SCAQMD air quality significance thresholds for both construction and operation. Table 7 provides the estimated maximum daily regional construction emissions for the Project.¹⁴ The analysis recognizes that construction would be phased with the improvements in the terminal area occurring first, followed by the rental car facilities improvements, and the final phase would be the ground transportation plaza. As shown in Table 7 impacts for each criteria pollutant would be less than significant.

**TABLE 6
SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT AIR QUALITY
SIGNIFICANCE THRESHOLDS**

Mass Daily Thresholds (lbs/day)		
Pollutant	Construction	Operation
VOC	75	55
NOx	100	55
CO	550	550
SOx	150	150
PM10	150	150
PM2.5	55	55
lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides. PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter.		
Source: SCAQMD 2015.		

¹³ FEIR 37-03 estimated criteria pollutant emissions from construction activities using the California Air Resources Board's (CARB's) OFFROAD model emission factors for equipment engines, and URBEMIS2002 for architectural coatings and Parcel O grading/paving (Long Beach 2006a). CalEEMod and URBEMIS are both air quality models that quantify emissions from the various phases of construction and operation for land uses identified in the Institute of Traffic Engineers (ITE) Trip Generation Manual. CalEEMod was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts and accounts for local requirements and conditions. The programs use different methods to estimate PM. URBEMIS used the quantity of cut and fill, whereas CalEEMod uses equipment hours. The SCAQMD has replaced the use of URBEMIS with CalEEMod in CEQA analyses.

¹⁴ At the time the analysis was conducted, the Phase II improvements provided for a total of 23,525 square feet of new construction. Based on further refinements, a total of 24,760 square feet of new construction is proposed. However, given the projected emissions are substantially below the SCAQMD thresholds, the impacts would still be less than significant.

TABLE 7
ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Year	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2018	1	13	9	<1	2	1
2019	44	10	8	<1	1	1
2020	4	43	24	<1	10	6
2021	2	22	16	<1	4	2
Maximum	44	43	24	<1	10	6
SCAQMD Thresholds (Table 6)	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No
lbs/day: pounds per day; VOC: volatile organic compound; NO _x : nitrogen oxides; CO: carbon monoxide; SO _x : sulfur oxides; PM ₁₀ : respirable particulate matter 10 microns or less in diameter; PM _{2.5} : fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District. Source: SCAQMD 2015 (thresholds); see Attachment C for CalEEMod model outputs.						

The localized effects from the on-site portion of daily emissions were evaluated at receptor locations potentially impacted by the Project according to the SCAQMD's localized significance threshold (LST) method, which utilizes on-site emissions rate look up tables and Project-specific modeling, where appropriate. LSTs are applicable to the following criteria pollutants: nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter 10 microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest receptor. For LST CO and NO_x exposure analysis, receptors who could be exposed for one hour or more are considered. Receptors in surrounding buildings near the Project site could be exposed for 1 hour, and therefore, for NO_x and CO, the receptors distance used for LST purposes is 25 meters (the minimum distance used for LST purposes). For PM₁₀ and PM_{2.5} exposure analysis, receptors who could be exposed for 24 hours are considered. The nearest receptors that could be exposed for 24 hours are at hotel uses, over 750 meters north of the Project site. Therefore, the 500 meter receptor distance is used for PM₁₀ and PM_{2.5} (500 meters is the maximum recommended distance for LST purposes). The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The SCAQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres, which means this is the appropriate method for the Project. When quantifying mass emissions for localized analysis, only emissions that occur on site are considered. Consistent with the SCAQMD's LST method guidelines, emissions related to off-site delivery/haul truck activity and employee trips are not considered in the evaluation of localized impacts. As shown in Table 8 impacts would be less than significant when applying the SCAQMD LST.

TABLE 8
CONSTRUCTION PHASE
LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS

Emissions and Thresholds	Emissions (lbs/day)			
	NOx	CO	PM10	PM2.5
Project maximum daily on-site emissions	44	22	9	6
Localized Significance Threshold	70	714	163	97
Exceeds Threshold?	No	No	No	No
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter. Note: Data is for SCAQMD Source Receptor Area 4, South Coastal Los Angeles County, 1.5 acres. Source: SCAQMD 2009 (thresholds); see Attachment C for CalEEMod model outputs.				

Based on the information provided above, there would be no new significant construction related air quality impact and the impacts would not be more severe than those identified in FEIR 37-03. Impacts would be less than significant using the SCAQMD thresholds.

From an operation perspective, the long-term operational impacts would be associated with utility usage associated with expanded facilities (i.e., heating and cooling requirements) and potentially an incremental increase in employees at the Airport related to the increased concessions opportunities. The increase in square footage requiring heating and cooling would be limited to the approximately 19,760 square feet (ticketing/AOA facilities [14,310 square feet], TSA baggage security screening [net increase of 1,200 square feet], baggage claim office [500 square feet], concessions area (2,000 square feet), and the additional restroom area [1,750 square feet]. However, even with the increased square footage over existing conditions, it is less than or equal to what was assumed in FEIR 37-03 and the total square footage of terminal area facilities would not exceed the City Council adjusted space allocations square footage total. However, to ensure the assessment of impacts is comprehensive, the operational impacts were assessed. As noted above, the improvements would not result in any additional flights or change the characteristics of the current operations at the Airport. Therefore, there would not be additional vehicle trips accessing the Airport. Table 9 identifies the peak operational emissions associated with build-out of the improvements and Table 10 provides the operational impacts in relationship to the LST. As shown in these two tables, impacts would be nominal. Therefore, there would be no new significant impact and the impacts would not be more severe than those identified in FEIR 37-03.

TABLE 9
PEAK DAILY OPERATIONAL EMISSIONS FOR FULL BUILDOUT

Source	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Area sources	1	<1	<1	<1	<1	<1
Energy sources	<1	<1	<1	<1	<1	<1
Mobile sources	<1	<1	<1	<1	<1	<1
Total Operational Emissions^a	1	<1	<1	<1	<1	<1
SCAQMD Significance Thresholds (Table 5)	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District. ^a Some totals do not add due to rounding. Note: CalEEMod model data sheets are included in Attachment C.						

TABLE 10
OPERATIONS PHASE
LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS

Emissions and Thresholds	Emissions (lbs/day)			
	NOx	CO	PM10	PM2.5
Project Maximum Daily On-Site Emissions				
Area	<1	<1	<1	<1
Energy	<1	<1	<1	<1
Mobile ^a	<1	<1	<1	<1
Total	<1	<1	<1	<1
Localized Significance Threshold	70	714	39	24
Exceeds Threshold?	No	No	No	No
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District. ^a On-site mobile emissions are conservatively assumed to be 5% of the total on- and off-site emissions. Note: Data is for SCAQMD Source Receptor Area 4, South Coastal Los Angeles County, 1.5 acres Source: SCAQMD 2009 (thresholds); see Attachment C for CalEEMod model outputs.				

To assess potential impacts on sensitive receptors, a health risk assessment was prepared as part of FEIR 37-03.¹⁵ Air dispersion modeling was used to estimate ambient criteria pollutant and toxic air contaminant (TAC) concentrations. The analysis noted that the 2020 scenarios have lower incremental risks than the 2011 scenarios because the phase-in of regulations that apply to both on-road (passenger cars and cargo trucks) and off-road mobile sources (ground service equipment [GSE]) that will result in a decrease in emissions. The Estimated Highest Incremental Non-Cancer Inhalation Health Hazard Indices (HI), even with implementation of the Optimized Flights scenario, would not be expected to result in significant chronic non-cancer effects. HI estimates include cumulative exposures to all TACs that are toxic to the respiratory system at low

¹⁵ The TAC inventories from construction equipment were developed using profile data from CARB for gasoline-fueled and diesel-fueled equipment. TACs from architectural coatings and construction dust were also estimated from CARB profile data. The specifics are in FEIR 37-03 (Long Beach 2006a).

chronic daily exposure. No impacts would occur. It should also be noted that the analysis in FEIR 37-03 also assumed construction on Parcel O, which is in close proximity to residential development. For the proposed improvements, the closest sensitive receptor would be the residences located east of Clark Avenue, which is slightly more than 0.6 mile away.

Mitigation Program

The following project design feature, standard conditions and mitigation measures pertaining to air quality that were identified in the FEIR 37-03 Mitigation Program that are applicable to the improvements proposed as part of the Phase II LGB Terminal Area Improvement Program. FEIR 37-03 identified several measures that would not be applicable to the Project improvements. Specifically, MM 3.2-12 through MM 3.2-16 pertain to airfield improvements, aviation operations, or the City's purchase of new vehicles or equipment serving the Airport; therefore, they are not applicable because the improvements being proposed would not affect the airfield.

Project Design Feature

PDF 3.2-1 As part of project design, the City of Long Beach shall ensure the terminal area improvements are designed and constructed to meet Leadership in Energy and Environmental Design (LEED) specifications.

Standard Conditions

SC 3.2-1 During construction of the Proposed Project, the City and its contractors will be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions should not create a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Two options are presented in Rule 403; monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction.

Rule 403 requires that "A person conducting active operations within the boundaries of the South Coast Air Basin shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation." Rule 403 also requires that the construction activities "shall not cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined by simultaneous sampling, as the difference between upwind and downwind sample." A project is exempt from the monitoring requirement "if the dust control actions, as specified in Table 2 are implemented on a routine basis for each applicable fugitive dust source type." Table 2 from Rule 403 is presented below as Table 3.2-22.¹⁶ Under high wind conditions (*i.e.*, when wind gusts exceed 25 miles per hour) additional control measures are required, and "the required control measures for high wind conditions are implemented for each applicable fugitive dust source type, as specified in Table 1." Table 1 from Rule 403 is presented below as Table 3.2-23. Monitoring of particulate concentrations does not reduce fugitive dust emissions; therefore, to minimize fugitive dust emissions the construction activities will utilize

¹⁶ The Mitigation Program is based on what was approved by the City Council with certification of FEIR 37-03. The table numbers in these measures reflects the table numbering in FEIR 37-03.

the measures presented in Table 3.2-23 and Table 3.2-22 (Tables 1 and 2 in Rule 403) rather than the monitoring option of SCAQMD Rule 403.

Further, Rule 403 requires that the project shall “prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations.” Alternatively, the project can “take at least one of the actions listed in Table 3.” Table 3 from Rule 403 is presented below as Table 3.2-24. In addition, the project would be required to “prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at any time track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.

**TABLE 3.2-22
FUGITIVE DUST CONTROL ACTIONS FOR EXEMPTION TO MONITORING
(RULE 403 TABLE 2)**

Source Category	Control Actions
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the USEPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR (1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas	(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the USEPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the USEPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.
Earth-moving: Construction cut areas and mining operations	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) Apply chemical stabilizers within five working days of grading completion; OR (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas
Inactive disturbed surface areas	(3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than

**TABLE 3.2-22
FUGITIVE DUST CONTROL ACTIONS FOR EXEMPTION TO MONITORING
(RULE 403 TABLE 2)**

Source Category	Control Actions
	30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.
Unpaved Roads	(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR (4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR•(4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a) Apply chemical stabilizers; OR (5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR (5c) Install temporary coverings; OR (5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extends, at a minimum, to the top of the pile.
All Categories	(6a) Any other control measures approved by the Executive Officer and the USEPA as equivalent to the methods specified in Table 2 may be used.

**TABLE 3.2 23
REQUIRED BEST AVAILABLE CONTROL MEASURES
(SCAQMD RULE 403, TABLE 1)**

Control Measure	Guidance
Backfilling	
01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	• Mix backfill soil with water prior to moving • Dedicate water truck or high capacity hose to backfilling equipment • Empty loader bucket slowly so that no dust plumes are generated • Minimize drop height from loader bucket
Clearing and Grubbing	
02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	• Maintain live perennial vegetation where possible • Apply water in sufficient quantity to prevent generation of dust plumes
Clearing Forms	
03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	• Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	
04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	• Follow permit conditions for crushing equipment • Pre-water material prior to loading into crusher • Monitor crusher emissions opacity • Apply water to crushed material to prevent dust plumes

TABLE 3.2 23
REQUIRED BEST AVAILABLE CONTROL MEASURES
(SCAQMD RULE 403, TABLE 1)

Control Measure		Guidance
Cut and Fill		
05-1	Pre-water soils prior to cut and fill activities; and	- For large sites, pre-water with sprinklers or water trucks and allow time for penetration - Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
05-2	Stabilize soil during and after cut and fill activities.	
Demolition – Mechanical/Manual		
06-1	Stabilize wind erodible surfaces to reduce dust; and	Apply water in sufficient quantities to prevent the generation of visible dust plumes
06-2	Stabilize surface soil where support equipment and vehicles will operate; and	
06-3	Stabilize loose soil and demolition debris; and	
06-4	Comply with AQMD Rule 1403.	
Disturbed Soil		
07-1	Stabilize disturbed soil throughout the construction site; and	- Limit vehicular traffic and disturbances on soils where possible - If interior block walls are planned, install as early as possible - Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
07-02	Stabilize disturbed soil between structures	
Earth-Moving Activities		
08-1	Pre-apply water to depth of proposed cuts; and	- Grade each project phase separately, timed to coincide with construction phase - Upwind fencing can prevent material movement on site - Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
08-2	Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and	
08-3	Stabilize soils once earth-moving activities are complete.	
Importing/Exporting of Bulk Materials		
09-1	Stabilize material while loading to reduce fugitive dust emissions; and	- Use tarps or other suitable enclosures on haul trucks - Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage - Comply with track-out prevention/mitigation requirements - Provide water while loading and unloading to reduce visible dust plumes
09-2	Maintain at least six inches of freeboard on haul vehicles; and	
09-3	Stabilize material while transporting to reduce fugitive dust emissions; and	
09-4	Stabilize material while unloading to reduce fugitive dust emissions; and	
09-5	Comply with Vehicle Code Section 23114.	
Landscaping		
10-1	Stabilize soils, materials, slopes	- Apply water to materials to stabilize, maintain materials in a crusted condition - Maintain effective cover over materials - Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes - Hydro seed prior to rain season

TABLE 3.2 23
REQUIRED BEST AVAILABLE CONTROL MEASURES
(SCAQMD RULE 403, TABLE 1)

Control Measure		Guidance
Road Shoulder Maintenance		
11-1	Apply water to unpaved shoulders prior to clearing; and	• Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs • Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs
11-2	Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	
Screening		
12-1	Pre-water material prior to screening; and	• Dedicate water truck or high capacity hose to screening operation • Drop material through the screen slowly and minimize drop height • Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
12-2	Limit fugitive dust emissions to opacity and plume length standards; and	
12-3	Stabilize material immediately after screening.	
Staging Areas		
13-1	Stabilize staging areas during use; and	• Limit size of staging area • Limit vehicle speeds to 15 miles per hour • Limit number and size of staging area entrances/exits
13-2	Stabilize staging area soils at project completion.	
Stockpiles/Bulk Material Handling		
14-1	Stabilize stockpiled materials.	• Add or remove material from the downwind portion of the storage pile • Maintain storage piles to avoid steep sides or faces
14-2	Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	
Traffic Areas for Construction Activities		
15-1	Stabilize all off-road traffic and parking areas; and	• Apply gravel/paving to all haul routes as soon as possible to all future roadway areas • Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
15-2	Stabilize all haul routes; and	
15-3	Direct construction traffic over established haul routes.	
Trenching		
16-1	Stabilize surface soils where trencher or excavator and support equipment will operate; and	• Pre-watering of soils prior to trenching is an effective preventive measure. • For deep trenching activities, pre-trench to 18 inches, soak soils via the pre-trench and resume trenching • Washing mud and soils from equipment at the conclusion of trenching activities to prevent crusting and drying of soil on equipment
16.2	Stabilize soils at the completion of trenching activities.	
Truck Loading		
17-1	Pre-water material prior to loading; and	• Empty loader bucket such that no visible dust plumes are created • Ensure that the loader bucket is close to the truck to minimize drop height while loading
17.2	Ensure that freeboard exceeds six inches (CVC 23114)	
Turf Overseeding		
18-1	Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and	• Haul waste material immediately off-site
18-2	Cover haul vehicles prior to exiting the site.	

TABLE 3.2 23
REQUIRED BEST AVAILABLE CONTROL MEASURES
(SCAQMD RULE 403, TABLE 1)

Control Measure		Guidance
Unpaved Roads/Parking Lots		
19-1	Stabilize soils to meet the applicable performance standards; and	• Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
19-2	Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	
Vacant Land		
20-1	In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

TABLE 3.2-24
TRACK OUT CONTROL OPTIONS

(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the Executive Officer and the USEPA as equivalent to the methods specified in Table 3 may be used.

- SC 3.2-2 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations.
- SC 3.2-3 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, all new and substantially modified buildings shall meet California Title 24 Energy Efficiency standards for water heating, space heating and cooling, to the extent feasible.
- SC 3.2-4 All new and modified point source facilities (e.g., utility equipment, fuel storage and dispensing) shall obtain all required permits from the SCAQMD. To obtain these permits, the facilities will need to include Best Available Control Technology (BACT) that reduces emissions of criteria pollutants.
- SC 3.2-5 In support of PDF 3.2-1 and to conserve energy, require that all exterior lighting use color-corrected low sodium lighting.

Mitigation Measures

- MM 3.2-1 The contract specifications shall require and the City shall enforce general contractors to ensure that all equipment is properly tuned and maintained in accordance with manufacturers' specifications.
- MM 3.2-2 The contract specifications shall require and the City shall enforce general contractors to maintain and operate construction equipment so as to minimize exhaust emissions. During construction, engines on trucks and vehicles in loading and unloading queues will be turned off when not in use, to reduce vehicle emissions. Construction activities should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- MM 3.2-3 The contract specifications shall require and the City shall enforce general contractors sweep streets as needed during construction, but not more frequently than hourly, if visible soil material has been carried onto adjacent public roads.
- MM 3.2-4 The contract specifications shall require and the City shall enforce general contractors to visually inspect construction equipment prior to leaving the site; loose dirt shall be washed off with wheel washers as necessary.
- MM 3.2-5 During construction, the City shall coordinate with the contractor to maximize the ability to power construction activity utilizing electricity from power poles rather than temporary diesel or gasoline power generators, to the extent possible.
- MM 3.2-6 The contract specifications shall require that all on-site mobile equipment used during construction shall be powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) where feasible.
- MM 3.2-7 During construction, the City shall provide a location and require the contractor to store all construction equipment used in the project construction within the project site (away from adjacent residential areas) to reduce the impact on the roadway system and the resultant air emissions.
- On-site construction equipment staging areas and construction worker parking lots shall be located on either paved surfaces or unpaved surfaces that are periodically treated with non-toxic soil stabilizers.
- MM 3.2-8 The contract specifications shall require and the City shall enforce the contractor to schedule all deliveries related to construction activities that affect traffic flow during off-peak hours (e.g., 10:00 a.m. and 3:00 p.m.) and deliveries shall be coordinated to achieve consolidated truck trips. When traffic flow is impacted by the movement of construction materials and/or equipment, temporary traffic controls shall be provided to improve traffic flow (e.g., flag person).
- MM 3.2-9 The contract specifications shall require all on-site heavy-duty construction equipment shall be equipped with diesel particulate traps to the extent that this equipment is available at the time the contracts are awarded.
- MM 3.2-10 The construction specifications shall require and the City shall enforce that emulsified diesel fuel be used in diesel-fueled construction equipment that is not equipped with diesel particulate traps to reduce NO_x emissions.

The use of emulsified diesel fuel in construction equipment is assumed to reduce construction equipment NO_x emissions by 15 to 20 percent (CARB 2004). Applying the lower end of that range to the peak daily NO_x emissions from construction equipment would reduce NO_x emissions by approximately 70 lbs/day to a peak day NO_x emission inventory for construction of 424 lbs/day. This level would still be above the significance threshold. VOC emissions would also remain significant and unavoidable.

MM 3.2-10a During construction of the Proposed Project, the City and its contractors shall be required to comply with the following provisions, where feasible, to reduce construction NO_x and VOC emissions:

- Provide on-site lunch trucks/facilities during construction to reduce off-site worker vehicle trips.
- Prohibit construction vehicles idling in excess of five minutes to be consistent with State law.
- Suspend use of all construction equipment during a first-stage smog alert.
- Designate a person who will ensure implementation of the proposed mitigation measures through direct inspection and investigation of complaints. The City or the contractor shall provide a telephone number that residents may call should they have complaints regarding construction nuisance.

MM 3.2-10b During construction of the Proposed Project, the City and its contractors shall be required to comply with the following provisions, where feasible, to reduce construction VOC emissions:

- Use zero VOC content architectural coatings on buildings.
- Restrict the number of gallons of coatings used per day.
- Encourage water-based coatings or other low-emitting alternatives.
- Paint contractors should use hand applications instead of spray guns.

MM 3.2-11 During project design, the architect shall provide that all fixtures used for lighting exterior common areas are regulated by automatic devices to turn off lights when they are not needed.

MM 3.2-17 The City will require street cleaning of Douglas Drive with a vacuum type street sweeper at least once per week. The vacuum sweeper will make sufficient circuits through the terminal area to vacuum the entire street surface (not just the gutter area) to reduce fugitive PM emissions from re-entrained road dust. Douglas Drive between Lakewood Boulevard and the Long Beach Airport terminal (including the loop in front of the terminal and return) shall be cleaned in this manner. The anticipated future exit road back to Lakewood Boulevard would also be cleaned in this manner.

The range of potential control efficiencies for this mitigation measure is from approximately 10 percent to 50 percent.^{17,18} It is anticipated that a 75 percent reduction would be needed to reduce the peak incremental PM₁₀ concentration below the significance threshold; therefore, PM₁₀ concentrations would remain significant after implementation of this mitigation measure.

4.4 BIOLOGICAL RESOURCES

Summary of Previous Findings

As part of the Initial Study/Notice of Preparation (IS/NOP), the biological resources topic was focused out of FEIR 37-03 due to lack of resources.

Project Impact Analysis

- 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 Game 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, regulations or by the California Department of Fish and Game 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 ordinances?***
- 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?***

As a subset of the Terminal Area Improvements, the Project would be constructed on a portion of the Airport that is currently developed/paved to support airport-associated activities. The improvements would not have any direct impact on biological resources because it would not result in the removal of any sensitive habitat or impact any sensitive species. The Project would not change the type of operations or operational procedures at the Airport; therefore, the Project would not result in substantial interference with the movement of wildlife or migration of birds. Given the history of flights at the Airport, it can be assumed that the existing wildlife has habituated to the noise and other indirect impacts associated with aircraft operations. Additionally, as part of

¹⁷ Cowherd, C., P. Englehart, G.E. Muleski, J.S. Kinsey, and K.D. Rosbury, 1990. Control of Fugitive and Hazardous Dusts, Noyes Data Corporation, Park Ridge, NJ. p.21.

¹⁸ "Improvement of Specific Emission Factors (BACM Project No. 1) Final Report," by Midwest Research Institute for SCAQMD, Diamond Bar, CA, March 29, 1996.

the regular operation of the Airport, the City has incorporated measures such as a Bird Hazard Reduction Plan to reduce potential direct impacts to wildlife species.

Mitigation Program

Since analysis of biological resources was focused out of FEIR 37-03, there is no applicable Mitigation Program for this topical area. Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.5 CULTURAL RESOURCES

Summary of Previous Findings

The record search conducted for FEIR 37-03 indicates that there are no previously recorded archaeological sites within a one-mile radius of the Airport. The potential for archaeological resources or human remains to be present on the Project site was found to be very low because of the disturbed nature of the site.

FEIR 37-03 fully addressed the potential impacts to the Historic Terminal Building, a designated historical landmark. The building is an example of the Streamline Moderne, which is also known as “Art Moderne”. The Historical Assessment (Appendix D of FEIR 37-03) identified 24 character-defining features (CDFs), which are defined as architecturally significant exterior elements that best convey its original use. FEIR 37-03 identified a potentially significant impact because the Terminal Area Improvements proposed alterations to a designated historical landmark. The FEIR identified a number of mitigation measures to minimize potential impacts on the Historic Terminal Building. With the implementation of these measures, which includes the requirement that improvement plans be evaluated by Cultural Heritage Commission and the Commission issue a certificate of appropriateness prior to construction.

Project Impact Analysis

- a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?***
- b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?***
- c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***
- d) Would the project disturb any human remains, including those interred outside of formal cemeteries?***

Archaeological and Paleontological Resources/Human Remains

Based on the disturbed nature of the site and the limited grading that would be expected for the Phase II LGB Terminal Area Improvement Program impacts on archaeological and paleontological resources are not anticipated. Similar to the findings of FEIR 37-03, the potential for archaeological resources or human remains to be present on the Project site is very low because of the disturbed nature of the site. Therefore, the likelihood of a significant impact on archaeological resources is low.

Similarly, based on the literature and records search conducted by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County, there are no recorded vertebrate

fossil localities within the Terminal Area Improvements Project's boundaries. The study area is situated on younger Quaternary alluvium, which would probably not yield fossils in the uppermost layers of soil. As a result, the likelihood of a significant impact on paleontological resources is low.

The Mitigation Program adopted as part of FEIR 37-03 does include standard conditions for construction projects that are identified in the event that resources are inadvertently discovered during construction. Implementation of the standard conditions would reduce potential impacts on archaeological, paleontological, and to human remains to a level considered less than significant.

Historic Resources

The Phase II Terminal Area Improvements Program identifies two proposed improvements that would have direct impacts to the Historic Terminal Building. The first modification is to the back of the terminal building to open it to the courtyard. The second is moving the rental car counters into the building. As with all the improvements, both of these improvements would need to be evaluated by the City Cultural Heritage Commission and the City Council demonstrating that all improvements are for consistent with the May 7, 1990 Memorandum of Understanding (MOU).

FEIR 37-03 discussed the concept of modifying the first floor of the Historic Terminal Building to remove the ticket counters and baggage conveyor system to allow for the reestablishment of the gateway at the center of the western wall. Exterior modifications were also identified for the west side facade of the Historic Terminal Building. FEIR 37-03 identified that the curved window walls would overlook two small arc-shaped garden areas that abut the corridor and create a cushion of space between the older building and new construction. The west facade is a secondary elevation, but is identified as important because it displays the two-story bay with the geometric panels and associated view terraces, as well as the curved window walls on the first story (this was identified as character-defining feature [CDF] 1). The proposed modifications would not alter the second story curved windows (see Exhibits 9 and 10, provided in the Aesthetics discussion).

During the design of the improvements completed as part of Phase I, modifications to the design concept were made to avoid direct impacts to the Historic Terminal Building by not having new construction connect to the historic building. As a result, the planned opening of the western wall was not completed. Based on the design of the Phase I improvements, an open courtyard between the Historic Terminal Building and the new holdrooms would be provided and substantially larger than the two small arc-shaped garden areas. By providing the connection to the courtyard, the passenger flow of the original terminal would be reestablished. Originally, passengers exited the concourse/ticketing area through this doorway and into the waiting room.

Placement of rental car counters in the Historic Terminal Building is consistent with previous use of the building. This would require interior modifications; however, the nature of the modifications would be consistent with the analysis in FEIR 37-03 that addressed interior changes on the first floor.

In addition to those improvements with direct impacts, all improvements would need to be evaluated by the Cultural Heritage Commission to ensure consistency with Secretary of the Interior's Rehabilitation Standards. Potential impacts on the CDFs of the Historic Terminal Building would need to be assessed as part of the design review process. As part of FEIR 37-03, a Mitigation Program was developed to reduce potential impacts to less than significant. Any improvements would need to abide by the May 7, 1990, MOU adopted by the Cultural Heritage Commission and the City Council pertaining to new construction adjacent to or attached to the Terminal Building that recommends the Secretary of the Interior's Rehabilitation Standards be followed. With implementation of the Mitigation Program, the Phase II LGB Terminal Area Improvement Program would be consistent with the analysis included in FEIR 37-03.

Mitigation Program

It was determined that, prior to mitigation, the proposed terminal area improvements' conceptual design has the potential to cause a substantial adverse change in the significance of the Long Beach Airport Terminal Building (per Section 15064.5[b] of the State CEQA Guidelines) because physical characteristics that convey the historical significance of the resource would be materially altered in a manner that may not meet the Secretary's Standards. Those specific design concepts that have been identified as potentially adverse have corresponding mitigation measures. If, during the final design phase, the design plans are found to not affect the identified historic characteristic, then the associated mitigation measures would not be necessary. The applicability of these measures would be determined through design review by the Cultural Heritage Commission and issuance by the Commission of a certificate of appropriateness, as outlined in Chapter 2.63 of the Municipal Code (SC 3.3-3). Additionally, other design measures may be recommended by the Cultural Heritage Commission through the design review process, which would be required prior to issuance of a certificate of appropriateness.

As part of the FEIR 37-03, MM 3.3-1 addressed requirements to implement if the Airport Terminal improvements are to be connected to the original 1941 structure. The design of Phase I improvements elected to avoid a direct connection to the Historic Terminal Building. Therefore, this measure would also not be applicable to the Phase II LGB Terminal Area Improvement Program. Pending completion of design, the remaining project design feature, standard conditions and mitigation measures would be applicable to the proposed improvements.

Project Design Feature

PDF 3.3-1 The Guiding Principles have been used in the development of the conceptual design plan. As part of final design, the requirements outlined in these documents, which are named below, would provide guidance to protect the historic integrity of the existing terminal. The Guiding Principles include: (1) May 7, 1990, MOU by the Neighborhood and Historic Preservation Officer for the City of Long Beach providing guidelines for future environmental review of the Airport Terminal Building; (2) Secretary of the Interior's standards for rehabilitation of historic buildings; (3) Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan Ordinance adopted by the City Council on September 2, 1997; (4) the City's Cultural Heritage Ordinance (Chapter 2.63 of the Municipal Code); and (5) a memorandum on considerations for new construction prepared by PCR (June 22, 2005). These documents all provide guidance on development standards for terminal area improvements and are included in Appendix B of the EIR.

Standard Conditions

SC 3.3-1 Should any archaeological resources be uncovered during grading or excavation activities, these activities shall be diverted to a part of the site away from the find, and a qualified archaeologist shall be contracted by the contractor to: (1) ascertain the significance of the resource; (2) establish protocol with the project applicant to protect such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if deemed appropriate. If human remains are discovered on the site, the Los Angeles County Coroner shall be contacted to examine the remains, and the provisions of Section 15064.5(3) of the CEQA Guidelines shall be followed.

- SC 3.3-2 If human remains are encountered during ground-disturbing activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
- SC 3.3-3 In compliance with Chapter 2.63 of the Municipal Code no permits for the alteration, remodel, enlarging, or improvements to the Airport Terminal, shall be issued prior to review by the Cultural Heritage Commission and issuance by the Commission of a certificate of appropriateness.
- SC 3.3-4 Should any paleontological resources be uncovered during grading or excavation activities, the construction contractor shall divert activities to a part of the site away from the find, and a qualified paleontologist shall be contracted by the contractor to: (1) ascertain the significance of the resource; (2) establish protocol with the project applicant to protect such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if deemed appropriate. If human remains are discovered on the site, the Los Angeles County Coroner shall be contacted to examine the remains, and the provisions of Section 15064.5(3) of the CEQA Guidelines shall be followed.

Mitigation Measures

- MM 3.3-2 If during final design, new windows are required in the original Airport Terminal Building, the project architect shall ensure that window treatments reference the style of the original Airport Terminal windows, which are very specific to the Airport Terminal. The use of the window wall, as seen on the northwest and southwest corner, shall be used as an example.
- MM 3.3-3 If during the final design, window replacement is proposed for the original Airport Terminal Building, then the new window(s) shall replicate the original style of fenestration. If the original windows that are currently missing from the building are still extant, then those windows shall be returned to their original location, if feasible.
- MM 3.3-4 If during final design, new doorframes in the original Airport Terminal Building are proposed, then the project architect shall reference the style of the original doorframes located on the east and south facades of the original Airport Terminal Building for the new doorway(s).
- MM 3.3-5 The City of Long Beach, Public Works Director or designee shall stipulate in the plans and specifications that exterior material should be compatible in type, color and finish to the existing material used on the Airport Terminal Building. Testing should be done to determine original colors, if necessary. Implementation of this mitigation measure will be at the direction of the Cultural Heritage Commission.

- MM 3.3-6 If during final design, the shelter/ticketing areas are proposed on either side of the existing 1941 Airport Terminal Building, then the project architect shall scale down the proposed design. This could be accomplished with a lower profile, possibly with a flat roof that fits in visually with the horizontal nature of the architectural style of the terminal. The manner in which this mitigation measure will be implemented shall be reviewed by the Cultural Heritage Commission as part of the issuance of the certificate of appropriateness.

4.6 GEOLOGY AND SOILS

Summary of Previous Findings

The evaluation of geology and soils was focused out of FEIR 37-03. The IS/NOP identified that the area of the proposed improvements is relatively flat and, with the exception of Parcel O, is currently covered by an impervious surface.

Project Impact Analysis

- a) Would the project 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? Refer to Division of Mines and Geology Special Publication 42.***
 - ii) Strong seismic ground shaking?***
 - iii) Seismic-related ground failure, including liquefaction?***
 - iv) Landslides?***
- b) Would the project result in substantial soil erosion or the loss of topsoil?***
- c) Would the project be located on a geologic unit or soil that is unstable, or that would become 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 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***
- e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

Construction activities would expose the underlying soils; however, the overall area exposed would be limited. The Project site would not be prone to geotechnical constraints such as slope instability or landslides because the site is relatively flat. Though all of Southern California is exposed to seismic hazards, the Long Beach General Plan's Seismic Safety Element indicates that the site would have a low potential for liquefaction. Additionally, a geotechnical survey conducted by the City of Long Beach for the existing parking structure at the Airport concluded that the potential for the site to be significantly impacted by earthquakes, seismic ground shaking, liquefaction, landslides, substantial soil erosion, or unstable or expansive soil is limited. Implementation of regulations, such as compliance with the Uniform Building Code and seismic safety standards would reduce the risks to a level considered less than significant (City of Long Beach 2006a). No septic tanks are proposed as part of the Project.

There are no unique components of the Phase II LGB Terminal Area Improvement Program that would necessitate further evaluation of geology and soils. The lack of constraints and compliance with existing building regulations would sufficiently avoid or minimize impacts on the environment.

Mitigation Program

Since analysis of geology and soils was focused out of FEIR 37-03, there is no applicable Mitigation Program for this topical area. Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.7 GREENHOUSE GAS EMISSIONS

Summary of Previous Findings

Greenhouse gas (GHG) emissions was not a CEQA issue in 2006 when FEIR 37-03 prepared.

Project Impact Analysis

- 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 an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

Effective March 18, 2010, the State of California adopted amendments to the State CEQA Guidelines requiring the analysis and mitigation of the effects of GHG emissions in CEQA documents. The new State CEQA Guidelines regarding GHG emissions do not specifically address situations involving subsequent implementing actions for a project with a previously certified FEIR.

Pursuant to CEQA and the State CEQA Guidelines, subsequent activities in implementing the approved Terminal Area Improvement Project that are subject to further discretionary approvals by the City are to be examined pursuant to the three-part test set forth in Section 15162(a) of the State CEQA Guidelines.¹⁹

The courts have found that GHG emissions and global climate change is not “new information” since these effects have been generally known for quite some time. In the *San Diego Navy Broadway Complex Coalition v. City of San Diego* case, the court held that the City of San Diego was not required to prepare a subsequent EIR (SEIR) regarding the potential impact of a redevelopment project on global climate change (*San Diego Navy Broadway Complex Coalition v. City of San Diego*, 185 Cal App 4th 924 [2010]). In a 2011 case, *Citizens for Responsible Equitable Environmental Development v. City of San Diego*, the Fourth District Court of Appeal affirmed the trial court’s denial of a petition for writ of mandate challenging the City of San Diego’s adoption of an addendum to a previously certified EIR rather than the preparation of an SEIR for a development project. In one of many issues, the court found that “information on the effect of greenhouse gas emissions on climate was known long before the City approved the 1994 FEIR” (*Citizens for Responsible Equitable Environmental Development v. City of San Diego*, 196 Cal. App.4th 51[2011]).

¹⁹ Section 1.0 of this Addendum provides the citation from Section 15162(a) of the State CEQA Guidelines, which explains the three-part test for determining if a subsequent EIR (SEIR) is required.

A 2014 decision by the Sixth District Court of Appeals in *Citizens Against Airport Pollution v. City of San Jose* is consistent with the cases described above. The decision states, “Thus, information about the potential environmental impact of greenhouse gas emissions was known or could have been known at the time the 1997 EIR and the 2003 SEIR for the Airport Master Plan were certified. We reiterate, . . . an agency may not require an SEIR unless ‘[n]ew information, which was not known and could not have been known at the time the [EIR] was certified as complete, becomes available.’” Since the potential environmental impact of GHG emissions does not constitute new information as defined in the CEQA statutes, Section 21166, subdivision (c), the City did not violate Section 15064.4 of the State CEQA Guidelines by failing to analyze greenhouse gas emissions in the eighth addendum.

The Phase II LGB Terminal Improvement Project would not result in substantial changes to the Project as addressed in FEIR 37-03 and there have not been substantial changes in circumstances, such that new or more severe environmental impacts require major revisions to the FEIR, the issue is simply whether GHG emissions constitute “new information” under Section 15162(a) of the State CEQA Guidelines. As noted above, a factual finding can be made by the lead agency that such emissions do not constitute new information. Therefore, although no further analysis of this topic is required, a quantitative analysis of the GHG impacts of the Project has been prepared.

The City of Long Beach has not formally adopted a quantitative GHG emissions significance criterion to date. Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 metric tons of CO₂ equivalent per year (MTCO₂e/yr) for projects where the SCAQMD is the lead agency (SCAQMD 2008). In September 2010, the Working Group proposed that the 10,000 MTCO₂e/yr threshold be expanded to apply to industrial projects where SCAQMD is not the lead agency (SCAQMD 2010). The Working Group has not convened since the fall of 2010. As of November 2017, the proposal has not been considered or approved for use by the SCAQMD Board. However, due to the lack of any other established threshold, this threshold is applied to the proposed Project.

Construction GHG emissions are generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, vendor trips, and worker commuting trips. Construction GHG emissions were calculated concurrently with air quality criteria pollutant emissions by using CalEEMod Version 2016.3.2.

The results are output in MTCO₂e for each year of construction. The estimated construction GHG emissions for the Project are shown in Table 11. GHG emissions generated from construction activities are finite and occur for a relatively short-term period of time. Unlike the numerous opportunities available to reduce a project’s long-term GHG emissions through design features, operational restrictions, use of green-building materials, and other methods, GHG emissions-reduction measures for construction equipment are relatively limited. Therefore, SCAQMD staff recommended that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008). Table 11 provides the estimated annual GHG emissions from construction and shows these emissions amortized over 30-year would be equivalent to 10 MTCO₂e/yr. The amortized construction emissions are then combined with the

operational emissions for the Project. This combination is shown in Table 12.²⁰ The Project emissions would be less than the 10,000 MTCO₂e threshold; and therefore less than significant.

**TABLE 11
CONSTRUCTION-RELATED
GREENHOUSE GAS EMISSIONS**

Construction-Period Emissions	Annual MTCO ₂ e
2018	57
2019	20
2020	136
2021	91
Total Construction-Period Emissions	305
Amortized Construction-Period Emissions^a	10
MTCO ₂ e: metric tons of carbon dioxide equivalent ^a Total construction emissions amortized over 30 years CalEEMod output worksheets are provided in Attachment C.	

**TABLE 12
PROJECT-RELATED
GREENHOUSE GAS EMISSIONS**

Operational Emissions Source	Annual MTCO ₂ e
Area	0
Energy	143
Mobile ^a	0
Waste	11
Water	32
<i>Total Operational Emissions^b</i>	186
Amortized construction Emissions (Table 11)	10
Total Project Emissions	196
SCAQMD Screening Threshold	10,000
Exceeds Threshold?	No
MTCO ₂ e: metric tons of carbon dioxide equivalent; SCAQMD: South Coast Air Quality Management District. ^a There would not be mobile GHG emissions associated with the Project because the Project would not result in additional vehicle trips associated with operations because no new flights or increase in number of passengers would result from the proposed improvements. ^b Totals may not add due to rounding. Source: SCAQMD 2008 (threshold). CalEEMod output worksheets are provided in Attachment C.	

²⁰ Similar to the air quality analysis, the GHG emissions data was developed based on the assumption that the Phase II improvements would result in the construction of 23,525 square feet of new construction and a net increase of 18,525 square feet of building. Based on further refinements, a total of 24,760 square feet of new construction is proposed. However, given the projected emissions are substantially below the SCAQMD thresholds, the impacts would still be less than significant.

Mitigation Program

Since analysis of GHG was not included in FEIR 37-03, there is no applicable Mitigation Program for this topical area; however, some of the measures identified for air quality would also reduce the potential impacts associated with GHG. Since the Phase II LGB Terminal Area Improvement Program would not result in any significant impacts, no Mitigation Program is required for this topical issue.

4.8 HAZARDS AND HAZARDOUS MATERIALS

Summary of Previous Findings

FEIR 37-03 identified a number of potential sources for exposure to hazardous materials. Many of the impacts identified pertained to potential hazards during construction. Specifically asbestos containing materials and lead-based paint could be introduced into the environment, especially as part of the demolition and removal of buildings. During grading activities at Parcel O, aerially deposited lead from Interstate (I) 405 and possible trace amounts of dichloro-diphenyl-trichloroethane (DDT) could be released into the environment during soil removal and disturbance on Parcel O. During construction, hazardous materials could be transported onto the Airport adjacent to school sites along Willow Street. All of these were identified as potentially significant impacts; however, existing regulations and mitigation measures were identified that would reduce impacts to less than significant. Project design and existing regulations would minimize potential impacts associated with the handling of hazardous materials during the long-term operation of the Project improvements.

Project Impact Analysis

- 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 one-quarter mile of an existing or proposed school?***
- d) ***Would the project be located on a site which is included on a list of hazardous materials 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?***

Given the industrial nature of the Airport and the ongoing use and storage of hazardous materials at the site, there is the potential that locations identified for improvements may have been exposed to hazardous materials in the past. However, due to the fact that the improvements are proposed on locations that are currently paved and have been covered by impervious surfaces for well over a decade, there is a low potential for the risk of exposure from soil contamination during construction. As noted above, FEIR 37-03 identified risks associated with aerially deposited lead and possible trace amounts of DDT being released into the environment during soil removal and disturbance on Parcel O. This impact would not be applicable to the Phase II LGB Terminal Area Improvement Program because it would not utilize Parcel O. As indicated above, sites being considered for the proposed improvements are completely paved over and are not in close proximity to I-405 or grassy infield areas.

Consistent with the analysis in FEIR 37-03, the Historic Terminal Building contains lead-based paint and/or asbestos-containing materials, which may be encountered during modifications to the terminal building. Lead-based paint and/or asbestos-containing materials may be encountered with the improvements to the Historic Terminal Building. The FEIR identified requirements in the Mitigation Program that addressed these concerns and reduced impacts to less than significant levels.

FEIR 37-03 also identified that, during the construction, supplies that would be considered hazardous would be brought onto the site. Though the materials would be standard construction supplies (e.g., paint and architectural coatings), there would be the potential for short-term significant hazardous materials impacts associated with construction activities. However, permits and licenses from health and regulatory agencies to operate and properly manifest all hazardous or California-regulated materials are standard conditions for contractors transporting or handling hazardous materials and/or wastes. These standard regulations and conditions include the applicable State and federal regulations on the handling and storage of these materials and the Storm Water Pollution Prevention Plan (SWPPP) for the Airport's existing Industrial Permit and for future Construction Activity Permits. Compliance with the standard conditions and existing regulations for the handling and transport of these materials would minimize these impacts.

The Phase II LGB Terminal Area Improvement Program improvements would not change the number of flights, the flight patterns, or the operational procedures at the Airport; therefore, the Project would not result in increased safety hazards on site or off site. Flight operations would be under the purview of the FAA and would be required to abide by applicable safety regulations. The TSA Baggage Security Screening facilities would be required to comply with the TSA design requirements, thereby reducing the potential for safety hazards.

The proposed improvements would not alter or interfere with an adopted emergency response plan or emergency evacuation plan. Access to the Airport is off Lakewood Boulevard, which is not designated as an evacuation route. FEIR 37-03 identified five school facilities within 0.25 mile of the Airport; however, these schools are located south of I-405 and are not within 0.50 mile of the location of the proposed improvements. Therefore, there would be no risk associated with emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste near a school. However, the five schools are less than 0.25 mile from Lakewood Boulevard or Willow Street, which could be used for the transport of construction materials, which may be classified as hazardous. The Mitigation Program adopted as part of FEIR 37-03 requires verification that every contractor transporting or handling hazardous materials and/or wastes during Project implementation has permits and licenses from all relative health and regulatory agencies to operate and properly manifest all hazardous or California regulated material.

Government Code Section 65962.5 requires the California Environmental Protection Agency (CEPA) to provide a listing of known hazardous materials release sites. This listing, known as the Hazardous Waste and Substances Sites (Cortese) List is a planning document used by State and local agencies as well as developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. At the time FEIR 37-03 was prepared, two locations were included on the Cortese list: (1) a leaking underground storage tank (UST) at Long Beach Airport Fuel D, 4301 Donald Douglas Drive, and (2) the leaking UST at the Cameron Dumas property, 4310 Donald Douglas Drive. Though on the list, remedial action was completed at both these sites and the cases were closed at the time FEIR 37-03 was prepared. These sites are no longer shown on the list. The only location in the City of Long Beach on the current Cortese List is the Long Beach Naval Complex located off Ocean Boulevard and Navy Way. This is a sufficient distance from the Airport that no impacts or constraints to development would occur.

The Airport site is not located in an area subject to wildland fires. The area surrounding the Airport is urbanized, and the conditions for wildland fires do not exist in close proximity.

Based on overall site conditions, existing regulations, and nature of the Phase II LGB Terminal Area Improvement Program improvements, no safety impacts or constraints associated with hazardous materials are anticipated.

Mitigation Program

The following project design feature, standard conditions, and mitigation measures pertaining to hazards and hazardous materials that were identified in the FEIR-37-03 Mitigation Program that would be applicable to the Phase II LGB Terminal Area Improvement Program. FEIR 37-03 did identify several measures that would not be applicable to the Project improvements. Specifically, MM 3.4-5 pertained to testing for asbestos containing materials prior to demolition of facilities at the Million Air site. This would not be applicable to the proposed improvements. Further, MM 3.4-8 requires for testing for aerially deposited lead and DDT. As discussed above, the distance from I-405 and not disturbing areas where DDT would have been used (vegetated areas), eliminates the need for these measures.

Project Design Features

PDF 3.4-1 The proposed terminal improvements would be constructed in a manner consistent with LEED standards certification requirements to, among other things, minimize potential hazards and hazardous waste impacts.

Standard Conditions

- SC 3.4-1 The Proposed Project and any additional flights associated with optimize flight operations would be required to comply with the provisions of the *Long Beach Airport Certification Manual* and *Long Beach Airport Rules and Regulations* pertaining to the handling, use, and disposal of hazardous materials and hazardous wastes.
- SC 3.4-2 The Contractor shall develop a SWPPP to minimize potential short-term significant hazardous materials impacts associated with construction activities.
- SC 3.4-3 The Airport Terminal Building is known to contain ACMs. The applicant shall comply with notification and asbestos removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos-related health issues.
- SC 3.4-4 The Airport shall comply with the Airport Industrial NPDES permit (CAS000001/WDID 4B19S004985). Construction activities that disturbs more than one acre shall abide by the State issued State Water Resources Control Board Order 99-08 General Permit CAS000002. As part of this process, the Airport would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP)²¹.

²¹ A National Pollutant Discharge Elimination System (NPDES) is issued under the Federal Water Pollution Control Act, also known as Clean Water Act. The standard condition references the number of the General Permit for Construction Activity in effect at the time FEIR 37-03 was prepared. This permit has been updated with NPDES No. CAS004003, Water Quality Order R4-2014-0024-A01, which is the State Water Resources Control Board (SWRCB) NPDES General Permit for Storm Water Discharges Associated with Construction Activity. This General Permit was adopted by the SWRCB on September 2, 2009, and became effective on July 1, 2010. This order was amended by 2010-0014-DWQ, which became effective on February 14, 2011, and 2012-0006-DWQ, which became effective on July 17, 2012.

- SC 3.4-5 Construction of the Proposed Project shall be in compliance with local and State construction and building requirements and regulations, including the Uniform Building Code.

Mitigation Measures

- MM 3.4-1 Prior to the initiation of demolition/construction, the Contractor shall develop an approved Health and Safety Contingency Plan (HSCP) in the event that unanticipated/unknown environmental contaminants are encountered during construction. The plan shall be developed to protect workers, safeguard the environment, and meet the requirements of the CCR, Title 8, General Industry Safety Orders – Control of Hazardous Substances. The Plan shall include measures for handling any unknown wastes or suspect materials discovered during construction by the Contractor, which he/she believes may involve hazardous waste or hazardous materials.
- The HSCP should be prepared as a supplemental to the Contractor's Site-Specific Health and Safety Plan, which should be prepared to meet the requirements of CCR Title 8, Construction Safety Orders.
- MM 3.4-2 Prior to the demolition of any on-site building or portion of any on-site building constructed prior to 1973, the City shall screen the buildings for lead-based paint. If lead-based paint is identified, mitigation shall be developed in accordance with all applicable federal, State, and local regulatory requirements.
- MM 3.4-3 During demolition and excavation activities and during preparation of the geotechnical study in the design phase, the City shall have a qualified inspector onsite to inspect and sample the soil for contaminants. If observations during demolition activities indicate that site soil is affected by contaminants, demolition work should be stopped in the area involved until an analysis of the soil conditions can be performed and additional recommendations evaluated and performed as necessary.
- MM 3.4-4 As part of the contract specification, a haul route, which could include Willow Street, shall be designated by the City Engineer, or his designee. During construction, the City Engineer, or his designee shall instruct every contractor that no hazardous or acutely hazardous materials may be transported onto the Airport via Willow Street to avoid potential impacts within one-quarter mile of the Alpert Jewish Community Center, where school programs are conducted.
- MM 3.4-6 The City Engineer, or his designee, shall verify that every contractor transporting or handling hazardous materials and/or wastes during project implementation has permits and licenses from all relative health and regulatory agencies to operate and properly manifest all hazardous or California regulated material.
- MM 3.4-7 Prior to initiating construction activities, the contractor shall verify the locations of underground pipelines in the terminal area, ramp, and parking areas. Appropriate precautions shall be taken to ensure that pipelines are not disturbed or are properly relocated during construction.

4.9 HYDROLOGY AND WATER QUALITY

Summary of Previous Findings

Through the IS/NOP, Hydrology and Water Quality was focused out of FEIR 37-03. It was determined that, since the Terminal Area Improvements would improve facilities in the terminal area, the improvements would not result in a substantial increase in impervious soil or result in increased runoff. Only development of Parcel O would result in the increase of impervious area. It was determined that this development would not alter the existing drainage pattern of the site or affect the quality or quantity of the groundwater table.

Project Impact Analysis

- a) Would the project violate any water quality standards or waste discharge requirements?***
- b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of 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) 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 through 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) 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?***
- f) Would the project otherwise substantially degrade water quality?***
- g) Would the project 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) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?***
- i) Would the project 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?***

The Phase II LGB Terminal Area Improvement Program would exclusively be in the vicinity of the terminal and the entire site is impervious. Therefore, these same conditions at the time of the preparation of FEIR 37-03 apply.

The Federal Clean Water Act establishes a framework for regulating potential surface water quality impacts, mandating sewage treatment, and regulating wastewater discharges, and requires communities and industries to obtain National Pollutant Discharge Elimination System (NPDES) permits to discharge storm water to urban storm sewer systems. The NPDES program is administered by the California Regional Water Quality Control Boards (RWQCBs). The Airport

has its own separate Industrial NPDES permit that it must comply with (CAS000001/WDID 4B19S004985). The Industrial Permit is generally more stringent than the Municipal Storm Water Permit because it treats the Airport as a point source discharge, rather than a non-point discharge. The Permit requires the Airport and its tenants to maintain a number of Best Management Practices (BMPs) and requires the Airport to conduct periodic testing of storm water runoff. Through this program, the City would be able to identify pollutant levels in excess of established thresholds. Monitoring in past years has not identified water quality issues associated with the Airport. The requirements of this permit, which apply to the entire Airport site, would address the long-term water quality issues associated with the improvements.

As previously noted in the discussion of hazards and hazardous materials, construction activities that disturbs more than one acre would also have to abide by the State issued NPDES No. CAS000002, Water Quality Order 2009 0009 DWQ, which is the State Water Resources Control Board (SWRCB) NPDES General Permit for Storm Water Discharges Associated with Construction Activity. As part of this process, the Airport would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) (see SC 3.4-6). The SWPPP is required to identify Best Management Practices (BMPs) for the control of potential erosion, siltation, and other water quality impacts that may occur during construction. A SWPPP typically contains a list of target structural and non-structural best management practices, which would be used to control, prevent, remove, or reduce pollution. In addition to the requirements of the NPDES program, provisions of the California Building Code, grading permits requirements, and Fire Code provisions include elements that also require reduction of erosion and sedimentation impacts. The Project would be required to comply with the Airport's Industrial permit issued to the City of Long Beach, as well as the City-developed Long Beach Storm Water Management Program.

Consistent with the findings in the IS/NOP for FEIR 37-03, since the Phase II LGB Terminal Area Improvement Program improvements would not be located within a 100-year flood hazard area, nor would it alter the flood zone. Therefore, it would not place housing or any structures that would impede or redirect flood flows within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map.

Mitigation Program

Since hydrology and water quality was focused out of FEIR 37-03, no Mitigation Program for this issue was adopted. Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.10 LAND USE AND PLANNING

Summary of Previous Findings

The IS/NOP focused the issue of physically dividing the community and conflicting with any applicable habitat conservation plan or natural community conservation plan out of FEIR 37-03 as not applicable. The Terminal Area Improvements were identified as being limited to the Airport property and would not be expected to have direct impacts on the surrounding land uses. Though the Terminal Area Improvements would result in displacement of uses on the Airport, this would not result in any displacements beyond those required for project implementation. None of the displacements would occur off site. Additionally, the construction activities would not induce airport related land uses beyond the Airport boundary. Therefore, the improvements would not physically divide an established community. The Airport is not located in a habitat conservation plan area.

The Terminal Area Improvements were found to be consistent with applicable plans and no impacts were identified.

Project Impact Analysis

- a) *Would the project physically divide an established community?***
- 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?***
- c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?***

As a subset of the improvements evaluated in FEIR 37-03, the findings pertaining to not physically dividing an established community or having impacts on a habitat conservation plan area would also be applicable to the Phase II LGB Terminal Area Improvement Program. There have been changes since FEIR 37-03 was certified that would change these findings.

The Phase II LGB Terminal Area Improvement Program would require new construction at the Airport; however, substantial land use impacts are not anticipated. The improvements are consistent with the land uses envisioned as part of the Terminal Area Improvements. The Project would be consistent with the City's General Plan Land Use Districts and Zoning Districts. The Airport terminal area is zoned PD-12 (planned development within the Airport land use district). Development regulations for PD-12 are defined in the *Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan (Development Plan)*. Exhibit A of the *Development Plan* identifies the Project site as Subareas 1 and 2. The uses identified for the Phase II Terminal Area Improvements are consistent with the uses permitted in this subareas.

As a subset of the improvements evaluated in FEIR 37-03, the Project would not conflict with land use planning programs because it would not change the nature of the uses at the Airport. The Project would relocate uses in the terminal area to increase efficiency and streamline the security screening; however, all the existing uses would be retained on the Airport, and no uses unrelated to the Airport services are proposed. The land use impacts associated with the Project would be consistent with the analysis in FEIR 37-03. The Project is not expected to result in direct or indirect impacts on surrounding land uses.

Consistent with the May 6, 2008 direction by the City Council as part of the Phase I Site Plan Review approval, the Project would relocate rental cars north of the Historic Terminal Building (Million Air Leasehold). As noted previously, FEIR 37-03 assumed the rental cars operations would be located Parking Structure B, which was addressed as being a larger facility than what was constructed as part of Phase I improvements. However, FEIR 37-03 did assume this locations would be reconstruction as commercial aircraft parking positions. FEIR 37-03 identified with the construction of the aircraft parking positions, approximately 70 general aviation aircraft would be displaced, as well as the removal of a small building currently used for office space, TSA, and general aviation support. The general aviation aircraft displaced from the Million Air site were assumed to be relocated to a new tie-down area south of Runway 12-30, known as Parcel O.

Since the certification of FEIR 37-03, a portion of the area north of the Historic Terminal Building is being used for valet parking of automobiles. Currently, north of the Historic Terminal Building there are approximately 41 tie-down spaces, of which between 18 and 22 are currently occupied with functioning and non-function general aviation aircraft. The Project would not affect all this tie-downs. As shown in Exhibit 5, one row of tie-down spaces (approximately 10 to 12 tie-down)

would be displaced.²² These aircraft can be accommodated in other unoccupied tie-down locations north of the Historic Terminal Building. Although FEIR 37-03 provided for use of Parcel O for general aviation tie-downs, no improvements on Parcel O would be required to accommodate the minimal number of aircraft that would be affected by the proposed improvements.

As noted above, a portion of the area identified for the rental car facilities is currently being used for valet parking. Although a drop-off location may be maintained, the cars would be moved to the parking structure. There is sufficient capacity in the parking structure. Additionally, the rental cars would be relocated out of the parking structure providing additional capacity.

Based on the above assessment, the proposed improvements would not result in any new significant impacts to land use nor would it increase the severity of the impacts evaluated in FEIR 37-03.

Mitigation Program

FEIR 37-03 did not include a Mitigation Program for this topical area.²³ Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.11 MINERAL RESOURCES

Summary of Previous Findings

The California Division of Mines and Geology (CDMG) is the State agency with the responsibility to oversee the management of mineral resources in California. The CDMG considers a site to be significant in regard to mineral commodities if it can be mined commercially and there must be enough of the resource to be economically viable. There are no such resources on site; therefore, mineral resources was focused out of FEIR 37-03.

Project Impact Analysis

- 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?***

Conditions have not changed since FEIR 37-03 was certified. There are no mineral resources onsite that can be commercially mined. No further evaluation of this topic is required.

Mitigation Program

FEIR 37-03, did not adopt a Mitigation Program pertaining to Mineral Resources because no impacts were identified. The Phase II LGB Terminal Area Improvement Program would not result

²² Not all these tie-downs are occupied but as part of a worst-case analysis, the assessment evaluates the potential need to relocate the entire row of aircraft.

²³ In Land Use and Planning (Section 3.5 of FEIR 37-03), the subsection pertaining to the Mitigation Program cross-referenced MM 3.8-2 contained in the Transportation and Circulation section of the FEIR because the only land use impact pertained to parking with the Optimized Flights scenario.

in any new circumstances that would result in new impacts necessitating the development of a Mitigation Program for mineral resources

4.12 NOISE

Summary of Previous Findings

FEIR 37-03 evaluated the potential noise impacts associated with the Terminal Area Improvements Project within the context of the City's Airport Noise Compatibility Ordinance. No project related operational noise impacts were identified with the improvements. The FEIR did identify the potential for noise impacts if night construction activity occurred on Parcel O. The impacts would be when heavy construction equipment associated with grading and paving are used.

Project Impact Analysis

- a) Would the project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*
- b) Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?*
- c) Would the project cause a substantial permanent increase in ambient noise levels in the vicinity above levels existing without it?*
- d) Would the project cause a substantial temporary or periodic increase in ambient noise levels in the vicinity above levels existing without it?*
- e) Would the project expose people residing or working 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 to excessive noise levels?*
- f) Would the project expose people residing or working in the vicinity of a private airstrip to excessive noise levels?*

The City's Airport Noise Compatibility Ordinance continues to be the controlling mechanism for aircraft noise.²⁴ There are no elements of the Project that would jeopardize the continued implementation of the Airport Noise Compatibility Ordinance. The Project would not modify the aircraft operational procedures at the Airport, the number of flights at the Airport, or the type of aircraft utilizing the Airport. Therefore, the Phase II LGB Terminal Area Improvement Program would not alter the noise characteristics of the Airport or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The Project would be consistent with the noise characteristics evaluated in FEIR 37-03.

During construction of the Project, there would be short-term elevated noise levels. As discussed in FEIR 37-03, though public works projects are exempt from the provisions of the City of Long Beach Municipal Noise Ordinance (Section 8.80.010), the FEIR used the Noise Ordinance as a basis for assessing noise impacts during construction. FEIR 37-03 identified that, for the Terminal Area Improvement Project, the highest noise-generating activities would include construction activities associated with the improvements in the terminal area and construction of the parking structure. The FEIR evaluated the "worst case" construction noise impacts, which were

²⁴ An overview of the fundamentals of the Airport Noise Compatibility Ordinance is discussed in Section 2.2 of this Addendum.

associated with nighttime construction on the parking structure, and determined that no construction noise impacts would occur. This analysis assumed a distance from the nearest edge of the parking garage to the nearest home as approximately 2,185 feet. The closest sensitive receptor to the Project location would also be the residences east of Clark Avenue. The closest residence is approximately 3,280 feet from the location for the proposed improvements (as measured from Donald Douglas Drive in front of the Historic Terminal Building to the western edge of the Clark Avenue frontage road). Given the greater separation from what was assumed in FEIR 37-03, the construction noise levels associated with the Project would be less than significant. FEIR 37-03 also found that this distance from the nearest sensitive receptor would also reduce any groundborne vibration to less than significant. None of the proposed improvements would produce discernable vibration that would cause a potentially significant impact. Once constructed, the noise and vibration levels associated with use of the Project would not be substantially different from the existing conditions in the terminal area. The impacts associated the Project would be consistent with the findings of FEIR 37-03.

Mitigation Program

FEIR 37-03 determined that the terminal area improvements would not require any measures to minimize noise impacts. However, two standard conditions and two mitigation measures were adopted. The two mitigation measures would not be applicable to the improvements proposed as part of the Phase II LGB Terminal Area Improvement Program. Specifically, MM 3.6-1 required noise measurements during any night construction on Parcel O that utilized heavy construction equipment. The Project does not propose any use of Parcel O. MM 3.6-2 required the Airport to develop a land use compatibility program addressing existing and future aviation noise levels. This land use compatibility program, called *The Quieter Home Program*, was approved by the City Council on October 6, 2009.²⁵

Standard Conditions

- SC 3.6-1 The Airport Noise Compatibility Ordinance would apply to continued operations at the Airport. All future operations would need to be consistent with the provisions of the ordinance.
- SC 3.6-2 The contractor shall comply with the City of Long Beach Noise Ordinance pertaining to limitations on construction activities, as outlined in Exhibit 3.6-12, to the extent feasible while minimizing any potential conflicts with aviation activities.²⁶

4.13 POPULATION AND HOUSING

Summary of Previous Findings

As part of the IS/NOP, it was determined that the Terminal Area Improvements Project would not result in changes in population projections for the City of Long Beach or the vicinity of the Airport. The project would not result in increased flight levels or displace existing housing. Therefore, there would be no need for construction of replacement housing. Additionally, the project would not change the noise budget for LGB resulting in potential displacement of housing to achieve noise/land use compatibility. Though the improvements would potentially have an incremental increase of employees at the Airport, it was determined that it would not be substantial enough to

²⁵ The Quieter Home Program provided for sound-insulation for the 27 homes that were identified as being in the 65 CNEL. All but two of the eligible homeowners participated in the program, which has been fully implemented.

²⁶ Exhibit 3.6-12 in FEIR 37-03 is Section 8.80.202 of the Municipal Code, which outlines the Construction Activity-Noise Regulations.

increase demand for housing in the area. Therefore, population and housing was not discussed in FEIR 37-03.

Project Impact Analysis

- 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)?*
- 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?*

As noted above, Population and Housing was focused out of FEIR 37-03; however, the potential for growth-inducing impacts is included in the FEIR. The growth-inducing evaluation concluded that the Terminal Area Improvements would not be growth-inducing, even under the Optimized Flights Scenario. In part, this was because, while the Optimized Flights Scenario would provide additional capacity by increasing the number of flights and passengers served at LGB, the area and the region would continue to have a significant unmet demand for air transportation. This remains true even with the capacity improvements currently underway at Los Angeles International Airport and John Wayne Airport in Orange County.

This analysis is applicable to the Phase II LGB Terminal Area Improvement Program improvements because the overall number of employees serving the new facilities would be nominal, especially when considered in light of the metropolitan setting. This small increase in employees would not result in the demand for additional housing beyond the current and planned housing stock, nor would it result in a substantial change in the population of the region. The total size of the terminal area facilities is less than what was evaluated in FEIR 37-03.

Mitigation Program

Since analysis of population and housing was focused out of FEIR 37-03, there is no applicable Mitigation Program for this topical area. Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.14 PUBLIC SERVICES

Summary of Previous Findings

FEIR 37-03 did not identify any impacts to public services. Implement of the facilities improvements were identified as being beneficial because the improved terminal area facilities would be better serve the passengers who currently use the Airport. Based on coordination with the police and fire services, staffing levels are generally based on the number of passengers and flights at the Airport, and new facilities would not result in a substantial increase in demand for fire or police service at Long Beach Airport. The Airport has dedicated services located at the Airport that would provide the necessary response.

Project Impact Analysis

- a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:***

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

The Phase II LGB Terminal Area Improvement Program would be consistent with the nature and scope of the improvements evaluated in FEIR 37-03. There are no elements of the Project that would modify the operations of the Airport, thereby changing the need for new fire or police facilities.

No impact on parks, schools, or library services would result from the Project because it would not generate new population that would create the need for these services.

Mitigation Program

The following project design feature, standard conditions, and mitigation measures pertaining to public services identified in FEIR-37-03 would be applicable to the Project.

Project Design Features

- PDF 3.7-1 The Proposed Project and the build scenarios include a number of features that would enhance public safety and security at the Airport. These features, which include new concession areas, passenger and baggage security screening facilities, baggage claim devices, baggage service office, restrooms, office space, space and ticketing facilities, would reduce overcrowding and provide an expanded baggage screening area, which would also be enclosed to protect sensitive screening equipment.

Standard Conditions

- SC 3.7-1 Prior to the initiation of construction activities, the City's contractor shall prepare a Traffic Control Plan to ensure that adequate emergency access is maintained at the Airport during construction. As part of the Traffic Control Plan the contractor shall alert emergency and security service providers of the construction activities for each phase of construction. The Traffic Control Plan shall be submitted to the City Traffic Engineer for approval.
- SC 3.7-2 During project design, the facility improvements shall adhere to TSA, FAA, and all applicable standards including City of Long Beach fire code, building code, and safety code. Long Beach Fire Department shall review and approve design plans as part of the site plan review and building permit processes.

Mitigation Measures

- MM 3.7-1 During construction activities, the relocation or modification of TSA facilities shall be coordinated with TSA to ensure that there is no compromise to the TSA function that would adversely affect TSA's ability to perform its passenger and baggage security screening activities.
- MM 3.7-2 Prior to initiation of any modifications to the airfield side, the contractor shall provide a Construction Phasing Implementation Plan, meeting the approval of the Airport Manager. The Plan shall demonstrate how construction activities will be conducted and that all applicable FAA airfield safety requirements are being met. In addition, the contractor shall prepare a safety plan and participate in on-going weekly safety meetings during construction.

4.15 RECREATION

Summary of Previous Findings

The IS/NOP analysis focused recreation out of FEIR 37-03 because of the nature of the Terminal Area Improvements. Demand for additional recreational facilities is generally linked to increased housing, which generates the population that would utilize neighborhood and regional parks. The Terminal Area Improvements would not generate any increase in population or provide development that would result in increased usage of existing neighborhood and regional parks. Therefore, there would not be any physical deterioration to existing recreational facilities due to the project.

Project Impact Analysis

- 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?*

As a subset of the larger Terminal Area Improvements Project, the findings from the IS/NOP for the Terminal Area Improvement would also be applicable to the Phase II LGB Terminal Area Improvement Program.

Mitigation Program

Since analysis of recreation was focused out of FEIR 37-03, there is no applicable Mitigation Program for this topical area. Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.16 TRANSPORTATION/TRAFFIC

Summary of Previous Findings

FEIR 37-03 found that traffic generated during site construction/preparation would result in a short-term minimal impact on the roadways in the immediate vicinity of the Airport (i.e., approximately 50 peak hour trips during the most active construction period).

The Congestion Management Program (CMP) guidelines establish the thresholds of when an assessment of project impacts on the freeway system and at selected arterial intersections that are on the designated CMP system is required.²⁷ The evaluation for Terminal Area Improvement Project conducted as part of FEIR 37-03 determined that there would not be sufficient operational or construction trips to warrant a CMP Transportation Impact Analysis.

Project Impact Analysis

- a) Would the project conflict with an applicable plan, ordinance or policy establishing measures 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?***
- 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?***
- d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***
- e) Would the project result in inadequate emergency access?***
- f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?***

Since the Project would not alter the number of flights and since the total square footage of terminal improvements is consistent with the assumptions in FEIR 37-03, the expected traffic volumes associated with the Project would not change from the previous analysis. The Phase II Terminal Area Improvements is intended to make the overall operation of the terminal area improvements more efficient. These improvements would not introduce uses that would generate additional trips. The additional concessions area and the consolidated rental car facility would serve the passengers already utilizing the Airport. It is the number of passengers that influence the demand for these uses and the incremental increase in physical space provided to the uses would not alter the demand. The improvements would not change the trip generation or distribution of trips on the external roadway network.

²⁷ In Los Angeles County, the CMP is the responsibility of the Metropolitan Transportation Authority (Metro).

As discussed above, the City's Airport Noise Compatibility Ordinance controls the number of commercial carrier flights that are allocated to the airlines. The vehicle trips are associated with the number of passengers and flight levels.²⁸ Therefore, from a long-range operational perspective, the terminal improvements would not result in circulation impacts because it would not add trips to the network.

Since the proposed improvements are a subset of the Terminal Area Improvement Project, the same conclusion would also be applicable to the Phase II LGB Terminal Area Improvement Program. The Project would not alter the alternative modes of transportation currently serving the Airport (e.g., shuttles and transit) directly resulting from the number of flights. There would be no element of the Project that would result in hazardous design features or incompatible use. The requirement (SC 3.7-1) that the contractor prepare a Traffic Control Plan to ensure adequate emergency access is maintained at the Airport during construction would minimize any potential impact for emergency access during construction.

Mitigation Program

The Mitigation Program included three Project Design Features (PDFs) that pertain to Transportation/Traffic. As discussed below, none of these PDFs would apply to the Phase II LGB Terminal Area Improvement Program.

- PDF 3.8-1 provides for a new parking structure that would accommodate 4,000 vehicles. A component of this PDF was included in Phase I of the Airport Improvements. Subsequent phases of improvements may include the additional parking spaces provided for as part of the Terminal Area Improvement Project should demand warrant.
- PDF 3.8-2 states that the Terminal Area Improvement Project would include the extension of the south side of the Donald Douglas Drive loop to exit onto Lakewood Boulevard, with eastbound right turn only to southbound access on to Lakewood Boulevard. This roadway was implemented with the Phase I improvements.
- PDF 3.8-3 provide that during construction of the new parking structure, Parcel O would be developed to serve parking demand not met by existing facilities. At the time Phase I improvements were implemented alternative methods of meeting parking demand were developed and there was not a need for surface parking on Parcel O.

Additionally, FEIR 37-03 identified two mitigation measures that would not be applicable to the Project improvements.

- MM 3.8-1 pertained only to the Optimized Flights scenario and was applicable when the average daily peak month passenger levels reached 12,700 or until such time as the improvements provided as part of the Douglas Park project were implemented.
- MM 3.8-2 also pertained only to the Optimized Flights scenario and required the monitoring of parking demand with the increased number of flights.

The following Standard Condition pertaining to transportation and circulation identified in the FEIR-37-03 Mitigation Program is applicable to the improvements proposed as part of the Phase

²⁸ The FEIR considered the trips associated with the commercial carriers and assumed 25 commuter flights, which are the minimum levels provided by the Airport Noise Compatibility Ordinance. This assumption overstates the historical and current traffic generated by the Airport because the full 25 commuter flights have never been allocated due to lack of demand.

II LGB Terminal Area Improvement Program. However, it should be noted no portion of the Phase II LGB Terminal Area Improvements would be utilizing Parcel O.

Standard Condition

SC 3.8-1 As part of contract specification, the Airport shall require all construction trucks to access the Airport terminal area via the I-605 to I-405 and Lakewood Boulevard. Should oversized-transport vehicles accessing the Project site use a state highway, a Caltrans transportation permit will be required. Construction vehicles accessing Parcel O shall use this route and access the construction site off of Clark Avenue or Willow Street.

4.17 TRIBAL CULTURAL RESOURCES

Summary of Previous Findings

Tribal Cultural Resources was not a checklist question at the time that FEIR 37-03 was prepared. This issue was added to the checklist in September 2016 and reflects the requirements of Assembly Bill (AB) 52, requiring consultation with tribal governments on projects that were initiated on or after July 1, 2015. The Terminal Area Improvement Project was initiated before that date.

Project Impact Analysis

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:***
 - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?***
 - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

As discussed above as part of Cultural Resources, the results of the record search conducted for FEIR 37-03 indicate that there are no previously recorded archaeological sites within a one-mile radius of the Airport. The potential for archaeological resources or human remains to be present on the Project site is very low because of the disturbed nature of the site. Additionally, Native American concerns were not raised as part of the FEIR 37-03 public review or outreach process.

Mitigation Program

Since analysis of tribal cultural resources was not included in FEIR 37-03, there is no applicable Mitigation Program for this topical area. Since the Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, no Mitigation Program is required for this topical issue.

4.18 UTILITIES AND SERVICE SYSTEMS

Summary of Previous Findings

The evaluation of utilities was focused out of FEIR 37-03. The IS/NOP identified that, though the Terminal Area Improvement Project would be expected to have an incremental increase in water demand and wastewater production because there would be additional facilities, this would only result in slight increases in peak flow rates. The overall increases would not be substantial enough to require expansion of existing facilities. For the Airport, the number of passengers being served is more of a determining factor in the generation for wastewater rather than the size of the facilities. Given that the number of passengers being served would be the same, the development of the terminal improvements would not be expected to exceed capacity of existing facilities. It was determined that the terminal area improvements would not require a water supply assessment pursuant to Senate Bill (SB) 610 because the size of the improvements is well below the thresholds used in SB 610 or the State Water Code. As part of routine plan check, a Fire Flow Test may be required, though based on discussion with the Long Beach Water Department at the time FEIR 37-03 was prepared, the 12-inch water main in Lakewood Boulevard would have sufficient capacity to provide necessary water supply to meet demand.

The IS/NOP also indicated that, though the terminal area improvements would have the potential to increase the amount of solid waste both through construction and operation of the new facilities, since the number of passengers would be consistent for each of the project alternatives, the incremental increase would not be expected to result in a significant impact. The City of Long Beach has developed programs to divert the amount of refuse that is sent to landfills through waste reduction, recycling, and business and government source reduction programs. Additionally, a standard specification in all City contracts requires that the contractor recycle such construction wastes so these materials are not disposed of in landfills.

Project Impact Analysis

- 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?***
- 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?***
- d) Would the project have sufficient water supplies available from existing entitlements and resources, or are new or expanded entitlements needed?***
- e) Would the project result in a determination by the wastewater treatment provider which serves or may serve it that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***
- f) Would the project be served by a landfill with sufficient permitted capacity to accommodate its solid waste disposal needs?***
- g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?***

Since the Phase II LGB Terminal Area Improvement Program is a subset of the Terminal Area Improvement Project evaluated in FEIR 37-03, it is reasonable to assume that the Project would

not result in impacts on utilities. The increased facilities are within the level of development evaluated in FEIR 37-03 and number of passengers being served would also not change as a result of the Project.

Mitigation Program

Since analysis of utilities was focused out of FEIR 37-03, there is no applicable Mitigation Program for this topical area. The Phase II LGB Terminal Area Improvement Program would not result in any new circumstances that would result in new impacts, and no Mitigation Program is required for this topical issue.

4.19 MANDATORY FINDINGS OF SIGNIFICANCE

Summary of Previous Findings

FEIR 37-03 identified significant, unavoidable impacts associated short-term air quality impacts during construction for both the Project and cumulative conditions. Specifically, NO_x and VOC emissions would exceed the established standard. Additionally, the incremental emissions resulting from aviation operations under the Optimized Flights scenario would exceed SCAQMD thresholds of significance for CO and NO_x. Mitigation Measures were implemented to reduce this short-term impact. The City Council adopted Findings of Fact and a Statement of Overriding Considerations.

Project Impact Analysis

- 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 of 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? ("Cumulative 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 noted above in Section 4.4, biological resources was focused out of FEIR 37-03 due to lack of resources. Therefore, the Project would not have the potential to result in substantial impacts on habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant of animal community; or reduce the number or restrict the range of a rare or endangered plant or animal. Similarly, archaeological and paleontological resources were focused out of FEIR 37-03 due to lack of resources (see Section 4.5). The potential effects on the Historic Terminal Building were evaluated in FEIR 37-03 and mitigation measures were adopted that would reduce impacts to less than significant. However, the Phase II LGB Terminal Area Improvements are designed to avoid all direct impacts to the Historic Terminal Building. The improvements would still be reviewed by the Cultural Heritage Commission for potential indirect impacts and a certificate of appropriateness would be required (MM 3.3-6 under Cultural Resources). Therefore, the Project would not have significant impacts on important examples of the major periods of California history or prehistory.

The Project is a subset of the Terminal Area Improvements evaluated in FEIR 37-03, which fully evaluated the potential for cumulative impacts. As part of that analysis, it was determined that there was the potential for a short-term cumulative impact resulting from other projects in the vicinity of the Airport (the Douglas Park project was specifically identified) that would have similar significant construction air emissions. Therefore, the FEIR determined it was reasonable to assume that in addition to significant project-related construction air quality impacts, there would be significant cumulative construction air quality impacts. Although the construction air quality emissions associated with the Phase II LGB Terminal Area Improvements would be less than the SCAQMD's thresholds of significance, with the Douglas Park being ongoing and other improvements being constructed on the Airport or in close proximity to the Airport, it is possible that cumulative construction air quality emissions would be significant. This would not be a new impact because it was addressed in FEIR 37-03 and the Findings of Fact and a Statement of Overriding Considerations adopted by the City Council.

SECTION 5.0 CONCLUSIONS

The City of Long Beach has determined, on the basis of substantial evidence in the light of the whole record, that (1) the Phase II LGB Terminal Area Improvements does not represent a substantial change from the Project evaluated in FEIR 37-03; (2) there are no substantial changes with respect to the circumstances under which the Project is undertaken; and (3) there is no new information of substantial importance, which was not known and could not have been known at the time FEIR 37-03 certified as complete. The Phase II LGB Terminal Area Improvements would not have any new or substantially more severe impacts than what was evaluated FEIR 37-03. There are no new mitigation measures that were not adopted at the time the FEIRs were certified that would further reduce Project impacts. Therefore, since none of the conditions described in Section 15162 calling for preparation of an SEIR have occurred, an Addendum to FEIR 37-03 is the appropriate document for CEQA compliance. FEIR 37-03, when considered in conjunction with this Addendum, provide adequate documentation pursuant to the CEQA.

As noted above, this evaluation assumes implementation of applicable project design features, standard conditions, and mitigation measures from FEIR 37-03. To support this analysis, the Mitigation Monitoring and Reporting Program (MMRP) approved in conjunction with the certification of FEIR 37-03 is provided in Attachment A. The elements of the Mitigation Program that were found not to be applicable for this Project have been shown in light gray font. This allows easy identification of the applicable measures.

This page intentionally left blank

SECTION 6.0 REPORT PREPARERS AND CONTRIBUTORS

City of Long Beach

Civil Engineer Stepahie Gunawan-Piraner, PE
Senior Civil Engineer..... Stephan Lum, PE
Airport Engineering Officer Ambi Thuai, PE, GE, PMP

Jacobs Engineering

Principal Michael Doucette

Psomas

Project Manager..... Kathleen Brady, AICP
GIS Specialist..... Michael Deseo
Technical Editor Julia R. Black
Word Processor Sheryl Kristal

This page intentionally left blank

SECTION 7.0 REFERENCES

- California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP). 2016. Los Angeles County Important Farmland 2014. Sacramento, CA: FMMP.
- California Department of Toxic Substance Control, EnviroStor. 2017. [http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTES&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS WASTE AND SUBSTANCES SITE LIST](http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTES&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST)
- Citizens for Responsible Equitable Environmental Development v. City of San Diego*, 196 Cal. App.4th 51 (2011).
- Citizens for a Sustainable Treasure Island vs. City and County of San Francisco, et al.* 227 Cal.App.4th 1036 (2014).
- Jacobs Engineering Group, Inc. 2016 (December). *Feasibility Study for a Federal Inspection Services Facility at Long Beach Airport*. Long Beach, CA: Jacobs Engineering.
- Long Beach, City of. 2007 (April 24). RECOMMENDATION (to the Honorable Mayor and City Council from Christina F. Andersen, Director of Public Works): Request the City Manager to proceed with the preparation of final plans, specifications, cost estimates and financing plan for the construction of an Airport Terminal Improvement Project consistent with the project identified as part of the Airport EIR certification and require that any changes to the Council-approved post-screening areas within the terminal building not be designed and/or constructed, without formal council review and approval. Long Beach, CA: City.
- . 2006a (June). *Long Beach Airport Terminal Area Improvement Project Final Environmental Impact Report No. 37-03 (SCH No. 200309112)*. Long Beach, CA: the City
- . 2006b (June 20). Resolution No. RES-06-0056. Long Beach, CA: the City.
- . 2006c (June). Mitigation Monitoring and Reporting Program for Long Beach Airport Terminal Area Improvement Project. Long Beach, CA: the City.
- . 1990. *Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan Ordinance*. <http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3503>
- San Diego Navy Broadway Complex Coalition v. City of San Diego*, 185 Cal App 4th 924 (2010).
- South Coast Air Quality Management District (SCAQMD). 2015 (March). SCAQMD Air Quality Significance Thresholds. Diamond Bar, CA: SCAQMD. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.
- . 2010 (September 28). Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group #15 (slide presentation). Diamond Bar, CA. SCAQMD. <http://www.aqmd.gov/ceqa/handbook/GHG/2010/sept28mtg/ghgmtg15-web.pdf>.
- . 2009 (October). *Mass Rate Localized Significance Thresholds Look-up Tables*. Diamond Bar, CA: SCAQMD. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>.

- . 2008 (December 5). PROPOSAL: Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. Diamond Bar, CA: SCAQMD.
[http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2).

ATTACHMENT A
MITIGATION MONITORING AND REPORTING PROGRAM

**MITIGATION MONITORING AND REPORTING PROGRAM
FOR LONG BEACH AIRPORT TERMINAL AREA IMPROVEMENT PROJECT
(FOCUSED FOR THE LGB TERMINAL AREA IMPROVEMENTS PROJECT)**

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared in accordance with Public Resources Code Section 21081.6, which requires a Lead or Responsible Agency that approves or carries out a project, where an EIR has identified significant environmental effects, to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment”. The City of Long Beach is the Lead Agency for the proposed Project.

This MMRP reflects the document that was approved by the City Council with certification of FEIR 37-03. **Not all elements of the original MMRP are applicable to this Project. Therefore, those elements of the MMRP that were found not to be applicable for this Project have been shown in light gray font. This allows easy identification of the applicable measures.**

The MMRP is designed to monitor implementation of all feasible mitigation measures (MM) as identified in the Draft Environmental Impact Report (EIR) for the Long Beach Terminal Area Improvement Project. Each mitigation measure is listed and categorized by topic, with an accompanying discussion of the following:

- The **Monitoring Phase**, or the phase of the project during which the mitigation measure should be monitored (i.e., pre-construction, construction, or post-construction);
- The **Enforcement Agency** (i.e., the agency with the authority to enforce the mitigation measure); and
- The **Monitoring Agency** (i.e., the agency to which mitigation reports involving feasibility, compliance, implementation, and development operation are made).

The entity responsible for the implementation of all mitigation measures shall be the City of Long Beach, Planning and Building Department unless otherwise noted.

To more easily facilitate implementation of the MMP, the mitigation measures are roughly organized in stages associated with construction. Several of the mitigation measures would apply to more than one stage of construction. To facilitate the monitoring at each phase, these measures have been duplicated in each of the applicable stages. The categories and descriptions are as follows:

- **Pre-Construction** – This stage includes all aspects of design, including design of buildings (both interior and exterior) and design of construction practices (e.g., haul routes, Safety Plans, permits).
- **Demolition** – This includes measures which must be addressed immediately before or during demolition activities.
- **Grading** – This includes measures which must be addressed immediately before or during grading activities.
- **Construction** – This includes measures which must be addressed immediately before or during construction activities.

- **Post-Construction** – This stage describes measures which can only be addressed once construction has terminated and the building is in use.
- **On-Going** – This includes ongoing activities.
- **Optimized Flights Scenario** – This includes measures not associated with the proposed project.

The Mitigation Program identified to reduce potential project impacts consists of: Project Design Features (PDF); Standard Conditions and Requirements (SC); and Mitigation Measures (MM). The numbering of these items in the MMRP is generally consistent with the numbering provided in the EIR, with the following exceptions:

Old Number	New Number
SC 3.4-4	MM 3.4-5
SC 3.4-5	MM 3.4-6
SC 3.4-6	SC 3.4-4
SC 3.4-7	SC 3.4-5
SC 3.4-8	MM 3.4-7
SC 3.4-9	MM3.4-8
SC 3.7-3	MM 3.7-1
SC 3.7-4	MM 3.7-2

It should also be noted that several new mitigation measures were added in response to comments received on the Draft EIR. Specifically, the following mitigation measures, which are included herein, were added: MM 3.2-10a, MM 3.2-10b, MM 3.2-16, and MM 3.2-17.

The components of the mitigation program are described below.

- **Project Design Features** – PDFs are specific design elements proposed by the project applicant and incorporated into the project to prevent the occurrence of, or reduce the significance of, potential environmental effects. Because PDFs have been incorporated into the project, they do not constitute mitigation measures as defined by California Environmental Quality Act (CEQA). However, PDFs are identified in the mitigation section for each topical issue to ensure that they are included in the mitigation monitoring program (MMP) to be developed for, and implemented as a part of, the proposed project.
- **Standard Conditions and Requirements** – Standard conditions and requirements are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. They also serve to offset or prevent specific impacts. Typical standard conditions and requirements include compliance with the provisions of the Uniform Building Code, South Coast Air Quality Management District Rules, local agency fee programs, etc. Additional conditions may be imposed on the project by government agencies during the approval process, as appropriate.
- **Mitigation Measures** – Where a potentially significant environmental effect has been identified and is not reduced to a level considered less than significant through the application of PDFs and standard conditions and requirements, project-specific mitigation measures have been recommended.

LIST OF ACRONYMS

The following are acronyms used in the Mitigation Monitoring and Reporting Program:

ACMs	Asbestos Containing Materials
ACP	Asbestos Concrete Pipe
ADPM	Average Day-Peak Month
APU	Auxiliary Power Unit
BACT	Best Available Control Technology
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
DDT	dichloro-diphenyl-trichloroethane
EIR	Environmental Impact Report
FAA	Federal Aviation Administration
GSE	Ground Support Equipment
HSCP	Health and Safety Contingency Plan
Hz	Hertz
LEED	Leadership in Energy and Environmental Design
LOS	Level of Service
MLD	Most Likely Descendent
MM	Mitigation Measure
MMP	Mitigation Monitoring Program
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of Understanding
NO _x	Oxides of Nitrogen
PDF	Project Design Feature
PM ₁₀	Respirable particulate matter less than 10 micrometers in diameter
SCAQMD	South Coast Air Quality Management District
SC	Standard Conditions and Requirements
SWPPP	Stormwater Pollution Prevention Program
SWRCB	State Water Resources Control Board
TSA	Transportation Security Administration
USEPA	United States Environmental Protection Agency
V/C	Volume to Capacity (Ratio)
VOC	Volatile Organic Compound

PRE-CONSTRUCTION STAGE

Aesthetics

Project Design Features

PDF 3.1-1 The Guiding Principles have been used in the development of the conceptual design plan. As part of final design, the requirements outlined in these documents, which are named below, would provide guidance to protect the historic integrity of the existing terminal. This also serves to ensure a unified appearance and enhance the aesthetics of the terminal area. The Guiding Principles include: (1) May 7, 1990, memorandum of understanding (MOU) by the Neighborhood and Historic Preservation Officer for the City of Long Beach providing guidelines for future environmental review of the Airport Terminal Building; (2) Secretary of the Interior's standards for rehabilitation of historic buildings; (3) Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan Ordinance adopted by the City Council on September 2, 1997; (4) the City's Cultural Heritage Ordinance (Chapter 2.63 of the Municipal Code); and (5) a memorandum on considerations for new construction prepared by PCR (June 22, 2005). These documents all provide guidance on development standards for terminal area improvements and are included in Appendix B of the EIR.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review/issuance of building permits.

Standard Conditions and Requirements

SC 3.1-1 Prior to building plan approval, the Planning Commission shall ensure that all development complies with the development standards and design guidelines contained in Ordinance No. C-7496, *Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan (PD-12)*.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning Commission
- **Action Indicating Compliance:** Site Plan review/issuance of building permits.

SC 3.1-2 Prior to building plan approval, the Cultural Heritage Commission shall ensure that any new construction proposed adjacent to the Terminal Building or attached onto it shall comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings, and more specifically, the Secretary of the Interior's Standards for Rehabilitation (Standards).

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach, Planning and Building Department
- **Monitoring Agency:** City of Long Beach, Cultural Heritage Commission
- **Action Indicating Compliance:** Issuance of Certificate of Appropriateness.

SC 3.1-3 Prior to building plan approval, the Cultural Heritage Commission shall ensure that all development shall comply with the May 7, 1990 MOU adopted by the City Council and Cultural Heritage Commission providing guidelines for future environmental review of the Airport Terminal Building (the MOU is contained in Appendix B of the EIR).

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach, Planning and Building Department
- **Monitoring Agency:** City of Long Beach, Cultural Heritage Commission
- **Action Indicating Compliance:** Issuance of Certificate of Appropriateness.

Mitigation Measures

MM 3.1-3 Prior to building plan approval, the Planning Commission shall ensure that all exterior lighting be designed and located as to avoid intrusive effects on the runway operations, so as not to result in an air safety hazard. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary to prevent spill lighting on adjacent off-site uses.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning Commission
- **Action Indicating Compliance:** Site Plan review/issuance of building permits

MM 3.1-4 Prior to building plan approval, the Planning Commission shall ensure that all development projects use reflective glass that is less than 20 percent and all other materials used on exterior buildings and structures shall be selected with attention to minimizing reflective glare.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning Commission
- **Action Indicating Compliance:** Site Plan review/issuance of building permits.

Air Quality and Human Health Risk Assessment

Project Design Features

PDF 3.2-1 As part of project design, the City of Long Beach shall ensure the terminal area improvements are designed and constructed to meet Leadership in Energy and Environmental Design (LEED) specifications.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review/issuance of building permits.

Standard Conditions and Requirements

SC 3.2-3 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, all new and substantially modified buildings shall meet California Title 24 Energy Efficiency standards for water heating, space heating, and cooling to the extent feasible.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review/issuance of building permits.

SC 3.2-4 All new and modified point source facilities (e.g., utility equipment, fuel storage and dispensing) shall obtain all required permits from the South Coast Air Quality Management District (SCAQMD). To obtain these permits, the facilities will need to include Best Available Control Technology (BACT) that reduces emissions of criteria pollutants.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** South Coast Air Quality Management District
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** proof of BACT use/Site Plan review/issuance of permits.

SC 3.2-5 In support of PDF 3.2-1 and to conserve energy, require that all exterior lighting use color-corrected low sodium lighting.

- **Monitoring Phase:** Pre-construction

- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of building permits.

Mitigation Measures

MM 3.2-11 During project design, the architect shall provide that all fixtures used for lighting exterior common areas are regulated by automatic devices to turn off lights when they are not needed.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of building permits.

MM 3.2-12¹ As part of the air carrier ramp design, the City of Long Beach shall incorporate electric charging station infrastructure to support operation of electric Ground Support Equipment (GSE) and other on-airport vehicles.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Public Works Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of building permits.

MM 3.2-13¹ As part of the air carrier ramp design, preconditioned air and 400 Hertz (Hz) power from electric units (or electric power grid) will incorporate provisions at the commercial passenger aircraft parking positions to allow aircraft pilots the ability to plug in at the gate and turn off the auxiliary power unit (APU).

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Public Works Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of building permits.

¹ These measures are not applicable to the Phase II LGB Terminal Area Improvements because the air carrier ramp improvements were completed as part of Phase I.

Cultural Resources

Project Design Features

PDF 3.3-1 The Guiding Principles have been used in the development of the conceptual design plan. As part of final design, the requirements outlined in these documents, which are named below, would provide guidance to protect the historic integrity of the existing terminal. The Guiding Principles include: (1) May 7, 1990, MOU by the Neighborhood and Historic Preservation Officer for the City of Long Beach providing guidelines for future environmental review of the Airport Terminal Building; (2) Secretary of the Interior's standards for rehabilitation of historic buildings; (3) Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan Ordinance adopted by the City Council on September 2, 1997; (4) the City's Cultural Heritage Ordinance (Chapter 2.63 of the Municipal Code); and (5) a memorandum on considerations for new construction prepared by PCR (June 22, 2005). These documents all provide guidance on development standards for terminal area improvements and are included in Appendix B of the EIR.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Cultural Heritage Commission
- **Action Indicating Compliance:** Site Plan review/Issuance of a certificate of appropriateness by the Cultural Heritage Commission.

Standard Conditions and Requirements

SC 3.3-3 In compliance with Chapter 2.63 of the Municipal Code no permits for the alteration, remodel, enlarging, or improvements to the Airport Terminal, shall be issued prior to review by the Cultural Heritage Commission and issuance by the Commission of a certificate of appropriateness.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach, Cultural Heritage Commission
- **Monitoring Agency:** City of Long Beach, Planning and Building Department
- **Action Indicating Compliance:** Site plan approval. Issuance of certificate of appropriateness. Issuance of permits.

Mitigation Measures

It was determined that, prior to mitigation, the proposed terminal area improvements conceptual design has the potential to cause a substantial adverse change, as per Section 15064.5(b) of the CEQA Guidelines, in the significance of the Long Beach Airport Terminal Building because physical characteristics that convey the historical significance of the resource would be materially altered in a manner that may not meet the Secretary's Standards. Those specific design concepts that have been identified as potentially adverse have corresponding mitigation measures as explained in the list below. If during the final design phase these specific design plans are not selected, then the associated mitigation measures would not be necessary. The applicability of

these measures would be determined through design review by the Cultural Heritage Commission and issuance by the Commission of a certificate of appropriateness, as outlined in Chapter 2.63 of the Municipal Code (SC 3.3-3). Additionally, other design measures may be recommended by the Cultural Heritage Commission through the design review process, which would be required prior to issuance of a certificate of appropriateness.

MM 3.3-1² If the proposed Airport Terminal improvements are to be connected to the original 1941 structure, then the project architect shall design the connection between the new structure and the existing Airport Terminal Building so that it is attached beneath the existing cornice, to be consistent with the Streamline Moderne design.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of a certificate of appropriateness by the Cultural Heritage Commission.

MM 3.3-2 If during final design, new windows are required in the existing Airport Terminal Building, the project architect shall ensure that window treatments reference the style of the original Airport Terminal windows, which are very specific to the Airport Terminal. The use of the window wall, as seen on the northwest and southwest corner, shall be used as an example.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review/Issuance of a certificate of appropriateness by the Cultural Heritage Commission

MM 3.3-3 If during the final design, window replacement is proposed for the original Airport Terminal Building, then the new window(s) shall replicate the original style of fenestration. If the original windows that are currently missing from the building are still extant, then those windows shall be returned to their original location, if feasible.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department

² This measure is not applicable to the Phase II LGB Terminal Area Improvements because the improvements are not proposing a connection to the Historic Terminal Building.

- **Action Indicating Compliance:** Site Plan review. Issuance of a certificate of appropriateness by the Cultural Heritage Commission.

MM 3.3-4 If during final design, new doorframes in the Airport Terminal Building are proposed, then the project architect shall reference the style of the original doorframes located on the east and south facades of the original Airport Terminal Building for the new doorway(s).

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Cultural Heritage Commission
- **Action Indicating Compliance:** Site Plan review. Issuance of a certificate of appropriateness by the Cultural Heritage Commission.

MM 3.3-5 The City of Long Beach, Public Works Director or designee shall stipulate in the Plans and specifications that exterior material should be compatible in type, color and finish to the existing material used on the Airport Terminal Building. Testing should be done to determine original colors, if necessary. Implementation of this mitigation measure will be at the direction of the Cultural Heritage Commission.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Public Works Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of a certificate of appropriateness by the Cultural Heritage Commission.

MM 3.3-6 If during final design, the shelter/ticketing areas are proposed on either side of the existing 1941 Airport Terminal Building, then the project architect shall scale down the proposed design. This could be accomplished with a lower profile, possibly with a flat roof that fits in visually with the horizontal nature of the architectural style of the terminal. The manner in which this mitigation measure will be implemented shall be reviewed by the Cultural Heritage Commission as part of the issuance of the certificate of appropriateness.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of a certificate of appropriateness by the Cultural Heritage Commission.

Hazards and Hazardous Wastes

Standard Conditions and Requirements

- SC 3.4-2 The Contractor shall develop a Storm Water Pollution Prevention Plan (SWPPP) to minimize potential short-term significant hazardous materials impacts associated with construction activities.
- **Monitoring Phase:** Pre-construction
 - **Enforcement Agency:** City of Long Beach Public Works Department
 - **Monitoring Agency:** State Water Resources Control Board (SWRCB)
 - **Action Indicating Compliance:** A completed SWPPP submitted to SWRCB.
- SC 3.4-4 The Airport shall comply with the Airport Industrial National Pollutant Discharge Elimination System permit (CAS000001/WDID 4B19S004985). Construction activities that disturb more than one acre shall abide by the State issued State Water Resources Control Board Order 99-08 General Permit CAS000002. As part of this process, the Airport would be required to prepare a Storm Water Pollution Prevention Plan.
- **Monitoring Phase:** Pre-construction
 - **Enforcement Agency:** City of Long Beach Public Works Department
 - **Monitoring Agency:** State Water Resources Control Board
 - **Action Indicating Compliance:** A completed SWPPP submitted to SWRCB/issuance of permit.
- SC 3.4-5 Construction of the Proposed Project shall be in compliance with local and State construction and building requirements and regulations, including the Uniform Building Code.
- **Monitoring Phase:** Pre-Construction/Construction
 - **Enforcement Agency:** City of Long Beach, Planning and Building Department
 - **Monitoring Agency:** City of Long Beach, Planning and Building Department
 - **Action Indicating Compliance:** Approval of Development Plans. Site inspections.

Mitigation Measures

- MM 3.4-1 Prior to the initiation of demolition/construction, the Contractor shall develop an approved Health and Safety Contingency Plan (HSCP) in the event that unanticipated/unknown environmental contaminants are encountered during construction. The plan shall be developed to protect workers, safeguard the environment, and meet the requirements of the California Code of Regulations (CCR), Title 8, General Industry Safety Orders – Control of Hazardous Substances. The Plan shall include measures for handling any unknown wastes

or suspect materials discovered during construction by the Contractor, which he/she believes may involve hazardous waste or hazardous materials.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach Planning and Building Department
- **Monitoring Agency:** City of Long Beach Planning and Building Department
- **Action Indicating Compliance:** A completed HSCP. Issuance of Notice to Proceed for construction.

Public Services

Project Design Features

PDF 3.7-1 The Proposed Project and the build scenarios include a number of features that would enhance public safety and security at the Airport. These features, which include new holdrooms, concession areas, passenger and baggage security screening facilities, baggage claim devices, baggage service office, restrooms, office space, and ticketing facilities, would reduce overcrowding and provide an expanded baggage screening area, which would also be enclosed to protect sensitive screening equipment.³

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach, Planning and Building Department
- **Monitoring Agency:** City of Long Beach, Planning and Building Department
- **Action Indicating Compliance:** Site Plan review. Issuance of permit.

Standard Conditions and Requirements

SC 3.7-1 Prior to the initiation of construction activities, the City's contractor shall prepare a Traffic Control Plan to ensure that adequate emergency access is maintained at the Airport during construction. As part of the Traffic Control Plan the contractor shall alert emergency and security service providers of the construction activities for each phase of construction. The Traffic Control Plan shall be submitted to the City Traffic Engineer for approval.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department

³ This PDF identifies a number of improvements proposed to help minimize overcrowding at the Airport. The holdrooms were provided as part of the Phase I improvements. The Phase II LGB Terminal Area Improvement Project provides improvements to concession areas, baggage security screening facilities, baggage claim devices, restrooms, and ticketing facilities; however, no additional improvements to holdrooms, baggage service office, or office space are provided in this phase of improvements. This does not affect the consistency of the Project with this PDF.

- **Action Indicating Compliance:** Acceptance of an approved Traffic Control Plan.

SC 3.7-2 During project design, the facility improvements shall adhere to Transportation Security Administration (TSA), Federal Aviation Administration (FAA), and all applicable standards including City of Long Beach fire code, building code, and safety code. Long Beach Fire Department shall review and approve design plans as part of the site plan review and building permit processes.

- **Monitoring Phase:** Pre-construction
- **Enforcement Agency:** City of Long Beach, Planning and Building Department.
- **Monitoring Agency:** City of Long Beach, Airport Bureau and City of Long Beach Fire Department
- **Action Indicating Compliance:** Site Plan review. Issuance of permit.

MM 3.7-2 Prior to initiation of any modifications to the airfield side, the contractor shall provide a Construction Phasing Implementation Plan, meeting the approval of the Airport Manager. The Plan shall demonstrate how construction activities will be conducted and that all applicable FAA airfield safety requirements are being met. In addition, the contractor shall prepare a safety plan and participate in on-going weekly safety meetings during construction.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Airport Bureau
- **Monitoring Agency:** City of Long Beach, Airport Bureau
- **Action Indicating Compliance:** Acceptance of an approved Construction Phasing Implementation Plan and an approved Safety Plan.

Traffic and Circulation

Project Design Features

PDF 3.8-1⁴ A component of the Proposed Project is the provision of a new parking structure that would accommodate 4,000 vehicles.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Planning and Building Department
- **Action Indicating Compliance:** Design and construction of a parking structure.

⁴ These PDFs would not be applicable to the Phase II LGB Terminal Area Improvement Project because they were implemented as part of Phase I improvements.

PDF 3.8-2⁵ The project would also include the extension of the south side of the Donald Douglas Drive loop to exit onto Lakewood Boulevard, with eastbound right turn only to southbound access on to Lakewood Boulevard.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Design and extension of Douglas Drive loop; eastbound right turn to southbound access onto Lakewood Boulevard.

PDF 3.8-3⁵ With the construction of the parking structure existing surface parking would be displaced. To address potential parking demand during construction, Parcel O would be developed to serve parking demand not met by existing facilities.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Development of Parcel O to accommodate displaced vehicle parking during construction of the parking structure and Terminal improvements. Compliance can also be accomplished by leasing existing unused parking spaces from Boeing (requires a signed lease agreement).

⁵ These PDFs would not be applicable to the Phase II LGB Terminal Area Improvement Project because they were implemented as part of Phase I improvements.

DEMOLITION STAGE

Aesthetics

Mitigation Measures

- MM 3.1-1 During construction activities, the construction contractor shall ensure that construction materials and equipment staging areas be located away from existing residential uses and, when feasible, appropriate screening (i.e., temporary fencing with opaque material) shall be used to buffer views of the construction site.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** Placement of staging area to be approved prior to building commencement. Inclusion of requirement in contract specifications.
- MM 3.1-2 During construction activities, the construction contractor shall ensure that temporary construction-related security lighting shall be arranged so that direct rays will not shine on or produce glare for adjacent street traffic and residential uses. The light fixtures specified for the Project design must comply with the standard of the Illuminating Engineering Society for full cutoff capability.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Approval of construction staging plans.

Air Quality and Human Health Risk Assessment

Standard Conditions and Requirements

- SC 3.2-1 During construction of the Proposed Project, the City and its contractors will be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions should not create a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Two options are presented in Rule 403; monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction.
- Rule 403 requires that “A person conducting active operations within the boundaries of the South Coast Air Basin shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation.” Rule 403 also

requires that the construction activities “shall not cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined by simultaneous sampling, as the difference between upwind and down wind sample.” A project is exempt from the monitoring requirement “if the dust control actions, as specified in Table 2 are implemented on a routine basis for each applicable fugitive dust source type.” (Table 2 from Rule 403 is presented at the end of this MMRP as Table 1.) Under high wind conditions (i.e., when wind gusts exceed 25 miles per hour) additional control measures are required, and “the required control measures for high wind conditions are implemented for each applicable fugitive dust source type, as specified in Table 1.” (Table 1 from Rule 403 is presented at the end of this MMRP as Table 2.) Monitoring of particulate concentrations does not reduce fugitive dust emissions; therefore, to minimize fugitive dust emissions the construction activities will utilize the measures presented in Table 2 and Table 1 (Tables 1 and 2 in Rule 403) rather than the monitoring option of SCAQMD Rule 403.

Further, Rule 403 requires that the project shall “prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations.” Alternatively, the project can “take at least one of the actions listed in Table 3.” (Table 3 from Rule 403 is presented at the end of this MMRP as Table 3.) In addition, the project would be required to “prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

SC 3.2-2 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirements in contract specifications. Field Inspections.

Mitigation Measures

The follow mitigation measures are grouped because the enforcement agency, monitoring agency, and actions indicating compliance are the same for all.

- MM 3.2-1 The contract specifications shall require and the City shall enforce general contractors to ensure that all equipment is properly tuned and maintained in accordance with manufacturers' specifications.
- MM 3.2-2 The contract specifications shall require and the City shall enforce general contractors to maintain and operate construction equipment so as to minimize exhaust emissions. During construction, engines on trucks and vehicles in loading and unloading queues will be turned off when not in use, to reduce vehicle emissions. Construction activities should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- MM 3.2-3 The contract specifications shall require and the City shall enforce general contractors sweep streets as needed during construction, but not more frequently than hourly, if visible soil material has been carried onto adjacent public roads.
- MM 3.2-4 The contract specifications shall require and the City shall enforce general contractors to visually inspect construction equipment prior to leaving the site; loose dirt shall be washed off with wheel washers as necessary.
- MM 3.2-5 During construction, the City shall coordinate with the contractor to maximize the ability to power construction activity utilizing electricity from power poles rather than temporary diesel or gasoline power generators, to the extent possible.
- MM 3.2-6 The contract specifications shall require that all on-site mobile equipment used during construction shall be powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) where feasible.
- MM 3.2-7 During construction, the City shall provide a location and require the contractor to store all construction equipment used in the project construction within the project site (away from adjacent residential areas) to reduce the impact on the roadway system and the resultant air emissions.
- On-site construction equipment staging areas and construction worker parking lots shall be located on either paved surfaces or unpaved surfaces that are periodically treated with non-toxic soil stabilizers.
- MM 3.2-8 The contract specifications shall require and the City shall enforce the contractor to schedule all deliveries related to construction activities that affect traffic flow during off-peak hours (e.g., 10:00 a.m. and 3:00 p.m.) and deliveries shall be coordinated to achieve consolidated truck trips. When traffic flow is impacted by the movement of construction materials and/or equipment, temporary traffic controls shall be provided to improve traffic flow (e.g., flag person).
- MM 3.2-9 The contract specifications shall require all on-site heavy-duty construction equipment shall be equipped with diesel particulate traps to the extent that this equipment is available at the time the contracts are awarded.

MM 3.2-10 The construction specifications shall require and the City shall enforce that emulsified diesel fuel be used in diesel-fueled construction equipment that is not equipped with diesel particulate traps to reduce NO_x emissions.

The use of emulsified diesel fuel in construction equipment is assumed to reduce construction equipment NO_x emissions by 15 to 20 percent (CARB 2004). Applying the lower end of that range to the peak daily NO_x emissions from construction equipment would reduce NO_x emissions by approximately 70 lbs/day to a peak day NO_x emission inventory for construction of 424 lbs/day. This level would still be above the significance threshold. Volatile Organic Compound (VOC) emissions would also remain significant and unavoidable.

MM 3.2-10a During construction of the Proposed Project, the City and its contractors shall be required to comply with the following provisions, where feasible, to reduce construction NO_x and VOC emissions:

- Provide on-site lunch trucks/facilities during construction to reduce off-site worker vehicle trips.
- Prohibit construction vehicles idling in excess of five minutes to be consistent with State law.
- Suspend use of all construction equipment during a first-stage smog alert.
- Designate a person who will ensure implementation of the proposed mitigation measures through direct inspection and investigation of complaints. The City or the contractor shall provide a telephone number that residents may call should they have complaints regarding construction nuisance.

MM 3.2-17 The City will require street cleaning of Douglas Drive with a vacuum type street sweeper at least once per week. The vacuum sweeper will make sufficient circuits through the terminal area to vacuum the entire street surface (not just the gutter area) to reduce fugitive PM emissions from re-entrained road dust. Douglas Drive between Lakewood Boulevard and the Long Beach Airport terminal (including the loop in front of the terminal and return) shall be cleaned in this manner. The anticipated future exit road back to Lakewood Boulevard would also be cleaned in this manner.

The range of potential control efficiencies for this mitigation measure is from approximately 10 percent to 50 percent.^{6,7} It is anticipated that a 75 percent reduction would be needed to reduce the peak incremental PM₁₀ concentration below the significance threshold; therefore, PM₁₀ concentrations would remain significant after implementation of this mitigation measure.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department

⁶ Cowherd, C., P. Englehart, G.E. Muleski, J.S. Kinsey, and K.D. Rosbury, 1990. Control of Fugitive and Hazardous Dusts, Noyes Data Corporation, Park Ridge, NJ. p.21.

⁷ "Improvement of Specific Emission Factors (BACM Project No. 1) Final Report," by Midwest Research Institute for SCAQMD, Diamond Bar, CA, March 29, 1996.

- **Action Indicating Compliance:** Inclusion of requirements in contract specifications. Site inspections.

Hazards and Hazardous Wastes

Project Design Features

PDF 3.4-1 The proposed terminal improvements would be constructed in a manner consistent with LEED standards certification requirements to, among other things, minimize potential hazards and hazardous waste impacts.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

Standard Conditions and Requirements

SC 3.4-3 The Airport Terminal Building is known to contain asbestos concrete materials (ACMs). The applicant shall comply with notification and asbestos removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos-related health issues.

- **Monitoring Phase:** Demolition
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Report summarizing the findings and submitted to the City and SCAQMD, which includes a description of mitigation measures which will be taken to remove the ACMs (if applicable). Notification measures as described in SCAQMD Rule 1403.

Mitigation Measures

MM 3.4-2 Prior to the demolition of any on-site building or portion of any on-site building constructed prior to 1973, the City shall screen the buildings for lead-based paint. If lead-based paint is identified, remediation measures shall be developed in accordance with all applicable federal, State, and local regulatory requirements.

- **Monitoring Phase:** Demolition
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Report summarizing the findings and identification of remediation measures, if necessary. Inclusion in contractor specifications, if applicable.

MM 3.4-3 During demolition and excavation activities and during preparation of the geotechnical study in the design phase, the City shall have a qualified inspector onsite to inspect and sample the soil for contaminants. If observations during

demolition activities indicate that site soil is affected by contaminants, demolition work should be stopped in the area involved until an analysis of the soil conditions can be performed and additional recommendations evaluated and performed as necessary.

- **Monitoring Phase:** Demolition
- **Enforcement Agency:** City of Long Beach Public Works Department
- **Monitoring Agency:** City of Long Beach Public Works Department
- **Action Indicating Compliance:** A completed geotechnical study. Issuance of permits.

MM 3.4-5⁸ Prior to demolition of any facilities at Million Air, the applicant shall test for asbestos containing materials. Should ACM or asbestos concrete pipe (ACP) be found, the applicant shall comply with notification and asbestos removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos related health risks.

- **Monitoring Phase:** Demolition
- **Enforcement Agency:** City of Long Beach, Planning and Building Department
- **Monitoring Agency:** City of Long Beach, Planning and Building Department
- **Action Indicating Compliance:** Report summarizing the findings and submitted to the City and SCAQMD, which includes a description of mitigation measures which will be taken to remove the ACM or ACP (if applicable). Notification measures as described in SCAQMD Rule 1403.

MM 3.4-6 The City Engineer, or his designee, shall verify that every contractor transporting or handling hazardous materials and/or wastes during project implementation has permits and licenses from all relative health and regulatory agencies to operate and properly manifest all hazardous or California regulated material.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach Public Works Department
- **Monitoring Agency:** City of Long Beach Public Works Department
- **Action Indicating Compliance:** Proof that appropriate permits and licenses have been obtained; display of manifests.

MM 3.4-7 Prior to initiating construction activities, the contractor shall verify the locations of underground pipelines in the terminal area, ramp, and parking areas. Appropriate precautions shall be taken to ensure that pipelines are not disturbed or are properly relocated during construction.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department

⁸ This measure would not be applicable to the Phase II LGB Terminal Area Improvements Project because the Project does not involve demolition of improvements at the Million Area lease area.

- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

Noise

Standard Conditions and Requirements

SC 3.6-2 The contractor shall comply with the City of Long Beach Noise Ordinance pertaining to limitations on construction activities, as outlined in Exhibit 3.6-12 of the EIR, to the extent feasible while minimizing any potential conflicts with aviation activities.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Adherence to the construction hours and requirements specified in the City's Noise Ordinance or permission from City work outside of those hours.

Mitigation Measures

MM 3.6-1⁹ The City shall conduct noise measurements during any night construction on Parcel O where such construction involves the use of heavy construction equipment such as front loaders, tractors, graders, paving machines, jackhammers or similar devices. Such measurements shall be made near the homes located directly across Clark Avenue from Parcel O. If any night measurement exceeds the limits specified in Sections 8.80.150 and 8.80.160 of the Long Beach Municipal Code as a result of the construction activity, the operation shall be terminated until such time that a construction noise mitigation plan can be put into effect that will result in compliance with the night time noise limits. Note that in the case where ambient noise levels exceed the noise limits specified in Section 8.80.160, the allowable noise exposure standard shall be increased per Section 8.80.150 [C] of the Municipal Code to reflect ambient levels.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Reports summarizing the findings of the noise measurements, if heavy construction equipment as defined above is used on during night construction on Parcel O. Preparation of a construction noise mitigation plan (if applicable).

⁹ This measure would not be applicable to the Phase II LGB Terminal Improvements Project because the Project does not propose any construction on Parcel O.

Traffic and Circulation

Standard Conditions and Requirements

- SC 3.8-1 As part of contract specification, the Airport shall require all construction trucks to access the Airport terminal area via the I-605 to I-405 and Lakewood Boulevard. Should oversized-transport vehicles accessing the Project site use a State highway, a Caltrans transportation permit will be required. Construction vehicles accessing Parcel O shall use this route and access the construction site off of Clark Avenue or Willow Street.

Monitoring Phase: Demolition/Grading/Construction

- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Site inspections.

GRADING STAGE

Aesthetics

Mitigation Measures

MM 3.1-1 During construction activities, the construction contractor shall ensure that construction materials and equipment staging areas be located away from existing residential uses and, when feasible, appropriate screening (i.e., temporary fencing with opaque material) shall be used to buffer views of the construction site.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Planning and Building Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Placement of staging area to be approved prior to building commencement. Inclusion of requirement in contract specifications.

MM 3.1-2 During construction activities, the construction contractor shall ensure that temporary construction-related security lighting shall be arranged so that direct rays will not shine on or produce glare for adjacent street traffic and residential uses. The light fixtures specified for the Project design must comply with the standard of the Illuminating Engineering Society for full cutoff capability.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Approval of construction staging plans.

Air Quality and Human Health Risk Assessment

Standard Conditions and Requirements

SC 3.2-1 During construction of the Proposed Project, the City and its contractors will be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions should not create a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Two options are presented in Rule 403; monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction.

Rule 403 requires that "A person conducting active operations within the boundaries of the South Coast Air Basin shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each

fugitive dust source type which is part of the active operation.” Rule 403 also requires that the construction activities “shall not cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined by simultaneous sampling, as the difference between upwind and down wind sample.” A project is exempt from the monitoring requirement “if the dust control actions, as specified in Table 2 are implemented on a routine basis for each applicable fugitive dust source type.” (Table 2 from Rule 403 is presented at the end of this MMRP as Table 1.) Under high wind conditions (i.e., when wind gusts exceed 25 miles per hour) additional control measures are required, and “the required control measures for high wind conditions are implemented for each applicable fugitive dust source type, as specified in Table 1.” (Table 1 from Rule 403 is presented at the end of this MMRP as Table 2. Monitoring of particulate concentrations does not reduce fugitive dust emissions; therefore, to minimize fugitive dust emissions the construction activities will utilize the measures presented in Table 2 and Table 1 (Tables 1 and 2 in Rule 403) rather than the monitoring option of SCAQMD Rule 403.

Further, Rule 403 requires that the project shall “prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations.” Alternatively, the project can “take at least one of the actions listed in Table 3.” (Table 3 from Rule 403 is presented at the end of this MMRP as Table 3.) In addition, the project would be required to “prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** South Coast Air Quality Management District
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

SC 3.2-2 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Field Inspections.

Mitigation Measures

The follow mitigation measures are grouped because the enforcement agency, monitoring agency, and actions indicating compliance are the same for all.

- MM 3.2-1 The contract specifications shall require and the City shall enforce general contractors to ensure that all equipment is properly tuned and maintained in accordance with manufacturers' specifications.
- MM 3.2-2 The contract specifications shall require and the City shall enforce general contractors to maintain and operate construction equipment so as to minimize exhaust emissions. During construction, engines on trucks and vehicles in loading and unloading queues will be turned off when not in use, to reduce vehicle emissions. Construction activities should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- MM 3.2-3 The contract specifications shall require and the City shall enforce general contractors sweep streets as needed during construction, but not more frequently than hourly, if visible soil material has been carried onto adjacent public roads.
- MM 3.2-4 The contract specifications shall require and the City shall enforce general contractors to visually inspect construction equipment prior to leaving the site; loose dirt shall be washed off with wheel washers as necessary.
- MM 3.2-5 During construction, the City shall coordinate with the contractor to maximize the ability to power construction activity utilizing electricity from power poles rather than temporary diesel or gasoline power generators, to the extent possible.
- MM 3.2-6 The contract specifications shall require that all on-site mobile equipment used during construction shall be powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) where feasible.
- MM 3.2-7 During construction, the City shall provide a location and require the contractor to store all construction equipment used in the project construction within the project site (away from adjacent residential areas) to reduce the impact on the roadway system and the resultant air emissions.
- On-site construction equipment staging areas and construction worker parking lots shall be located on either paved surfaces or unpaved surfaces that are periodically treated with non-toxic soil stabilizers.
- MM 3.2-8 The contract specifications shall require and the City shall enforce the contractor to schedule all deliveries related to construction activities that affect traffic flow during off-peak hours (e.g., 10:00 a.m. and 3:00 p.m.) and deliveries shall be coordinated to achieve consolidated truck trips. When traffic flow is impacted by the movement of construction materials and/or equipment, temporary traffic controls shall be provided to improve traffic flow (e.g., flag person).
- MM 3.2-9 The contract specifications shall require all on-site heavy-duty construction equipment shall be equipped with diesel particulate traps to the extent that this equipment is available at the time the contracts are awarded.

MM 3.2-10 The construction specifications shall require and the City shall enforce that emulsified diesel fuel be used in diesel-fueled construction equipment that is not equipped with diesel particulate traps to reduce NO_x emissions.

The use of emulsified diesel fuel in construction equipment is assumed to reduce construction equipment NO_x emissions by 15 to 20 percent (CARB 2004). Applying the lower end of that range to the peak daily NO_x emissions from construction equipment would reduce NO_x emissions by approximately 70 lbs/day to a peak day NO_x emission inventory for construction of 424 lbs/day. This level would still be above the significance threshold. VOC emissions would also remain significant and unavoidable.

MM 3.2-10a During construction of the Proposed Project, the City and its contractors shall be required to comply with the following provisions, where feasible, to reduce construction NO_x and VOC emissions:

- Provide on-site lunch trucks/facilities during construction to reduce off-site worker vehicle trips.
- Prohibit construction vehicles idling in excess of five minutes to be consistent with State law.
- Suspend use of all construction equipment during a first-stage smog alert.
- Designate a person who will ensure implementation of the proposed mitigation measures through direct inspection and investigation of complaints. The City or the contractor shall provide a telephone number that residents may call should they have complaints regarding construction nuisance.

MM 3.2-17 The City will require street cleaning of Douglas Drive with a vacuum type street sweeper at least once per week. The vacuum sweeper will make sufficient circuits through the terminal area to vacuum the entire street surface (not just the gutter area) to reduce fugitive PM emissions from re-entrained road dust. Douglas Drive between Lakewood Boulevard and the Long Beach Airport terminal (including the loop in front of the terminal and return) shall be cleaned in this manner. The anticipated future exit road back to Lakewood Boulevard would also be cleaned in this manner.

The range of potential control efficiencies for this mitigation measure is from approximately 10 percent to 50 percent.^{10,11} It is anticipated that a 75 percent reduction would be needed to reduce the peak incremental PM₁₀ concentration below the significance threshold; therefore, PM₁₀ concentrations would remain significant after implementation of this mitigation measure.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department

¹⁰ Cowherd, C., P. Englehart, G.E. Muleski, J.S. Kinsey, and K.D. Rosbury, 1990. Control of Fugitive and Hazardous Dusts, Noyes Data Corporation, Park Ridge, NJ. p.21.

¹¹ "Improvement of Specific Emission Factors (BACM Project No. 1) Final Report," by Midwest Research Institute for SCAQMD, Diamond Bar, CA, March 29, 1996.

- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

Cultural Resources

Standard Conditions and Requirements

- SC 3.3-1 Should any archaeological resources be uncovered during grading or excavation activities, these activities shall be diverted to a part of the site away from the find, and a qualified archaeologist shall be contracted by the contractor to: (1) ascertain the significance of the resource; (2) establish protocol with the project applicant to protect such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if deemed appropriate. If human remains are discovered on the site, the Los Angeles County Coroner shall be contacted to examine the remains, and the provisions of Section 15064.5(3) of the CEQA Guidelines shall be followed.
- **Monitoring Phase:** Grading
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** If remains are discovered, preparation of a written report by archaeologist and/or Los Angeles County Coroner.
- SC 3.3-2 If human remains are encountered during ground-disturbing activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC). The will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
- **Monitoring Phase:** Grading
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Health Department
 - **Action Indicating Compliance:** if remains are found, written approval by MLD or his/her authorized representative after inspection.
- SC 3.3-4 Should any paleontological resources be uncovered during grading or excavation activities, the construction contractor shall divert activities to a part of the site away from the find, and a qualified paleontologist shall be contracted by the contractor to: (1) ascertain the significance of the resource; (2) establish protocol with the project applicant to protect such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if deemed appropriate. If human remains are discovered on the site, the Los Angeles County Coroner shall

be contacted to examine the remains, and the provisions of Section 15064.5(3) of the CEQA Guidelines shall be followed.

- **Monitoring Phase:** Grading
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** If paleontological resources are discovered, preparation of protocol and preparation of a written report by paleontologist. Inclusion of requirement in contract specifications.

Hazards and Hazardous Wastes

Project Design Features

PDF 3.4-1 The proposed terminal improvements would be constructed in a manner consistent with LEED standards certification requirements to, among other things, minimize potential hazards and hazardous waste impacts.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

Mitigation Measures

MM 3.4-6 The City Engineer, or his designee, shall verify that every contractor transporting or handling hazardous materials and/or wastes during project implementation has permits and licenses from all relative health and regulatory agencies to operate and properly manifest all hazardous or California regulated material.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach Public Works Department
- **Monitoring Agency:** City of Long Beach Public Works Department
- **Action Indicating Compliance:** Proof that appropriate permits and licenses have been obtained; display of manifests.

MM 3.4-7 Prior to initiating construction activities, the contractor shall verify the locations of underground pipelines in the terminal area, ramp, and parking areas. Appropriate precautions shall be taken to ensure that pipelines are not disturbed or are properly relocated during construction.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

- MM 3.4-8¹² Prior to issuance of grading permits, the applicant shall test the soil for aurally deposited lead and dichloro-diphenyl-trichloroethane (DDT). As a result of soil testing, should aurally deposited lead or DDT be found in quantities that exceed acceptable thresholds, the applicant shall develop a remediation program to dispose of soil material properly.
- **Monitoring Phase:** Grading
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Health Department
 - **Action Indicating Compliance** Written description of findings of soil test/issuance of grading permits.

Noise

Standard Conditions and Requirements

- SC 3.6-2 The contractor shall comply with the City of Long Beach Noise Ordinance pertaining to limitations on construction activities, as outlined in Exhibit 3.6-12 of the EIR, to the extent feasible while minimizing any potential conflicts with aviation activities.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Adherence to the construction hours and requirements specified in the City's Noise Ordinance or permission from City work outside of those hours.

Mitigation Measures

- MM 3.6-1¹² The City shall conduct noise measurements during any night construction on Parcel O where such construction involves the use of heavy construction equipment such as front loaders, tractors, graders, paving machines, jackhammers or similar devices. Such measurements shall be made near the homes located directly across Clark Avenue from Parcel O. If any night measurement exceeds the limits specified in Sections 8.80.150 and 8.80.160 of the Long Beach Municipal Code as a result of the construction activity, the operation shall be terminated until such time that a construction noise mitigation plan can be put into effect that will result in compliance with the night time noise limits. Note that in the case where ambient noise levels exceed the noise limits specified in Section 8.80.160, the allowable noise exposure standard shall be increased per Section 8.80.150 [C] of the Municipal Code to reflect ambient levels.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department

¹² This measure would not be applicable to the Phase II LGB Terminal Area Improvements Project because the Project does not propose any improvements in open or grassy areas (DDT concern) or adjacent to I-405 (source of aurally deposited lead).

- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Reports summarizing the findings of the noise measurements if heavy construction equipment as defined above is used on during night construction on Parcel O. Preparation of a construction noise mitigation plan (if applicable).

Traffic and Circulation

Standard Conditions and Requirements

SC 3.8-1 As part of contract specification, the Airport shall require all construction trucks to access the Airport terminal area via the I-605 to I-405 and Lakewood Boulevard. Should oversized-transport vehicles accessing the Project site use a State highway, a Caltrans transportation permit will be required. Construction vehicles accessing Parcel O shall use this route and access the construction site off of Clark Avenue or Willow Street.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Site inspections.

CONSTRUCTION STAGE

Aesthetics

Mitigation Measures

- MM 3.1-1 During construction activities, the construction contractor shall ensure that construction materials and equipment staging areas be located away from existing residential uses and, when feasible, appropriate screening (i.e., temporary fencing with opaque material) shall be used to buffer views of the construction site.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** Placement of staging area to be approved prior to building commencement. Inclusion of requirement in contract specifications.
- MM 3.1-2 During construction activities, the construction contractor shall ensure that temporary construction-related security lighting shall be arranged so that direct rays will not shine on or produce glare for adjacent street traffic and residential uses. The light fixtures specified for the Project design must comply with the standard of the Illuminating Engineering Society for full cutoff capability.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Approval of construction staging plans.

Air Quality and Human Health Risk Assessment

Standard Conditions and Requirements

- SC 3.2-1 During construction of the Proposed Project, the City and its contractors will be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions should not create a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Two options are presented in Rule 403; monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction.
- Rule 403 requires that "A person conducting active operations within the boundaries of the South Coast Air Basin shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation." Rule 403 also

requires that the construction activities “shall not cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined by simultaneous sampling, as the difference between upwind and down wind sample.” A project is exempt from the monitoring requirement “if the dust control actions, as specified in Table 2 are implemented on a routine basis for each applicable fugitive dust source type.” (Table 2 from Rule 403 is presented at the end of this MMRP as Table 1.) Under high wind conditions (i.e., when wind gusts exceed 25 miles per hour) additional control measures are required, and “the required control measures for high wind conditions are implemented for each applicable fugitive dust source type, as specified in Table 1.” (Table 1 from Rule 403 is presented at the end of this MMRP as Table 2.) Monitoring of particulate concentrations does not reduce fugitive dust emissions; therefore, to minimize fugitive dust emissions the construction activities will utilize the measures presented in Table 2 and Table 1 (Tables 1 and 2 in Rule 403) rather than the monitoring option of SCAQMD Rule 403.

Further, Rule 403 requires that the project shall “prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations.” Alternatively, the project can “take at least one of the actions listed in Table 3.” (Table 3 from Rule 403 is presented at the end of this MMRP as Table 3.) In addition, the project would be required to “prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** South Coast Air Quality Management District
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

SC 3.2-2 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Field inspections.

Mitigation Measures

The follow mitigation measures are grouped because the enforcement agency, monitoring agency, and actions indicating compliance are the same for all.

- MM 3.2-1 The contract specifications shall require and the City shall enforce general contractors to ensure that all equipment is properly tuned and maintained in accordance with manufacturers' specifications.
- MM 3.2-2 The contract specifications shall require and the City shall enforce general contractors to maintain and operate construction equipment so as to minimize exhaust emissions. During construction, engines on trucks and vehicles in loading and unloading queues will be turned off when not in use, to reduce vehicle emissions. Construction activities should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- MM 3.2-3 The contract specifications shall require and the City shall enforce general contractors sweep streets as needed during construction, but not more frequently than hourly, if visible soil material has been carried onto adjacent public roads.
- MM 3.2-4 The contract specifications shall require and the City shall enforce general contractors to visually inspect construction equipment prior to leaving the site; loose dirt shall be washed off with wheel washers as necessary.
- MM 3.2-5 During construction, the City shall coordinate with the contractor to maximize the ability to power construction activity utilizing electricity from power poles rather than temporary diesel or gasoline power generators, to the extent possible.
- MM 3.2-6 The contract specifications shall require that all on-site mobile equipment used during construction shall be powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) where feasible.
- MM 3.2-7 During construction, the City shall provide a location and require the contractor to store all construction equipment used in the project construction within the project site (away from adjacent residential areas) to reduce the impact on the roadway system and the resultant air emissions.
- On-site construction equipment staging areas and construction worker parking lots shall be located on either paved surfaces or unpaved surfaces that are periodically treated with non-toxic soil stabilizers.
- MM 3.2-8 The contract specifications shall require and the City shall enforce the contractor to schedule all deliveries related to construction activities that affect traffic flow during off-peak hours (e.g., 10:00 a.m. and 3:00 p.m.) and deliveries shall be coordinated to achieve consolidated truck trips. When traffic flow is impacted by the movement of construction materials and/or equipment, temporary traffic controls shall be provided to improve traffic flow (e.g., flag person).
- MM 3.2-9 The contract specifications shall require all on-site heavy-duty construction equipment shall be equipped with diesel particulate traps to the extent that this equipment is available at the time the contracts are awarded.

MM 3.2-10 The construction specifications shall require and the City shall enforce that emulsified diesel fuel be used in diesel-fueled construction equipment that is not equipped with diesel particulate traps to reduce NO_x emissions.

The use of emulsified diesel fuel in construction equipment is assumed to reduce construction equipment NO_x emissions by 15 to 20 percent (CARB 2004). Applying the lower end of that range to the peak daily NO_x emissions from construction equipment would reduce NO_x emissions by approximately 70 lbs/day to a peak day NO_x emission inventory for construction of 424 lbs/day. This level would still be above the significance threshold. VOC emissions would also remain significant and unavoidable.

MM 3.2-10a During construction of the Proposed Project, the City and its contractors shall be required to comply with the following provisions, where feasible, to reduce construction NO_x and VOC emissions:

- Provide on-site lunch trucks/facilities during construction to reduce off-site worker vehicle trips.
- Prohibit construction vehicles idling in excess of five minutes to be consistent with State law.
- Suspend use of all construction equipment during a first-stage smog alert.
- Designate a person who will ensure implementation of the proposed mitigation measures through direct inspection and investigation of complaints. The City or the contractor shall provide a telephone number that residents may call should they have complaints regarding construction nuisance.

MM 3.2-10b During construction of the Proposed Project, the City and its contractors shall be required to comply with the following provisions, where feasible, to reduce construction VOC emissions:

- Use zero VOC content architectural coatings on buildings.
- Restrict the number of gallons of coatings used per day.
- Encourage water-based coatings or other low-emitting alternatives.
- Paint contractors should use hand applications instead of spray guns.

MM 3.2-17 The City will require street cleaning of Douglas Drive with a vacuum type street sweeper at least once per week. The vacuum sweeper will make sufficient circuits through the terminal area to vacuum the entire street surface (not just the gutter area) to reduce fugitive PM emissions from re-entrained road dust. Douglas Drive between Lakewood Boulevard and the Long Beach Airport terminal (including the loop in front of the terminal and return) shall be cleaned in this manner. The anticipated future exit road back to Lakewood Boulevard would also be cleaned in this manner.

The range of potential control efficiencies for this mitigation measure is from approximately 10 percent to 50 percent.^{13,14} It is anticipated that a 75 percent reduction would be needed to reduce the peak incremental PM10 concentration below the significance threshold; therefore, PM10 concentrations would remain significant after implementation of this mitigation measure.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

Hazards and Hazardous Wastes

Project Design Features

PDF 3.4-1 The proposed terminal improvements would be constructed in a manner consistent with LEED standards certification requirements to, among other things, minimize potential hazards and hazardous waste impacts.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

Standard Conditions and Requirements

SC 3.4-5 Construction of the Proposed Project shall be in compliance with local and State construction and building requirements and regulations, including the Uniform Building Code.

- **Monitoring Phase:** Pre-Construction/Construction
- **Enforcement Agency:** City of Long Beach, Planning and Building Department
- **Monitoring Agency:** City of Long Beach, Planning and Building Department
- **Action Indicating Compliance:** Approval of Development Plans. Site inspections.

¹³ Cowherd, C., P. Englehart, G.E. Muleski, J.S. Kinsey, and K.D. Rosbury, 1990. Control of Fugitive and Hazardous Dusts, Noyes Data Corporation, Park Ridge, NJ. p.21.

¹⁴ "Improvement of Specific Emission Factors (BACM Project No. 1) Final Report," by Midwest Research Institute for SCAQMD, Diamond Bar, CA, March 29, 1996.

Mitigation Measures

- MM 3.4-4 As part of the contract specification, a haul route, which could include Willow Street, shall be designated by the City Engineer, or his designee. During construction, the City Engineer, or his designee shall instruct every contractor that no hazardous or acutely hazardous materials may be transported onto the Airport via Willow Street to avoid potential impacts within one-quarter mile of the Alpert Jewish Community Center, where school programs are conducted.
- **Monitoring Phase:** Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** Inclusion of requirement in contract specifications. A completed haul route/notes written during site visits including directives given to the contractor/crew regarding transportation of hazardous materials.
- MM 3.4-6 The City Engineer, or his designee, shall verify that every contractor transporting or handling hazardous materials and/or wastes during project implementation has permits and licenses from all relative health and regulatory agencies to operate and properly manifest all hazardous or California regulated material.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach Public Works Department
 - **Monitoring Agency:** City of Long Beach Public Works Department
 - **Action Indicating Compliance:** Proof that appropriate permits and licenses have been obtained; display of manifests.
- MM 3.4-7 Prior to initiating construction activities, the contractor shall verify the locations of underground pipelines in the terminal area, ramp, and parking areas. Appropriate precautions shall be taken to ensure that pipelines are not disturbed or are properly relocated during construction.
- **Monitoring Phase:** Demolition/Grading/Construction
 - **Enforcement Agency:** City of Long Beach, Public Works Department
 - **Monitoring Agency:** City of Long Beach, Public Works Department
 - **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Site inspections.

Noise

Standard Conditions and Requirements

- SC 3.6-2 The contractor shall comply with the City of Long Beach Noise Ordinance pertaining to limitations on construction activities, as outlined in Exhibit 3.6-12 of the EIR, to the extent feasible while minimizing any potential conflicts with aviation activities.
- **Monitoring Phase:** Demolition/Grading/Construction

- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Health Department
- **Action Indicating Compliance:** Inclusion of requirement in contract specifications. Adherence to the construction hours and requirements specified in the City's Noise Ordinance or permission from City work outside of those hours.

Mitigation Measures

MM 3.6-1¹⁵ The City shall conduct noise measurements during any night construction on Parcel O where such construction involves the use of heavy construction equipment such as front loaders, tractors, graders, paving machines, jackhammers or similar devices. Such measurements shall be made near the homes located directly across Clark Avenue from Parcel O. If any night measurement exceeds the limits specified in Sections 8.80.150 and 8.80.160 of the Long Beach Municipal Code as a result of the construction activity, the operation shall be terminated until such time that a construction noise mitigation plan can be put into effect that will result in compliance with the night time noise limits. Note that in the case where ambient noise levels exceed the noise limits specified in Section 8.80.160, the allowable noise exposure standard shall be increased per Section 8.80.150 [C] of the Municipal Code to reflect ambient levels.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Health Department
- **Action Indicating Compliance:** Reports summarizing the findings of the noise measurements conducted if heavy construction equipment as defined above is used on during night construction on Parcel O. Preparation of a construction noise mitigation plan (if applicable).

Public Services

MM 3.7-1 During construction activities, the relocation or modification of TSA facilities shall be coordinated with TSA to ensure that there is no compromise to TSA functions that would adversely affect TSA's ability to perform its passenger and baggage securing screening activities.

- **Monitoring Phase:** Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Monitoring Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Action Indicating Compliance:** Coordination with TSA to ensure that its passenger and baggage screening activities are not compromised.

¹⁵ This measure would not be applicable to the Phase II LGB Terminal Area Improvement Project because the Project does not propose any improvements on Parcel O.

MM 3.7-2 Prior to initiation of any modifications to the airfield side, the contractor shall provide a Construction Phasing Implementation Plan, meeting the approval of the Airport Manager. The Plan shall demonstrate how construction activities will be conducted and that all applicable FAA airfield safety requirements are being met. In addition, the contractor shall prepare a safety plan and participate in on-going weekly safety meetings during construction.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Monitoring Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Action Indicating Compliance:** Acceptance of an approved Construction Phasing Implementation Plan and an approved Safety Plan

Traffic and Circulation

Standard Conditions and Requirements

SC 3.8-1 As part of contract specification, the Airport shall require all construction trucks to access the Airport terminal area via the I-605 to I-405 and Lakewood Boulevard. Should oversized-transport vehicles accessing the Project site use a State highway, a Caltrans transportation permit will be required. Construction vehicles accessing Parcel O shall use this route and access the construction site off of Clark Avenue or Willow Street.

- **Monitoring Phase:** Demolition/Grading/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Site inspections.

Project Design Features

PDF 3.8-1¹⁶ A component of the Proposed Project is the provision of a new parking structure that would accommodate 4,000 vehicles.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Planning and Building Department
- **Action Indicating Compliance:** Design and construction of a parking structure

¹⁶ These PDFs would not be applicable to the Phase II LGB Terminal Area Improvement Project because these improvements were implemented as part of Phase I improvements.

PDF 3.8-2¹⁷ The project would also include the extension of the south side of the Donald Douglas Drive loop to exit onto Lakewood Boulevard, with eastbound right turn only to southbound access on to Lakewood Boulevard.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Design and extension of Douglas Drive loop; eastbound right turn to southbound access onto Lakewood Boulevard.

PDF 3.8-3¹⁷ With the construction of the parking structure existing surface parking would be displaced. To address potential parking demand during construction, Parcel O would be developed to serve parking demand not met by existing facilities.

- **Monitoring Phase:** Pre-construction/Construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Development of Parcel O to accommodate displaced vehicle parking during construction of the parking structure and Terminal improvements. Compliance can also be accomplished by leasing existing unused parking spaces from Boeing (requires a signed lease agreement).

¹⁷ These PDFs would not be applicable to the Phase II LGB Terminal Area Improvement Project because these improvements were implemented as part of Phase I improvements.

POST-CONSTRUCTION STAGE

Air Quality and Human Health Risk Assessment

The Proposed Project is a construction activity and, as such, would not result in operational impacts. The following mitigation options are proposed to reduce operational emission impacts associated with the Optimized Flights scenario and project alternatives:

Mitigation Measures

MM 3.2-14¹⁸ The City shall require the use of ultra-low sulfur diesel for diesel-fueled equipment that are not readily convertible to electrical power on all future lease and operational agreements for air carriers.

- **Monitoring Phase:** Post-construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Inclusion of requirement in lease and operational agreements.

MM 3.2-15¹⁸ Through its lease language with them, the City of Long Beach shall require the airlines to comply with the South Coast GSE MOU signed by the airlines and CARB in December 2002, or replacement agreements and/or regulations. Through the implementation of MM 3.2-12 and MM 3.2-13 (see Design section above), the Airport will design the infrastructure necessary to assist airlines in complying with the GSE MOU. The GSE MOU includes provisions for retrofitting diesel GSE with particulate traps where feasible. Therefore, compliance with the GSE MOU would reduce PM₁₀ and PM_{2.5} impacts as well as NO_x and VOC emissions.

The mitigated criteria pollutant emission inventories associated with installing preconditioned air, 400 Hz power, and electric battery chargers would reduce APU carbon monoxide (CO) emissions by 61 and APU NO_x emissions by 57 percent in 2011 and 2020. GSE CO emissions would be reduced by 97 percent in 2011; and GSE NO_x emissions would be reduced by 55 percent in 2011 and 40 percent in 2020.

Comparing the mitigated Project criteria pollutant incremental inventories to the operational emission thresholds indicates that the mitigated inventories of all pollutants except NO_x would be below the significance thresholds in 2011 and 2020.

MM 3.2-17 The City will require street cleaning of Douglas Drive with a vacuum type street sweeper at least once per week. The vacuum sweeper will make sufficient circuits through the terminal area to vacuum the entire street surface (not just the gutter area) to reduce fugitive PM emissions from re-entrained road dust. Douglas Drive between Lakewood Boulevard and the Long Beach Airport terminal (including the loop in front of the terminal and return) shall be cleaned in this manner. The

¹⁸ These measures would not be applicable to the Phase II LGB Terminal Area Improvement Project because the Project does not propose any modification to air lease agreements.

anticipated future exit road back to Lakewood Boulevard would also be cleaned in this manner.

The range of potential control efficiencies for this mitigation measure is from approximately 10 percent to 50 percent.^{19,20} It is anticipated that a 75 percent reduction would be needed to reduce the peak incremental PM₁₀ concentration below the significance threshold; therefore, PM₁₀ concentrations would remain significant after implementation of this mitigation measure.

- **Monitoring Phase:** Post-construction
- **Enforcement Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Monitoring Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Action Indicating Compliance:** Inclusion of requirement in lease agreements or replacement agreements/regulations.

Noise

Standard Conditions and Requirements

SC 3.6-1 The Airport Noise Compatibility Ordinance would apply to continued operations at the Airport. All future operations would need to be consistent with the provisions of the ordinance.

- **Monitoring Phase:** Post-construction
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Compliance documented through regular monitoring reports prepared pursuant to the Airport Noise Compatibility Ordinance.

¹⁹ Cowherd, C., P. Englehart, G.E. Muleski, J.S. Kinsey, and K.D. Rosbury, 1990. Control of Fugitive and Hazardous Dusts, Noyes Data Corporation, Park Ridge, NJ. p.21.

²⁰ "Improvement of Specific Emission Factors (BACM Project No. 1) Final Report," by Midwest Research Institute for SCAQMD, Diamond Bar, CA, March 29, 1996.

ON-GOING

Air Quality and Human Health Risk Assessment

Mitigation Measures

MM 3.2-16²¹ As the City purchases new vehicles or equipment serving the Airport, staff shall consider the purchase of low or zero-emission technology, such as the use of CNG or any other clean fuel technology available.

- **Monitoring Phase:** On-going
- **Enforcement Agency:** City of Long Beach, Public Works Department, Fleet Bureau
- **Monitoring Agency:** City of Long Beach, Public Works Department, Fleet Bureau
- **Action Indicating Compliance:** Purchase of vehicles and equipment that are equipped with low or zero-emissions technology.

MM 3.2-17 The City will require street cleaning of Douglas Drive with a vacuum type street sweeper at least once per week. The vacuum sweeper will make sufficient circuits through the terminal area to vacuum the entire street surface (not just the gutter area) to reduce fugitive PM emissions from re-entrained road dust. Douglas Drive between Lakewood Boulevard and the Long Beach Airport terminal (including the loop in front of the terminal and return) shall be cleaned in this manner. The anticipated future exit road back to Lakewood Boulevard would also be cleaned in this manner.

The range of potential control efficiencies for this mitigation measure is from approximately 10 percent to 50 percent.^{22,23} It is anticipated that a 75 percent reduction would be needed to reduce the peak incremental PM₁₀ concentration below the significance threshold; therefore, PM₁₀ concentrations would remain significant after implementation of this mitigation measure.

Hazards and Hazardous Wastes

Standard Conditions and Requirements

SC 3.4-1 The Proposed Project and any additional flights associated with optimize flight operations would be required to comply with the provisions of the *Long Beach Airport Certification Manual* and *Long Beach Airport Rules and Regulations* pertaining to the handling, use, and disposal of hazardous materials and hazardous wastes.

- **Monitoring Phase:** On-going

²¹ This measure would not be applicable to the Phase II LGB Terminal Area Improvement Project because the Project does not propose acquisition of new vehicles and equipment at the Airport.

²² Cowherd, C., P. Englehart, G.E. Muleski, J.S. Kinsey, and K.D. Rosbury, 1990. Control of Fugitive and Hazardous Dusts, Noyes Data Corporation, Park Ridge, NJ. p.21.

²³ "Improvement of Specific Emission Factors (BACM Project No. 1) Final Report," by Midwest Research Institute for SCAQMD, Diamond Bar, CA, March 29, 1996.

- **Enforcement Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Monitoring Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Action Indicating Compliance:** Site inspections during construction; ongoing compliance shall occur in accordance with the *Long Beach Airport Certification Manual* and *Long Beach Airport Rules and Regulations*

Noise

Mitigation Measures

MM 3.6-2²⁴ Within 24 months of certification of the EIR, the Airport Manager shall develop a land use compatibility program addressing existing and future aviation noise levels. The program shall be an ongoing voluntary program that will provide noise attenuation and be available to all residential units within the 65 Community Noise Equivalent Level (CNEL) contour and schools within the 60 CNEL contour based on the contours published for Long Beach Airport for the previous calendar year (Quarterly Report for 12 month Period Ending December 31). In exchange for sound insulation treatment, the owners of the property will provide the City of Long Beach an aviation easement over said property. The program shall identify (1) methods of providing noise attenuation; (2) funding sources for the improvements; (3) methods for establishing priorities for implementing the improvements; and (4) an installation agreement. The land use compatibility program will be administered by the City of Long Beach, Airport Bureau.

- **Monitoring Phase:** On-going
- **Enforcement Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Monitoring Agency:** City of Long Beach, Public Works Department, Airport Bureau
- **Action Indicating Compliance:** Development of a land use compatibility program.

²⁴ This measure would not be applicable to the Phase II LGB Terminal Area Improvement Project because the measure has been implemented by the City Council. The Project does not propose any improvements that would result in additional residential units being exposed to noise levels in excess of 65 CNEL.

MITIGATION MEASURES ASSOCIATED WITH THE OPTIMIZED FLIGHTS SCENARIO²⁵

The following mitigation measures are not associated with the proposed project. Rather, they apply to future conditions under the Optimized Flights Scenario which, as noted in the Final EIR, could occur with or without implementation of the proposed project.

Traffic and Circulation

Mitigation Measures

The two impacted intersections along Lakewood Boulevard at Spring and Willow Streets are currently built out to the maximum feasible configuration. Additional improvements would require extensive right of way purchases that would impact several local businesses. Discussions with City staff indicate that no further lane additions are feasible at these two intersections. However, as discussed in Section 3.8 of the EIR, the impacts to these intersections under the Existing Plus Optimized Flights scenario are not expected until at a substantial number of the additional flights and associated passengers are added. For the Spring Street at Lakewood Boulevard intersection, the intersection would reach Level of Service (LOS) E when approximately 375 additional AM peak hour trips or an increase of 3,500 Average Day-Peak Month (ADPM) passengers (45 percent of the total added) over 2005 conditions. At the Willow Street and Lakewood Boulevard intersection, the intersection currently operates at LOS E, and would exceed the 0.02 Volume to Capacity Ratio (V/C) impact threshold when approximately 675 additional AM peak hour trips or 6,340 additional ADPM passengers occur. Currently, the ADPM is 9,246 passengers. Therefore, impacts would be expected if the ADPM level reached 12,746 passengers.

Though the Spring Street/Lakewood Boulevard intersection would still operate at a deficient level of service in the 2020, this is not an impact of the Proposed Project or the Optimized Flights scenario. Elsewhere the improvements associated with the Douglas Park would accommodate the additional demand associated with the Optimized Flights scenario. The improvements for Douglas Park include various Adaptive Traffic Control System measures, which are expected to increase the saturation flow rate by 10 percent to 1,760 vehicles per hour. While these improvements are expected, they are not currently programmed in any capital improvement program; therefore, their implementation cannot be relied upon to mitigate the impacts of the Existing with Optimized Flights scenario. Though the Optimized Flights are not a component of the Proposed Project, it is recommended that the following mitigation measure be adopted should the air carriers make the necessary adjustments to qualify for additional flight.

MM 3.8-1 In conjunction with the allocation of additional flights in accordance with the Airport Noise Compatibility Ordinance (Optimized Flights) the City shall develop a traffic monitoring program when the ADPM passenger levels reach 12,700. The traffic monitoring program shall evaluate the LOS at the Spring Street and Lakewood Boulevard and the Willow Street and Lakewood Boulevard intersections. If deficient LOS is identified, the City of Long Beach shall develop and implement a mitigation program that includes transportation management control measures to enhance the efficiency of traffic movement. Post implementation monitoring shall be required to ensure that sufficient capacity enhancement have been provided to accommodate the traffic associated with the increased passenger levels. If no deficiency in LOS is identified, the traffic monitoring of the key intersections shall

²⁵ Neither of the two measures pertaining to Optimized Flights would be applicable to the Phase II LGB Terminal Area Improvement Project because the Project does not propose any modifications that would influence the number of flights allowed at the Airport.

be conducted on an annual basis or until such time as the improvements provided for as part of the Douglas Park project are implemented.

- **Monitoring Phase:** Post-buildout
- **Enforcement Agency:** City of Long Beach, Public Works Department
- **Monitoring Agency:** City of Long Beach, Public Works Department
- **Action Indicating Compliance:** Traffic monitoring program as passenger levels reach designated levels. Development of a mitigation program that includes transportation management control measures or traffic monitoring of key intersections annually or until such time as the improvements provided for as part of the Douglas Park project are implemented.

With the Optimized Flights scenario the parking structure for the Airport would be insufficient to accommodate the additional passenger levels. Though the Optimized Flights scenario is not a component of the Proposed Project, the following mitigation measure is proposed to address this potential impact.

MM 3.8-2 In conjunction with the allocation of additional flights in accordance with the Airport Noise Compatibility Ordinance (Optimized Flights) when the annual passenger levels reach 4.2 Million Annual Passengers (MAP) the Airport Manager shall identify and develop additional on-site parking opportunities. This may include development of an additional parking structure within the Airport Entrance area. Implementation of the identified improvements would require separate documentation pursuant to CEQA.

- **Monitoring Phase:** Post-buildout
- **Enforcement Agency:** City of Long Beach, Public Works Department, Airport Manager
- **Monitoring Agency:** City of Long Beach, Public Works Department

Action Indicating Compliance: Development of parking facilities/ opportunities to meet onsite needs when designated passenger levels are met.

APPLICABLE SCAQMD RULES

**TABLE 1
FUGITIVE DUST CONTROL ACTIONS FOR EXEMPTION TO MONITORING
(RULE 403 TABLE 2)**

Source Category	Control Actions
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a) Maintain soil moisture content at a minimum of 12%, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the United States Environmental Protection Agency (USEPA). Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR (1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas	(1b) Maintain soil moisture content at a minimum of 12%, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the USEPA. For areas which have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the USEPA, complete the compaction process as expeditiously as possible after achieving at least 70% of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.
Earth-moving: Construction cut areas and mining operations	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80% of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) Apply chemical stabilizers within five working days of grading completion; OR (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas
Inactive disturbed surface areas	(3a) Apply water to at least 80% of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30% of unstabilized ground within 90 days of planting, and at all times thereafter; OR (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.
Unpaved Roads	(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR (4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR (4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a) Apply chemical stabilizers; OR (5b) Apply water to at least 80% of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR (5c) Install temporary coverings; OR (5d) Install a three-sided enclosure with walls with no more than 50% porosity which extends, at a minimum, to the top of the pile.
All Categories	(6a) Any other control measures approved by the Executive Officer and the USEPA as equivalent to the methods specified in Table 2 may be used.

TABLE 2
REQUIRED BEST AVAILABLE CONTROL MEASURES
(SCAQMD RULE 403, TABLE 1)

Control Measure	Guidance
Backfilling	
01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	• Mix backfill soil with water prior to moving • Dedicate water truck or high capacity hose to backfilling equipment • Empty loader bucket slowly so that no dust plumes are generated • Minimize drop height from loader bucket
Clearing and Grubbing	
02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	• Maintain live perennial vegetation where possible • Apply water in sufficient quantity to prevent generation of dust plumes
Clearing Forms	
03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	• Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	
04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	• Follow permit conditions for crushing equipment • Pre-water material prior to loading into crusher • Monitor crusher emissions opacity • Apply water to crushed material to prevent dust plumes
Cut and Fill	
05-1 Pre-water soils prior to cut and fill activities; and 05-2 Stabilize soil during and after cut and fill activities.	• For large sites, pre-water with sprinklers or water trucks and allow time for penetration • Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – Mechanical/Manual	
06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; and 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403.	• Apply water in sufficient quantities to prevent the generation of visible dust plumes
Disturbed Soil	
07-1 Stabilize disturbed soil throughout the construction site; and 07-02 Stabilize disturbed soil between structures	• Limit vehicular traffic and disturbances on soils where possible • If interior block walls are planned, install as early as possible • Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-Moving Activities	
08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	• Grade each project phase separately, timed to coincide with construction phase • Upwind fencing can prevent material movement on site • Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

TABLE 2
REQUIRED BEST AVAILABLE CONTROL MEASURES
(SCAQMD RULE 403, TABLE 1)

Control Measure	Guidance
Importing/Exporting of Bulk Materials	
09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	• Use tarps or other suitable enclosures on haul trucks • Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage • Comply with track-out prevention/mitigation requirements • Provide water while loading and unloading to reduce visible dust plumes
Landscaping	
10-1 Stabilize soils, materials, slopes	• Apply water to materials to stabilize, maintain materials in a crusted condition • Maintain effective cover over materials • Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes • Hydroseed prior to rain season
Road Shoulder Maintenance	
11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	• Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs • Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs
Screening	
12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	• Dedicate water truck or high capacity hose to screening operation • Drop material through the screen slowly and minimize drop height • Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging Areas	
13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	• Limit size of staging area • Limit vehicle speeds to 15 miles per hour • Limit number and size of staging area entrances/exits
Stockpiles/Bulk Material Handling	
14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	• Add or remove material from the downwind portion of the storage pile • Maintain storage piles to avoid steep sides or faces
Traffic Areas for Construction Activities	
15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	• Apply gravel/paving to all haul routes as soon as possible to all future roadway areas • Barriers can be used to ensure vehicles are only used on established parking areas/haul routes

TABLE 2
REQUIRED BEST AVAILABLE CONTROL MEASURES
(SCAQMD RULE 403, TABLE 1)

Control Measure	Guidance
Trenching	
16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16.2 Stabilize soils at the completion of trenching activities.	• Pre-watering of soils prior to trenching is an effective preventive measure. • For deep trenching activities, pre-trench to 18 inches, soak soils via the pre-trench and resume trenching • Washing mud and soils from equipment at the conclusion of trenching activities to prevent crusting and drying of soil on equipment
Truck Loading	
17-1 Pre-water material prior to loading; and 17.2 Ensure that freeboard exceeds six inches (CVC 23114)	• Empty loader bucket such that no visible dust plumes are created • Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	
18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	• Haul waste material immediately off-site
Unpaved Roads/Parking Lots	
19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	• Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant Land	
20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

TABLE 3
TRACK OUT CONTROL OPTIONS

(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the Executive Officer and the USEPA as equivalent to the methods specified in Table 3 may be used.

ATTACHMENT B

**APRIL 24, 2007 RECOMMENDATION TO THE HONORABLE MAYOR AND CITY
COUNCIL FROM CHRISTINA F. ANDERSEN, DIRECTOR OF PUBLIC WORKS**



CITY OF LONG BEACH

DEPARTMENT OF PUBLIC WORKS

R-24

333 West Ocean Boulevard • Long Beach, CA 90802 • (562) 570-6383 • FAX (562) 570-6012

April 24, 2007

HONORABLE MAYOR AND CITY COUNCIL
City of Long Beach
California

RECOMMENDATION:

Request the City Manager to proceed with the preparation of final plans, specifications, cost estimates and financing plan for the construction of an Airport Terminal Improvement Project consistent with the project identified as part of the Airport EIR certification and require that any changes to the Council-approved post-screening areas within the terminal building not be designed and/or constructed, without formal council review and approval. (District 5)

DISCUSSION

On April 17, 2007, a workshop was conducted by the City Council to review the results of a detailed space needs analysis completed by the City's architectural consultant for the Airport Terminal Improvement Project. Based on the information provided at this workshop, staff is recommending that the City Council authorize the preparation of final plans, specifications, cost estimates and a financing plan for the construction of a terminal improvement project of 89,995 square feet as described on Exhibit A.

It is anticipated that the preparation of the final project plans will take approximately 20 months. The initial phase of work will include the preparation of a detailed financing plan that will include discussions with the airlines regarding lease rates and terms. Upon completion, this financing plan will be brought to the City Council for approval. The project will also need to go to the Cultural Heritage Commission and the Planning Commission for design approval. Finally, the project plans will be subject to building and fire code reviews, prior to the issuance of building permits. Should any of these reviews result in the need to alter the size of the terminal as approved by the City Council due to life safety issues, staff will submit them to the City Council for formal approval before finalizing the project plans. Once the final plans have been completed, they will be brought to the City Council for formal approval and authorization requested to solicit bids. If the final project plans are approved by Council, there will be a 3-month period of bidding which would conclude with the Council awarding a construction contract. Construction would follow and is estimated to take two years, with project

ADMINISTRATION,
PLANNING & FACILITIES
333 W. Ocean Blvd., 9th Floor
Long Beach, CA 90802
Ph. (562) 570-6383
Fax (562) 570-6012

AIRPORT
4100 Donald Douglas Dr.
Long Beach, CA 90808
Ph. (562) 570-2600
Fax (562) 570-2601

ENGINEERING & STREET
MAINTENANCE
333 W. Ocean Blvd., 9th Floor
Long Beach, CA. 90802
Ph. (562) 570-6634
Fax (562) 570-6012

ENVIRONMENTAL
SERVICES
2929 E. Willow Street
Long Beach, CA 90806
Ph. (562) 570-2850
Fax (562) 570-2861

FLEET SERVICES
2600 Temple Avenue
Long Beach, CA 90806
Ph. (562) 570-5400
Fax (562) 570-5414

TRAFFIC &
TRANSPORTATION
333 W. Ocean Blvd., 10th Floor
Long Beach, CA 90802
Ph. (562) 570-6331
Fax (562) 570-7161

completion around April 2011. All project schedules are subject to the outcome of the pending litigation on the Environmental Impact Report for this project.

This matter was reviewed by Assistant City Attorney Mike Mais on April 18, 2007.

TIMING CONSIDERATIONS

City Council approval is requested on April 24, 2007, to proceed with the preparation of the project plans.

FISCAL IMPACT

The Council action is only for the preparation of final plans, specifications, cost estimates and a financing plan. The initial phase of this portion of the project is funded in the Airport Enterprise Fund. Complete project funding will require bonding and will be brought to the Council as a separate action prior to the award of a construction contract.

SUGGESTED ACTION:

Approve recommendation with a specified terminal size.

Respectfully submitted,



CHRISTINE F. ANDERSEN
DIRECTOR OF PUBLIC WORKS

P:\CL\07-08\april\airport sizing.rev1.doc

Attachment

APPROVED:



GERALD R. MILLER
CITY MANAGER

Function	Alternative A (Approved EIR)	HOK Detailed Space Analysis	Adjusted Space Analysis
Holdrooms /1			
Permanent Space:	6,500 sf	0 sf	0 sf
Temporary Space:	0 sf	0 sf	0 sf
Proposed Additional Space:	<u>20,000</u> sf	<u>40,200</u> sf	<u>26,500</u> sf
Subtotal:	26,500 sf	40,200 sf	26,500 sf
Passenger Security Screening /2			
Existing:	3,900 sf	0 sf	0 sf
Proposed Additional Space:	6,000 sf	8,940 sf	8,940 sf
Subtotal:	9,900 sf	8,940 sf	8,940 sf
Concession Area /3			
Permanent Space:	5,460 sf	5,210 sf	5,210 sf
Proposed Additional Space:	<u>8,000</u> sf	<u>16,070</u> sf	<u>8,250</u> sf
Subtotal:	13,460 sf	21,280 sf	13,460 sf
Baggage Security Screening			
Baggage Security Screening:	7,000 sf	6,200 sf	6,200 sf
Baggage Claim			
Passenger Side:	380 lf	510 lf	380 lf
Airline Loading Side:	<u>250</u> lf	320 lf	<u>250</u> lf
Subtotal:	630 lf	830 lf	630 lf
Baggage Service Office:	825 sf	825 sf	825 sf
Multi-Purpose Rooms:	<u>300</u> sf	300 sf	<u>300</u> sf
Subtotal:	1,125 sf	1,125 sf	1,125 sf
Restrooms (non-secure)			
Permanent Space:	1,330 sf	1,330 sf	1,330 sf
Temporary Space:	0 sf	0 sf	0 sf
Proposed Additional Space:	<u>850</u> sf	<u>1,000</u> sf	<u>850</u> sf
Subtotal:	2,180 sf	2,330 sf	2,180 sf
Office Space			
TSA Offices			
Temporary Space:	3,600 sf	0 sf	0 sf
Proposed Additional Space:	<u>1,400</u> sf	<u>5,440</u> sf	<u>5,000</u> sf
Subtotal:	5,000 sf	5,440 sf	5,000 sf
Airlines (Operations Office)			
Permanent Space:	2,000 sf	2,000 sf	2,000 sf
Temporary Space:	0 sf	0 sf	0 sf
Proposed Additional Space:	<u>5,000</u> sf	<u>6,500</u> sf	<u>4,930</u> sf
Subtotal:	7,000 sf	8,500 sf	6,930 sf
Airport (Offices and Conference)			
Permanent Space:	6,970 sf	6,970 sf	6,970 sf
Temporary Space:	0 sf	0 sf	0 sf
Proposed Additional Space:	<u>10,000</u> sf	<u>4,330</u> sf	<u>4,330</u> sf
Subtotal:	16,970 sf	11,300 sf	11,300 sf
Subtotal for Office Space:	28,970 sf	25,240 sf	23,230 sf
Ticketing Facilities			
Ticket Counter Area			
Ticket Counter Area (Existing):	1,250 sf	1250 sf	1250 sf
Proposed Additional Space:	<u>0</u> sf	<u>150</u> sf	<u>0</u> sf
Subtotal:	1,250 sf	1,400 sf	1,250 sf
Ticket Counter Queuing			
Ticket Counter Queuing (Existing):	1,400 sf	1,400 sf	1,400 sf
Proposed Additional Space:	<u>0</u> sf	<u>2,800</u> sf	<u>0</u> sf
Subtotal:	1,400 sf	4,200 sf	1,400 sf
Airline Ticket Office			
Airline Ticket Office (Existing):	4,360 sf	4,360 sf	4,360 sf
Proposed Additional Space:	<u>0</u> sf	<u>930</u> sf	<u>0</u> sf
Subtotal:	4,360 sf	5,290 sf	4,310 sf
Circulation - Ticketing			
Circulation - Ticketing (Existing):	1,400 sf	1,400 sf	1,400 sf
Proposed Additional Space:	<u>0</u> sf	<u>700</u> sf	<u>0</u> sf
Subtotal:	1,400 sf	2,100 sf	1,400 sf
Subtotal for Ticketing Facilities:	8,410 sf	12,990 sf	8,360 sf
/4 Total:	97,545 sf	118,305 sf	89,995 sf
Airline Gates and Parking Positions			
Airline Gates	11	11	11
Aircraft Parking Positions	12	12	12

lf - linear feet sf - square feet
/1 Holdroom includes secure circulation, departure lounges, and restrooms
/2 Passenger Security Screening includes screening area, queue, and exit corridor
/3 Concessions includes non-secure and secure concessions
/4 Total Area does not include exterior covered space or terminal support functions such as mechanical, electrical, kitchen equipment and food prep, janitorial and maintenance

ATTACHMENT C

**CALEEMOD COMPUTER OUTPUT FOR AIR QUALITY
AND GREENHOUSE GAS EMISSIONS**

Long Beach Airport Phase 1 - Los Angeles-South Coast County, Winter

Long Beach Airport Phase 1

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	23.52	1000sqft	0.54	23,520.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Defaults

Trips and VMT - Defaults

Demolition - Estimates based on Data needs

Construction Off-road Equipment Mitigation -

Vehicle Trips - Existing use- not a trip-generating use

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -
Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	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					
2018	1.2496	13.4711	9.1460	0.0229	2.9614	0.7130	3.6005	0.4873	0.6561	1.0971	0.0000	2,337.7829	2,337.7829	0.3684	0.0000	2,345.4396
2019	43.8836	10.3168	8.0325	0.0133	0.2012	0.6091	0.7242	0.0534	0.5605	0.5916	0.0000	1,327.5509	1,327.5509	0.3675	0.0000	1,336.7396
Maximum	43.8836	13.4711	9.1460	0.0229	2.9614	0.7130	3.6005	0.4873	0.6561	1.0971	0.0000	2,337.7829	2,337.7829	0.3684	0.0000	2,345.4396

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					
2018	1.2496	13.4711	9.1460	0.0229	1.3533	0.7130	1.9923	0.2438	0.6561	0.8536	0.0000	2,337.7829	2,337.7829	0.3684	0.0000	2,345.4396
2019	43.8836	10.3168	8.0325	0.0133	0.2012	0.6091	0.7242	0.0534	0.5605	0.5916	0.0000	1,327.5509	1,327.5509	0.3675	0.0000	1,336.7396
Maximum	43.8836	13.4711	9.1460	0.0229	1.3533	0.7130	1.9923	0.2438	0.6561	0.8536	0.0000	2,337.7829	2,337.7829	0.3684	0.0000	2,345.4396

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	50.85	0.00	37.19	45.04	0.00	14.42	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	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Energy	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Mobile	0.0000	0.0000	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	0.5329	0.0658	0.0577	3.9000e-004	0.0000	5.0100e-003	5.0100e-003	0.0000	5.0100e-003	5.0100e-003		78.9232	78.9232	1.5200e-003	1.4500e-003	79.3925

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	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Energy	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Mobile	0.0000	0.0000	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	0.5329	0.0658	0.0577	3.9000e-004	0.0000	5.0100e-003	5.0100e-003	0.0000	5.0100e-003	5.0100e-003		78.9232	78.9232	1.5200e-003	1.4500e-003	79.3925

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	9/1/2018	9/14/2018	5	10	
2	Site Preparation	Site Preparation	9/15/2018	9/17/2018	5	1	
3	Grading	Grading	9/18/2018	9/19/2018	5	2	
4	Building Construction	Building Construction	9/20/2018	2/6/2019	5	100	
5	Paving	Paving	2/7/2019	2/13/2019	5	5	
6	Architectural Coating	Architectural Coating	2/14/2019	2/20/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 35,280; Non-Residential Outdoor: 11,760; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	4	10.00	0.00	122.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					2.6364	0.0000	2.6364	0.3992	0.0000	0.3992			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	2.6364	0.6228	3.2591	0.3992	0.5943	0.9935		1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.1242	3.9954	0.8725	9.7200e-003	0.2133	0.0153	0.2286	0.0585	0.0146	0.0731		1,050.3751	1,050.3751	0.0764		1,052.2853
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.1853	4.0415	1.3697	0.0109	0.3251	0.0163	0.3414	0.0881	0.0155	0.1037		1,168.4327	1,168.4327	0.0809		1,170.4540

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					1.0282	0.0000	1.0282	0.1557	0.0000	0.1557			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	1.0282	0.6228	1.6509	0.1557	0.5943	0.7500	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.1242	3.9954	0.8725	9.7200e-003	0.2133	0.0153	0.2286	0.0585	0.0146	0.0731		1,050.3751	1,050.3751	0.0764		1,052.2853
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.1853	4.0415	1.3697	0.0109	0.3251	0.0163	0.3414	0.0881	0.0155	0.1037		1,168.4327	1,168.4327	0.0809		1,170.4540

3.3 Site Preparation - 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					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.5303	0.4180	0.9483	0.0573	0.3846	0.4418		982.7113	982.7113	0.3059		990.3596

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	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843
Total	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843

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					0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.2068	0.4180	0.6248	0.0223	0.3846	0.4069	0.0000	982.7113	982.7113	0.3059		990.3596

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	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843
Total	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843

3.4 Grading - 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					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	0.7528	0.6228	1.3755	0.4138	0.5943	1.0081		1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687

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					0.2936	0.0000	0.2936	0.1614	0.0000	0.1614			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	0.2936	0.6228	0.9163	0.1614	0.5943	0.7557	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687

3.5 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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555

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	0.0192	0.4913	0.1473	1.0300e-003	0.0256	3.5100e-003	0.0291	7.3700e-003	3.3600e-003	0.0107		109.6599	109.6599	7.9100e-003		109.8578
Worker	0.0489	0.0369	0.3978	9.5000e-004	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		94.4461	94.4461	3.5500e-003		94.5349
Total	0.0681	0.5283	0.5452	1.9800e-003	0.1150	4.3100e-003	0.1193	0.0311	4.1000e-003	0.0352		204.1060	204.1060	0.0115		204.3927

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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555

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	0.0192	0.4913	0.1473	1.0300e-003	0.0256	3.5100e-003	0.0291	7.3700e-003	3.3600e-003	0.0107		109.6599	109.6599	7.9100e-003		109.8578
Worker	0.0489	0.0369	0.3978	9.5000e-004	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		94.4461	94.4461	3.5500e-003		94.5349
Total	0.0681	0.5283	0.5452	1.9800e-003	0.1150	4.3100e-003	0.1193	0.0311	4.1000e-003	0.0352		204.1060	204.1060	0.0115		204.3927

3.5 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	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892

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	0.0173	0.4635	0.1354	1.0200e-003	0.0256	3.0000e-003	0.0286	7.3700e-003	2.8700e-003	0.0102		108.5108	108.5108	7.6200e-003		108.7014
Worker	0.0443	0.0325	0.3540	9.2000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		91.3705	91.3705	3.1400e-003		91.4491
Total	0.0616	0.4961	0.4894	1.9400e-003	0.1150	3.7700e-003	0.1188	0.0311	3.5800e-003	0.0347		199.8813	199.8813	0.0108		200.1505

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	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892

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	0.0173	0.4635	0.1354	1.0200e-003	0.0256	3.0000e-003	0.0286	7.3700e-003	2.8700e-003	0.0102		108.5108	108.5108	7.6200e-003		108.7014
Worker	0.0443	0.0325	0.3540	9.2000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		91.3705	91.3705	3.1400e-003		91.4491
Total	0.0616	0.4961	0.4894	1.9400e-003	0.1150	3.7700e-003	0.1188	0.0311	3.5800e-003	0.0347		199.8813	199.8813	0.0108		200.1505

3.6 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	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231

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	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604

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	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231

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	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604

3.7 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	43.6061					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		282.0423
Total	43.8725	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

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	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623
Total	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623

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	43.6061					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		282.0423
Total	43.8725	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

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	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623
Total	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

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	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
NaturalGas Unmitigated	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870

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					
General Office Building	670.803	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Total		7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870

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					
General Office Building	0.670803	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Total		7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Unmitigated	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003

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	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4657					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Total	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003

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	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4657					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Total	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003

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 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport Phase 1 - Los Angeles-South Coast County, Summer

Long Beach Airport Phase 1

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	23.52	1000sqft	0.54	23,520.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Defaults

Trips and VMT - Defaults

Demolition - Estimates based on Data needs

Construction Off-road Equipment Mitigation -

Vehicle Trips - Existing use- not a trip-generating use

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -
Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	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					
2018	1.2406	13.4126	9.1318	0.0231	2.9614	0.7129	3.6002	0.4873	0.6560	1.0968	0.0000	2,362.9690	2,362.9690	0.3681	0.0000	2,370.5605
2019	43.8825	10.3130	8.0517	0.0135	0.2012	0.6091	0.7241	0.0534	0.5605	0.5916	0.0000	1,336.2317	1,336.2317	0.3673	0.0000	1,345.4133
Maximum	43.8825	13.4126	9.1318	0.0231	2.9614	0.7129	3.6002	0.4873	0.6560	1.0968	0.0000	2,362.9690	2,362.9690	0.3681	0.0000	2,370.5605

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					
2018	1.2406	13.4126	9.1318	0.0231	1.3533	0.7129	1.9920	0.2438	0.6560	0.8533	0.0000	2,362.9690	2,362.9690	0.3681	0.0000	2,370.5605
2019	43.8825	10.3130	8.0517	0.0135	0.2012	0.6091	0.7241	0.0534	0.5605	0.5916	0.0000	1,336.2317	1,336.2317	0.3673	0.0000	1,345.4133
Maximum	43.8825	13.4126	9.1318	0.0231	1.3533	0.7129	1.9920	0.2438	0.6560	0.8533	0.0000	2,362.9690	2,362.9690	0.3681	0.0000	2,370.5605

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	50.85	0.00	37.19	45.04	0.00	14.42	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	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Energy	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Mobile	0.0000	0.0000	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	0.5329	0.0658	0.0577	3.9000e-004	0.0000	5.0100e-003	5.0100e-003	0.0000	5.0100e-003	5.0100e-003		78.9232	78.9232	1.5200e-003	1.4500e-003	79.3925

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	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Energy	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Mobile	0.0000	0.0000	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	0.5329	0.0658	0.0577	3.9000e-004	0.0000	5.0100e-003	5.0100e-003	0.0000	5.0100e-003	5.0100e-003		78.9232	78.9232	1.5200e-003	1.4500e-003	79.3925

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	9/1/2018	9/14/2018	5	10	
2	Site Preparation	Site Preparation	9/15/2018	9/17/2018	5	1	
3	Grading	Grading	9/18/2018	9/19/2018	5	2	
4	Building Construction	Building Construction	9/20/2018	2/6/2019	5	100	
5	Paving	Paving	2/7/2019	2/13/2019	5	5	
6	Architectural Coating	Architectural Coating	2/14/2019	2/20/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 35,280; Non-Residential Outdoor: 11,760; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	4	10.00	0.00	122.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					2.6364	0.0000	2.6364	0.3992	0.0000	0.3992			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	2.6364	0.6228	3.2591	0.3992	0.5943	0.9935		1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.1211	3.9414	0.8155	9.8900e-003	0.2133	0.0150	0.2283	0.0585	0.0143	0.0728		1,068.2498	1,068.2498	0.0735		1,070.0883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.1763	3.9831	1.3556	0.0112	0.3251	0.0160	0.3411	0.0881	0.0153	0.1034		1,193.6188	1,193.6188	0.0782		1,195.5748

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					1.0282	0.0000	1.0282	0.1557	0.0000	0.1557			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	1.0282	0.6228	1.6509	0.1557	0.5943	0.7500	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.1211	3.9414	0.8155	9.8900e-003	0.2133	0.0150	0.2283	0.0585	0.0143	0.0728		1,068.2498	1,068.2498	0.0735		1,070.0883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.1763	3.9831	1.3556	0.0112	0.3251	0.0160	0.3411	0.0881	0.0153	0.1034		1,193.6188	1,193.6188	0.0782		1,195.5748

3.3 Site Preparation - 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					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.5303	0.4180	0.9483	0.0573	0.3846	0.4418		982.7113	982.7113	0.3059		990.3596

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	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433
Total	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433

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					0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.2068	0.4180	0.6248	0.0223	0.3846	0.4069	0.0000	982.7113	982.7113	0.3059		990.3596

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	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433
Total	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433

3.4 Grading - 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					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	0.7528	0.6228	1.3755	0.4138	0.5943	1.0081		1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865

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					0.2936	0.0000	0.2936	0.1614	0.0000	0.1614			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	1.0643	9.4295	7.7762	0.0120	0.2936	0.6228	0.9163	0.1614	0.5943	0.7557	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857

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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865

3.5 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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555

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	0.0184	0.4902	0.1340	1.0600e-003	0.0256	3.4500e-003	0.0291	7.3700e-003	3.3000e-003	0.0107		112.6718	112.6718	7.4200e-003		112.8572
Worker	0.0442	0.0334	0.4321	1.0100e-003	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		100.2952	100.2952	3.7600e-003		100.3892
Total	0.0626	0.5236	0.5661	2.0700e-003	0.1150	4.2500e-003	0.1193	0.0311	4.0400e-003	0.0351		212.9670	212.9670	0.0112		213.2465

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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555

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	0.0184	0.4902	0.1340	1.0600e-003	0.0256	3.4500e-003	0.0291	7.3700e-003	3.3000e-003	0.0107		112.6718	112.6718	7.4200e-003		112.8572
Worker	0.0442	0.0334	0.4321	1.0100e-003	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		100.2952	100.2952	3.7600e-003		100.3892
Total	0.0626	0.5236	0.5661	2.0700e-003	0.1150	4.2500e-003	0.1193	0.0311	4.0400e-003	0.0351		212.9670	212.9670	0.0112		213.2465

3.5 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	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892

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	0.0166	0.4629	0.1228	1.0500e-003	0.0256	2.9500e-003	0.0286	7.3700e-003	2.8200e-003	0.0102		111.5259	111.5259	7.1500e-003		111.7045
Worker	0.0400	0.0294	0.3857	9.7000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		97.0362	97.0362	3.3300e-003		97.1196
Total	0.0566	0.4923	0.5086	2.0200e-003	0.1150	3.7200e-003	0.1188	0.0311	3.5300e-003	0.0346		208.5621	208.5621	0.0105		208.8241

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	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892

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	0.0166	0.4629	0.1228	1.0500e-003	0.0256	2.9500e-003	0.0286	7.3700e-003	2.8200e-003	0.0102		111.5259	111.5259	7.1500e-003		111.7045
Worker	0.0400	0.0294	0.3857	9.7000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		97.0362	97.0362	3.3300e-003		97.1196
Total	0.0566	0.4923	0.5086	2.0200e-003	0.1150	3.7200e-003	0.1188	0.0311	3.5300e-003	0.0346		208.5621	208.5621	0.0105		208.8241

3.6 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	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231

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	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190

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	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231

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	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190

3.7 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	43.6061					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		282.0423
Total	43.8725	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

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	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799
Total	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799

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	43.6061					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		282.0423
Total	43.8725	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

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	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799
Total	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

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	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
NaturalGas Unmitigated	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870

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					
General Office Building	670.803	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Total		7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870

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					
General Office Building	0.670803	7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870
Total		7.2300e-003	0.0658	0.0552	3.9000e-004		5.0000e-003	5.0000e-003		5.0000e-003	5.0000e-003		78.9180	78.9180	1.5100e-003	1.4500e-003	79.3870

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Unmitigated	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003

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	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4657					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Total	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003

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	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4657					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003
Total	0.5257	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1500e-003	5.1500e-003	1.0000e-005		5.5000e-003

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 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport Phase 1 - Los Angeles-South Coast County, Annual

Long Beach Airport Phase 1

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	23.52	1000sqft	0.54	23,520.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Defaults

Trips and VMT - Defaults

Demolition - Estimates based on Data needs

Construction Off-road Equipment Mitigation -

Vehicle Trips - Existing use- not a trip-generating use

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -
Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	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					
2018	0.0496	0.5045	0.3591	6.2000e-004	0.0201	0.0301	0.0501	4.0200e-003	0.0278	0.0318	0.0000	57.1351	57.1351	0.0139	0.0000	57.4831
2019	0.1257	0.1638	0.1332	2.2000e-004	2.0700e-003	9.6600e-003	0.0117	5.6000e-004	8.9200e-003	9.4800e-003	0.0000	19.8566	19.8566	5.2500e-003	0.0000	19.9880
Maximum	0.1257	0.5045	0.3591	6.2000e-004	0.0201	0.0301	0.0501	4.0200e-003	0.0278	0.0318	0.0000	57.1351	57.1351	0.0139	0.0000	57.4831

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										M1/yr					
2018	0.0496	0.5045	0.3591	6.2000e-004	0.0114	0.0301	0.0414	2.5400e-003	0.0278	0.0303	0.0000	57.1350	57.1350	0.0139	0.0000	57.4831
2019	0.1257	0.1638	0.1332	2.2000e-004	2.0700e-003	9.6600e-003	0.0117	5.6000e-004	8.9200e-003	9.4800e-003	0.0000	19.8566	19.8566	5.2500e-003	0.0000	19.9880
Maximum	0.1257	0.5045	0.3591	6.2000e-004	0.0114	0.0301	0.0414	2.5400e-003	0.0278	0.0303	0.0000	57.1350	57.1350	0.0139	0.0000	57.4831

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	39.15	0.00	14.01	32.31	0.00	3.61	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2018	11-30-2018	0.4190	0.4190
2	12-1-2018	2-28-2019	0.4270	0.4270
		Highest	0.4270	0.4270

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	0.0959	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004
Energy	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	110.4125	110.4125	4.2700e-003	1.0700e-003	110.8384
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.4394	0.0000	4.4394	0.2624	0.0000	10.9985
Water						0.0000	0.0000		0.0000	0.0000	1.3262	26.4127	27.7389	0.1373	3.4400e-003	32.1972
Total	0.0972	0.0120	0.0104	7.0000e-005	0.0000	9.1000e-004	9.1000e-004	0.0000	9.1000e-004	9.1000e-004	5.7656	136.8258	142.5914	0.4039	4.5100e-003	154.0347

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	0.0959	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004
Energy	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	110.4125	110.4125	4.2700e-003	1.0700e-003	110.8384
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.4394	0.0000	4.4394	0.2624	0.0000	10.9985
Water						0.0000	0.0000		0.0000	0.0000	1.3262	26.4127	27.7389	0.1373	3.4400e-003	32.1972
Total	0.0972	0.0120	0.0104	7.0000e-005	0.0000	9.1000e-004	9.1000e-004	0.0000	9.1000e-004	9.1000e-004	5.7656	136.8258	142.5914	0.4039	4.5100e-003	154.0347

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	9/1/2018	9/14/2018	5	10	
2	Site Preparation	Site Preparation	9/15/2018	9/17/2018	5	1	
3	Grading	Grading	9/18/2018	9/19/2018	5	2	
4	Building Construction	Building Construction	9/20/2018	2/6/2019	5	100	
5	Paving	Paving	2/7/2019	2/13/2019	5	5	
6	Architectural Coating	Architectural Coating	2/14/2019	2/20/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 35,280; Non-Residential Outdoor: 11,760; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	4	10.00	0.00	122.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					0.0132	0.0000	0.0132	2.0000e-003	0.0000	2.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3200e-003	0.0472	0.0389	6.0000e-005		3.1100e-003	3.1100e-003		2.9700e-003	2.9700e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3297
Total	5.3200e-003	0.0472	0.0389	6.0000e-005	0.0132	3.1100e-003	0.0163	2.0000e-003	2.9700e-003	4.9700e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3297

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	6.1000e-004	0.0204	4.2000e-003	5.0000e-005	1.0500e-003	8.0000e-005	1.1200e-003	2.9000e-004	7.0000e-005	3.6000e-004	0.0000	4.8115	4.8115	3.4000e-004	0.0000	4.8199
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.4000e-004	2.5500e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5444	0.5444	2.0000e-005	0.0000	0.5449
Total	8.9000e-004	0.0206	6.7500e-003	6.0000e-005	1.6000e-003	8.0000e-005	1.6700e-003	4.4000e-004	7.0000e-005	5.1000e-004	0.0000	5.3559	5.3559	3.6000e-004	0.0000	5.3648

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					5.1400e-003	0.0000	5.1400e-003	7.8000e-004	0.0000	7.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3200e-003	0.0472	0.0389	6.0000e-005		3.1100e-003	3.1100e-003		2.9700e-003	2.9700e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3296
Total	5.3200e-003	0.0472	0.0389	6.0000e-005	5.1400e-003	3.1100e-003	8.2500e-003	7.8000e-004	2.9700e-003	3.7500e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3296

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	6.1000e-004	0.0204	4.2000e-003	5.0000e-005	1.0500e-003	8.0000e-005	1.1200e-003	2.9000e-004	7.0000e-005	3.6000e-004	0.0000	4.8115	4.8115	3.4000e-004	0.0000	4.8199
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.4000e-004	2.5500e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5444	0.5444	2.0000e-005	0.0000	0.5449
Total	8.9000e-004	0.0206	6.7500e-003	6.0000e-005	1.6000e-003	8.0000e-005	1.6700e-003	4.4000e-004	7.0000e-005	5.1000e-004	0.0000	5.3559	5.3559	3.6000e-004	0.0000	5.3648

3.3 Site Preparation - 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					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9000e-004	4.8800e-003	2.1300e-003	0.0000		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total	3.9000e-004	4.8800e-003	2.1300e-003	0.0000	2.7000e-004	2.1000e-004	4.8000e-004	3.0000e-005	1.9000e-004	2.2000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492

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	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0272	0.0272	0.0000	0.0000	0.0273
Total	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0272	0.0272	0.0000	0.0000	0.0273

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					1.0000e-004	0.0000	1.0000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9000e-004	4.8800e-003	2.1300e-003	0.0000		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total	3.9000e-004	4.8800e-003	2.1300e-003	0.0000	1.0000e-004	2.1000e-004	3.1000e-004	1.0000e-005	1.9000e-004	2.0000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492

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	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0272	0.0272	0.0000	0.0000	0.0273
Total	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0272	0.0272	0.0000	0.0000	0.0273

3.4 Grading - 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					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005	7.5000e-004	6.2000e-004	1.3700e-003	4.1000e-004	5.9000e-004	1.0000e-003	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659

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-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090
Total	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090

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					2.9000e-004	0.0000	2.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005	2.9000e-004	6.2000e-004	9.1000e-004	1.6000e-004	5.9000e-004	7.5000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659

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-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090
Total	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090

3.5 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	0.0396	0.4027	0.2829	4.2000e-004		0.0259	0.0259		0.0238	0.0238	0.0000	37.9643	37.9643	0.0118	0.0000	38.2597
Total	0.0396	0.4027	0.2829	4.2000e-004		0.0259	0.0259		0.0238	0.0238	0.0000	37.9643	37.9643	0.0118	0.0000	38.2597

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	6.8000e-004	0.0183	5.1400e-003	4.0000e-005	9.2000e-004	1.3000e-004	1.0500e-003	2.7000e-004	1.2000e-004	3.9000e-004	0.0000	3.6889	3.6889	2.5000e-004	0.0000	3.6953
Worker	1.6200e-003	1.3800e-003	0.0149	4.0000e-005	3.2000e-003	3.0000e-005	3.2300e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	3.1793	3.1793	1.2000e-004	0.0000	3.1823
Total	2.3000e-003	0.0197	0.0200	8.0000e-005	4.1200e-003	1.6000e-004	4.2800e-003	1.1200e-003	1.5000e-004	1.2700e-003	0.0000	6.8682	6.8682	3.7000e-004	0.0000	6.8775

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	0.0396	0.4027	0.2829	4.2000e-004		0.0259	0.0259		0.0238	0.0238	0.0000	37.9642	37.9642	0.0118	0.0000	38.2597
Total	0.0396	0.4027	0.2829	4.2000e-004		0.0259	0.0259		0.0238	0.0238	0.0000	37.9642	37.9642	0.0118	0.0000	38.2597

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	6.8000e-004	0.0183	5.1400e-003	4.0000e-005	9.2000e-004	1.3000e-004	1.0500e-003	2.7000e-004	1.2000e-004	3.9000e-004	0.0000	3.6889	3.6889	2.5000e-004	0.0000	3.6953
Worker	1.6200e-003	1.3800e-003	0.0149	4.0000e-005	3.2000e-003	3.0000e-005	3.2300e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	3.1793	3.1793	1.2000e-004	0.0000	3.1823
Total	2.3000e-003	0.0197	0.0200	8.0000e-005	4.1200e-003	1.6000e-004	4.2800e-003	1.1200e-003	1.5000e-004	1.2700e-003	0.0000	6.8682	6.8682	3.7000e-004	0.0000	6.8775

3.5 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	0.0129	0.1326	0.1018	1.5000e-004		8.1700e-003	8.1700e-003		7.5200e-003	7.5200e-003	0.0000	13.8106	13.8106	4.3700e-003	0.0000	13.9198
Total	0.0129	0.1326	0.1018	1.5000e-004		8.1700e-003	8.1700e-003		7.5200e-003	7.5200e-003	0.0000	13.8106	13.8106	4.3700e-003	0.0000	13.9198

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	2.3000e-004	6.3800e-003	1.7400e-003	1.0000e-005	3.4000e-004	4.0000e-005	3.8000e-004	1.0000e-004	4.0000e-005	1.4000e-004	0.0000	1.3504	1.3504	9.0000e-005	0.0000	1.3526
Worker	5.4000e-004	4.5000e-004	4.9000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1376	1.1376	4.0000e-005	0.0000	1.1386
Total	7.7000e-004	6.8300e-003	6.6400e-003	2.0000e-005	1.5200e-003	5.0000e-005	1.5700e-003	4.1000e-004	5.0000e-005	4.6000e-004	0.0000	2.4880	2.4880	1.3000e-004	0.0000	2.4912

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	0.0129	0.1326	0.1018	1.5000e-004		8.1700e-003	8.1700e-003		7.5200e-003	7.5200e-003	0.0000	13.8106	13.8106	4.3700e-003	0.0000	13.9198
Total	0.0129	0.1326	0.1018	1.5000e-004		8.1700e-003	8.1700e-003		7.5200e-003	7.5200e-003	0.0000	13.8106	13.8106	4.3700e-003	0.0000	13.9198

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	2.3000e-004	6.3800e-003	1.7400e-003	1.0000e-005	3.4000e-004	4.0000e-005	3.8000e-004	1.0000e-004	4.0000e-005	1.4000e-004	0.0000	1.3504	1.3504	9.0000e-005	0.0000	1.3526
Worker	5.4000e-004	4.5000e-004	4.9000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1376	1.1376	4.0000e-005	0.0000	1.1386
Total	7.7000e-004	6.8300e-003	6.6400e-003	2.0000e-005	1.5200e-003	5.0000e-005	1.5700e-003	4.1000e-004	5.0000e-005	4.6000e-004	0.0000	2.4880	2.4880	1.3000e-004	0.0000	2.4912

3.6 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	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102

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	2.3000e-004	1.9000e-004	2.0400e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4740	0.4740	2.0000e-005	0.0000	0.4744
Total	2.3000e-004	1.9000e-004	2.0400e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4740	0.4740	2.0000e-005	0.0000	0.4744

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	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102

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	2.3000e-004	1.9000e-004	2.0400e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4740	0.4740	2.0000e-005	0.0000	0.4744
Total	2.3000e-004	1.9000e-004	2.0400e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4740	0.4740	2.0000e-005	0.0000	0.4744

3.7 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	0.1090					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	0.1097	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397

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	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0527	0.0527	0.0000	0.0000	0.0527
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0527	0.0527	0.0000	0.0000	0.0527

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	0.1090					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	0.1097	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397

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	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0527	0.0527	0.0000	0.0000	0.0527
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0527	0.0527	0.0000	0.0000	0.0527

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

[illegible]

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

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	97.3468	97.3468	4.0200e-003	8.3000e-004	97.6950
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	97.3468	97.3468	4.0200e-003	8.3000e-004	97.6950
NaturalGas Mitigated	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0658	13.0658	2.5000e-004	2.4000e-004	13.1434
NaturalGas Unmitigated	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0658	13.0658	2.5000e-004	2.4000e-004	13.1434

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					
General Office Building	244843	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0658	13.0658	2.5000e-004	2.4000e-004	13.1434
Total		1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0658	13.0658	2.5000e-004	2.4000e-004	13.1434

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					
General Office Building	244843	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0658	13.0658	2.5000e-004	2.4000e-004	13.1434
Total		1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0658	13.0658	2.5000e-004	2.4000e-004	13.1434

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	305525	97.3468	4.0200e-003	8.3000e-004	97.6950
Total		97.3468	4.0200e-003	8.3000e-004	97.6950

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	305525	97.3468	4.0200e-003	8.3000e-004	97.6950
Total		97.3468	4.0200e-003	8.3000e-004	97.6950

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0959	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004
Unmitigated	0.0959	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004

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	0.0109					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0850					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004
Total	0.0959	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004

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	0.0109					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0850					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004
Total	0.0959	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.8000e-004	5.8000e-004	0.0000	0.0000	6.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.7389	0.1373	3.4400e-003	32.1972
Unmitigated	27.7389	0.1373	3.4400e-003	32.1972

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	4.1803 / 2.56212	27.7389	0.1373	3.4400e-003	32.1972
Total		27.7389	0.1373	3.4400e-003	32.1972

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	4.1803 / 2.56212	27.7389	0.1373	3.4400e-003	32.1972
Total		27.7389	0.1373	3.4400e-003	32.1972

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.4394	0.2624	0.0000	10.9985
Unmitigated	4.4394	0.2624	0.0000	10.9985

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	21.87	4.4394	0.2624	0.0000	10.9985
Total		4.4394	0.2624	0.0000	10.9985

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	21.87	4.4394	0.2624	0.0000	10.9985
Total		4.4394	0.2624	0.0000	10.9985

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport- Rental Car Facility - Los Angeles-South Coast County, Winter

Long Beach Airport- Rental Car Facility

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	1000sqft	4.59	200,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Rental Car Facility Paving

Construction Phase - Per data needs

Trips and VMT - Defaults

Demolition - Estimates based on Data needs

Construction Off-road Equipment Mitigation -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -
Grading -
Architectural Coating -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	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					
2020	4.1685	42.4826	23.6447	0.0553	18.2675	2.1991	20.4666	9.9840	2.0232	12.0072	0.0000	5,516.1022	5,516.1022	1.1981	0.0000	5,545.5570
Maximum	4.1685	42.4826	23.6447	0.0553	18.2675	2.1991	20.4666	9.9840	2.0232	12.0072	0.0000	5,516.1022	5,516.1022	1.1981	0.0000	5,545.5570

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					
2020	4.1685	42.4826	23.6447	0.0553	7.2470	2.1991	9.4461	3.9263	2.0232	5.9495	0.0000	5,516.1022	5,516.1022	1.1981	0.0000	5,545.5569
Maximum	4.1685	42.4826	23.6447	0.0553	7.2470	2.1991	9.4461	3.9263	2.0232	5.9495	0.0000	5,516.1022	5,516.1022	1.1981	0.0000	5,545.5569

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.33	0.00	53.85	60.67	0.00	50.45	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	lb/day										lb/day					
Area	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0880	1.9000e-004	0.0205	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004	0.0000	0.0467

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	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0880	1.9000e-004	0.0205	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004	0.0000	0.0467

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	8/1/2020	8/28/2020	5	20	
2	Site Preparation	Site Preparation	8/29/2020	9/25/2020	5	20	
3	Grading	Grading	9/26/2020	10/23/2020	5	20	
4	Paving	Paving	10/24/2020	11/20/2020	5	20	
5	Architectural Coating	Architectural Coating	11/21/2020	12/16/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 12,000

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	381.00	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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					4.1279	0.0000	4.1279	0.6250	0.0000	0.6250			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	4.1279	1.6587	5.7866	0.6250	1.5419	2.1669		3,747.7049	3,747.7049	1.0580		3,774.1536

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	0.1704	5.5486	1.2900	0.0148	0.3331	0.0178	0.3508	0.0913	0.0170	0.1083		1,602.2842	1,602.2842	0.1150		1,605.1594
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.2471	5.6029	1.8915	0.0165	0.5007	0.0192	0.5199	0.1358	0.0183	0.1540		1,768.3973	1,768.3973	0.1203		1,771.4033

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					1.6099	0.0000	1.6099	0.2438	0.0000	0.2438			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	1.6099	1.6587	3.2686	0.2438	1.5419	1.7856	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

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	0.1704	5.5486	1.2900	0.0148	0.3331	0.0178	0.3508	0.0913	0.0170	0.1083		1,602.2842	1,602.2842	0.1150		1,605.1594
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.2471	5.6029	1.8915	0.0165	0.5007	0.0192	0.5199	0.1358	0.0183	0.1540		1,768.3973	1,768.3973	0.1203		1,771.4033

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

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	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	7.0458	2.1974	9.2433	3.8730	2.0216	5.8946	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

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	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927

3.4 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.5523	1.2734	7.8258	3.3675	1.1716	4.5390		2,872.4851	2,872.4851	0.9290		2,895.7106

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	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	2.5554	1.2734	3.8288	1.3133	1.1716	2.4849	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106

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	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440

3.5 Paving - 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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.6013					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7850	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830

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	0.1022	0.0725	0.8020	2.2200e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		221.4841	221.4841	6.9800e-003		221.6586
Total	0.1022	0.0725	0.8020	2.2200e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		221.4841	221.4841	6.9800e-003		221.6586

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.6013					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7850	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830

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	0.1022	0.0725	0.8020	2.2200e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		221.4841	221.4841	6.9800e-003		221.6586
Total	0.1022	0.0725	0.8020	2.2200e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		221.4841	221.4841	6.9800e-003		221.6586

3.6 Architectural Coating - 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					
Archit. Coating	3.0900					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	3.3322	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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	0.0869	0.0616	0.6817	1.8900e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		188.2615	188.2615	5.9300e-003		188.4098
Total	0.0869	0.0616	0.6817	1.8900e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		188.2615	188.2615	5.9300e-003		188.4098

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	3.0900					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	3.3322	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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	0.0869	0.0616	0.6817	1.8900e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		188.2615	188.2615	5.9300e-003		188.4098
Total	0.0869	0.0616	0.6817	1.8900e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		188.2615	188.2615	5.9300e-003		188.4098

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Unmitigated	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467

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	0.0152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0708					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Total	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467

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	0.0152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0708					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Total	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467

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 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport- Rental Car Facility - Los Angeles-South Coast County, Summer

Long Beach Airport- Rental Car Facility

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	1000sqft	4.59	200,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Rental Car Facility Paving

Construction Phase - Per data needs

Trips and VMT - Defaults

Demolition - Estimates based on Data needs

Construction Off-road Equipment Mitigation -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -
Grading -
Architectural Coating -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	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					
2020	4.1593	42.4763	23.6238	0.0556	18.2675	2.1991	20.4666	9.9840	2.0232	12.0072	0.0000	5,554.4815	5,554.4815	1.1985	0.0000	5,583.8435
Maximum	4.1593	42.4763	23.6238	0.0556	18.2675	2.1991	20.4666	9.9840	2.0232	12.0072	0.0000	5,554.4815	5,554.4815	1.1985	0.0000	5,583.8435

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					
2020	4.1593	42.4763	23.6238	0.0556	7.2470	2.1991	9.4461	3.9263	2.0232	5.9495	0.0000	5,554.4815	5,554.4815	1.1985	0.0000	5,583.8435
Maximum	4.1593	42.4763	23.6238	0.0556	7.2470	2.1991	9.4461	3.9263	2.0232	5.9495	0.0000	5,554.4815	5,554.4815	1.1985	0.0000	5,583.8435

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.33	0.00	53.85	60.67	0.00	50.45	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	lb/day										lb/day					
Area	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0880	1.9000e-004	0.0205	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004	0.0000	0.0467

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	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0880	1.9000e-004	0.0205	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004	0.0000	0.0467

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	8/1/2020	8/28/2020	5	20	
2	Site Preparation	Site Preparation	8/29/2020	9/25/2020	5	20	
3	Grading	Grading	9/26/2020	10/23/2020	5	20	
4	Paving	Paving	10/24/2020	11/20/2020	5	20	
5	Architectural Coating	Architectural Coating	11/21/2020	12/16/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 12,000

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	381.00	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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					4.1279	0.0000	4.1279	0.6250	0.0000	0.6250			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	4.1279	1.6587	5.7866	0.6250	1.5419	2.1669		3,747.7049	3,747.7049	1.0580		3,774.1536

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	0.1664	5.4777	1.2138	0.0151	0.3331	0.0175	0.3506	0.0913	0.0167	0.1080		1,630.3596	1,630.3596	0.1110		1,633.1339
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.2354	5.5268	1.8706	0.0168	0.5007	0.0189	0.5196	0.1358	0.0180	0.1538		1,806.7765	1,806.7765	0.1165		1,809.6899

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					1.6099	0.0000	1.6099	0.2438	0.0000	0.2438			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	1.6099	1.6587	3.2686	0.2438	1.5419	1.7856	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

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	0.1664	5.4777	1.2138	0.0151	0.3331	0.0175	0.3506	0.0913	0.0167	0.1080		1,630.3596	1,630.3596	0.1110		1,633.1339
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.2354	5.5268	1.8706	0.0168	0.5007	0.0189	0.5196	0.1358	0.0180	0.1538		1,806.7765	1,806.7765	0.1165		1,809.6899

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

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	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	7.0458	2.1974	9.2433	3.8730	2.0216	5.8946	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

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	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672

3.4 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.5523	1.2734	7.8258	3.3675	1.1716	4.5390		2,872.4851	2,872.4851	0.9290		2,895.7106

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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	2.5554	1.2734	3.8288	1.3133	1.1716	2.4849	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106

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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560

3.5 Paving - 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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.6013					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7850	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830

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	0.0920	0.0655	0.8757	2.3600e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		235.2226	235.2226	7.4200e-003		235.4080
Total	0.0920	0.0655	0.8757	2.3600e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		235.2226	235.2226	7.4200e-003		235.4080

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.6013					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7850	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830

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	0.0920	0.0655	0.8757	2.3600e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		235.2226	235.2226	7.4200e-003		235.4080
Total	0.0920	0.0655	0.8757	2.3600e-003	0.4179	1.8700e-003	0.4198	0.1070	1.7200e-003	0.1087		235.2226	235.2226	7.4200e-003		235.4080

3.6 Architectural Coating - 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					
Archit. Coating	3.0900					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	3.3322	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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	0.0782	0.0557	0.7443	2.0100e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		199.9392	199.9392	6.3000e-003		200.0968
Total	0.0782	0.0557	0.7443	2.0100e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		199.9392	199.9392	6.3000e-003		200.0968

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	3.0900					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	3.3322	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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	0.0782	0.0557	0.7443	2.0100e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		199.9392	199.9392	6.3000e-003		200.0968
Total	0.0782	0.0557	0.7443	2.0100e-003	0.1900	1.5900e-003	0.1916	0.0504	1.4600e-003	0.0519		199.9392	199.9392	6.3000e-003		200.0968

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Unmitigated	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467

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	0.0152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0708					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Total	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467

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	0.0152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0708					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9100e-003	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467
Total	0.0880	1.9000e-004	0.0205	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0438	0.0438	1.2000e-004		0.0467

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 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport- Rental Car Facility - Los Angeles-South Coast County, Annual

Long Beach Airport- Rental Car Facility

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	1000sqft	4.59	200,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Rental Car Facility Paving

Construction Phase - Per data needs

Trips and VMT - Defaults

Demolition - Estimates based on Data needs

Construction Off-road Equipment Mitigation -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -
Grading -
Architectural Coating -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	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					
2020	0.1515	1.2129	0.7793	1.5200e-003	0.3018	0.0591	0.3608	0.1430	0.0546	0.1976	0.0000	135.3492	135.3492	0.0355	0.0000	136.2355
Maximum	0.1515	1.2129	0.7793	1.5200e-003	0.3018	0.0591	0.3608	0.1430	0.0546	0.1976	0.0000	135.3492	135.3492	0.0355	0.0000	136.2355

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										M1/yr					
2020	0.1515	1.2129	0.7793	1.5200e-003	0.1264	0.0591	0.1855	0.0581	0.0546	0.1127	0.0000	135.3491	135.3491	0.0355	0.0000	136.2354
Maximum	0.1515	1.2129	0.7793	1.5200e-003	0.1264	0.0591	0.1855	0.0581	0.0546	0.1127	0.0000	135.3491	135.3491	0.0355	0.0000	136.2354

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	58.11	0.00	48.60	59.38	0.00	42.98	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2020	9-30-2020	0.9408	0.9408
		Highest	0.9408	0.9408

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	0.0160	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	22.3035	22.3035	9.2000e-004	1.9000e-004	22.3833
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0160	2.0000e-005	2.5600e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	22.3085	22.3085	9.3000e-004	1.9000e-004	22.3886

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										M1/yr					
Area	0.0160	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	22.3035	22.3035	9.2000e-004	1.9000e-004	22.3833
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0160	2.0000e-005	2.5600e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	22.3085	22.3085	9.3000e-004	1.9000e-004	22.3886

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	8/1/2020	8/28/2020	5	20	
2	Site Preparation	Site Preparation	8/29/2020	9/25/2020	5	20	
3	Grading	Grading	9/26/2020	10/23/2020	5	20	
4	Paving	Paving	10/24/2020	11/20/2020	5	20	
5	Architectural Coating	Architectural Coating	11/21/2020	12/16/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 12,000

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	381.00	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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					0.0413	0.0000	0.0413	6.2500e-003	0.0000	6.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e-004	0.0413	0.0166	0.0579	6.2500e-003	0.0154	0.0217	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386

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	1.6800e-003	0.0566	0.0125	1.5000e-004	3.2700e-003	1.8000e-004	3.4500e-003	9.0000e-004	1.7000e-004	1.0700e-003	0.0000	14.6834	14.6834	1.0200e-003	0.0000	14.7090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
Total	2.3700e-003	0.0571	0.0186	1.7000e-004	4.9100e-003	1.9000e-004	5.1100e-003	1.3400e-003	1.8000e-004	1.5200e-003	0.0000	16.2154	16.2154	1.0700e-003	0.0000	16.2422

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					0.0161	0.0000	0.0161	2.4400e-003	0.0000	2.4400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e-004	0.0161	0.0166	0.0327	2.4400e-003	0.0154	0.0179	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385

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	1.6800e-003	0.0566	0.0125	1.5000e-004	3.2700e-003	1.8000e-004	3.4500e-003	9.0000e-004	1.7000e-004	1.0700e-003	0.0000	14.6834	14.6834	1.0200e-003	0.0000	14.7090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
Total	2.3700e-003	0.0571	0.0186	1.7000e-004	4.9100e-003	1.9000e-004	5.1100e-003	1.3400e-003	1.8000e-004	1.5200e-003	0.0000	16.2154	16.2154	1.0700e-003	0.0000	16.2422

3.3 Site Preparation - 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					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010
Total	0.0408	0.4242	0.2151	3.8000e-004	0.1807	0.0220	0.2026	0.0993	0.0202	0.1195	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010

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	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399
Total	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399

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					0.0705	0.0000	0.0705	0.0387	0.0000	0.0387	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009
Total	0.0408	0.4242	0.2151	3.8000e-004	0.0705	0.0220	0.0924	0.0387	0.0202	0.0590	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009

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	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399
Total	8.3000e-004	6.7000e-004	7.4100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8384	1.8384	6.0000e-005	0.0000	1.8399

3.4 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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.2639	0.1605	3.0000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total	0.0243	0.2639	0.1605	3.0000e-004	0.0655	0.0127	0.0783	0.0337	0.0117	0.0454	0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694

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	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
Total	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332

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					0.0256	0.0000	0.0256	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.2639	0.1605	3.0000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total	0.0243	0.2639	0.1605	3.0000e-004	0.0256	0.0127	0.0383	0.0131	0.0117	0.0249	0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694

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	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
Total	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332

3.5 Paving - 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	0.0118	0.1180	0.1228	1.9000e-004		6.5100e-003	6.5100e-003		6.0100e-003	6.0100e-003	0.0000	16.3720	16.3720	5.1400e-003	0.0000	16.5006
Paving	6.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0179	0.1180	0.1228	1.9000e-004		6.5100e-003	6.5100e-003		6.0100e-003	6.0100e-003	0.0000	16.3720	16.3720	5.1400e-003	0.0000	16.5006

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	9.2000e-004	7.4000e-004	8.2300e-003	2.0000e-005	4.0900e-003	2.0000e-005	4.1100e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.0427	2.0427	6.0000e-005	0.0000	2.0443
Total	9.2000e-004	7.4000e-004	8.2300e-003	2.0000e-005	4.0900e-003	2.0000e-005	4.1100e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.0427	2.0427	6.0000e-005	0.0000	2.0443

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	0.1180	0.1228	1.9000e-004		6.5100e-003	6.5100e-003		6.0100e-003	6.0100e-003	0.0000	16.3720	16.3720	5.1400e-003	0.0000	16.5006
Paving	6.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0179	0.1180	0.1228	1.9000e-004		6.5100e-003	6.5100e-003		6.0100e-003	6.0100e-003	0.0000	16.3720	16.3720	5.1400e-003	0.0000	16.5006

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	9.2000e-004	7.4000e-004	8.2300e-003	2.0000e-005	4.0900e-003	2.0000e-005	4.1100e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.0427	2.0427	6.0000e-005	0.0000	2.0443
Total	9.2000e-004	7.4000e-004	8.2300e-003	2.0000e-005	4.0900e-003	2.0000e-005	4.1100e-003	1.0500e-003	2.0000e-005	1.0700e-003	0.0000	2.0427	2.0427	6.0000e-005	0.0000	2.0443

3.6 Architectural Coating - 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					
Archit. Coating	0.0278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024
Total	0.0300	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024

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	7.1000e-004	5.7000e-004	6.3000e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5627	1.5627	5.0000e-005	0.0000	1.5639
Total	7.1000e-004	5.7000e-004	6.3000e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5627	1.5627	5.0000e-005	0.0000	1.5639

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	0.0278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024
Total	0.0300	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024

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	7.1000e-004	5.7000e-004	6.3000e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5627	1.5627	5.0000e-005	0.0000	1.5639
Total	7.1000e-004	5.7000e-004	6.3000e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5627	1.5627	5.0000e-005	0.0000	1.5639

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

[illegible]

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

[illegible]

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	70000	22.3035	9.2000e-004	1.9000e-004	22.3833
Total		22.3035	9.2000e-004	1.9000e-004	22.3833

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	70000	22.3035	9.2000e-004	1.9000e-004	22.3833
Total		22.3035	9.2000e-004	1.9000e-004	22.3833

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0160	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003
Unmitigated	0.0160	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003

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	2.7800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003
Total	0.0160	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003

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	2.7800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003
Total	0.0160	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport Ground Transportation Plaza - Los Angeles-South Coast County, Winter

Long Beach Airport Ground Transportation Plaza

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	88.00	1000sqft	2.02	88,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Per data needs

Grading -

Demolition -

Trips and VMT -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	20.00
tblConstructionPhase	PhaseEndDate	8/11/2022	12/17/2021
tblConstructionPhase	PhaseEndDate	9/9/2021	10/22/2021
tblConstructionPhase	PhaseEndDate	7/28/2022	11/19/2021
tblConstructionPhase	PhaseEndDate	9/1/2021	9/24/2021
tblConstructionPhase	PhaseStartDate	7/29/2022	11/20/2021
tblConstructionPhase	PhaseStartDate	9/2/2021	9/25/2021
tblConstructionPhase	PhaseStartDate	7/15/2022	10/23/2021

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					
2021	2.1267	22.0199	15.5315	0.0320	6.6641	1.0491	7.5808	3.3971	0.9793	4.2405	0.0000	3,160.8075	3,160.8075	0.7700	0.0000	3,177.0076
Maximum	2.1267	22.0199	15.5315	0.0320	6.6641	1.0491	7.5808	3.3971	0.9793	4.2405	0.0000	3,160.8075	3,160.8075	0.7700	0.0000	3,177.0076

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					
2021	2.1267	22.0199	15.5315	0.0320	2.6672	1.0491	3.5838	1.3430	0.9793	2.1863	0.0000	3,160.8075	3,160.8075	0.7700	0.0000	3,177.0076
Maximum	2.1267	22.0199	15.5315	0.0320	2.6672	1.0491	3.5838	1.3430	0.9793	2.1863	0.0000	3,160.8075	3,160.8075	0.7700	0.0000	3,177.0076

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	59.98	0.00	52.72	60.47	0.00	48.44	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	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0387	8.0000e-005	9.0000e-003	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005	0.0000	0.0205

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	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0387	8.0000e-005	9.0000e-003	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005	0.0000	0.0205

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	8/1/2021	8/27/2021	5	20	
2	Site Preparation	Site Preparation	8/28/2021	9/24/2021	5	20	
3	Grading	Grading	9/25/2021	10/22/2021	5	20	
4	Paving	Paving	10/23/2021	11/19/2021	5	20	
5	Architectural Coating	Architectural Coating	11/20/2021	12/17/2021	5	20	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.02

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,280

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48

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
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	168.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	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
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					1.8168	0.0000	1.8168	0.2751	0.0000	0.2751			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	1.8168	1.0409	2.8577	0.2751	0.9715	1.2466		2,322.7171	2,322.7171	0.5940		2,337.5658

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	0.0717	2.2809	0.5602	6.4400e-003	0.1469	7.0200e-003	0.1539	0.0403	6.7200e-003	0.0470		698.6978	698.6978	0.0500		699.9466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	0.1337	2.3233	1.0390	7.8400e-003	0.2922	8.1900e-003	0.3004	0.0788	7.8000e-003	0.0866		838.0904	838.0904	0.0541		839.4418

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					0.7085	0.0000	0.7085	0.1073	0.0000	0.1073			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	0.7085	1.0409	1.7494	0.1073	0.9715	1.0788	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658

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	0.0717	2.2809	0.5602	6.4400e-003	0.1469	7.0200e-003	0.1539	0.0403	6.7200e-003	0.0470		698.6978	698.6978	0.0500		699.9466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	0.1337	2.3233	1.0390	7.8400e-003	0.2922	8.1900e-003	0.3004	0.0788	7.8000e-003	0.0866		838.0904	838.0904	0.0541		839.4418

3.3 Site Preparation - 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					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	1.5463	18.2862	10.7496	0.0245	1.5908	0.7019	2.2926	0.1718	0.6457	0.8175		2,372.8832	2,372.8832	0.7674		2,392.0692

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	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432

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					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	1.5463	18.2862	10.7496	0.0245	0.6204	0.7019	1.3223	0.0670	0.6457	0.7127	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692

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	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432
Total	0.0382	0.0261	0.2946	8.6000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		85.7801	85.7801	2.5200e-003		85.8432

3.4 Grading - 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.6114	1,995.6114	0.6454		2,011.7470

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	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040
Total	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	2.5554	0.9158	3.4712	1.3133	0.8425	2.1558	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470

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	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040
Total	0.0477	0.0326	0.3683	1.0800e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2251	107.2251	3.1600e-003		107.3040

3.5 Paving - 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	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3279	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524

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	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560

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	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3279	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524

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	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560

3.6 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	1.2236					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		281.9309
Total	1.4425	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	0.0334	0.0228	0.2578	7.5000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		75.0576	75.0576	2.2100e-003		75.1128
Total	0.0334	0.0228	0.2578	7.5000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		75.0576	75.0576	2.2100e-003		75.1128

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	1.2236					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		281.9309
Total	1.4425	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	0.0334	0.0228	0.2578	7.5000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		75.0576	75.0576	2.2100e-003		75.1128
Total	0.0334	0.0228	0.2578	7.5000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		75.0576	75.0576	2.2100e-003		75.1128

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Unmitigated	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205

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	6.7000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4000e-004	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Total	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205

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	6.7000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4000e-004	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Total	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205

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 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport Ground Transportation Plaza - Los Angeles-South Coast County, Summer

Long Beach Airport Ground Transportation Plaza

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	88.00	1000sqft	2.02	88,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Per data needs

Grading -

Demolition -

Trips and VMT -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	20.00
tblConstructionPhase	PhaseEndDate	8/11/2022	12/17/2021
tblConstructionPhase	PhaseEndDate	9/9/2021	10/22/2021
tblConstructionPhase	PhaseEndDate	7/28/2022	11/19/2021
tblConstructionPhase	PhaseEndDate	9/1/2021	9/24/2021
tblConstructionPhase	PhaseStartDate	7/29/2022	11/20/2021
tblConstructionPhase	PhaseStartDate	9/2/2021	9/25/2021
tblConstructionPhase	PhaseStartDate	7/15/2022	10/23/2021

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					
2021	2.1188	21.9882	15.5445	0.0322	6.6641	1.0490	7.5808	3.3971	0.9792	4.2405	0.0000	3,181.7720	3,181.7720	0.7701	0.0000	3,197.9361
Maximum	2.1188	21.9882	15.5445	0.0322	6.6641	1.0490	7.5808	3.3971	0.9792	4.2405	0.0000	3,181.7720	3,181.7720	0.7701	0.0000	3,197.9361

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					
2021	2.1188	21.9882	15.5445	0.0322	2.6672	1.0490	3.5838	1.3430	0.9792	2.1863	0.0000	3,181.7720	3,181.7720	0.7701	0.0000	3,197.9361
Maximum	2.1188	21.9882	15.5445	0.0322	2.6672	1.0490	3.5838	1.3430	0.9792	2.1863	0.0000	3,181.7720	3,181.7720	0.7701	0.0000	3,197.9361

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	59.98	0.00	52.72	60.47	0.00	48.44	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	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0387	8.0000e-005	9.0000e-003	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005	0.0000	0.0205

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	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	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	0.0387	8.0000e-005	9.0000e-003	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005	0.0000	0.0205

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	8/1/2021	8/27/2021	5	20	
2	Site Preparation	Site Preparation	8/28/2021	9/24/2021	5	20	
3	Grading	Grading	9/25/2021	10/22/2021	5	20	
4	Paving	Paving	10/23/2021	11/19/2021	5	20	
5	Architectural Coating	Architectural Coating	11/20/2021	12/17/2021	5	20	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.02

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,280

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48

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
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	168.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	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
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					1.8168	0.0000	1.8168	0.2751	0.0000	0.2751			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	1.8168	1.0409	2.8577	0.2751	0.9715	1.2466		2,322.7171	2,322.7171	0.5940		2,337.5658

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	0.0700	2.2533	0.5283	6.5500e-003	0.1469	6.9200e-003	0.1538	0.0403	6.6200e-003	0.0469		711.0149	711.0149	0.0483		712.2212
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	0.1258	2.2916	1.0519	8.0400e-003	0.2922	8.0900e-003	0.3003	0.0788	7.7000e-003	0.0865		859.0550	859.0550	0.0526		860.3703

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					0.7085	0.0000	0.7085	0.1073	0.0000	0.1073			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	0.7085	1.0409	1.7494	0.1073	0.9715	1.0788	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658

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	0.0700	2.2533	0.5283	6.5500e-003	0.1469	6.9200e-003	0.1538	0.0403	6.6200e-003	0.0469		711.0149	711.0149	0.0483		712.2212
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	0.1258	2.2916	1.0519	8.0400e-003	0.2922	8.0900e-003	0.3003	0.0788	7.7000e-003	0.0865		859.0550	859.0550	0.0526		860.3703

3.3 Site Preparation - 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					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.8832	2,372.8832	0.7674		2,392.0692
Total	1.5463	18.2862	10.7496	0.0245	1.5908	0.7019	2.2926	0.1718	0.6457	0.8175		2,372.8832	2,372.8832	0.7674		2,392.0692

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	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687

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					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692
Total	1.5463	18.2862	10.7496	0.0245	0.6204	0.7019	1.3223	0.0670	0.6457	0.7127	0.0000	2,372.8832	2,372.8832	0.7674		2,392.0692

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	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687
Total	0.0343	0.0236	0.3222	9.1000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.7000e-004	0.0244		91.1016	91.1016	2.6800e-003		91.1687

3.4 Grading - 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.6114	1,995.6114	0.6454		2,011.7470

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	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609
Total	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	2.5554	0.9158	3.4712	1.3133	0.8425	2.1558	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470

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	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609
Total	0.0429	0.0295	0.4028	1.1400e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		113.8770	113.8770	3.3600e-003		113.9609

3.5 Paving - 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	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3279	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524

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	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413

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	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3279	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524

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	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413

3.6 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	1.2236					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		281.9309
Total	1.4425	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	0.0300	0.0206	0.2819	8.0000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		79.7139	79.7139	2.3500e-003		79.7726
Total	0.0300	0.0206	0.2819	8.0000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		79.7139	79.7139	2.3500e-003		79.7726

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	1.2236					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		281.9309
Total	1.4425	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	0.0300	0.0206	0.2819	8.0000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		79.7139	79.7139	2.3500e-003		79.7726
Total	0.0300	0.0206	0.2819	8.0000e-004	0.0782	6.3000e-004	0.0789	0.0208	5.8000e-004	0.0213		79.7139	79.7139	2.3500e-003		79.7726

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Unmitigated	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205

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	6.7000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4000e-004	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Total	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205

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	6.7000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4000e-004	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205
Total	0.0387	8.0000e-005	9.0000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0193	0.0193	5.0000e-005		0.0205

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 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Long Beach Airport Ground Transportation Plaza - Los Angeles-South Coast County, Annual

Long Beach Airport Ground Transportation Plaza

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	88.00	1000sqft	2.02	88,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Per data needs

Grading -

Demolition -

Trips and VMT -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	20.00
tblConstructionPhase	PhaseEndDate	8/11/2022	12/17/2021
tblConstructionPhase	PhaseEndDate	9/9/2021	10/22/2021
tblConstructionPhase	PhaseEndDate	7/28/2022	11/19/2021
tblConstructionPhase	PhaseEndDate	9/1/2021	9/24/2021
tblConstructionPhase	PhaseStartDate	7/29/2022	11/20/2021
tblConstructionPhase	PhaseStartDate	9/2/2021	9/25/2021
tblConstructionPhase	PhaseStartDate	7/15/2022	10/23/2021

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					
2021	0.0844	0.7287	0.5114	1.0200e-003	0.1069	0.0335	0.1403	0.0401	0.0310	0.0711	0.0000	90.4043	90.4043	0.0239	0.0000	91.0016
Maximum	0.0844	0.7287	0.5114	1.0200e-003	0.1069	0.0335	0.1403	0.0401	0.0310	0.0711	0.0000	90.4043	90.4043	0.0239	0.0000	91.0016

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										M1/yr					
2021	0.0844	0.7287	0.5114	1.0200e-003	0.0461	0.0335	0.0796	0.0168	0.0310	0.0478	0.0000	90.4042	90.4042	0.0239	0.0000	91.0015
Maximum	0.0844	0.7287	0.5114	1.0200e-003	0.0461	0.0335	0.0796	0.0168	0.0310	0.0478	0.0000	90.4042	90.4042	0.0239	0.0000	91.0015

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.86	0.00	43.30	58.06	0.00	32.73	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2021	9-30-2021	0.4787	0.4787
		Highest	0.4787	0.4787

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	7.0200e-003	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8135	9.8135	4.1000e-004	8.0000e-005	9.8487
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.0200e-003	1.0000e-005	1.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	9.8157	9.8157	4.2000e-004	8.0000e-005	9.8510

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										M1/yr					
Area	7.0200e-003	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8135	9.8135	4.1000e-004	8.0000e-005	9.8487
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.0200e-003	1.0000e-005	1.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	9.8157	9.8157	4.2000e-004	8.0000e-005	9.8510

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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	8/1/2021	8/27/2021	5	20	
2	Site Preparation	Site Preparation	8/28/2021	9/24/2021	5	20	
3	Grading	Grading	9/25/2021	10/22/2021	5	20	
4	Paving	Paving	10/23/2021	11/19/2021	5	20	
5	Architectural Coating	Architectural Coating	11/20/2021	12/17/2021	5	20	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.02

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,280

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48

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
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	168.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	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
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					0.0182	0.0000	0.0182	2.7500e-003	0.0000	2.7500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	0.0199	0.1970	0.1449	2.4000e-004	0.0182	0.0104	0.0286	2.7500e-003	9.7100e-003	0.0125	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060

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	7.1000e-004	0.0233	5.4200e-003	7.0000e-005	1.4400e-003	7.0000e-005	1.5100e-003	4.0000e-004	7.0000e-005	4.6000e-004	0.0000	6.4033	6.4033	4.4000e-004	0.0000	6.4144
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.4000e-004	4.9200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2856	1.2856	4.0000e-005	0.0000	1.2865
Total	1.2700e-003	0.0237	0.0103	8.0000e-005	2.8600e-003	8.0000e-005	2.9500e-003	7.8000e-004	8.0000e-005	8.5000e-004	0.0000	7.6889	7.6889	4.8000e-004	0.0000	7.7009

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					7.0900e-003	0.0000	7.0900e-003	1.0700e-003	0.0000	1.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	0.0199	0.1970	0.1449	2.4000e-004	7.0900e-003	0.0104	0.0175	1.0700e-003	9.7100e-003	0.0108	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060

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	7.1000e-004	0.0233	5.4200e-003	7.0000e-005	1.4400e-003	7.0000e-005	1.5100e-003	4.0000e-004	7.0000e-005	4.6000e-004	0.0000	6.4033	6.4033	4.4000e-004	0.0000	6.4144
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.4000e-004	4.9200e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2856	1.2856	4.0000e-005	0.0000	1.2865
Total	1.2700e-003	0.0237	0.0103	8.0000e-005	2.8600e-003	8.0000e-005	2.9500e-003	7.8000e-004	8.0000e-005	8.5000e-004	0.0000	7.6889	7.6889	4.8000e-004	0.0000	7.7009

3.3 Site Preparation - 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					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1829	0.1075	2.5000e-004		7.0200e-003	7.0200e-003		6.4600e-003	6.4600e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005
Total	0.0155	0.1829	0.1075	2.5000e-004	0.0159	7.0200e-003	0.0229	1.7200e-003	6.4600e-003	8.1800e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005

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	3.4000e-004	2.7000e-004	3.0300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7911	0.7911	2.0000e-005	0.0000	0.7917
Total	3.4000e-004	2.7000e-004	3.0300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7911	0.7911	2.0000e-005	0.0000	0.7917

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					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1829	0.1075	2.5000e-004		7.0200e-003	7.0200e-003		6.4600e-003	6.4600e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005
Total	0.0155	0.1829	0.1075	2.5000e-004	6.2000e-003	7.0200e-003	0.0132	6.7000e-004	6.4600e-003	7.1300e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005

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	3.4000e-004	2.7000e-004	3.0300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7911	0.7911	2.0000e-005	0.0000	0.7917
Total	3.4000e-004	2.7000e-004	3.0300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7911	0.7911	2.0000e-005	0.0000	0.7917

3.4 Grading - 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					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.2021	0.0976	2.1000e-004		9.1600e-003	9.1600e-003		8.4200e-003	8.4200e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503
Total	0.0183	0.2021	0.0976	2.1000e-004	0.0655	9.1600e-003	0.0747	0.0337	8.4200e-003	0.0421	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503

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	4.3000e-004	3.3000e-004	3.7800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9889	0.9889	3.0000e-005	0.0000	0.9896
Total	4.3000e-004	3.3000e-004	3.7800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9889	0.9889	3.0000e-005	0.0000	0.9896

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					0.0256	0.0000	0.0256	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.2021	0.0976	2.1000e-004		9.1600e-003	9.1600e-003		8.4200e-003	8.4200e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2502
Total	0.0183	0.2021	0.0976	2.1000e-004	0.0256	9.1600e-003	0.0347	0.0131	8.4200e-003	0.0216	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2502

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	4.3000e-004	3.3000e-004	3.7800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9889	0.9889	3.0000e-005	0.0000	0.9896
Total	4.3000e-004	3.3000e-004	3.7800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9889	0.9889	3.0000e-005	0.0000	0.9896

3.5 Paving - 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	0.0106	0.1065	0.1178	1.8000e-004		5.8300e-003	5.8300e-003		5.3700e-003	5.3700e-003	0.0000	15.5048	15.5048	4.9100e-003	0.0000	15.6276
Paving	2.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0133	0.1065	0.1178	1.8000e-004		5.8300e-003	5.8300e-003		5.3700e-003	5.3700e-003	0.0000	15.5048	15.5048	4.9100e-003	0.0000	15.6276

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	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845
Total	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845

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	0.1065	0.1178	1.8000e-004		5.8300e-003	5.8300e-003		5.3700e-003	5.3700e-003	0.0000	15.5048	15.5048	4.9100e-003	0.0000	15.6276
Paving	2.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0133	0.1065	0.1178	1.8000e-004		5.8300e-003	5.8300e-003		5.3700e-003	5.3700e-003	0.0000	15.5048	15.5048	4.9100e-003	0.0000	15.6276

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	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845
Total	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845

3.6 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	0.0122					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.0144	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

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	3.0000e-004	2.3000e-004	2.6500e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6922	0.6922	2.0000e-005	0.0000	0.6928
Total	3.0000e-004	2.3000e-004	2.6500e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6922	0.6922	2.0000e-005	0.0000	0.6928

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	0.0122					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.0144	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

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	3.0000e-004	2.3000e-004	2.6500e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6922	0.6922	2.0000e-005	0.0000	0.6928
Total	3.0000e-004	2.3000e-004	2.6500e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6922	0.6922	2.0000e-005	0.0000	0.6928

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

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					
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		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	30800	9.8135	4.1000e-004	8.0000e-005	9.8487
Total		9.8135	4.1000e-004	8.0000e-005	9.8487

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	30800	9.8135	4.1000e-004	8.0000e-005	9.8487
Total		9.8135	4.1000e-004	8.0000e-005	9.8487

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.0200e-003	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003
Unmitigated	7.0200e-003	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003

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	1.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003
Total	7.0100e-003	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003

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	1.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003
Total	7.0100e-003	1.0000e-005	1.1200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1800e-003	2.1800e-003	1.0000e-005	0.0000	2.3300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation
