Attachment H

Downtown Plan Program Environmental Impact Report Analysis 923 and 927 Long Beach Boulevard Application No. 2108-08 SPR21-039 May 19, 2022

PROJECT DATA

Project Title

Ocean Park located at 923 and 927 Long Beach Boulevard

Lead Agency Name and Address

City of Long Beach 333 W. Ocean Boulevard, 5th Floor Long Beach, CA 90802

Contact Person and Phone Number

Gina Casillas, Planner IV (562) 570-6879

Project Location

923 and 927 Long Beach Boulevard Assessor Parcel Numbers 7273-012-037 and 7273-012-011 City of Long Beach, County of Los Angeles, California.

Project Sponsor's Name and Contact Information

A&H Architects, Inc – Stuart Ahn 2560 W. Olympic Blvd, Suite 305 Los Angeles, CA 90006

Preparation of this Compliance Checklist

<u>City of Long Beach Staff</u> Gina Casillas Planner IV (562) 570-6879

Required Project Approvals and Public Agencies Whose Approval is Required

The proposed project would require the following discretionary entitlement approvals by the approval body indicated in parentheses:

• Site Plan Review (Planning Commission)

Incorporation by Reference

This Environmental Compliance Checklist may reference all or portions of another document that is a matter of public record or is generally available to the public. Informational details from the documents that have been incorporated by reference are summarized below. These documents include:

- Downtown Plan (PD-30) (January 2012)
- Downtown Plan Environmental Impact Report (December 2010) (State Clearinghouse No. 2009071006) and subsequent addenda, including the Mitigation Monitoring and Reporting Program (MMRP).
- Downtown Plan Program EIR Land Use Equivalency Program and 7th and Locust Development - Downtown Plan EIR Addendum (EIRA06-20) ("Downtown Plan PEIR Addendum EIRA06-20")

- Shade and Shadow Report prepared by Meridian Consultants dated June 2021(Attached as Appendix A)
- Traffic Impact Analysis for 923 and 927 Long Beach Boulevard prepared by Fehr and Peers, dated June 1, 2021(Attached as Appendix B)

Land Use Equivalency Calculator (Appendix C)

PROJECT INFORMATION, SETTING, AND CEQA HISTORY

General Plan

The proposed residential project addressed at 923 and 927 Long Beach Boulevard (Project) is located in the Downtown District (DT) PlaceType of the General Plan. The Downtown area is characterized by compact, mixed-use urban development; high vehicular, pedestrian and transit traffic; diverse building sizes, heights, ages, and styles; and a wide range of uses a blending of uses to create a synergistic effect—in this case, residential and neighborhood-serving commercial.

Zoning

The project is located within the Downtown Plan (PD-30), a planned development plan for the downtown area. PD-30 allows dense multi-family residential and mixed-use commercial at the subject site.

Project Description

The project, named "Ocean Park", consists of 75 residential units in a six-story low rise building. The ground floor will consist of five residential units, nine surface parking stalls and the project's amenities such as a lobby, meeting room, fitness room, and laundry room. The upper floors (2 to 6) will each consist of 14 residential units. The project's open space is provided on the second floor and on the roof. Three levels of subterranean parking provides the majority of the project's code required parking.

The building design has a modern glass façade, combined with vertical panels and textured materials such as smooth stucco, glass fiber reinforced concrete, and stone veneer. The building is rectangular in shape and features a zero-foot, build-to line, a ground floor, floor-to-ceiling height of approximately 17-feet, and large windows that activate the street frontage. The building exterior will feature neutral colors of grey and creams accented by vibrant orange color block. The first-floor wall features a stone veneer exterior which provides a decorative separation to the smooth stucco upper floor walls. The windows and doors will feature black frames. Projecting balconies add articulation and relief to the flat building wall and the solid glass railings enhance the building's contemporary design. The building features floor-to-ceiling glass, large windows and glass doors which will bring in an abundant light to the building interior. The planter boxes, in addition to new street trees, will enhance the pedestrian experience at the ground level.

The project provides a mix of units, nine studio, 89 one-bedroom and 32 two-bedroom residential units. As required by Long Beach Municipal Code Section 21.67 Inclusionary Housing, if an application is submitted during calendar year 2021, the applicant shall provide five percent (5%) of the units in the residential development available at an affordable rent to very low-income households. As such, the project provides a total of four affordable units as very-low-income, and the balance of the 71 residential units will be market rate.

Surrounding Land Uses and Setting

The project site is located on the west side of Long Beach Boulevard between 9th and 10th Streets, just east of a north-south alley. The site consists of two separate lots (APN's 7273-012-037 and 7273-012-011) addressed as 923 and 927 Long Beach Boulevard. The project site fronts on Long Beach Boulevard and measures 110 feet in width and 150 feet in depth. A 10-foot wide (east-west) alley (Nardo Way) previously bisected the two lots. This alley was vacated to allow future development opportunity. The site is served by a

variety of multi-modal local and regional transportation options. It has access from the Interstate-710 (I-710) freeway off-ramp at 6th Street, with an on-ramp located one block away on 7th Street. Bus transit service is available <u>both</u> one block east and west of the project site on Pacific Avenue and Long Beach Boulevard. The Metro A Line also maintains a light rail stop location north and south of the project site, on Long Beach Boulevard, providing regional rail service to downtown Los Angeles and the greater Los Angeles County area.

List of Figures

Figure 1. Vicinity Map. . Figure 2. Proposed Site Plan. . Figure 3. Proposed Ground Floor Plan. Figure 4. Proposed Building Elevations. Figure 5. Downtown Plan Land Use Map.

History of CEQA Review for Downtown Plan

In December 2010, the City prepared a Draft Program Environmental Impact Report (PEIR) for the Downtown Plan (State Clearinghouse No. 2009071006), and circulated the PEIR for public review. In November 2011, a Final PEIR was prepared and certified by the City Council. The City was the public agency which had the principal responsibility for carrying out or approving the Downtown Plan, and as such was the "Lead Agency" under the California Environmental Quality Act (CEQA) (*State CEQA Guidelines*, Section 15367).

The Downtown Plan PEIR analyzed the potential impacts of growth anticipated over the 25-year horizon of the Plan. The anticipated 5,000 residential units has been met due to the high demand and critical need for housing; however, the growth of other uses, such as office, commercial and hotel uses, has not materialized. Upon review of the housing needs and development in the Downtown area, the City determined that additional residential development in the PD-30 area is needed and can be accommodated within the same levels of development contemplated by the PD-30 and its PEIR by allowing additional residential units while reducing commensurate levels of office, commercial and hotel development. An Addendum (EIRA-06-20) to the Final PEIR was prepared and approved by the Planning Commission on September 16, 2021. The Planning Commission's approval was appealed (APL21-006) by Supporters Alliance for Environmental Responsibility on September 27, 2021. On January 18, 2022, the City Council denied the appeal and upheld the Planning Commission approval.

The Addendum to the Program EIR established the Downtown Plan Land Use Equivalency Program (Equivalency Program). The Equivalency Program allows for the reallocation of permitted land uses (office, commercial, hotel, and residential uses) within the Downtown Plan on a per project basis so long as the limitations of the Equivalency Program are satisfied and do not exceed the analyzed upper levels of environmental impacts that are identified in the Certified PEIR or exceed average maximum Floor Area Ratios (FARs) contemplated by the plan, including FAR incentives. To determine the reallocation rates, a Downtown Plan Equivalency Calculator (DPEC) has been developed to allow the City to easily track the approved projects and to reduce available commercial, office, and/or hotel space, accordingly, to accommodate increased demand for residential housing units, while staying within the overall levels of development and impacts analyzed in the PEIR. The DPEC has been developed at a conservative exchange rate to allow for the reallocation of commercial, office, and/or hotel space to residential units such that

applicable regulations are satisfied, and no additional significant environmental impacts or substantially greater impacts would occur than previously identified in the Certified PEIR.

Purpose of the Compliance Checklist

This document is a compliance checklist to evaluate the project (Application No. 2108-08 (SPR21-039)), located at 923 and 927 Long Beach Boulevard, which will construct a sixstory residential development located on a 0.38-acre site containing 75 residential units (the "Project"), located in the Downtown Plan (PD-30) for consistency with the impacts identified in the PEIR and the Addendum.

Assumptions included in the Downtown Plan PEIR for the Project Site

The Project is located in the 150-foot height area of the Downtown Plan (PD-30). This height area allows for a project floor area ratio of 5.0 per PD-30.

Figures

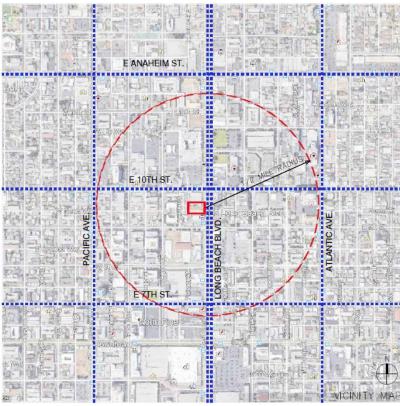


Figure 1. Vicinity Map.

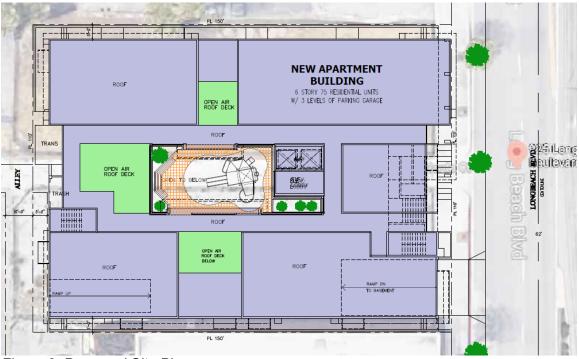


Figure 2. Proposed Site Plan.



Figure 3. Proposed Ground Floor Plan.







North Elevation



West Elevation



South Elevation

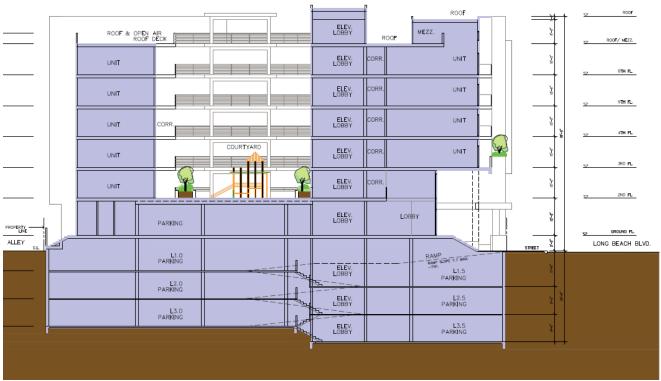




Figure 4. Proposed Building Elevations

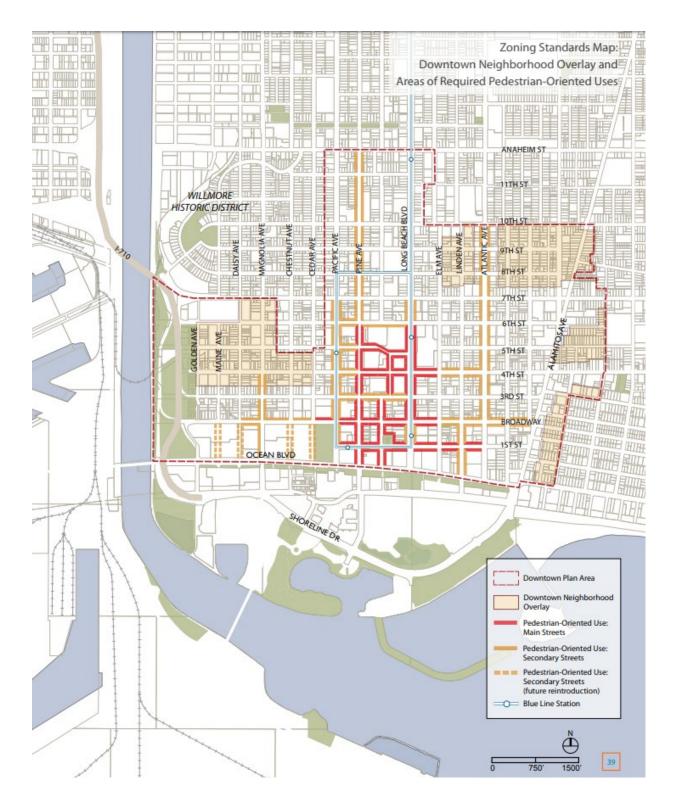


Figure 5. Downtown Plan Land Use Map.

DETERMINATION

On the basis of this compliance checklist:

- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIAVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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Gina Casillas Planner IV <u>5/19/2022</u> Date

FORMAT AND EVALUATION OF IMPACTS

Format of this Environmental Compliance Checklist

The Downtown Plan PEIR analyzed potential environmental impacts of the implementation of the Downtown Plan by utilizing the Environmental Checklist Form included in Appendix G of the CEQA Guidelines. The City determined that an EIR would be required for the Downtown Plan Project, and issued a Notice of Preparation (NOP) and Initial Study in June 2009 (Refer to Appendix A of the Downtown Plan Draft PEIR). The NOP process was used to help determine the scope of the environmental issues to be addressed in the Draft PEIR.

Based on this process and the Initial Study for the Downtown Plan, certain environmental categories were identified as having the potential to result in significant impacts. Issues considered Potentially Significant were addressed in the Downtown Plan Draft PEIR. Issues identified as Less Than Significant or No Impact were not addressed beyond the discussion contained in the Initial Study.

An Addendum to the Downtown Plan PEIR was adopted in 2022 (EIRA06-20). The Addendum to the Program EIR established the Downtown Plan Land Use Equivalency Program. The Equivalency Program allows for the reallocation of permitted land uses (office, commercial, hotel, and residential uses) within the Downtown Plan on a per project basis so long as the limitations of the Equivalency Program are satisfied and do not exceed the analyzed upper levels of environmental impacts that are identified in the Certified PEIR or exceed average maximum Floor Area Ratios (FARs) contemplated by the plan, including FAR incentives. The proposed project falls within the envelope of the PD-30 development standards ad discussed above in detail. Under the Equivalency Program, increases in residential land uses can be permitted when corresponding decreases in the amount of other permitted non-residential land uses are made. In accordance with the Equivalency Program, a reduction of 23,610 square feet of office floor area has been accounted for to offset the additional 75 residential units proposed as part of this project .(Appendix C – Downtown Plan Equivalency Calculator).

The analysis in this Environmental Compliance Checklist will include all environmental topics analyzed in the PEIR prepared for the Downtown Plan and the Addendum to the Program EIR. For each impact identified in this Environmental Compliance Checklist, a summary of the analysis in the Downtown Plan PEIR, the Addendum to the Program EIR and statement of the level of significance of the impact are provided. Included in the analysis is a determination if the mitigation measures identified in the Downtown Plan PEIR and Addendum to the Program EIR are applicable to the Project, and whether there are any additional impacts not previously identified in the Downtown Plan PEIR and Addendum to the Program EIR, which would therefore require the implementation of new mitigation measures. Components of certain mitigation measures identified in the Downtown Plan PEIR and Addendum to the Program EIR, are not applicable to this project, and therefore have been shown as stricken.

The Environmental Compliance Checklist applies the following determination of impacts:

- Potentially Significant Impact Not Identified in Downtown Plan PEIR
- No Impact/No Change to Downtown Plan PEIR

Evaluation of Environmental Impacts

CEQA requires a Lead Agency to consider the information contained in the EIR prior to taking any discretionary action on the proposed project. This document has been prepared in accordance with the California Environmental Quality Act. According to Section 15168(c)(2) of the State CEQA Guidelines, a Program EIR can be used in compliance with CEQA to address the effects of a subsequent activity, so long as the activity of the project is within the scope of the Program EIR, and no new effects are found, and no new mitigation measures are required. As supported by the analysis presented in this document, the Project would not result in new or substantially more severe significant environmental impacts than were analyzed in the Downtown Plan PEIR.

In addition, CEQA Guidelines Section 15183.3 allows streamlining for certain qualified infill projects by limiting the topics subject to review at the project level where the effects of infill development have been addressed in a planning level decision or by uniformly applicable development policies. An infill project is eligible if: 1) It is located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter; 2) It satisfies the performance standards in Appendix M of the State CEQA Guidelines; and 3) It is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy.

This document has been prepared in accordance with California Environmental Quality Act. According to Section 15162 of the State CEQA Guidelines, when a Program EIR has been certified for a project, no new subsequent EIR needs to be prepared as long as the activity of the project is within the scope of the program EIR, and no new effects are found, and no new mitigation measures are required. As supported by the analysis presented in this document, the Project would not result in new or substantially more severe significant environmental impacts than was analyzed in the Downtown Plan PEIR.

This environmental compliance review is intended to serve as an informational document to be considered by the City and its decision-making bodies during deliberations and actions on the proposed project.

General Guidelines for Responses

- 1) A brief explanation is required for all answers except "No Impact" answers that are supported adequately by the information sources a lead agency cites in the parenthesis following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may

be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

- 4) "Negative Declaration; Less Than Significant With Mitigation Incorporation" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration (per Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effect were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less that Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Supporting information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) The explanation of each issue should identify:
 - a) The significance criteria or threshold. If any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

Im	pact Area: Aesthetics	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
	Would the Project:			
a)	Have a substantial adverse effect on a scenic vista?	Less Than Significant		•
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant		•
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	Potentially Significant	-	•
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant With Mitigation		•

a) Would the project have a substantial adverse effect on a scenic vista?

The Downtown Plan PEIR found that there are no designated scenic vistas located within or adjacent to the Project site. Because Project implementation would be subject to the PD-30 zoning regulations for setbacks, height requirements and building design, development within the Downtown Plan Area would have a less than significant impact to scenic vistas. Therefore, no impact related to scenic vistas would occur and further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Downtown Plan PEIR found that the closest State scenic highway is Pacific Coast Highway. The project site is located 0.9 miles south of Pacific Coast Highway and not otherwise visible from Pacific Coast Highway. Therefore, no impact related to scenic resources would occur and further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

The Downtown Plan PEIR found that construction of high-rise structures would cast shadows onto adjacent properties. Mitigation Measure AES-3 was included to apply to project-level development review:

Mitigation Measure AES-3 – Shadow Impacts - Prior to the issuance of building permits for any structure exceeding 75 feet in height or any structure that is adjacent to a light sensitive use and exceeds 45 feet in height, the applicant shall submit a shading study that includes calculations of the extent of shadowing arches for winter and equinox conditions. If feasible, projects shall be designed to avoid shading of light sensitive uses in excess of the significance thresholds outlined in this EIR. Shadow impacts are considered significant if shadow-sensitive uses would be shaded by proposed structures for more than 3 hours between late October and early April (including Winter Solstice), or for more than 4 hours between early April and late October (including Summer Solstice). If avoidance of shadows exceeding significance thresholds is determined to be infeasible, the shadow impact will be disclosed as part of a project environmental impact report (EIR)."

The proposed six-story tall, residential project has a building height of 70-feet 6-inches did not warrant a shade impact study. However, a shade impact study was submitted for the project. The shading study illustrated that shade impacts were shown to directly impact the properties to the northwest to the northeast, specifically the surface parking areas and the commercial uses to the north west. However, the project is not expected to cast shadows over "light-sensitive" uses, as defined in the Final PEIR. During the Downtown Plan PEIR's public comment period, the Long Beach Unified School District clarified that school uses were considered light-sensitive uses". The Project site is located approximately 0.3 miles (or two blocks) from Oropeza Middle School and 0.2 miles (or one block) from Boyd High School, and 0.4 miles (or two blocks) from a pre-school Montessori On Elm, the nearest schools or light-sensitive uses. The six-story development will be incapable of casting a shadow on these or any other schools, therefore no further study of this issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Downtown Plan PEIR determined that extensive use of glass and reflective materials on building façades for new development might cause light and glare impacts on nearby properties, but that inclusion of Mitigation Measures AES-2(a) through AES-2(d) would result in impacts that were less than significant.

Mitigation Measure AES-2(a) Lighting Plans and Specifications. Prior to the issuance of building permits for new large development projects, the applicant shall submit lighting plans and specifications for all exterior lighting fixtures and light standards to the Development Services Department for review and approval. The plans shall include a photometric design study demonstrating that all outdoor light fixtures to be installed are

designed or located in a manner as to contain the direct rays from the lights onsite and to minimize spillover of light onto surrounding properties or roadways. All exterior lighting shall be shielded and directed away from adjacent residential uses. Rooftop decks and other similar amenities are encouraged in the Plan. Lighting for such features shall be designed so that light is directed so as to provide adequate security and minimal spill-over or nuisance lighting.

A lighting plan and photometric study detailing all exterior lighting fixtures and light standards will be required in the Project's building permit submittal as a condition of approval.

Mitigation Measure AES-2(b) Building Material Specifications. Prior to the issuance of any building permits for development projects, applicants shall submit plans and specifications for all building materials to the Development Services Department for review and approval. The Plan provides measures to ensure that the highest quality materials are used for new development projects. This is an important consideration, since high quality materials last longer. Quality development provides an impression of permanence and can encourage additional private investment in Downtown Long Beach.

A Project materials board was filed with the Site Plan Review submittal. Proposed building materials were found to be of high quality and durability.

Mitigation Measure AES-2(c) Light Fixture Shielding. Prior to the issuance of building permits for development projects within the Downtown Plan Project area, applicants shall demonstrate to the Development Services Department that all-night lighting installed on private property within the project site shall be shielded, directed away from residential and lighting, or aviation warning lights, shall be in accordance with Airport/Federal Aviation Administration (FAA) requirements. Additionally, all lighting shall comply with all applicable Airport Land Use Plan (ALUP) Safety Policies and FAA regulations.

The project proposes surface and underground parking with no aspect of open to sky vehicular parking. The building is built to the property boundary lines. All exterior lighting will be mounted to the building wall and will illuminate the walkways. The project is entirely a residential use and all illumination will be used solely for safety and security. The Project's lighting plan and photometric study will include a night lighting analysis, as per the Project's conditions of approval.

Mitigation Measure AES-2(d) Window Tinting. Prior to the issuance of any building permits, the applicant shall submit plans and specifications showing that building windows are manufactured or tinted to minimize glare from interior lighting and to minimize heat gain in accordance with energy conservation measures.

Final window selections will be reviewed during the building permit process for consistency with glare-reduction and energy conservation guidelines. Final window selections shall require Director of Development Services approval, as per the Project's conditions of approval.

No impact related to lighting and glare beyond that identified in the Downtown Plan PEIR would occur and further study of the issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Agricultural Resources			
Would the Project: a) 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?	No Impact		•
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact		•
c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	No Impact		•

The Downtown Plan PEIR found no impact to farmland, agricultural land or uses, or with the agricultural zoning of Williamson Act contracts. The project site is located within an urbanized area with no agricultural uses therefore no further study of these issues is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Air Quality			
Would the Project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant		•
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Potentially Significant		•
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Potentially Significant		•
d) Expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant		•
e) Create objectionable odors affecting a substantial number of people?	Potentially Significant		•

- 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 contracture substantially to an existing or projected air quality violation?
- c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The Downtown Plan PEIR found that plan implementation would enable development that could generate a substantial increase in traffic and worsen operations at existing intersections within and near the project area. Air pollutant emissions from additional traffic and longer idling times at project area intersections could conflict with or obstruct

implementation of air quality plans. Construction activity could also result in temporary air quality and odor impacts due to fugitive dust and exhaust emissions from diesel-powered construction equipment. In accordance with the Equivalency Program, a reduction of 23,610 square feet of office floor area has been accounted for to offset the additional 75 residential units proposed as part of this project therefore the impact remains less than significant with the previously certified mitigation measures. The Land Use Equivalency Calculator has been prepared which provides a running calculation of land use exchanges for the Downtown Plan (Appendix C). Mitigation Measures AQ-1(a), AQ-1(b), AQ-1(c), and AQ-2 were included to apply to project-level development review:

Mitigation Measure AQ-1(a) – Enhanced Exhaust Control Practices – To reduce shortterm construction emissions, the City shall require that all construction projects that would require use of heavy-duty (50 horsepower [hp] or more), off-road vehicles to be used during construction shall require their contractors to implement the Enhanced Exhaust Control Practices (listed below) or whatever mitigation ensures are recommended by SCAQMD at the time individual portions of the site undergo construction, including those specified in the mitigation recommendations in the SCAQMD CEQA Handbook or SCAQMD's Mitigation Measures and Control Efficiencies recommendations located at the following url: http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html.

Enhanced Exhaust Control Practices

- The project applicant shall provide a plan for approval by the City, demonstrating that the heavy-duty (50 hp or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_X reduction, 20 percent VOC reduction, and 45 percent particulate reduction compared to the 2011 ARB fleet average, as contained in the URBEMIS output sheets in Appendix C. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. SCAQMD, which is the resource agency for air quality in the Project area, can be used in an advisory role to demonstrate fleet-wide reductions. SCAQMD's mitigation measures for off-road engines can be used to identify an equipment fleet that achieves this reduction (SCAQMD 2007b).
- The project applicant shall submit to the City a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 hp, that would be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the hp rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of heavy-duty off-road equipment, the project representative shall provide the City with the anticipated construction timeline including start date and name and phone number of the project manager and onsite foreman. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed and the dates of each survey. SCAQMD staff and/or other officials may conduct periodic site inspections to determine compliance.

If, at the time of construction, SCAQMD, CARB, or the EPA has adopted a regulation or new guidance applicable to construction emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination must be supported by a project-level analysis and be approved by the City.

Mitigation Measure AQ-1(b) - Prior to construction of each development phase of onsite land uses that are proposed within 1,500 feet of sensitive receptors, each project applicant shall perform a project-level CEQA analysis that includes a detailed LST analysis of construction-generated emissions of NO₂, CO, PM₁₀, and PM_{2.5} to assess the impact at nearby sensitive receptors. The LST analysis shall be performed in accordance with applicable SCAQMD guidance that is in place at the time the analysis is performed. The project-level analysis, to be completed prior to the issuance of building permits, shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur.

Mitigation Measure AQ-1(c) - Prior to issuance of a grading permit, the project plans shall include the following provisions to reduce construction-related air quality impacts:

- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow;
- Provide dedicated turn lanes for movement of construction trucks and equipment onand off-site;
- Reroute construction trucks away from congested streets or sensitive receptor areas;
- Appoint a construction relations officer to act as a community liaison concerning onsite construction activity including resolution of issues related to PM10 generation;
- Improve traffic flow by signal synchronization, and ensure that all vehicles and equipment will be properly tuned and maintained according to manufacturers' specifications;
- Use coatings and solvents with a VOC content lower than that required under AQMD Rule 1113;
- Construct or build with materials that do not require painting;
- Require the use of pre-painted construction materials if available;
- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export);
 - During project construction, all internal combustion engines/construction equipment operating on the project site shall meet EPA-Certified Tier 2 emissions standards, or higher according to the following:
 - Project Start, to December 31, 2011: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 2 offroad emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - January 1, 2012, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In addition, all construction equipment shall be outfitted with BACT devices

certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

- Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
- A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

Encourage construction contractors to apply for AQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for AQMD "SOON" funds. The "SOON" program provides funds to accelerate cleanup of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: http://www.aqmd.gov/tao/Implementation/SOONProgram.htm"

Mitigation Measure AQ-2 - Mitigation to reduce mobile source emissions due to implementation of the Plan addresses reducing the number of motor vehicle trips and reducing the emissions of individual vehicles under the control of the project applicant(s). The following measures shall be implemented by project applicant(s) unless it can be demonstrated to the City that the measures would not be feasible.

- The project applicant(s) for all project phases shall require the commercial development operator(s) to operate, maintain, and promote a ride-share program for employees of the various businesses.
- The project applicant(s) for all project phases shall include one or more secure bicycle parking areas within the property and encourage bicycle riding for both employees and customers.
- The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include such measures as photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day.
- The City shall ensure that all new commercial developments include or have access to convenient shower and locker facilities for employees to encourage bicycle, walking, and jogging as options for commuting.
- The project applicant(s) for all project phases shall require that all equipment operated by the businesses within the facility be electric or use non-diesel engines.
- All truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two-dock door. Diesel trucks shall be prohibited from idling more than 5 minutes and must be required to connect to the 110/208-volt power to run any auxiliary equipment. Signs outlining the idling restrictions shall be provided.

If, at the time of construction, SCAQMD, CARB, or EPA has adopted a regulation or new guidance applicable to mobile- and area-source emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination shall be supported by a project-level analysis that is approved by the City.

The developer will be required to comply with LST analysis requirements and the listed construction-related air quality measures, per the Project's conditions of approval. During the Project's construction phase, Planning Bureau will coordinate with Building Bureau to verify compliance with enhanced exhaust control practices.

The developer has designed the building envelope in coordination with the mechanical and lighting systems to produce a minimum 20% increased efficiency over current Title 24 standards. During the Project's plan check phase, Building Bureau will be responsible to verify compliance with this energy efficiency standard.

The Project includes a small commercial component and a separate (garage) parking/loading area on the ground floor. Further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

d) Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The Downtown Plan PEIR and the Downtown Plan PEIR Addendum found that implementation of the Plan would result in a net increase in unmitigated long-term regional emissions of criteria air pollutants and ozone precursors that exceed SCAQMD's applicable thresholds, and would result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS. Mitigation Measure AQ-4(a), AQ-4(b), and AQ-5 were included to reduce exposure of sensitive receptors to operational emissions of TACs:

Mitigation Measure AQ-4(a) – The following measures shall be implemented to reduce exposure of sensitive receptors to operational emissions of TACs:

- Proposed commercial land uses that have the potential to emit TACs or host TACgenerating activity (e.g., loading docks) shall be located away from existing and proposed onsite sensitive receptors such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0.
- Where necessary to reduce exposure of sensitive receptors to an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0, proposed commercial and industrial land uses that would host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off.
- Signs shall be posted in at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by the California Office of Administrative Law in January 2005.

- Proposed facilities that would require the long-term use of diesel equipment and heavyduty trucks shall develop a plan to reduce emissions, which may include such measures as scheduling activities when the residential uses are the least occupied, requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling.
- When determining the exact type of facility that would occupy the proposed commercial space, the City shall take into consideration its toxic-producing potential.
- Commercial land uses that accommodate more than 100 trucks per day, or 40 trucks equipped with TRUs, within 1,000 feet of sensitive receptors (e.g., residences or schools) shall perform a site-specific project-level HRA in accordance with SCAQMD guidance for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles (SCAQMD 2003b). If the incremental increase in cancer risk determined by the HRA exceeds the threshold of significance recommended by SCAQMD or ARB at the time (if any), then all feasible mitigation measures shall be employed to minimize the impact.

Mitigation Measure AQ-4(b) - The City shall verify that the following measures are implemented by new developments to reduce exposure of sensitive receptors to emissions of TACs from POLB and stationary sources in the vicinity of the Downtown Plan Project area:

- All proposed residences in the Downtown Plan Project area shall be equipped with filter systems with high Minimum Efficiency Reporting Value (MERV) for removal of small particles (such as 0.3 micron) at all air intake points to the home. All proposed residences shall be constructed with mechanical ventilation systems that would allow occupants to keep windows and doors closed and allow for the introduction of fresh outside air without the requirement of open windows.
- The heating, ventilation, and air conditioning (HVAC) systems shall be used to maintain all residential units under positive pressure at all times.
- An ongoing education and maintenance plan about the filtration systems associated with HVAC shall be developed and implemented for residences.
- To the extent feasible, sensitive receptors shall be located as far away from the POLB as possible.

Mitigation Measure AQ-5 - The following additional guidelines, which are recommended in ARB's *Land Use Handbook: A Community Health Perspective* (ARB 2005) shall be implemented. The guidelines are considered to be advisory and not regulatory:

Sensitive receptors, such as residential units and daycare centers, shall not be located in the same building as dry-cleaning operations that use perchloroethylene. Dry-cleaning operations that use perchloroethylene shall not be located within 300 feet of any sensitive receptor. A setback of 500 feet shall be provided for operations with two or more machines.

The Project consists of 75 new residential units. During the Project's plan check phase, Building Bureau will verify compliance with the listed HVAC requirement during the Project's plan check phase to verify compliance. Further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

e) Would the project create objectionable odors affecting a substantial number of people?

The Downtown Plan PEIR found that truck deliveries to commercial uses could intermittently and temporarily emit diesel odors, and that commercial uses could provide development of convenience uses that may include sources of odorous emissions that would be perceived as offensive to some individuals. Mitigation Measure AQ-6 was included to control exposure of sensitive receptors to operational odorous emissions.

Mitigation Measure AQ-6 – The City shall ensure that all project applicant(s) implement the following measures:

- The City shall consider the odor-producing potential of land uses when reviewing future development proposals and when the exact type of facility that would occupy areas zoned for commercial, industrial, or mixed-use land uses is determined. Facilities that have the potential to emit objectionable odors shall be located as far away as feasible from existing and proposed sensitive receptors.
- Before the approval of building permits, odor-control devices shall be identified to
 mitigate the exposure of receptors to objectionable odors if a potential odor-producing
 source is to occupy an area zoned for commercial land use. The identified odor-control
 devices shall be installed before the issuance of certificates of occupancy for the
 potentially odor-producing use. The odor-producing potential of a source and control
 devices shall be determined in coordination with SCAQMD and based on the number
 of complaints associated with existing sources of the same nature.
- Truck loading docks and delivery areas shall be located as far away as feasible from existing and proposed sensitive receptors.
- Signs shall be posted at all loading docks and truck loading areas to indicate that dieselpowered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by California's Office of Administrative Law in January 2005. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.)
- Proposed commercial and industrial land uses that have the potential to host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.)

In addition, mitigation measures identified under AQ-4(b) to reduce indoor exposure to TACs would also result in a reduction in the intensity of offensive odors from the surrounding odor sources.

The Downtown Plan PEIR found that with proper maintenance and design residential land uses are typically not a major source of odors. The project, a residential development, is not anticipated to have a low odor-producing potential. Further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
ces			
abitat tified al olans, Game	No Impact		•
e effect nsitive al or s or by and rvice?	No Impact		•
e effect in d to, hrough	No Impact		•
the or with atory e of	No Impact		•
ies or ation	No Impact		•
s of an Plan, or	No Impact	•	•

Impact Area: Biological Resources

-- Would the Project:

a) Have a substantial adverse impact, 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) 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) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, or

Downtown	Potentially	
Plan	Significant	
PEIR	Impact Not	
Determination	Identified	No Impact/
	in	No Change to
	Downtown	Downtown
	Plan PEIR	Plan PEIR and
	and the	the
	Downtown	Downtown
	Plan PEIR	Plan PEIR
	Addendum	Addendum

Impact Area: Biological Resources

-- Would the Project:

other approved local, regional, or state habitat conservation plan?

The Downtown Plan PEIR found the plan area to contain no sensitive habitats or sensitive animal species. In addition, the project does not propose to alter existing parks or open space where native or migratory bird species could be present. No conflicts with local biological resource policies, ordinances, or habitat conservation programs would be relevant to the proposed mixed-use project. Further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Cultural Resources			
Would the Project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	Potentially Significant		•
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Potentially Significant		•

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Cultural Resources			
Would the Project:			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant		•
d) Disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant		

- 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?

The project site is currently vacant, and no demolition is required. No historical structures and or districts have been designated within the project area. Designated historic resources and others not currently designated by the City as historic landmarks could be affected by demolition or remodeling. Mitigation Measures CR-1(a) and CR-1(b) were included to encourage the local landmark designation of 21 identified downtown properties, encourage the adaptive reuse of historic buildings, and to require a Historic Survey Report be performed for select landmark or potential landmark properties, and those 45 years of age or older.

Mitigation Measure CR-1(a) - The City shall encourage the designation as local landmarks of 21 properties identified in Table 4.3-3 with the "Desired Outcome" of "Pursue Local Designation." The City will encourage the on-going maintenance and appropriate adaptive reuse of all properties in Table 4.3-2 (existing landmarks), and Table 4.3-3 as historic resources.

The development site consists of two lots which are vacant. Evaluation of this site determined that the site did not meet the criteria for preservation, therefore no further study of this issue is warranted.

Mitigation Measure CR-1(b) - The following procedures shall be followed prior to issuance of a demolition permit or a building permit for alteration of any property listed in the Historic Survey Report (ICF Jones & Stokes 2009) by Status Code 3S, 3CS, 5S1, or 5S3; designated as a Historic Landmark (City of Long Beach 2010a); listed in Tables 4.3-2 and 4.3-3 of this PEIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z):

Notification of Historic Preservation Staff

Historic Preservation staff in the City Development Services Department shall be notified upon receipt of any demolition permit or building permit for alteration of any property listed in the Historic Survey Report or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z)

Determination of Need for Historic Property Survey

In consultation with Historic Preservation staff, the City Development Services Department shall determine whether a formal historic property survey is needed and may require that the owner or applicant provide photographs of the property, including each building façade, with details of windows, siding, eaves, and streetscape views, and copies of the County Assessor and City building records, in order to make this determination.

Determination of Eligibility

If City Development Services Department staff determines that the property may be eligible for designation, the property shall be referred to the Cultural Heritage Commission, whose determination of eligibility shall be considered as part of the environmental determination for the project in accordance with CEQA.

Documentation Program

If the Cultural Heritage Commission determines that the property is eligible for historic listing, the City Development Services Department shall, in lieu of preservation, require that prior to demolition or alteration a Documentation Program be prepared to the satisfaction of the City Development Services Department, which shall include the following:

A. Photo Documentation

Documentation shall include professional quality photographs of the structure prior to demolition with 35 mm black and white photographs, 4" x 6" standard format, taken of all four elevations and with close-ups of select architectural elements, such as but not limited to, roof/wall junctions, window treatments, decorative hardware, any other elements of the building's exterior or interior, or other property features identified by the City Development Services Department to be documented. Photographs shall be of archival quality and easily reproducible.

B. Required Drawings

Measured drawings of the building's exterior elevations depicting existing conditions or other relevant features shall be produced from recorded, accurate measurements. If portions of the building are not accessible for measurement or cannot be reproduced from historic sources, they should not be drawn, but clearly labeled as not accessible. Drawings shall be produced in ink on translucent material or archivally stable material (blueline drawings are acceptable). Standard drawing sizes are 19" x 24" or 24" x 36" and standard scale is ¼" = 1 foot.

-C. Archival Storage

Xerox copies or CD of the photographs and one set of the measured drawings shall be submitted for archival storage with the City Development Services Department; and one set of original photographs, negatives, and measured drawings shall be submitted for archival storage with such other historical repository identified by the City Development Services Department.

The site of the proposed residential development project consists of two separate lots that are unimproved. No other sites are listed in the referenced Historic Survey Report therefore, no further study of this issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Downtown Plan PEIR found that archeological and paleontological resources, geologic features, and human remains in the project area, a fully urbanized setting subject to extensive disturbance from the construction of existing buildings and existing underground infrastructure, have likely been previously disturbed. Future construction of new land uses in the downtown area could result in additional surface and subsurface disturbance that may result in damage to previously unknown resources or remains. Mitigation Measures CR-2(a), CR-2(b), and CR-2(c) have been included to reduce potential impacts to archaeological resources.

Mitigation Measure CR-2(a) - A qualified project archaeologist or archaeological monitor approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of cultural resources. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities to allow the find to be evaluated. If the archaeological monitor determines the find to be significant, the project applicant and the City shall be notified and an appropriate treatment plan for the resources shall be prepared. The treatment plan shall include notification of a Native American representative and shall consider whether the resource should be preserved in place or removed to an appropriate repository as identified by the City.

Mitigation Measure CR-2(b) - The project archaeologist shall prepare a final report of the find for review and approval by the City and shall include a description of the resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historic Resources and the National Register of Historic Places. The report shall be filed with the California Historic Resources Information System South Central Coastal Information Center. If the resources are found to be significant, a separate report including the results of the recovery and evaluation process shall be prepared.

Mitigation Measure CR-2(c) - If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the corner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains. Preservation in place and project design alternatives shall be considered as possible courses of action by the project applicant, the City, and the Most Likely Descendent.

For the proposed residential project a qualified monitor will be retained, as required and conditioned. During the Project's plan check phase, Building Bureau will be responsible to verify compliance with ground disturbance monitoring to reduce potential impacts on unearthed resources. In the event significant resources are unearthed, a qualifying report will be produced and provided to the CHRISSCCIC. In the event human remains are encountered during project activities, the LA County Coroner (and NAHC, if necessary) will be notified. No further study of the issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

In the event paleontological resources or human remains are encountered during excavation and grading activities, Mitigation Measures CR-3(a) and CR-3(b) have been included to reduce potential impacts to paleontological resources (including fossils) and human remains that may exist at the site.

Mitigation Measure CR-3(a) - A qualified paleontologist approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of paleontological resources. Monitoring shall consist of visually inspecting fresh exposures of rock for fossil remains and, where appropriate, collection of sediment samples for further analysis. The frequency of inspections shall be based on the rate of excavation and grading activities, the materials being excavated, the depth of excavation, and, if found, the abundance and type of fossils encountered.

Mitigation Measure – CR-3(b) - If a potential fossil is found, the paleontologist shall be allowed to temporarily divert or redirect excavation and grading in the area of the exposed fossil to evaluate and, if necessary, salvage the find. All fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County and shall be accompanied by a report on the fossils collected and their significance, and notes, maps, and photographs of the salvage effort.

For the proposed residential project a qualified paleontologist will be retained, as required. Fossils encountered and recovered shall be catalogued and donated, as specified. No further study of the issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Geology/Soils			
Would the Project:			
 a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 			
 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? 	Potentially Significant		•
 ii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking? 	Potentially Significant		•
 iii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction? 	Potentially Significant		•
 iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides? 	No Impact		•
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant		•

		Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Geolo	gy/Soils			
Would the Pro	oject:			
unstable as a resu potentially result in landslide, lateral s	r that would become Ilt of the project, and n on- or off-site	Potentially Significant		•
d) Be located on exp defined in Table 1 Building Code (19 substantial risks to	8-1-B of the Uniform 94), creating	Potentially Significant		-
e) Have soils incapat supporting the use alternative waste systems where se available for the d water?	e of septic tanks or water disposal wers are not	No Impact		•

i) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The Downtown Plan PEIR found that faults associated with the Newport-Inglewood Fault Zone, which is mapped as an Alquist-Priolo Earthquake Fault Zone, is located within approximately 2 miles of the project area. Several other fault zones located within approximately 5 to 30 miles have the potential to impact the project area. Mitigation Measures Geo-1 and Geo-2 were included to apply to project-level development review:

Mitigation Measure Geo-1 - New construction or structural remodeling of buildings proposed with the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.

Mitigation Measure Geo-2 - Prior to issuance of a building permit for new structures, the Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.

The Project will comply with all applicable provisions of the most recent UBC adopted by the City of Long Beach. During the Project's plan check phase Building Bureau will be responsible to verify compliance with all applicable ground motion standards and determine the need for a geotechnical investigation and geo-engineering study, as conditioned. Any investigation/study would comply with the listed specifications.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

ii) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The Downtown Plan PEIR found that faults associated with the Newport-Inglewood Fault Zone, which is mapped as an Alquist-Priolo Earthquake Fault Zone, is located within approximately 2 miles of the project area. Several other fault zones located within approximately 5 to 30 miles have the potential to impact the project area. Mitigation Measures Geo-1 and Geo-2 were included to apply to project-level development review:

Mitigation Measure Geo-1 - New construction or structural remodeling of buildings proposed with the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.

Mitigation Measure Geo-2 - Prior to issuance of a building permit for new structures, the Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC

and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.

The Project will comply with all applicable provisions of the most recent UBC adopted by the City of Long Beach. During the Project's plan check phase Building Bureau will verify compliance with all applicable ground motion standards and determine the need for a geotechnical investigation and geo-engineering study, as conditioned. Any investigation/study would comply with the listed specifications.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

iii) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The Downtown Plan PEIR found that faults associated with the Newport-Inglewood Fault Zone, which is mapped as an Alquist-Priolo Earthquake Fault Zone, is located within approximately 2 miles of the project area. Several other fault zones located within approximately 5 to 30 miles have the potential to impact the project area. Mitigation Measures Geo-1 and Geo-2 were included to apply to project-level development review:

Mitigation Measure Geo-1 - New construction or structural remodeling of buildings proposed with the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.

Mitigation Measure Geo-2 - Prior to issuance of a building permit for new structures, the Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.

The Project will comply with all applicable provisions of the most recent UBC adopted by the City of Long Beach. During the Project's plan check phase Building Bureau will be responsible to verify compliance with all applicable ground motion standards and determine the need for a geotechnical investigation and geo-engineering study, as conditioned. Any investigation/study would comply with the listed specifications.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

iv) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides??

The Downtown Plan PEIR found that the relatively level site conditions and extent of developed lands in the project area would avoid potential impacts associated with landslides, soil erosion, or loss of topsoil and, therefore, further analysis of these issues in an EIR is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

b) Would the project result in substantial soil erosion or the loss of topsoil?

The Downtown Plan PEIR found that the relatively level site conditions and extent of developed lands in the project area would avoid potential impacts associated with landslides, soil erosion, or loss of topsoil and, therefore, further analysis of these issues is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

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?

The Downtown Plan PEIR determined that the City is relatively level without significant slopes and is located on a broad, slightly elevated coastal terrace flanked by flood plains on the east and west. Faults associated with the Newport-Inglewood Fault Zone, which is mapped as an Alquist-Priolo Earthquake Fault Zone, is located within approximately 2 miles of the project area. The 1920 Inglewood earthquake (estimated magnitude 4.9) and the 1933 Long Beach earthquake (estimated magnitude 6.3) are thought to be the result of movement of this fault. Several other fault zones located within approximately 5 to 30 miles have the potential to impact the project area. The project area is located at an elevation of approximately 30 feet above mean sea level with essentially flat topography. Groundwater associated with sea level has been encountered at between 29 and 35 feet below ground level (MACTEC Engineering and Consulting Inc., for Proposed Press-Telegram Mixed Development Project, July 7, 2006). These conditions create the potential for substantial adverse effects associated with seismic activity. Mitigation Measures Geo-1, Geo-2, and Geo-3 were included to apply to project-level development review:

Mitigation Measure Geo-1 - New construction or structural remodeling of buildings proposed with the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.

Mitigation Measure Geo-2 - Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geoengineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.

Mitigation Measure Geo-3 - Prior to issuance of a building permit for new structures, the Department of Development Services shall determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. For areas where the expansion index is found to be greater than 20, grading and foundation designs shall be engineered to withstand the existing conditions. The expansion testing may be omitted if the grading and foundations are engineered to withstand the presence of highly expansive soils.

The Project will comply with all applicable provisions of the most recent UBC adopted by the City of Long Beach. During the Project's plan check phase Building Bureau will verify compliance with all applicable ground motion standards, determine the need for a geotechnical investigation and geo-engineering study, and determine the need for soil samples, as conditioned. Any investigation/study will comply with the listed specifications. In the event the soil samples indicate the expansion index exceeds 20, Building Bureau will verify grading and foundation designs are engineered to withstand the existing conditions.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

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?

The Downtown Plan PEIR determined that the City is relatively level without significant slopes and is located on a broad, slightly elevated coastal terrace flanked by flood plains on the east and west. Faults associated with the Newport-Inglewood Fault Zone, which is mapped as an Alquist-Priolo Earthquake Fault Zone, is located within approximately 2 miles of the project area. The 1920 Inglewood earthquake (estimated magnitude 4.9) and the 1933 Long Beach earthquake (estimated magnitude 6.3) are thought to be the result of movement of this fault. Several other fault zones located within approximately 5 to 30 miles have the potential to impact the project area. The project area is located at an elevation of approximately 30 feet above mean sea level with essentially flat topography. Groundwater associated with sea level has been encountered at between 29 and 35 feet below ground level (MACTEC Engineering and Consulting Inc., for Proposed Press-

Telegram Mixed Development Project, July 7, 2006). These conditions create the potential for substantial adverse effects associated with seismic activity. Mitigation Measure Geo-3 was included to apply to project-level development review:

Mitigation Measure Geo-3 - Prior to issuance of a building permit for new structures, the Department of Development Services shall determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. For areas where the expansion index is found to be greater than 20, grading and foundation designs shall be engineered to withstand the existing conditions. The expansion testing may be omitted if the grading and foundations are engineered to withstand the presence of highly expansive soils.

During the Project's plan check phase Building Bureau will determine the need for soil samples. In the event the samples indicate the expansion index exceeds 20, Building Bureau will verify grading and foundation designs are engineered to withstand the existing conditions, as conditioned.

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?

The Downtown Plan PEIR found that all development in the project area would be served by the City's sewage disposal system and, therefore, further analysis of this issue in an EIR is not warranted.

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Greenhouse Gas Emissions			
Would the Project:			
 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? 	Potentially Significant		•
 b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases? 	Potentially Significant		•

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

Construction Impacts

The Downtown Plan PEIR found that construction activities associated with implementation of the proposed Downtown Plan would result in increased generation of GHG emissions. Although the construction-related emissions would be temporary, the PEIR assumes that the GHG emissions associated with construction activities would result in a cumulatively considerable incremental contribution to this significant cumulative impact. In accordance with the Equivalency Program, a reduction of 23,610 square feet of office floor area has been accounted for to offset the additional 75 residential units proposed as part of this project therefore the impact remains less than significant with the previously certified mitigation measures. The Land Use Equivalency Calculator has been prepared which provides a running calculation of land use exchanges for the Downtown Plan (Appendix C). Implementation of Mitigation Measures GHG-1(a) and GHG 1(b) would reduce construction vehicle emissions to the degree feasible, but because of the uncertainty with respect to GHG reductions from regulations that have not yet been developed, and because the GHGs generated by construction of land uses envisioned under the Downtown Plan could be considerable, the incremental contribution of GHG emissions from Downtown Plan related construction would be cumulatively considerable and therefore significant and unavoidable.

Mitigation Measure GHG-1(a) - <u>Implement Mitigation Measure AQ-1</u>. Implementation of the mitigation measures described in Section 4.2, Air Quality, of this PEIR, which would

reduce construction emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The construction mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.

Mitigation Measure GHG-1(b) - Implement Additional Measures to Control Construction-<u>Generated GHG Emissions</u>. To further reduce construction-generated GHG emissions, the project applicant(s) of all public and private developments shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction, including those specified in the mitigation recommendations in the SCAQMD CEQA Handbook or SCAQMD's Mitigation Measures and Control Efficiencies recommendations located at the following url: http://www.aqmd.gov/cega/handbook/mitigation/MM intro.html.

Such measures may reduce GHG exhaust emissions from the use of onsite equipment, worker commute trips, and truck trips carrying materials and equipment to and from the project site, as well as GHG emissions embodied in the materials selected for construction (e.g., concrete). Other measures may pertain to the materials used in construction. Prior to the construction of each development phase, the project applicant(s) shall obtain the most current list of GHG-reduction measures that are recommended by the City and/or SCAQMD and stipulate that these measures be implemented during the appropriate construction phase. The project applicant(s) for any particular development phase may submit to the City a report that substantiates why specific measures are considered infeasible for construction of that particular development phase and/or at that point in time. The report, including the substantiation for not implementing particular GHG-reduction measures, shall be approved by the City.

The City's recommended measures for reducing construction-related GHG emissions at the time of writing this PEIR are listed below and the project applicant(s) shall, at a minimum, be required to implement the following:

- Improve fuel efficiency from construction equipment:
 - \circ reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort),
 - o perform equipment maintenance (inspections, detect failures early, corrections),
 - o train equipment operators in proper use of equipment,
 - $_{\odot}$ use the proper size of equipment for the job, and
 - o use equipment with new technologies (repowered engines, electric drive trains).
- Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power.
- Use an ARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment (emissions of NO_X from the use of low carbon fuel must be reviewed and increases mitigated). Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program (ARB 2010a).
- Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.

- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75 percent by weight).
- Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials).
- Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option.
- Produce concrete onsite if determined to be less emissive than transporting ready mix.
- Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from ARB's Heavy-Duty Vehicle GHG Measure (ARB 2010b) and EPA (EPA 2010).
- Develop a plan to efficiently use water for adequate dust control. This may consist of the use of non-potable water from a local source.

The proposed project involves construction and operation of a six-story residential building, proposing 75 residential units. Project construction is anticipated to take up to 24 months to complete and would involve generation of GHG emissions. The Downtown Plan PEIR determined that GHG construction impacts would be significant and unavoidable, but through incorporation of mitigation measures anticipated projects would fall within the scope of the Downtown Plan's PEIR analysis. With these mitigation measures incorporated, construction of the Project would not substantially increase the severity of GHG construction impacts beyond that identified in the Downtown Plan PEIR and no new impacts beyond those identified in the Downtown Plan PEIR would occur, further study of this issue is not warranted

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

Operational Impacts

The Downtown Plan PEIR found that implementation of the Downtown Plan over the long term would contribute considerably to cumulative GHG emissions. Implementation of Mitigation Measures GHG-2(a) and GHG-2(b) would require project-specific mitigation measures that are appropriate and feasible during each phase or increment of downtown development, and would respond to changes in the regulatory environment and to new GHG reduction technologies that would continue to be innovated over time. However, it is unknown at the time of the PEIR preparation whether the selected project-specific measures in combination with GHG reductions realized from the regulatory environment would result in the attainable of the applicable GHG reduction goal. The incremental contribution of GHG emissions from Downtown Plan operations would be cumulatively considerable and therefore significant and unavoidable.

Mitigation Measure GHG-2(a) - <u>Implement Mitigation Measure AQ-3</u>. Implementation of the mitigation measures described in Section 4.2, which would reduce operational emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The operational mitigation measures for exhaust emissions are relevant to the global climate change impact because

both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.

Mitigation Measure GHG-2(b) - Implement Additional Measures to Reduce Operational <u>GHG Emissions</u>. For each increment of new development within the Project area requiring a discretionary approval (e.g., tentative subdivision map, conditional use permit, improvement plan), measures that reduce GHG emissions to the extent feasible and to the extent appropriate with respect to the state's progress at the time toward meeting GHG emissions reductions required by the California Global Warming Solutions Act of 2006 (AB 32) shall be imposed, as follows:

- The project applicant shall incorporate feasible GHG reduction measures that, in combination with existing and future regulatory measures developed under AB 32, will reduce GHG emissions associated with the operation of future project development phases and supporting roadway and infrastructure improvements by an amount sufficient to achieve the goal of 6.6 CO₂e/SP/year, if it is feasible to do so. The feasibility of potential GHG reduction measures shall be evaluated by the City at the time each phase of development is proposed to allow for ongoing innovations in GHG reduction technologies and incentives created in the regulatory environment.
- For each increment of new development, the project applicant shall obtain a list of potentially feasible GHG reduction measures to be considered in the development design from the City. The City's list of potentially feasible GHG reduction measures shall reflect the current state of the regulatory environment, which will continuously evolve under the mandate of AB 32. The project applicant(s) shall then submit to the City a mitigation report that contains an analysis demonstrating which GHG reduction measures are feasible for the associated reduction in GHG emissions, and the resulting CO₂e/SP/year metric. The report shall also demonstrate why measures not selected are considered infeasible. The mitigation report must be reviewed and approved by the City for the project applicant(s) to receive the City's discretionary approval for the applicable increment of development. In determining what measures should appropriately be imposed by a local government under the circumstances, the following factors shall be considered:
 - The extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the Project site are projected to decrease over time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted in the future by ARB or other public agency pursuant to AB 32, or by EPA;
 - The extent to which mobile-source GHG emissions, which at the time of writing this PEIR comprise a substantial portion of the state's GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length;
 - The extent to which GHG emissions emitted by the mix of power generation operated by SCE, the electrical utility that will serve the Project site, are projected to decrease pursuant to the Renewables Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation;
 - The extent to which replacement of CCR Title 24 with the California Green Building Standards Code or other similar requirements will result in new buildings being more energy efficient and consequently more GHG efficient;
 - The extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies,

and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB's implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions;

- The extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, effecting cost-benefit analyses that determine economic feasibility; and
- Whether the total costs of proposed mitigation for GHG emissions, together with other mitigation measures required for the proposed development, are so great that a reasonably prudent property owner would not proceed with the project in the face of such costs.
- In considering how much, and what kind of, mitigation is necessary in light of these factors, the following list of options shall be considered, though the list is not intended to be exhaustive, as GHG-emission reduction strategies and their respective feasibility are likely to evolve over time. These measures are derived from multiple sources including the Mitigation Measure Summary in Appendix B of the California Air Pollution Control Officer's Association (CAPCOA) white paper, CEQA & Climate Change (CAPCOA 2008); CAPCOA's Model Policies for Greenhouse Gases in General Plans (CAPCOA 2009); and the California Attorney General's Office publication, The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level (California Attorney General's Office 2010).

Energy Efficiency

- Include clean alternative energy features to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines).
- Design buildings to meet CEC Tier II requirements (e.g., exceeding the requirements of Title 24 [as of 2007] by 20 percent).
- Site buildings to take advantage of shade and prevailing winds and design landscaping and sun screens to reduce energy use.
- Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings.
- Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes.

Water Conservation and Efficiency

- With the exception of ornamental shade trees, use water-efficient landscapes with native, drought-resistant species in all public area and commercial landscaping. Use water-efficient turf in parks and other turf-dependent spaces.
- Install the infrastructure to use reclaimed water for landscape irrigation and/or washing cars.
- $_{\odot}$ Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- Design buildings and lots to be water efficient. Only install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces. These restrictions should be included in the Covenants, Conditions, and Restrictions of the community.

- o Provide education about water conservation and available programs and incentives.
- To reduce storm water runoff, which typically bogs down wastewater treatment systems and increases their energy consumption, construct driveways to singlefamily detached residences and parking lots and driveways of multi-family residential uses, with pervious surfaces. Possible designs include Hollywood drives (two concrete strips with vegetation or aggregate in between) and/or the use of porous concrete, porous asphalt, turf blocks, or pervious pavers.

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste at all buildings.
- Provide adequate recycling containers in public areas, including parks, school grounds, golf courses, and pedestrian zones in areas of mixed-use development.
- \circ Provide education and publicity about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Promote ride-sharing programs and employment centers (e.g., by designating a certain percentage of parking spaces for ride-sharing vehicles, designating adequate passenger loading zones and waiting areas for ride-share vehicles, and providing a website or message board for coordinating ride-sharing).
- Provide the necessary facilities and infrastructure in all land use types to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).
- O At industrial and commercial land uses, all forklifts, "yard trucks," or vehicles that are predominately used onsite at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption.

The proposed project involves construction and operation of a six-story residential building, proposing 75 residential units. Project operations would involve vehicular trips and other activities that would increase generation of GHG emissions. The Downtown Plan PEIR determined that GHG operational impacts would be significant and unavoidable, but through incorporation of mitigation measures anticipated projects would fall within the scope of the Downtown Plan's PEIR analysis.

The building envelope in coordination with mechanical and lighting systems will produce 20-percent increased efficiency over current Title 24 standards. Exterior wall and window systems will be specified to increase the overall R-value of the exterior envelope. Mechanical and lighting systems will be designed to produce a low energy load for the building.

Strategies to reduce GHG emissions include site location, which is serviced by the Metro Blue Line on Long Beach Boulevard, several bus lines along Long Beach Boulevard, as well as shared bicycle lanes along Long Beach Boulevard. Additional efforts to reduce dependency on gas powered automobiles include a mixture of short term and long-term bicycle parking facilities that will promote bicycle culture and ridership. Within the development's parking garage EV parking stalls will be provided.

Existing street trees installed along Long Beach Boulevard will reduce the heat gain from afternoon sun. The use of reflective "cool" pavement, pavers, and roofing system will help reduce the heat island effect, while the building's operable windows will provide opportunities for passive cooling.

Drought resistant plants will be used throughout the project, as well as drip irrigation and an automatic weather-based controller system(s) with rain gauge shutoff. Inside the units and in the common areas, water efficient fixtures and appliances will be specified. To control solid waste, storage areas for recyclables and green waste will be provided in common spaces of the building with information displays regarding permitted recyclables.

With these mitigation measures incorporated, operation of the Project would not substantially increase the severity of GHG operation impacts beyond that identified in the Downtown Plan PEIR and no new impacts beyond those identified in the Downtown Plan PEIR would occur, further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

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

The Downtown Plan PEIR acknowledged that the Downtown Plan project area would be in development for multiple decades and during its lifetime would be subject to as-yetundeveloped thresholds. There is a lag time between enactment of legislative fixes and the regulations that will implement these fixes. As a consequence, local government agencies are left to struggle with trying to discern the extent to which their decisions can and will influence GHG emissions versus what will-to-be-developed regulations will achieve. For this reason, the PEIR determined that the potential for the Downtown Plan to conflict with applicable plans, policies or regulations would be significant and unavoidable.

The project involves construction and operation of a six-story residential building, proposing 75 residential units. Since this project would be implemented in conformity with the Downtown Plan but would not increase the severity of previously identified potential conflicts with existing and yet-to-be-determined GHG plans, policies and regulations, nor introduce new impacts related to such potential future but unknown legislation, further study of this issue is not warranted.

Import Aroa: VIII	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: VIII. HAZARDS AND HAZARDOUS MATERIALS			
Would the Project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant		-
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant		-
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant		-
d) 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?	Potentially Significant		-
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	No Impact		-
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact		•

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: VIII. HAZARDS AND HAZARDOUS MATERIALS			
Would the Project:			
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	No Impact		•

- 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?

a) – c) The Downtown Plan PEIR found that some types of commercial and residential land uses envisioned for the project area would not typically contain businesses involved in the transport, use, or disposal of substantial quantities of hazardous materials. However, some projects may consist of construction activities would involve full or partial demolition of existing structures, which, due to their age, may contain asbestos and lead-based paints and materials. Compliance with existing rules and regulations, including South Coast Air Quality Management District Rule 1403 (Asbestos Demolition and Renovation Activities), California Occupational Safety and Health Administration regulations regarding lead-based materials, and California Code of Regulations Section 1532.1 requiring testing, monitoring, containment, and disposal of lead-based materials, should avoid significant hazardous materials impacts. Mitigation Measures Haz-1(a), Haz-1(b), and Haz-1(c) were included to apply to project-level development review:

Haz-1(a) - Prior to issuance of a demolition or renovation permit, a lead-based paint and asbestos survey shall be performed by a licensed sampling company. The lead-based paint survey shall be prepared for any structures predating 1982; an asbestos survey shall

be performed for asbestos containing insulation for any structure pre-dating 1986; and an asbestos survey shall be performed for asbestos containing drywall for all structures for which drywall is to be removed. All testing procedures shall follow California and federal protocol. The lead-based paint and asbestos survey report shall quantify the areas of lead-based paint and asbestos containing materials pursuant to California and federal standards.

Haz-1(b) - Prior to any demolition or renovation, onsite structures that contain asbestos must have the asbestos containing material removed according to proper abatement procedures recommended by the asbestos consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only asbestos trained and certified abatement personnel shall be allowed to perform asbestos abatement. All asbestos containing material removed from onsite structures shall be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. Following completion of the asbestos abatement, the asbestos consultant shall provide a report documenting the abatement procedures used, the volume of asbestos-containing material removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party and a copy shall be submitted to the City of Long Beach prior to issuance of a demolition or construction permit.

Haz-1(c) - Prior to the issuance of a permit for the renovation or demolition of any structure, a licensed lead-based paint consultant shall be contracted to evaluate the structure for lead-based paint. If lead based paint is discovered, it shall be removed according to proper abatement procedures recommended by the consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only lead-based paint trained and certified abatement personnel shall be allowed to perform abatement activities. All lead-based paint removed from these structures shall be hauled and disposed of by a transportation company licensed to transport this type of material. In addition, the material shall be taken to a landfill or receiving facility licensed to accept the waste. Following completion of the lead based paint abatement, the lead based paint consultant shall provide a report documenting the abatement procedures used, the volume of lead based paint removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party, with a copy submitted to the City of Long Beach prior to issuance of a demolition or construction permit.

Further study of this issue is therefore not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

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?

The Downtown Plan PEIR found that the project area is highly urbanized and contains a wide variety of commercial activities, including businesses that use, store, and dispose of hazardous materials. Thus, the potential exists for hazardous materials to be present on sites that may be proposed for redevelopment.

Mitigation Measure Haz-1 - would require that all demolition, renovation, and excavation projects perform surveys to determine whether hazardous materials exist on the project sites and remove the materials in accordance with proper abatement procedures. Implementation of Mitigation Measure Haz-1 would reduce potential impacts from demolition, renovation, or excavation near schools to less than significant.

Mitigation Measure Haz-3(a) - All excavation and demolition projects conducted within the Project area shall be required to prepare a contingency plan to identify appropriate measures to be followed if contaminants are found or suspected or if structural features that could be associated with contaminants or hazardous materials are suspected or discovered. The contingency plan shall identify personnel to be notified, emergency contacts, and a sampling protocol to be implemented. The excavation and demolition contractors shall be made aware of the possibility of encountering unknown hazardous materials and shall be provided with appropriate contact and notification information. The contingency plan shall include a provision stating under what circumstances it would be safe to continue with the excavation or demolition, and shall identify the person authorized to make that determination.

Mitigation Measure Haz-3(b) - If contaminants are detected, the results of the soil sampling shall be forwarded to the appropriate local regulatory agency (Long Beach/Signal Hill Certified Unified Program Agency [CUPA], LARWQCB, or the state DTSC). Prior to any other ground disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency agency approval has been received.

Groundwater is subject to pre-treatment during de-watering activities to meet National Pollutant Discharge Elimination System (NPDES) Construction Dewatering permit limits. The construction activities shall conform to the NPDES requirements. The RWQCB requires the water to be tested for possible pollutants. The developer shall collect groundwater samples from existing site wells to determine pre-treatment system requirements for extracted groundwater. A water treatment system shall be designed and installed for treatment of extracted groundwater removed during dewatering activities so that such water complies with the applicable RWQCB and NPDES permit standards before disposal.

Mitigation Measure Haz-3(c) - If concentrations of contaminants warrant site remediation, contaminated materials shall be remediated either prior to construction of structures or concurrent with construction. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation. The remediation program shall also be approved by a regulatory oversight agency (Long Beach/Signal Hill CUPA, LARWQCB, or the state DTSC). All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, the analytical results after completion of the remediation, and all waste disposal or treatment manifests.

Mitigation Measure Haz-3(d) - If during the soil sampling, groundwater contamination is suspected or soil contamination is detected at depths at which groundwater could be encountered during demolition or construction, a groundwater sampling assessment shall be performed. If contaminants are detected in groundwater at levels that exceed maximum contaminant levels for those constituents in drinking water, or if the

contaminants exceed health risk standards such as Preliminary Remediation Goals, 1 in 1 million cancer risk, or a health risk index above 1, the results of the groundwater sampling shall be forwarded to the appropriate regulatory agency (Long Beach/Signal Hill CUPA, LARWQCB, or the State DTSC). Prior to any other ground-disturbing

The project site was developed with commercial and surface parking lot uses, however, no hazardous materials are expected to be found on this site. If hazardous materials are discovered during soil sampling, and/or prior to excavation, the contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation. Furthermore, the results of the soil sampling shall be forwarded to the appropriate local regulatory agency (Long Beach/Signal Hill Certified Unified Program Agency [CUPA], LARWQCB, or the state DTSC). Further study of this issue is not warranted with the proposed mitigation.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

e) Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The nearest boundary of the project area is located approximately 3 miles from the nearest airport/airstrip, the Long Beach Municipal Airport. No impacts are anticipated and further analysis in an EIR is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project does not propose to alter existing street patterns and would therefore not impair implementation of or physically interfere with an adopted response or evacuation plan. No impacts are anticipated and further analysis in an EIR is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The project area does not contain wildlands, nor is it adjacent to wildlands and further analysis in an EIR is not warranted.

		Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
lm	pact Area: Hydrology and Water Quality			
	Would the Project:			
a)	Violate any water quality standards or waste discharge requirements?	Potentially Significant		•
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering 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 planner uses for which permits have been granted)?	Potentially Significant		
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	Potentially Significant		•
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course if 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?	Potentially Significant		•

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
pact Area: Hydrology and Water Quality			
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?	Potentially Significant		•
Otherwise substantially degrade water quality?	Potentially Significant		•
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?	No Impact		•
Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	No Impact		•
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the4 failure of a levee or dam?	No Impact		•
Inundation by seiche, tsunami, or mudflow?	No Impact		•
	 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? Otherwise substantially degrade water quality? 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? Place within a 100-year flood hazard area structures which would impede or redirect flood flows? Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the4 failure of a levee or dam? 	Plan PEIR Determinationpact Area: Hydrology and Water Quality 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?Potentially SignificantOtherwise substantially degrade water quality?Potentially SignificantPlace housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood hazard delineation map?No ImpactPlace within a 100-year flood hazard area structures which would impede or redirect flood flows?No ImpactExpose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the4 failure of a levee or dam?No Impact	Plan PEIR DeterminationSignificant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendumupact Area: Hydrology and Water Quality 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?Potentially SignificantOtherwise substantially degrade water quality?Potentially SignificantPlace 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?No ImpactPlace within a 100-year flood hazard area structures which would impede or redirect flood flows?No ImpactExpose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the4 failure of a levee or dam?No ImpactInundation by seiche, tsunami, orNo Impact

a) Violate any water quality standards or waste discharge requirements?

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering 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 planner uses for which permits have been granted)?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course if a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

The Downtown Plan PEIR found that future development within the Downtown Plan project area could substantially deplete groundwater supplies via an increase in water demand due to the intensification of downtown development. Additionally, the Downtown Plan PEIR found that construction activities associated with future development of residential, hotel, office and other uses could result in discharges of urban pollutants into the City drainage system. This would include runoff from grading and excavation, fuel, as well as lubricants, and solvents from construction vehicles and machinery; and trash and other debris. While this could result in a significant adverse impact, Mitigation Measure Hydro-1 would reduce potential water quality impacts from construction activities to a less than significant level.

Mitigation Measure Hydro-1 - Prior to issuance of a grading permit, the City Department of Development Services shall determine the need for the developer to prepare a SWPPP for the site. If required, the SWPPP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any grading or building permits. The SWPPP shall fully comply with City and LARWQCB requirements and shall contain specific BMPs to be implemented during project construction to reduce erosion and sedimentation to the maximum extent practicable. The following BMPs or equivalent measures to control pollutant runoff shall be included within the project's grading and construction plans, if applicable:

Pollutant Escape: Deterrence

- Cover all storage areas, including soil piles, fuel and chemical depots. Protect from rain and wind with plastic sheets and temporary roofs.
- Implement tracking controls to reduce the tracking of sediment and debris from the construction site. At a minimum, entrances and exits shall be inspected daily and controls implemented as needed.
- Implement street sweeping and vacuuming as needed and as required.

Pollutant Containment Areas

- Locate all construction-related equipment and related processes that contain or generate pollutants (i.e., fuel, lubricants, solvents, cement dust, and slurry) in isolated areas with proper protection from escape.
- Locate construction-related equipment and processes that contain or generate pollutants in secure areas, away from storm drains and gutters.

- Place construction-related equipment and processes that contain or generate pollutants in bermed and plastic-lined depressions to contain all materials within that site in the event of accidental release or spill.
- Park, fuel, and clean all vehicles and equipment in one designated, contained area.

Pollutant Detainment Methods

• Protect downstream drainages from escaping pollutants by capturing materials carried in runoff and preventing transport from the site. Examples of detainment methods that retard movement of water and separate sediment and other contaminants are silt fences, hay bales, sand bags, berms, and silt and debris basins.

Recycling/Disposal

- Develop a protocol for maintaining a clean site. This includes proper recycling of construction-related materials and equipment fluids (i.e., concrete dust, cutting slurry, motor oil, and lubricants).
- Provide disposal facilities. Develop a protocol for cleanup and disposal of small construction wastes (i.e., dry concrete).

Hazardous Materials Identification and Response

- Develop a protocol for identifying risk operations and materials. Include protocol for identifying source and distribution of spilled materials.
- Provide a protocol for proper clean-up of equipment and construction materials, and disposal of spilled substances and associated cleanup materials.

Provide an emergency response plan that includes contingencies for assembling response teams and immediately notifying appropriate agencies.

The proposed mixed-use project, consisting of 271 residential units and approximately 1,300 square feet of commercial-retail area would not create any new conditions not anticipated in the Downtown Plan PEIR. Construction of these two mid-rise structures would not substantially increase the severity of impacts previously identified in the Downtown Plan PEIR or create any new impacts not identified in the Downtown Plan PEIR and further study of this issue is not warranted.

Future development in the Downtown Plan project area would generate various urban pollutants such as soil, herbicides, and pesticides that could adversely affect surface water and groundwater quality. While this could result in a significant adverse impact, Mitigation Measure Hydro-2 would reduce potential for urban pollutants into the City's stormwater collection system to a less than significant level.

Mitigation Measure Hydro-2 - Prior to issuance of a building permit, the Department of Development Services shall determine the need for the developer to prepare a SUSMP for the site. If required, the SUSMP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any building permits. The City's review shall include a determination of whether installation of pollutant removal technology in existing or proposed storm drains adjacent to the project site should be required. The City's review is required to confirm that the SUSMP is consistent with the City's NPDES Permit No. CAS 004003 or a subsequently issued NPDES permit applicable at the time of project construction. A SUSMP consistent with the City's NPDES permit shall be incorporated into the project design plans prior to issuance of any building permits.

The proposed mixed-use project, proposing 75 residential units would not create any new urban pollutant discharge conditions not anticipated in the Downtown Plan PEIR. The new six-story building would not substantially increase the severity of discharge impacts previously identified in the Downtown Plan PEIR or create any new discharge impacts not identified in the Downtown Plan PEIR and further study of this issue is not warranted.

The increased land use intensity of future residential and commercial land uses allowed by the Downtown Plan could increase pervious surfaces and result in an increased volume of stormwater discharges into the existing storm drain infrastructure. While this could result in a significant adverse impact, Mitigation Measure Hydro-3 would reduce impacts from potentially increased volumes of stormwater discharges from new development to a less than significant level.

Mitigation Measure Hydro-3 - Prior to issuance of a building permit, the City Stormwater Management Division shall determine the need for the developer to conduct an analysis of the existing stormwater drainage system and to identify improvements needed to accommodate any projected increased runoff that would result from the proposed Project. The evaluation conducted by the developer shall include a determination of whether Low Impact Development (LID) practices and strategies should be incorporated into the project to reduce post-development peak stormwater runoff discharge rates to not exceed the estimated pre-development discharge rates.

The proposed construction and operation of the six-story residential development consisting of 75 residential units would not create any new stormwater discharge conditions not anticipated in the Downtown Plan PEIR. The new building would not substantially increase the severity of discharge impacts previously identified in the Downtown Plan PEIR or create any new discharge impacts not identified in the Downtown Plan PEIR and further study of this issue is not warranted.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the4 failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

The Downtown Plan PEIR Initial Study determined that the City of Long Beach and the Federal Emergency Management Agency Flood Insurance Rate Maps show that the downtown project area is not within the 100-year flood zone. In addition, there are no dams or levees located within the vicinity of the downtown project area, nor are there any landlocked water bodies where impacts from a seiche would occur. The downtown project area is also substantially protected from inundation from a tsunami by its elevation approximately 30 feet above mean sea level; a wall as by the Long Beach Harbor breakwater and existing developments south of the project site. Therefore, this Initial Study determined that criteria g), h), I) and j) for Hydrology and Water Quality would not apply and these issues did not warrant further study in the PEIR.

The proposed construction and operation of the residential project, consisting of 75 residential units would not alter the existing physical conditions of the downtown area described in the PEIR Initial Study, nor would it create any new significant impacts not identified in the PEIR. Therefore, criteria g), h), i) and j) for Hydrology and Water Quality would remain at the No Impact level for this residential high-rise proposal and no further study is warranted.

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Land Use / Planning			
Would the Project:			
a) Physically divide an established community?	Less Than Significant		•
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant		•
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	No Impact		•

a) Would the project physically divide an established community?

The Downtown Plan PEIR found that the project area is currently urbanized with existing street and circulation patterns. The proposed residential project would not alter these patterns. Additionally, the proposed project features a code-compliant, context-sensitive design that integrates the project into the land use character of Long Beach Boulevard and the general downtown area. Further study of this issue is not warranted.

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?

Development within the Downtown Plan area is subject to consistency with the Land Use Element of the Long Beach General Plan and the PD-30 ordinance. The Downtown Plan PEIR analyzed the potential impacts of growth anticipated over the 25-year horizon of the Plan. The anticipated 5,000 residential units has been met due to the high demand and critical need for housing in the plan area, citywide, across the region and the state. However, the growth of other uses, such as office, commercial and hotel uses, has not materialized to the degree anticipated by the PD-30 PEIR. Upon review of the housing needs and development in the Downtown area, the City determined that additional residential development in the PD-30 area is needed and can be accommodated within the same levels of development contemplated by the PD-30 and its PEIR by allowing additional residential units while reducing commensurate levels of office, commercial and hotel development. An Addendum to the Program EIR established the Downtown Plan Land Use Equivalency Program to allows for the reallocation of permitted land uses (office, commercial, hotel, and residential uses) within the Downtown Plan on a per project basis so long as the limitations of the Equivalency Program are satisfied and do not exceed the analyzed upper levels of environmental impacts that are identified in the Certified PEIR or exceed average maximum Floor Area Ratios (FARs) contemplated by the plan, including FAR incentives. The proposed project falls within the envelope of the PD-30 development standards and discussed above in detail. Under the Equivalency Program, increases in residential land uses can be permitted when corresponding decreases in the amount of other permitted non-residential land uses are made. In accordance with the Equivalency Program, a reduction of 23,610 square feet of office floor area has been accounted for to offset the additional 75 residential units proposed as part of this project therefore the impact remains less than significant with the previously certified mitigation measures. The Land Use Equivalency Calculator has been prepared which provides a running calculation of land use exchanges for the Downtown Plan (Appendix C). The proposed residential project is consistent with the goals and provisions of these documents, and would continue the diverse mix of highly urban land uses in the downtown area. Further study of this issue is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The Downtown Plan PEIR found that no habitat or natural communities conservation plans apply to the project area. No such plans have subsequently been adopted, either. Further study of this issue is not warranted.

			Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Im	pact Area: N	lineral Resources			
	Would the	Project:			
a)	known minera	oss of availability of a I resource that would be region and the e state?	No Impact		•
b)	locally-importa recovery site o	oss of availability of a ant mineral resource delineated on a local specific plan, or other	No Impact		•

e) 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?

The Downtown Plan PEIR found that no oil extraction land uses or other mineral resource recovery sites currently exist within or adjacent to the project area. Therefore, no impacts to mineral resources are anticipated and further analysis in an EIR is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

f) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The Downtown Plan PEIR found that no mineral resource sites are designated on any City land use plan within the Downtown Community Plan project area and further analysis in an EIR is not warranted.

		Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Im	pact Area: Noise			
	Would the Project result in:			
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant		•
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Potentially Significant		•
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially Significant		•
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially Significant		-
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact		•
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to noise levels?	No Impact		•

The Downtown Plan PEIR found that construction of mid-rise structures would result in increased ambient noise levels in the project area, primarily from

additional traffic associated with residential and commercial growth. Operation of construction equipment associated with this growth would also create temporary noise level increases. The project consists of a low-rise, six-story residential development which includes three levels of subterranean parking. In accordance with the Equivalency Program, a reduction of 23,610 square feet of office floor area has been accounted for to offset the additional 75 residential units proposed as part of this project therefore the impact remains less than significant with the previously certified mitigation measures. The Land Use Equivalency Calculator has been prepared which provides a running calculation of land use exchanges for the Downtown Plan (Appendix C). Mitigation Measure Noise-2 was included to apply to project-level development review:

Mitigation Measure Noise-2 – The City shall review all construction projects for potential vibration-generating activities from demolition, excavation, pile– driving, and construction within 100 feet of existing structures and shall require site-specific vibration studies to be conducted to determine the area of impact and to identify appropriate mitigation measures. The studies shall, at a minimum, include the following:

- Identification of the project's vibration compaction activities, pile driving, and other vibration-generating activities that have the potential to generate ground-borne vibration; and the sensitivity of nearby structures to ground-borne vibration. This task should be conducted by a qualified structural engineer.
- A vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; establish a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for actions to be taken when vibration levels approached the defined vibration limits.
- Maintain a monitoring log of vibrations during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for a more or less intensive measurement schedule.
- Vibration levels limits for suspension of construction activities and implementation of contingencies to either lower vibration levels or secure the affected structures.
- Post-construction survey on structures where either monitoring has indicated high vibration levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

The identified vibration studies will be overseen by the City of Long Beach Building Bureau. Identification and implementation of appropriate mitigation measures and contingencies shall be to the satisfaction of the satisfaction of the Superintendent of Building & Safety. Further study of this issue is not warranted.

g) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The Downtown Plan PEIR found that construction of mid-rise structures would result in increased ambient noise levels in the project area. Operation of construction equipment associated with the construction of this project would create temporary noise level increases. The project consists of a low-rise, six -story residential development which includes three levels of subterranean parking. Mitigation Measure Noise-2 was included to apply to project-level development review:

Mitigation Measure Noise-2 – The City shall review all construction projects for potential vibration-generating activities from demolition, excavation, pile– driving, and construction within 100 feet of existing structures and shall require site-specific vibration studies to be conducted to determine the area of impact and to identify appropriate mitigation measures. The studies shall, at a minimum, include the following:

- Identification of the project's vibration compaction activities, pile driving, and other vibration-generating activities that have the potential to generate ground-borne vibration; and the sensitivity of nearby structures to ground-borne vibration. This task should be conducted by a qualified structural engineer.
- A vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; establish a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for actions to be taken when vibration levels approached the defined vibration limits.
- Maintain a monitoring log of vibrations during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for a more or less intensive measurement schedule.
- Vibration levels limits for suspension of construction activities and implementation of contingencies to either lower vibration levels or secure the affected structures.
- Post-construction survey on structures where either monitoring has indicated high vibration levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

h) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The Downtown Plan PEIR found that construction of mid-rise structures would result in increased ambient noise levels in the project area, primarily from additional traffic associated with residential and commercial growth. The project consists of a low-rise, six

-story residential development which includes three levels of subterranean parking. Mitigation Measure Noise-5 was included to apply to project-level development review:

Mitigation Measure Noise-5 – In areas where new residential development would be exposed than L_{dn} of greater than 65dBA, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following:

- Utilize site planning to minimize noise in shared residential outdoor activity areas by locating the areas behind the buildings or in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible.
- Provide mechanical ventilation in all residential units proposed along roadways or in areas where noise levels could exceed 65 dBA _{Ldn} so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 45 dBA L_{dn}.
- Install sound-rated windows and construction methods to provide the requisite noise control for residential units proposed along roadways or in areas where noise levels could exceed 70 dBA L_{dn}.

Prior to the issuance of building permits Planning Bureau will require a noise study to determine appropriate noise mitigation, as conditioned.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The Downtown Plan PEIR found that construction of mid-rise structures would result in increased ambient noise levels in the project area. The project consists of a low-rise, six -story residential development which includes three levels of subterranean parking. Operation of construction equipment associated with the construction of this project would create temporary noise level increases. Mitigation Measure Noise-2 was included to apply to project-level development review:

Mitigation Measure Noise-2 – The City shall review all construction projects for potential vibration-generating activities from demolition, excavation, pile– driving, and construction within 100 feet of existing structures and shall require site-specific vibration studies to be conducted to determine the area of impact and to identify appropriate mitigation measures. The studies shall, at a minimum, include the following:

- Identification of the project's vibration compaction activities, pile driving, and other vibration-generating activities that have the potential to generate ground-borne vibration; and the sensitivity of nearby structures to ground-borne vibration. This task should be conducted by a qualified structural engineer.
- A vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; establish a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo,

elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for actions to be taken when vibration levels approached the defined vibration limits.

- Maintain a monitoring log of vibrations during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for a more or less intensive measurement schedule.
- Vibration levels limits for suspension of construction activities and implementation of contingencies to either lower vibration levels or secure the affected structures.
- Post-construction survey on structures where either monitoring has indicated high vibration levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The Downtown Plan PEIR found that the project site is located over two miles from the Long Beach Municipal Airport. Significant impacts relating to aircraft noise are not anticipated and further analysis in an EIR is not warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to noise levels?

The Downtown Plan PEIR found that the project site is located over two miles from the Long Beach Airport. Significant impacts relating to aircraft noise are not anticipated and further analysis in an EIR is not warranted.

		Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Im	pact Area: Population and Housing			
	Would the Project:			
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Significant Impact		•
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	Significant Impact		-
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Significant Impact		•

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Downtown Plan PEIR found that adoption and implementation of the Downtown Plan and implementing ordinances would result in a significant adverse impact related to Population and Housing if the goals, policies, objectives, or regulations established by the proposed documents, or if anticipated subsequent development in accordance with those documents, would cause any of the following impacts:

Impact Pop-1 The proposed Downtown Plan is intended to accommodate substantial population growth in the Downtown project area. Although the area is presently zoned to permit densities of up to and exceeding 138 dwelling units per acre under the existing PD-

30 zone, the impact of this growth would be significant and unavoidable.

The Downtown Plan PEIR determined that the Downtown Plan project objectives include increasing the residential population and promoting job growth in the downtown project area. Based on the City average of 2.90 persons per household (California Department of Finance 2009), the proposed 5,000 dwelling units would generate a net increase of approximately 13,500 new residents. As stated in Section 2.6.1 of this PEIR, the purpose of the Downtown Plan is to replace the existing planned development zoning for the downtown project area; provide more up-to-date guidance to respond to Downtown's current development context and trends; and to provide direction regarding the type, character, and standard of quality desired for development in the downtown project area. The Downtown Plan would continue the downtown project area's diverse mix of highly urban land uses and would facilitate population and employment growth that has been anticipated by the existing Long Beach General Plan and by the regional population projections developed by SCAG (Southern California Association of Governments).

Impact Pop-2 Implementation of the Downtown Plan would occur over a period of 25 years or longer and would result in the displacement of existing housing and people, primarily housed in medium density multifamily dwelling units. New development would occur at higher densities and with more modern housing, frequently as part of a mixed-use development. While many residents would relocate into different dwelling units either within or outside of the Downtown Plan area, they would be displaced from their existing dwelling units and may be unable to obtain similar housing with respect to quality, price, and/or location. Therefore, the Downtown Plan would have a significant adverse impact on the housing supply and may require construction of replacement housing elsewhere.

The Downtown Plan could result in removal of existing housing in older apartment buildings not suitable for rehabilitation. While implementation of the Downtown Plan could add approximately 5,000 new residential units over the existing conditions, the City experienced a 7.5 percent increase in population during the 1990s, a 2.6 percent increase in households, and less than a one percent increase in the housing stock. This imbalance in population and housing growth has resulted in fewer vacancies, upward pressure on housing prices, more people crowded into too few housing units, and reduced opportunity for residents displaced during implementation of the Downtown Plan to find equivalent housing in the local area. There is no assurance that short-term or long-term displacement of residents would not occur. The anticipated 5,000 residential units analyzed in the Downtown PEIR has been met due to the high demand and critical need for housing; however, the growth of other uses, such as office, commercial and hotel uses, has not materialized. Upon review of the housing needs and development in the Downtown area, the City determined that additional residential development in the PD-30 area is needed and can be accommodated within the same levels of development contemplated by the PD-30 and its PEIR by allowing additional residential units while reducing commensurate levels of office, commercial and hotel development. In accordance with the Equivalency Program, a reduction of 23,610 square feet of office floor area has been accounted for to offset the additional 75 residential units proposed as part of this project therefore the impact remains less than significant with the previously certified mitigation measures. The Land Use Equivalency Calculator has been prepared which provides a running calculation of land use exchanges for the Downtown Plan (Appendix C).

Therefore, the Downtown Plan would contribute to existing housing deficiencies in the local area, which may cause a need to construct replacement housing elsewhere for the displaced households. While the benefits from buildout of the Downtown Plan are acknowledged and the resulting population is expected to be consistent with SCAG population projections, the Downtown Plan is intended to accommodate substantial population growth in the Downtown Plan project area. The associated displacement of existing housing and people during implementation of the Downtown Plan would contribute to a cumulative impact on housing opportunities in the Downtown Plan project area and on the adjacent communities as displaced residents search for new housing for the area's increased population. Therefore, the Downtown Plan cumulative impact to population and housing would be significant and adverse.

The proposed residential project consisting of 75 residential units would provide additional housing units and population within the projected growth parameters of the Downtown Plan. The six-story residential structure would be consistent with the Downtown Plan project objectives of increased downtown area population and housing growth (proposed 5,000 new dwelling units that would generate a net increase of approximately 13,500 new residents). A Land Use Equivalency Program (Equivalency Program) was developed as part of the preparation of the Addendum to the EIR to provide development flexibility so that PD-30 could respond to market conditions over the build-out duration of the plan. Land uses to be developed would be allowed to be reallocated among the permitted land uses so long as the limitations of the Equivalency Program are satisfied and do not exceed the analyzed upper levels of environmental impacts that are identified in the PD-30 PEIR or exceed the Plan's maximum Floor Area Ratios. Increases in permitted land uses can be reallocated for corresponding decreases of other permitted land uses under the proposed Equivalency Program. The proposed residential project, "Ocean Park" would not substantially increase the severity of previously identified Downtown Plan impacts or create new significant impacts and therefore further study of this issue is not warranted.

Impact Area: Public Services 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	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
any of the public services: a) Fire protection?	Potentially Significant		•
b) Police protection?	Potentially Significant		-
c) Schools?	Potentially Significant		•
d) Parks? e) Libraries?	Potentially Significant Potentially Significant		:
,	5		

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 fire protection?

The Downtown Plan PEIR found that although the proposed project would incrementally increase demands on the Long Beach Fire Department, those increased demands would not require the construction of new fire protection facilities.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

b) 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 police protection?

The Downtown Plan PEIR found that although the proposed project would incrementally increase demands on the Long Beach Police Department, those increased demands would not require the construction of new police protection facilities.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

c) 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 schools?

The Downtown Plan PEIR found that payment of required school impact fees prior to building permit issuance would avoid a significant impact to school services associated with the proposed residential project, consisting of 75 residential units located within a six-story building.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

d) 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 parks?

The Downtown Plan PEIR determined that based on the City standard of 8 acres of parkland per 1,000 residents, the entire Downtown Plan project area would generate demand for about 108 acres of parkland. Pertaining to the proposed residential project, which includes 75 residential units, the Downtown Plan REIR includes a mitigation measure/finding requiring that developers pay park and recreation facilities in-lieu fees. However, the Downtown Plan PEIR also recognizes that it is not feasible for all of this open space to be provided in the Downtown Plan Project area.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

e) 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 libraries?

The Downtown Plan PEIR found that although the proposed project may cause demands for library services to exceed the capacity of the Main Library, construction of new facilities to serve the Downtown Plan Project area would not have a significant environmental impact not addressed in the PEIR.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Recreation			
Would the Project:			
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?	Potentially Significant		•
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?	Potentially Significant		•

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The Downtown Plan PEIR determined that the project would increase the residential population in the downtown area, which will place increased demands on neighborhood and regional parks and other recreational facilities. Based on the City average of 2.90 persons per household (California Department of Finance 2009), the proposed 5,000

dwelling units would generate a net increase of 8 acres of parkland per 1,000 residents, the Project would generate demand for about 108 acres of parkland. The Downtown Plan does not propose any specific park improvements, but does allow new parklands within the Downtown area, and also provides for private open space within new development projects through required compliance with the Plan's development standards. Parks that are located in the Project area to serve project residents would not be sufficient for all the new development without the provision of new private or public open spaces that will be needed to serve the expanded Downtown population. This need would include the creation of new City parks using parkland fees collected from new residential developments. However, it is not feasible for all of the estimated need for an additional 108 acres of parkland to be provided in the Downtown Plan Project Area. Within a dense urban environment such as Downtown, the citywide goal for recreational open space

As discussed in Section 4.11.1a of the Downtown Plan PEIR Long Beach is currently deficient in parkland by about 820 acres. With new development anticipated by the Downtown Plan, the deficiency would increase with each new project. Therefore, the increased demand for recreational opportunities associated with the Project residents would place additional stress on the City's overburdened recreation system. As a condition of individual project approvals within the Downtown Plan, these projects would be required to pay an in-lieu park and recreation facilities impact fee. With collection of required fees, some additional parkland would be development within the Downtown Plan Project area, but is not expected to be enough to meet the established standard of 8 acres of parkland per 1,000 residents. Therefore, the impact on park and recreation facilities from new development would be significant but unavoidable.

By adding 75-residential units and no dedicated parkland, the project will add to the deficiency in park space in the Downtown Plan area. The PD-30 plan requires open space for all new residential developments. The project proposed both common and private open space. The PD-30 plan requires 15% of the lot to be provided as common outdoor open space. Based on the lot size of 16,200 square feet, the project will require 2,430 square feet of common outdoor open space. The project proposes a total of 2,809- square foot open space area; 1,159-square feet is proposed on the second floor which includes children's play space, and a 1,650-square foot is proposed on the roof as a roof deck.

Additionally, private open space and common indoor open space is also required as components of the development. The PD-30 plan requires 50% of all residential dwellings to have private open space (which is not less than 36 square feet in area and not less than six feet in width). The development project provides private balconies for 60 of the dwelling units totaling 2,482 square feet of area. The project as includes a large 1,314 square foot meeting room located on the ground floor overlooking Long Beach Boulevard. Additional amenities are provided in a 333 square foot fitness room and a 434 square foot laundry room which are located on the ground floor adjacent to the lobby/mail room. The project complies with the Downtown Plan open space requirements, thereby increasing the amount of open space on the project site. An in-lieu park fee will not be required.

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Transportation/Traffic			
Would the Project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections?	Potentially Significant		•
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	Potentially Significant		•
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	No Impact		•
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact		•
e) Result in inadequate emergency access?	Potentially Significant		•
f) Result in inadequate parking capacity?	Potentially Significant		•
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle	Less Than Significant		•

transporta racks)?

- a) Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections?
- b) Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

According to the project 's Traffic Assessment Technical Memorandum (Fehr and Peers, dated June 1, 2021), the project is expected to generate 330 daily, 21 AM peak hour, and 27 PM peak hour net external trips. Given that the project is not estimated to generate 500 or more net daily new trips, the location of the project is within identified VMT-efficient areas for VMT per capita, and the project is located in a TPA, this project should be screened from a full VMT assessment under the presumption that it will result in a less than-significant impact. In addition, because the project is not estimated to generate 500 or more net new daily trips, a full transportation impact study would not be required.

The Downtown Plan PEIR found that future development would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system and would result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections. In accordance with the Equivalency Program, a reduction of 23,610 square feet of office floor area has been accounted for to offset the additional 75 residential units proposed as part of this project therefore the impact remains less than significant with the previously certified mitigation measures. The Land Use Equivalency Calculator has been prepared which provides a running calculation of land use exchanges for the Downtown Plan (Appendix). Mitigation Measures Traf-1(a), Traf-1(b), Traf-1(c), and Traf-1(d) were adopted to improve operations to level of service D or better at seven of 16 intersections deemed to be significantly impacted by future traffic.

Mitigation Measure Traf-1(a) - As the system's capacity is reached, it will become important to manage the street system in a more efficient and coordinated manner. Improvements to the Project area transportation system are proposed as part of the overall Downtown development, including improvements that have been required of other area projects previously approved by the City. Therefore, the mitigation focuses on improvements that would not require significant additional rights-of-way and are achievable within the life of the Plan. There are five proposed mitigation measures for the Downtown Plan, as follows:

- 1. Implement traffic control system improvements in Downtown on selected arterials.
- 2. Improve the Alamitos Avenue corridor via removal of selected parking spaces and the implementation of additional travel lanes plus bike lanes in each direction.
- 3. Reconfigure the 6th Street and 7th Street intersections with Martin Luther King Avenue and Alamitos Avenue for safety and traffic flow enhancements.
- 4. Enhance freeway access to I-710 to and from Downtown Long Beach.
- 5. Implement transit facilities and programs to encourage public transit usage and Transportation Demand Management Policies.

Mitigation Measure Traf-1(b) - A series of traffic signal system improvements are recommended in Downtown to accommodate the anticipated growth in travel. The following traffic signal system improvements are recommended as part of this mitigation measure:

- 1. Implement Adaptive Traffic Signal Control System (ATCS) improvements throughout Downtown consistent with currently planned improvements on Ocean Boulevard and Atlantic Avenue. Streets that are proposed to be included in the ATCS as a mitigation measure for the Downtown Long Beach Strategic Plan include the following:
 - Alamitos Avenue north of Ocean Boulevard
 - Pine Avenue north of Ocean Boulevard
 - Pacific Avenue north of Ocean Boulevard
 - 7th Street from I-710 to Alamitos Avenue
 - 6th Street from I-710 to Alamitos Avenue
 - Broadway from I-710 to Alamitos Avenue
 - Ocean Boulevard from Shoreline to Alamitos Avenue (to join the proposed system starting at Alamitos Avenue)
 - Others as needed, to be determined by the City Traffic Engineer and Public Works Director
- 2. Implement pan/tilt/zoom Closed Circuit Television Camera (CCTV) surveillance and communications with power and control capability to the Department of Public Works to monitor real-time traffic operations from rooftops of selected new buildings as needed and to be determined based on the location of appropriate new high-rise structures along the Alamitos Avenue, Shoreline Drive, and Ocean Boulevard corridors.
- 3. Implement transit signal priority for Long Beach Boulevard and upgrade traffic signal system equipment and operations along the Blue Line light rail route.
- 4. Upgrade and improve traffic signal equipment throughout Downtown for safety and operational enhancements.

Mitigation Measure Traf-1(c) - As part of this mitigation measure, a number of intersections would receive major or minor signal modifications, depending on their current status. In addition to the enhancements listed, other potential improvements that can be included are:

- Bicycle improvements (detection, signalization, etc.)
- In-pavement LED crosswalk lights
- Automatic pedestrian detection (i.e., infrared, microwave, or video detection)
- Illuminated push buttons
- Countdown pedestrian signals
- Adaptive pedestrian clearance (increasing the flashing DON'T WALK time based on location of pedestrians in the crosswalk)
- Enhanced signal equipment including mast arms, poles, signal heads, and other necessary enhancements for safety and operations
- Communications enhancements as needed to tie the system together with the Traffic Control Center in City Hall

Mitigation Measure Traf-1(d) - <u>Traffic Calming and Pedestrian Amenities</u>. Appropriate traffic calming and pedestrian amenities shall be provided in conjunction with development projects. The development project will also improve the sidewalk and alley. Conditions have been included to require the removal of the existing alley (vacated Nardo Way) intersection on Long Beach Boulevard along the Project's frontage and replace with full height curb, curb gutter and sidewalk pavement, reconstruct the full width of Nardo Way from Waite Court. to the north-south alley (Palmer Court.) adjacent to the project site with Portland cement concrete, and reconstruct the full width of the north-south alley (Palmer Court) including the dedication area, adjacent to the western boundary of the project site from 9th Street to the east-west alley (Nardo Way) with Portland cement concrete. .Other potential improvements include wider sidewalks in locations where the existing sidewalks are less than 10 feet wide, pedestrian-scale street lights, and street furniture (City of Long Beach 2005).

Mitigation Measure Traf-1(e) – Long Beach Boulevard provides multiple lanes of travel. The developer will be responsible to improve traffic signal related equipment to current CA MUTCD and/or City of Long Beach Standards, provide directional signage along the adjacent one-way alley, Nardo Way (westward) and Palmer Court (northward) and improve side walk crossing. Traffic signal enhancements to implement the Long Beach Boulevard improvements shall also be implemented as needed.

Future improvements to Long Beach Boulevard, including traffic and bicycle lane modifications, would occur independent of project activities. No further study of the issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The proposed residential project would not necessitate any change in air traffic patterns. No further study of the issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

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)?

The proposed residential project does not alter existing street patterns or create new pedestrian and bicycle pathways and street crossing locations. No further study of the issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

e) Would the project result in inadequate emergency access?

The proposed residential project does not propose alteration to the roadways system and, therefore, emergency access would continue as it does under existing conditions. There

would be no additional impacts to routes of travel for emergency vehicles. No further study of the issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

f) Would the project result in inadequate parking capacity?

With more than 30 parking garages and numerous places to park on the street, the Downtown Plan PEIR found there is an adequate supply of Downtown parking spaces. The proposed residential project will provide a surplus of ten vehicular parking spaces to the required 94 vehicular on-site parking stalls, as well as bicycle, and electric vehicle (EV) parking than currently required in the Downtown Plan. Vehicular access to the proposed site will be provided via one driveway on Long Beach Boulevard. This will be a right-in/right-out driveway. No further study of this issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

g) Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The proposed residential project would support adopted policies for providing alternative transportation modes by including bicycle storage. The project is served by a southbound bus stop for Long Beach Transit and LA Metro is located approximately 100' north of the project site. A northbound bus stop for both agencies is located north of 10th Street, approximately 500' north of the project site. A light-rail station for the LA Metro A Line is located just south of Anaheim Street approximately ¼ mile north of the Project. Alternatively, the 5th Street Station is located approximately ¼ mile south of the Project. Additional bus transit is available along Pacific Avenue, Atlantic Avenue, Anaheim Street, and 6th/7th Streets. The proposed residential project would support adopted policies for providing alternative transportation modes by including long term and short term bicycle storage. No further study of the issue is warranted.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

PEIR Impact Not Identified Determination No Impact/ No Change to in Downtown Downtown Plan PEIR Plan PEIR and and the the Downtown Downtown Plan PEIR Plan PEIR Addendum Addendum Impact Area: Tribal Cultural Resources -- 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. that is: a) Listed or eligible for listing in the California Register of Historic Less Than Resources, or in a local register of Significant With historic resources as defined in Public Mitigation Resources Code Section 5020.1(k)? b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth Less Than in subdivision (c) of Public Resources Code Section 5024.1? In applying the Significant With criteria set forth in subdivision (c) of Mitigation **Public Resources Code Section** 5024.1, the lead agency shall consider

Downtown

Plan

Potentially

Significant

a) Listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code Section 5020.1(k)?

the significance of the resource to a California Native American tribe.

b) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

While the Downtown Plan PEIR did not include a separate Section specifically devoted to Tribal Cultural Resources, this issue is included in the PEIR Cultural Resources Section. The Downtown Plan project area has been known to contain prehistoric resources from Native American occupation of semi-permanent villages near the mouth of the Los Angeles River. Individual development projects may encounter these resources during demolition and excavation activities. Due to the lack of natural ground surfaces in the Downtown Plan project area, no surveys can be conducted prior to onset of demolition or other ground-disturbing activities. While the potential exists for such activities to encounter and damage archaeological resources, including Tribal Cultural Resources, Mitigation Measures CR-2(a), CR-2(b) and CR-2(c) would reduce potential impacts to a less than significant level.

Mitigation Measure CR-2(a) - A qualified project archaeologist or archaeological monitor approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of cultural resources. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities to allow the find to be evaluated. If the archaeological monitor determines the find to be significant, the project applicant and the City shall be notified and an appropriate treatment plan for the resources shall be prepared. The treatment plan shall include notification of a Native American representative and shall consider whether the resource should be preserved in place or removed to an appropriate repository as identified by the City.

Mitigation Measure CR-2(b) - The project archaeologist shall prepare a final report of the find for review and approval by the City and shall include a description of the resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historic Resources and the National Register of Historic Places. The report shall be filed with the California Historic Resources are found to be significant, a separate report including the results of the recovery and evaluation process shall be prepared.

Mitigation Measure CR-2(c) - If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the corner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains. Preservation in place and project design alternatives shall be considered as possible courses of action by the project applicant, the City, and the Most Likely Descendent.

Pine/Pacific Project – The potential exists to encounter previously undiscovered tribal cultural resources during construction ground disturbance and excavation activities. However, this residential development would be subject to Mitigation Measures CR-2(a), CR-2(b), and CR-2(c), and as such would reduce the impacts of this residential development on tribal cultural resources to a less than significant level. This development

would not substantially increase the severity of previously identified impacts in the PEIR or create any new significant impacts, and therefore no further study is this issue is warranted,

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Utilities and Service Systems			
Would the Project:			
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Potentially Significant		•
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant		•
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant		•
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Potentially Significant		•
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Potentially Significant		•

	Downtown Plan PEIR Determination	Potentially Significant Impact Not Identified in Downtown Plan PEIR and the Downtown Plan PEIR Addendum	No Impact/ No Change to Downtown Plan PEIR and the Downtown Plan PEIR Addendum
Impact Area: Utilities and Service Systems			
Would the Project:			
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Potentially Significant		•
g) Comply with federal, state, and local statutes and regulations related to solid waste?	Potentially Significant		•

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

e) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

a), b), e). The Downtown Plan PEIR determined proposed Community Plan would allow more intense residential and commercial development in the Downtown area and would, therefore, increase the generation of wastewater. To determine whether the existing wastewater conveyance system and treatment plant have sufficient available capacity to accommodate wastewater from the planned development.

The added daily wastewater would increase from the proposed residential project consisting of 75 residential units but would not result in citywide wastewater flows that would exceed total wastewater treatment capacity.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Hydro-3 - Prior to issuance of a building permit, the City Stormwater Management Division shall determine the need for the developer to conduct an analysis of the existing stormwater drainage system and to identify improvements needed to accommodate any projected increased runoff that would result from the proposed Project. The evaluation conducted by the developer shall include a determination of whether Low Impact Development (LID) practices and strategies should be incorporated into the project to reduce post development peak stormwater runoff.

The Downtown Plan PEIR determined that the proposed project could increase the area covered by impervious surfaces, potentially increasing runoff quantities. New drainage infrastructure will be needed, potentially affecting off-site facilities.

Although the project area is substantially urbanized and improved with impervious surfaces, the proposed project would continue recent trends of converting vacant property or low-intensity developed areas containing landscaped areas and other pervious surfaces, into more intensely developed land uses such that potentially increased quantities of runoff would be directed to the City's stormwater collection system. This runoff also has the potential to carry pollutants and sediment. However, construction and operation of future development sites would be required to comply with all local, state and federal requirements pertaining to preservation of water quality and reduction of runoff, including Best Management Practices (BMPs) and the implementation of a Standard Urban Stormwater Mitigation Plan (SUSMP). Provisions of the City's regulations that protect water quality, including Chapter 18.95 of the Municipal Code, would apply. In addition, earthwork for construction projects that would involve greater that one acre of land would require a National Pollutant Discharge Elimination System (NPDES) permit. Existing regulatory procedures are in place to reduce impacts from increased stormwater runoff, and will be reviewed during the plan check phase of development review.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The Downtown Plan PEIR determined that the proposed project would potentially increase the demand for water in the City and a Water Supply Assessment will be prepared to determine whether or not water supplies and infrastructure are adequate to serve the proposed development.

City water supplies are sufficient to meet the projected demand. As shown in Tables 4.13-4 and 4.13-5 for current and future LBWD water supplies and demand, LBWD would have the resources to meet the demand of the proposed Project during hydrologically normal and dry-year events. Not shown in these tables but available in, is LBWD's right to pump its carryover storage and to access other groundwater supplies in case of emergency per the adjudication of the basin. The reliability of the supplemental supply reflects MWD's reliability and MWD's commitment to regional water reliability. Table 4.13-6 shows the impact of the proposed Project on future supplies and demand during multiple dry years. The LBWD 2005 UWMP projected demand 20 years into the future and included the type of new demand the proposed project represents. Because of this 20-year projected demand, the, "With Project" sections of Table 4.13-6 show the same overall total demand for potable water in the year 2025 as shown in Table 4.13-1. Therefore, the proposed

Project would not have an impact on the supply and demand for water in fiscal year 2025, as the demand expected from the proposed Project was anticipated and planned for in the 2005 UWMP.

Development project built within the Downtown Plan that conform to the provisions of the plan have been anticipated by the LBWD and will not be required to prepare a project specific water availability supply assessment during the development review phase of the entitlement. This will be the case unless unanticipated water demand or significant changes in the circumstances or conditions affecting the availability of the public water system to provide sufficient supply of water for the proposed Project as noted in the WAA.

The proposed Project was reviewed by the Water Department and a no additional review was deemed necessary given that sufficient water supplies are available for the proposed 75 residential units.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g) Comply with federal, state, and local statutes and regulations related to solid waste?

f), g) The Downtown Plan PEIR determined that the project would potentially increase the amount of solid waste generated within the City. Compliance with State waste diversion requirements and the potential effects of the increase in solid waste generation on regional landfill capacity will be further evaluated in an EIR.

Adequate capacity exists within the Los Angeles County Sanitation Districts' Mesquite Regional Landfill in Imperial County. Mitigation measures Utilities-3(a), 3(b), 3(c) and 3(d) are to be implemented to reduce the volume of solid waste disposed of in a landfill.

Utilities-3(a) - All construction related to Project implementation shall include verification by the construction contractor that all companies providing waste disposal services recycle all demolition and construction-related wastes. The contract specifying recycled waste service shall be submitted to the City Building Official prior to approval of the Certificate of Occupancy.

Utilities-3(b) - In order to facilitate onsite separation and recycling of construction related wastes, all construction contractors shall provide temporary waste separation bins onsite during demolition and construction.

Utilities-3(c) - All future developments in the Project area shall include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and all other recyclable materials. Materials from these bins shall be collected on a regular basis consistent with the City's refuse disposal program.

Utilities-3(d) - All Project area residents and commercial tenants shall be provided with educational materials on the proper management and disposal of household hazardous waste, in accordance with educational materials made available by the Los Angeles County Department of Public Works.

Planning Bureau will coordinate with Building Bureau during the Project's plan check phase to verify compliance with waste management, recycling and disposal of household waste. During the Project's construction phase, Planning Bureau will perform final inspections to verify compliance with all mitigation measures.

NO IMPACT NOT IDENTIFIED IN PREVIOUS EIR

Shade and Shadow Study

923 & 927 Long Beach Boulevard Project

923 & 927 Long Beach Boulevard, Long Beach CA 90802

PREPARED FOR:

A&H Architects 2560 W. Olympic Boulevard, Suite 305 Los Angeles, CA 90006

PREPARED BY:

Westlake Village Office 920 Hampshire Road, Suite A5 Westlake Village, CA 91361



Los Angeles Office 706 S. Hill Street, 11th Floor Los Angeles, CA 90014

June 2021

TABLE OF CONTENTS

Section	Page
Introduction	1
Project Description	1
Environmental Setting	1
Existing Conditions	
Thresholds of Significance	3
Methodology	3
Impact Analysis	

List of Figures

Figure	Page	ì
1	Spring Equinox Shadows5	;
2	Summer Solstice Shadows6	;
3	Fall Equinox Shadows	,
4	Winter Solstice Shadows	}

INTRODUCTION

The Downtown Plan (PD-30) envisioned high density development and an EIR was prepared to analyze the anticipated additional dwelling units and commercial square footage. The number of dwelling units that were analyzed in the Program EIR have been certified. Since its adoption in 2013, PD-30 has met its target cap of new dwelling units and as a result supplemental application requirement are needed to provide to analyze new impacts related to the addition of more dwelling units in the PD-30 plan. Adherence to Mitigation Measure AES-3 of the Program EIR, prior to the issuance of building permits for any structure exceeding 75 feet in height or any structure that is adjacent to a light sensitive use and exceeds 45 feet in height, the Applicant is required to submit a shading study that includes calculations of the extend of shadowing arches for winter and equinox conditions. If feasible, projects shall be designed to avoid shading of light sensitive uses in excess of the significance thresholds outlined in the Program EIR. This study assesses and discusses the potential shade and shadow impacts that may occur with the 923 & 927 Long Beach Boulevard Project (Project), located within the PD-30 in the City of Long Beach.

Shading is a common and expected occurrence in urban areas, and it is often considered a beneficial feature of the environment when it provides cover from excess sunlight and heat. However, shading can have an adverse impact if it substantially interferes with the enjoyment or performance of sun-related activities. While some incidental shading of shade-sensitive uses is commonly acceptable, shading that occurs over extended periods of time can be considered an adverse effect. The analysis presented below assesses several shade-related factors, including local topography, the location and proposed height of the proposed development, the sensitivity of surrounding uses to shading, the season of the year, and the extent and duration of the Proposed Project's shading.

PROJECT DESCRIPTION

The PD-30 zoning district is characterized by mid- and high-rise residential development, high intensity employment, and numerous retail cultural entertainment and dining designations intended for a mixed use. The Project Site is located in the 150-foot height area which allows a maximum of 5.0 floor area ratio. The Proposed Project plans to develop a six-story (76.5 feet in height) residential apartment building over two parcels of land totaling 16,500 square feet of land (0.379 acres). The apartment building will consist of 87 market rate residential units. The project's required parking is located within three subterranean levels providing 112 (15 tandem) parking stalls.

ENVIRONMENTAL SETTING

The issue of shade and shadow pertains to the blockage of direct sunlight by project buildings affecting adjacent properties. Shading is an important environmental issue because the users of certain land-uses, such as residential, recreational/parks, churches, schools, outdoor restaurants, and pedestrian areas have

some reasonable expectations for direct sunlight and warmth from the sun. These land-uses are termed "shadow-sensitive."

Shadow lengths are dependent on the height and size of the building from which they are cast and the angle of the sun. The angle of the sun varies with respect to the rotation of the earth (i.e. time of day) and elliptical orbit (i.e. change in seasons). The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months.

Winter and Summer Solstice, and Equinox

"Solstice" is defined as either of the two points on the ecliptic (i.e., the path of the earth around the sun) that lie midway between the equinoxes (separated from them by an angular distance of 90°). At the solstices, the sun's apparent position on the celestial sphere reaches its greatest distance above or below the celestial equator, about 23 1/2° of the arc. At winter solstice, about December 22, the sun is overhead at noon at the Tropic of Capricorn; this marks the beginning of winter in the Northern Hemisphere. At the time of summer solstice, about June 22, the sun is directly overhead at noon at the Tropic of Cancer. In the Northern Hemisphere, the longest day and shortest night of the year occur on this date, marking the beginning of summer. Measuring shadow lengths for the winter and summer solstices represents the extremes of the shadow patterns that occur throughout the year. Shadows cast on the summer solstice when the shadows are the longest. Shadows are shown for winter solstice and summer solstice, cast from 9:00 A.M. to 3:00 P.M. (winter) and 9:00 A.M. to 5:00 P.M. (summer).

"Equinox" is defined as either of two points of intersection of the sun's apparent annual path and the plane of the earth's equator, that is, a point of intersection of the ecliptic and the celestial equator. At the equinoxes day and night are the same duration as the sun's transit falls on the equator. Shadows cast on the equinoxes are intermediary between the solstices. Shadows are shown for the spring equinox from 9:00 A.M. to 3:00 P.M. and the fall equinox from 9:00 A.M. to 5:00 P.M.

EXISTING CONDITIONS

The PD-30 zoning allows a mix of commercial and high-density residential uses, entertainment and visitorserving commercial uses, and a mix of other moderate to high-density residential uses with ground-floor storefronts, live/work spaces, and arts-related uses. The Project Site is bounded by Long Beach Boulevard to the east and E. 9th Street to the west. The Project Site is surrounded by commercial uses to the north on the corner of Long Beach Boulevard and E. 10th Street; the Renaissance High School for the Arts and Performance Arts Center to the south across E. 9th Street; commercial uses to the east across Long Beach Boulevard; and multifamily residential uses adjacent to the west. Shading can have an adverse impact if it substantially interferes with the enjoyment or performance of sun-related activities. While some incidental shading on shade-sensitive uses is commonly acceptable, shading that occurs over extended periods of time can be considered a detriment.

The City of Long Beach Downtown Plan Draft EIR defines a sensitive-use as:

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

As such, the shade-sensitive uses near the Project Site include the Renaissance High School for the Arts to the south and the multifamily residential uses to the west.

THRESHOLDS OF SIGNIFICANCE

The City of Long Beach Downtown Plan Draft EIR identifies the following criteria to evaluate shading:

• If shadow-sensitive uses would be shaded by project-related structures for more than 3 hours between late October and early April (including Winter Solstice), or for more than 4 hours between early April and late October (including Summer Solstice).

In assessing impacts related to shade/shadow in this section, the City will use the criteria identified above from the Thresholds Guide, as Appendix G of the State CEQA Guidelines does not provide guidance with regard to the shade/shadow impacts of a proposed project.

METHODOLOGY

The analysis of the Proposed Project's potential shading impacts focuses on changes in shading conditions for those identified shade-sensitive uses. Project-generated shadows were modeled using the proposed maximum building heights. Accordingly, in determining the effects of shading, the shadows of structures upon full implementation for the Proposed Project have been modeled and plotted for representative hours during the winter and summer solstices, and the spring and fall equinoxes.

Some sensitive uses in the area already experience some degree of shading. This methodology accounts for the incremental increase in shading that would result from development of the Proposed Project by analyzing current shadows cast from existing structures within and, in some cases, surrounding the Project Site. To analyze the Proposed Project's shading impacts shadow lengths have been identified for the winter and summer solstices, and the spring and fall equinoxes. The winter and summer solstices were selected

for analysis because they represent the most extreme shading conditions from buildings. The spring and fall equinoxes were selected for analysis because they represent intermediate shading conditions from buildings.

The varying and seasonally adjusted daytime hours represent the period of the day during which the expectation of available sunlight exists. For the purpose of establishing the hours in which significant impacts may occur, winter is described as occurring during Pacific Standard Time, which occurs between the first Sunday of November through the second Sunday in March; and spring, summer, and fall are described as occurring during Time, which occurs between the second Sunday in March and the first Sunday of November.

IMPACT ANALYSIS

Spring Equinox

As shown in **Figure 1: Spring Equinox Shadows**, the proposed development would shade areas from the northwest to the north east. However, the proposed development would not shade sensitive use areas for more than 3 hours as shadows from the Project Site will fall on-site and on parking areas and commercial uses to the northwest.

Summer Solstice

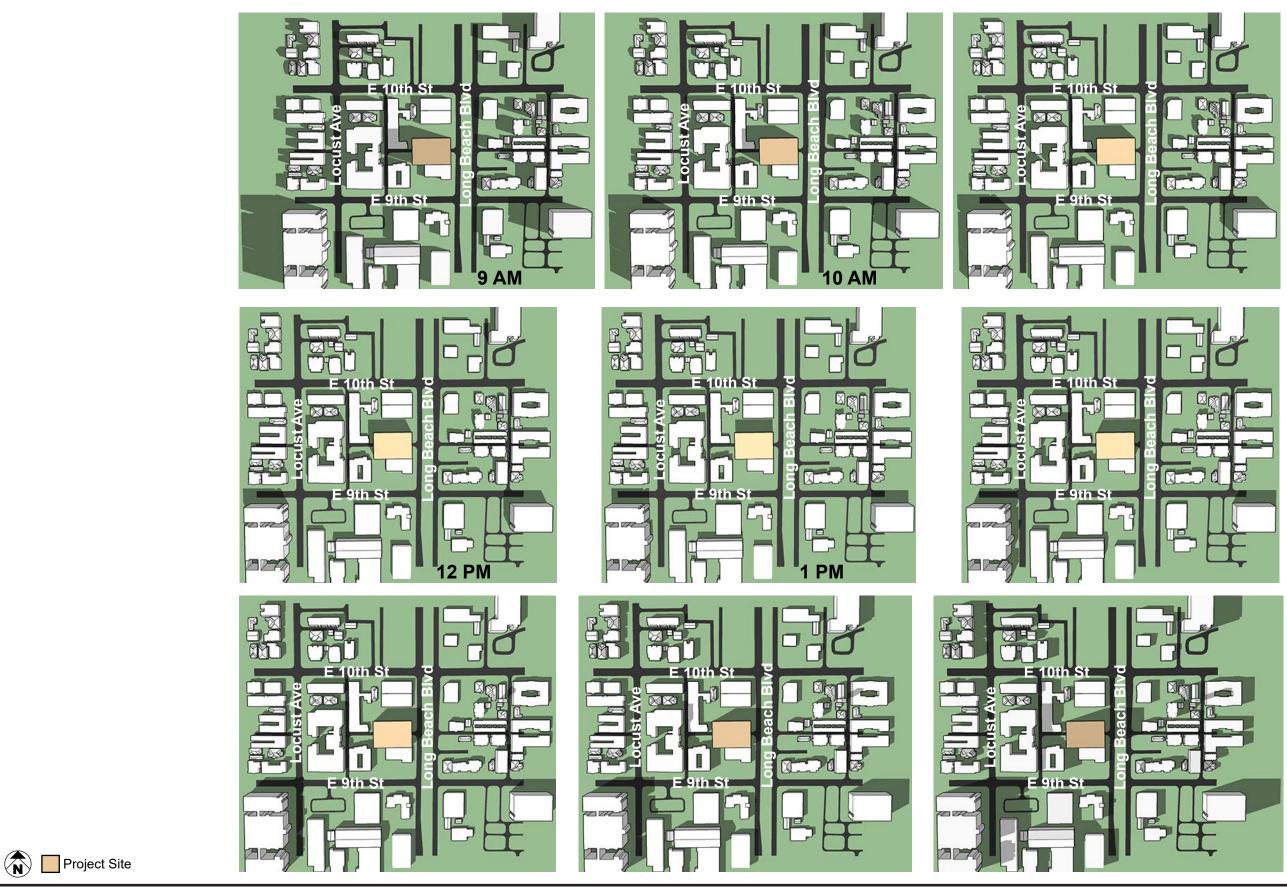
As shown in **Figure 2: Summer Solstice Shadows**, the proposed development would shade areas from the west to the east. However, the proposed development would not shade sensitive use areas for more than 3 hours as shadows from the Project Site will fall on-site and on parking areas and commercial uses to the west.

Fall Equinox

As shown in **Figure 3: Fall Equinox Shadows**, the proposed development would shade areas from the northwest to the northeast. However, the proposed development would not shade sensitive use areas for more than 3 hours as shadows from the Project Site will fall on-site and on parking areas and commercial uses to the northwest.

Winter Solstice

As shown in **Figure 4: Winter Solstice Shadows**, the proposed development would shade areas from the northwest to the northeast. However, the proposed development would not shade sensitive use areas for more than 3 hours as shadows from the Project Site will fall on-site and on parking areas and commercial uses to the northwest.



SOURCE: Relativity Architects - 2021



Spring Equinox Shadows

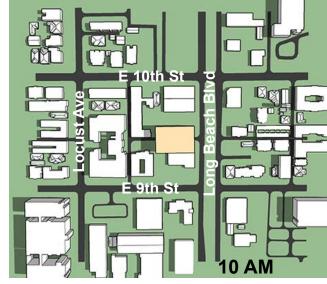




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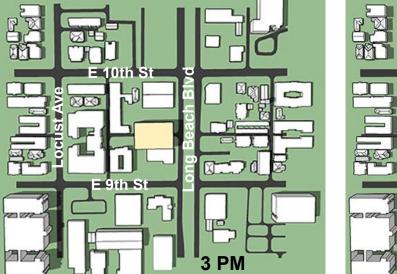
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SOURCE: Relativity Architects - 2021

Project Site



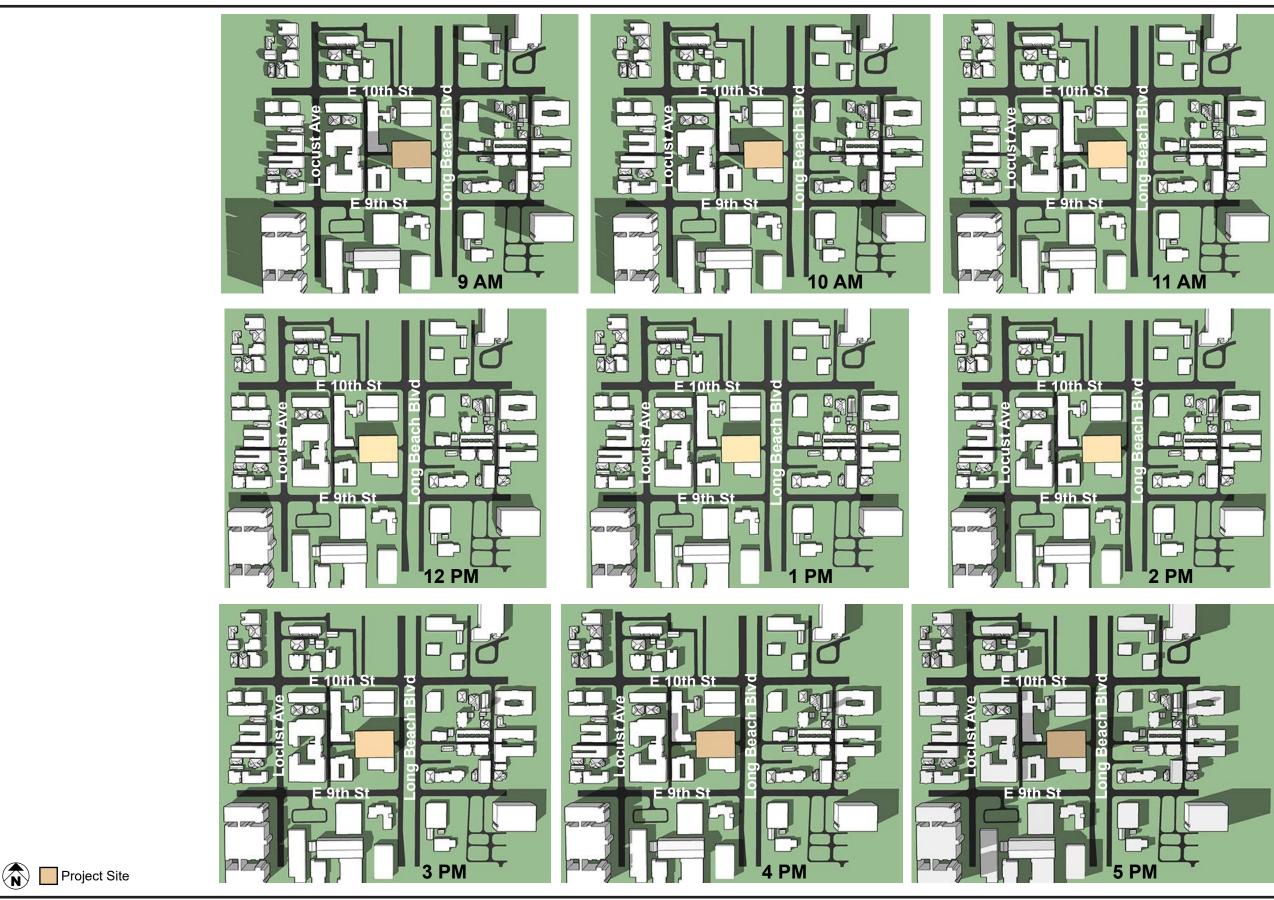
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FIGURE 2

Summer Solstice Shadows

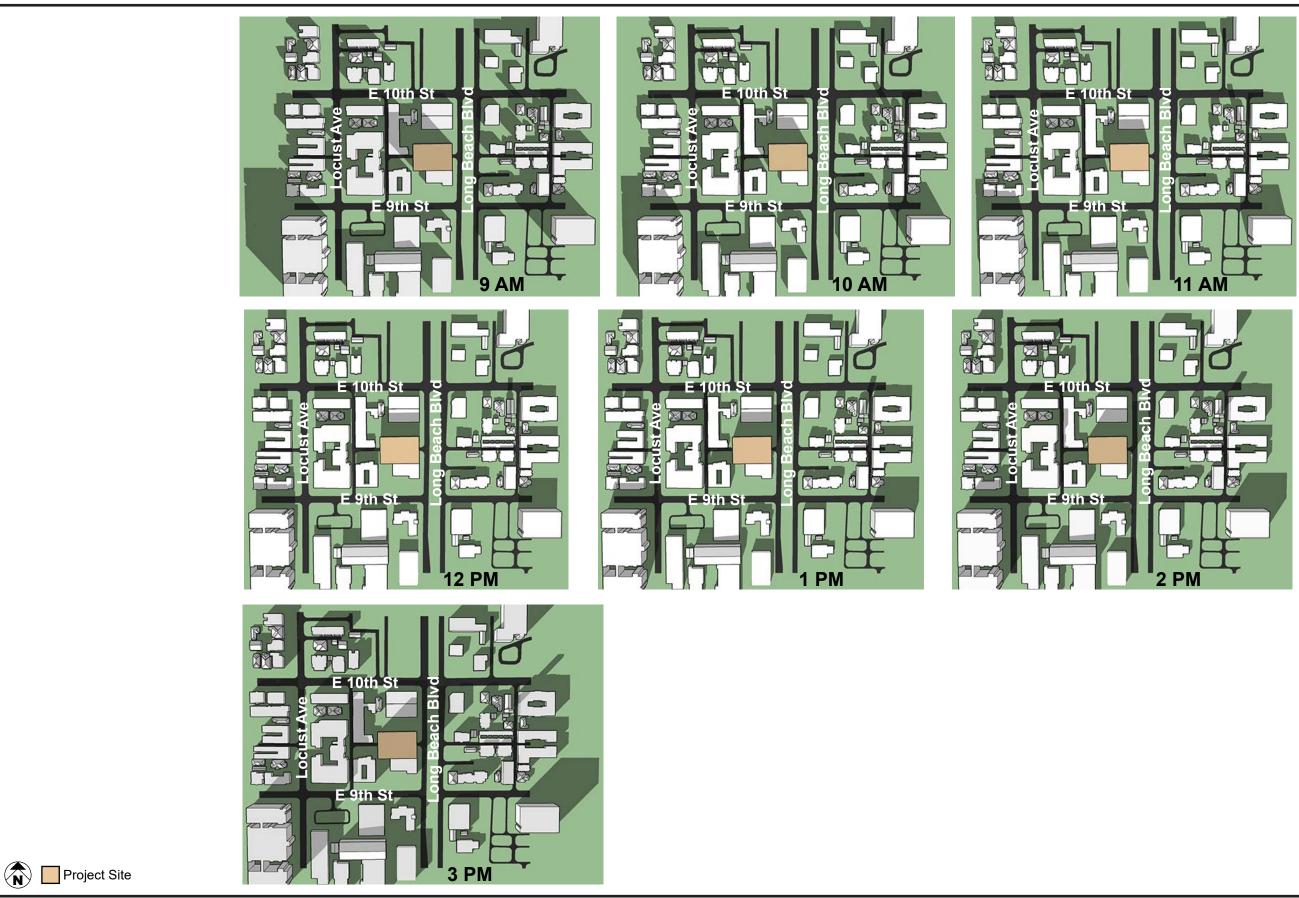


SOURCE: Relativity Architects - 2021



Fall Equinox Shadows

FIGURE 3



SOURCE: Relativity Architects - 2021



FIGURE 4

Winter Solstice Shadows

FEHR & PEERS

TECHNICAL MEMORANDUM

Date:	June 1, 2021
То:	Christ Kirikian, Meridian Consultants, LLC
From:	Ryan Liu, EIT and Michael Kennedy, AICP
Subject:	923 & 927 Long Beach Boulevard Project Traffic Assessment

LB21-0031

This technical memorandum presents the traffic assessment for the proposed development project located on a vacant site on the west side of Long Beach Boulevard between 9th Street and 10th Street in Long Beach, California. This memorandum presents the trip generation of the proposed site, an assessment of Vehicle Miles Traveled (VMT), and a site access review.

Project Description

The proposed project consists of 75 apartment units located within a 6-story building over one level of above grade parking and three levels of underground parking. As shown in **Figure 1**, the Project is located within the Long Beach Downtown Plan area.

Trip Generation

Trip generation rates from *Trip Generation*, 10th *Edition* (Institute of Transportation Engineers [ITE], 2017) were used as the starting point to estimate the number of trips associated with the Project. The Multi-Family (Mid-Rise) land use type (ITE Land Use #221) was determined to be the most appropriate trip generation rate to represent the project.

The Project is located within a Transit Priority Area (TPA) with access to the LA Metro A Line, LA Metro bus lines 60 and 232, and Long Beach Transit Lines 1, 46, 51, and 52. The Project is also located in a dense urban area with high intersection density, nearby bikeways, and a variety of land uses nearby. In order to accurately and defensibly estimate trip generation for the project, taking into account its site specific characteristics, Fehr & Peers employed the MXD 2.0 Mixed Use Trip Generation Methodology, which takes into account available transit service and the built environment to inform future residents' modal choice.

Standard trip generation methodologies typically use the Institute of Transportation (ITE) Engineers Trip Generation Manual (10th Edition) to establish trip rates for each individual land use in isolation. However, most of the empirical data used to develop ITE trip generation rates were collected in isolated, suburban settings, and do not accurately predict trip generation for mixed use and urban infill sites with transit proximity and a density, scale, and design that can facilitate walking and biking. Research indicates that the

ITE manuals overestimate peak traffic generation for mixed-use development (MXD) by an average of 35%.¹ To overcome this shortcoming of the conventional ITE trip generation procedure, researchers have developed a mixed-use trip generation model. MXD represents a substantial improvement over conventional traffic estimation methods. It improves accuracy, virtually eliminates overestimation, and is supported by substantial evidence. The established MXD method developed by Fehr & Peers for the US EPA, and continuously refined through consulting for other state, regional and local clients, is based on:

- Pooled household survey data for 239 MXDs in six diverse US regions.
- Equations on internal trip capture and mode share that were developed using regression statistical analysis of MXD variables that affect trip generation, such as population and employment density, number of bus stops, and other factors to determine a statistically significant model. Additional detail on the variables included in the MXD+ model are summarized in Getting Trip Generation Right.
- Validation at 27 existing MXD sites across the US, including mixed-use developments in California, Georgia, Florida, Texas, and Georgia. The mixed-use sites ranged from transit-oriented developments to suburban mixed-use retail centers.
- Peer reviews.

MXD+ 2.0 accounts for 97% of the statistical variation in trip generation among the 27 validation sites, compared to 65% for the ITE Handbook. It also all but eliminates the Handbook's systematic overestimation of traffic, found to be 35% for the validation sites. MXD+ 2.0 reduces the overestimation to 4%., meaning that the MXD model still slightly overestimates trip generation relative to the actual counted trip generation of the validation sites.

The model starts with ITE trip generation rates for each individual land use, but through the statistical processes of the model, calibrates the ITE rates to reflect the site specific and area contexts of the Project, including its mixture of uses, site and area demographics, accessibility to other land uses, such as adjacent residential development, availability of transit service, pedestrian connectivity, and other factors. The model calibrates ITE rates based on these factors to provide a much more accurate estimate of external project trip generation than the application of ITE trip rates alone.

Based on the output of the MXD analysis, reflecting the site specific characteristics of the Project a 10% transit credit and a 10% walking/biking credit was taken.

The Project trip generation estimates are presented in **Table 1**. As noted below, the project is expected to generate 330 daily, 21 AM peak hour, and 27 PM peak hour net external trips.

¹ Ewing, Reid, Michael Greenwald, Ming Zhang, Jerry Walters, Robert Cervero, Lawrence Frank, and John Thomas. 2011. "Traffic Generated by Mixed-Use Developments — Six-Region Study Using Consistent Built Environmental Measures." ASCE Journal of Urban Planning and Development 137(3): 248–61. <u>https://ascelibrary.org/doi/10.1061/%28ASCE%29UP.1943-5444.0000068</u>

VMT Assessment

SB 743, signed by the Governor in 2013, has directed the Office of Planning and Research (OPR) to look at different metrics for identifying transportation impacts under CEQA. The Final OPR Technical Advisory was released in December 2018 and identified VMT as the preferred metric for transportation impact analysis for California Environmental Quality Act (CEQA) assessment. The City of Long Beach adopted VMT thresholds and updated Traffic Impact Analysis (TIA) Guidelines in June 2020.

The City's guidelines include a list of screening criteria that screen projects from project-level assessment under the presumption that those projects will result in a less-than-significant impact. The following is from the adopted City guidelines regarding residential project screening:

"The OPR Technical Advisory on Evaluating Transportation Impacts in CEQA states that residential and office projects that have similar density, mix of uses, and transit accessibility as surrounding similar uses will likely have similar VMT generation as those uses. Therefore, maps showing VMTefficient areas can be used to screen residential and office projects from further analysis. Figure 2 presents a map of VMT per capita for all existing Long Beach residential areas. These data were obtained from the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) travel demand model... In these green areas, projects with similar characteristics to the surrounding development would be presumed to have a less than significant transportation impact."

The Project is located in a "green" area for VMT per capita, which indicates that the project would be eligible for screening in a VMT efficient area as projects in those areas are assumed to generate VMT per capita at least 15 percent below the regional average. The City's VMT per capita map is included as **Figure 2**.

The City's TIA guidelines also allow for small sized projects that generate less than 500 net new average daily trips to be screened from a full VMT assessment. The proposed project is estimated to generate less than 500 net new average daily trips.

Projects located within a TPA may also be screened from a full VMT assessment. A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor per the definitions below². The project site is located within a half mile of a high-quality transit corridor and within a half mile of a major transit stop. The project site is located approximately ¹/₄ mile from both the LA Metro A Line 5th Street and Anaheim Street stations, and is served by a variety of bus lines. The Long Beach TPA map is included as **Figure 3**.

² Pub. Resources Code, § 21064.3 - 'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

Pub. Resources Code, § 21155 - For purposes of this section, a 'high-quality transit corridor' means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Projects can be presumed less-than-significant and screened from further VMT analysis when it meets the requirements outlined in the City's guidelines for TPA screening. The project's ability to be screened from VMT assessment is summarized below in **Table 2**.

Criteria	Project Eligibility
Project is located within a half mile of high- quality transit	As shown in Figure 4, the project is located within a half mile of high-quality transit
Project has a minimum FAR of 0.75	Project has a FAR of greater than 0.75. FAR was calculated by the following formula: (Total usable square footage of the proposed building/Total land area of project parcels). The Project's FAR is 4.3
Project shall not supply more parking than is required by the City code	Project proposes parking supply that is not more than required by the City Code
Project is consistent with the RTP/SCS land use assumptions	The land use growth assumed in the RTP/SCS includes an increase in multi-family housing units in the project location greater than the number of multi-family housing units proposed, which indicates the project is consistent with the RTP/SCS.
Project does not replace affordable housing with market-rate housing units	The existing project site is vacant, there are no existing affordable housing units on the Project site which would be replaced.

Source: Fehr & Peers, 2021

Given that the project is not estimated to generate 500 or more net daily new trips, the location of the project is within identified VMT-efficient areas for VMT per capita, and the project is located in a TPA, this project should be screened from a full VMT assessment under the presumption that it will result in **a less-than-significant impact**. In addition, because the project is not estimated to generate 500 or more net new daily trips, a full transportation impact study would not be required.

Site Access Review

Pedestrian Access

Pedestrian access is provided by sidewalks adjacent to the Project. Sidewalks are present on all surrounding streets, excluding alleys. The project proposes direct building access on Long Beach Boulevard at street level and independent from vehicular access.

Bicycle Access

The next nearest bicycle facilities are Class III bike routes on east-west facilities on 14th Street and northsouth facilities on Pacific Avenue, approximately ½ mile and ¼ mile from the project site, respectively. The City has Active Transportation Plan (ATP) grant applications for a bike boulevard on Pine Avenue and Class IV protected bikeway on Pacific Avenue. Long Beach Boulevard is proposed to be a Class III bike route. The Project proposes secure bike parking in the building. No bike racks exist along the public ROW on Long Beach Boulevard.

Transit Access

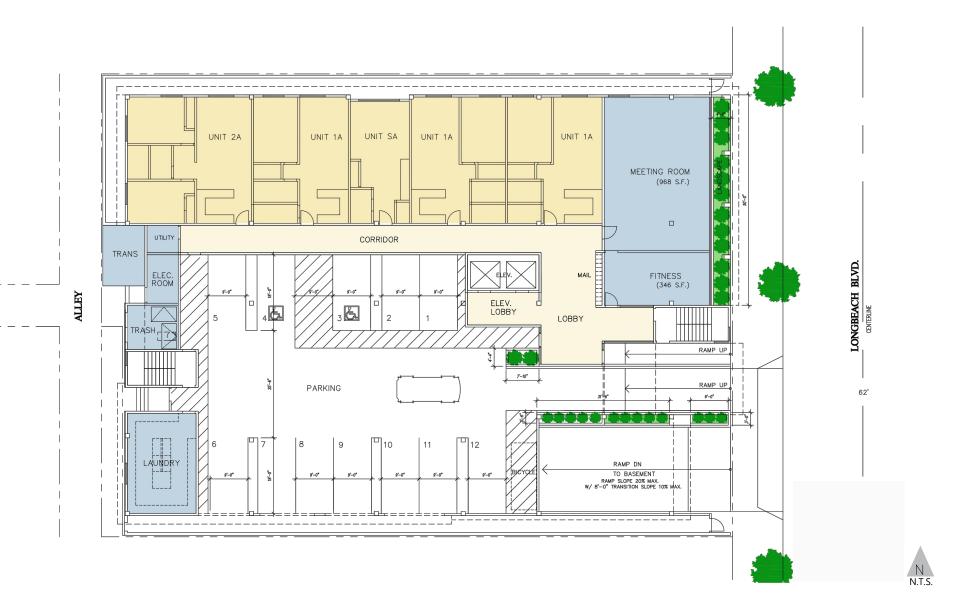
A southbound bus stop for Long Beach Transit and LA Metro is located approximately 100' north of the project site. A northbound bus stop for both agencies is located north of 10th Street, approximately 500' north of the project site. A light-rail station for the LA Metro A Line is located just south of Anaheim Street approximately ¹/₄ mile north of the Project. Alternatively, the 5th Street Station is located approximately ¹/₄ mile south of the Project. Additional bus transit is available along Pacific Avenue, Atlantic Avenue, Anaheim Street, and 6th/7th Streets.

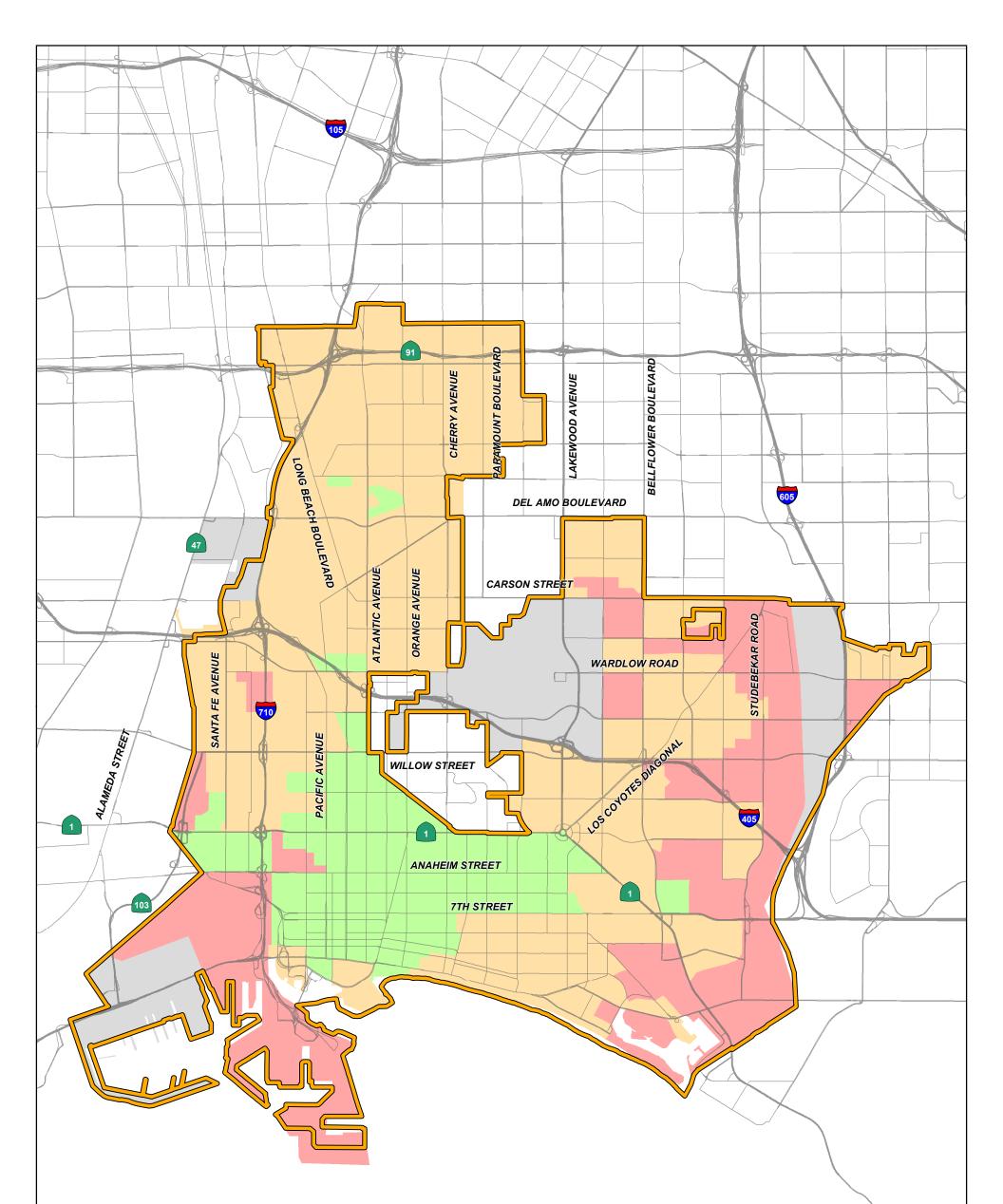
Vehicle Access

Vehicular access to the proposed site will be provided via one driveway on Long Beach Boulevard serving two different ramps and parking areas. This will be a right-in/right-out driveway. The primary two-way ramp serves a below grade parking garage, which will provide the vast majority of proposed parking spaces. An additional contraflow ramp adjacent to the primary ramp serves an above grade parking level with 10 parking spaces and two ADA spaces. This contraflow ramp adjacent to the primary garage ramp is not expected to cause major conflicts within the project site or on Long Beach Boulevard as the number of spaces served by this ramp is low.

Attachments

- Figure 1 Project Location
- Figure 2 Long Beach Existing VMT per Population Compared to Regional Average
- Figure 3 Long Beach Transit Priority Areas
- Table 1 Trip Generation Estimate





County of Los Angeles Average VMT per Population: 13.9



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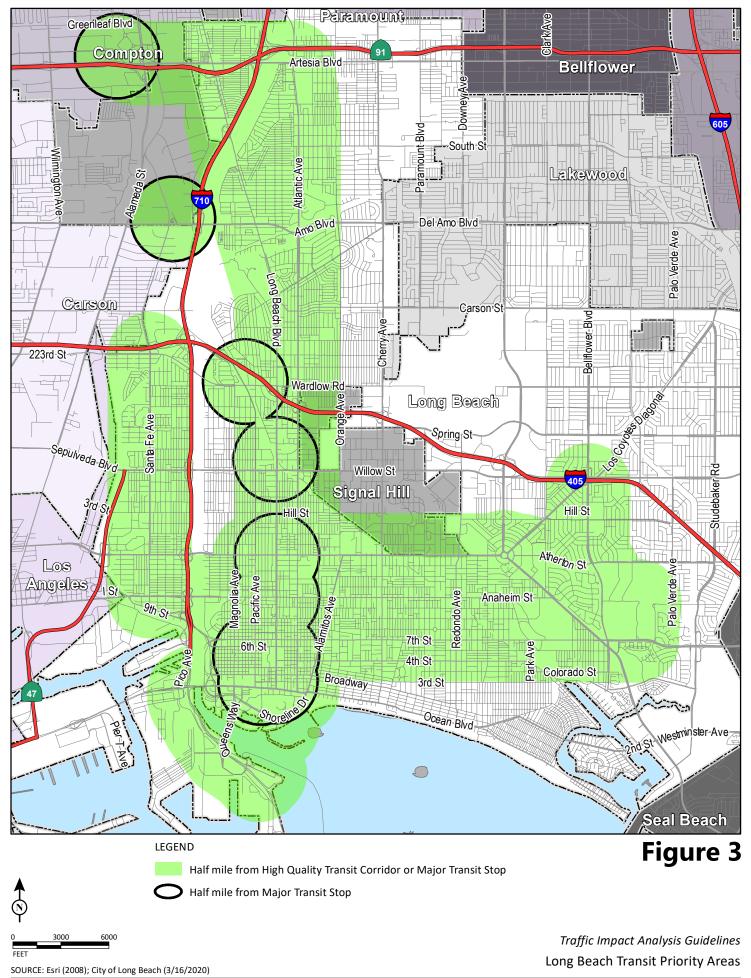


TABLE 1 TRIP GENERATION ESTIMATE 923 & 927 LONG BEACH BOULEVARD APARTMENT PROJECT

	ITE Land			Trip Generation Rates [a]									Estimate	ieration											
Land Use		Use Size		Size D		Size D		Use Size Dai		Jse Size		A	M Peak H	lour	PM	Peak H	our	Trip Rate	Daily	AM I	Peak Hour	Trips	PM F	Peak Hour	Trips
	Code		Rate	Rate	% In	% Out	Rate	% In	% Out	Unit	Trips	ln	Out	Total	In	Out	Total								
Proposed Project Multifamily Housing (Mid-Rise) <i>Walking/Biking Credit [b]</i> <i>Transit Credit [b]</i> Net External Trips	221	75 dwelling units	5.44 10% 10%	0.36 10% 10%	26%	74%	0.44 10% 10%	61%	39%	per du	408 <i>(41)</i> <u>(37)</u> 330	7 (1) <u>(1)</u> 5	20 (2) <u>(2)</u> 16	27 (3) <u>(3)</u> 21	20 (2) <u>(2)</u> 16	13 <i>(1)</i> <u><i>(1)</i></u> 11	33 <i>(3)</i> <u>(3)</u> 27								
Net External Project Trips											330	5	16	21	16	11	27								

Notes:

a. Original trip generation rates based on information from Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017, unless otherwise noted.

b. Walking, biking, and transit credits informed by the built environment and walkability, local transit service (A Line), and results of the MXD 2.0 Mixed Use Trip Generation Methodology to account for transit, walking, and biking access to the Project Site. The Project is located approximately 1/4 mile from the LA Metro A Line 5th Street and Anaheim Street stations.

Appendix C

The Land Use Equivalency Calculator

			N	ew Projec	t Information						Substitution Information							
			Residential	Office	Commercial	Hotel		Land Use incl	uded in Project									
	Date	Project Name	(DUs)	(KSF)	(KSF)	(Rooms)												
											Need to Substitute		# Units to	# Units to				
											for Residential		Substitute for					
		Remaining Balance	0	569.33	140.97	400	Land Use 1	Land Use 2	Land use 3	Land use 4	Overage?	for Office	Commercial	Hotel				
	6/11/2021		3260				Residential				Yes	1325	1655	280				
2	5/19/2022	923-927 Long Beach Blvd.	75	0.00	0.00	0	Residential				Yes	75						
3																		
4																		
5																		
6																		
7																		
8																		
9																		

0	krop Down	List Choices		Exchange Rat	te	(KSF = 1,000 se	quare feet)																																
	Residential																																							
-	Office			0.314762	WEE of all	ice per dwellir																																		
4.7	Commercial					mmercial per d	and the second s	3.																																
	-ommercial -lotel					and the second se	and an other states of the second states of the sec	ur.																																
	None			0.628931	Hotel Roo	oms per dwelli	ngunit																																	
ľ	Jone			N	New Project Information			New Project Information		New Project Information		New Project Information		New Project Information		New Project Information		New Project Information		w Project Information		olect Information		oformation					B	emaining	Running Total		1	Exchange Valu	0	<u> </u>	Bal	ance		1
ŝ.				Residential	Office	Commercial	Hotel					Residential	Office	Commercial		Office	Commercial		Residential	Office	Commercial	Hotel	Substitution																	
1		Date	Project Name	(DUs)	(KSF)	(KSF)	(Rooms)	Land Use 1	Land Use 2	Land use 3	Land use 4	(DUs)	(KSF)	(KSF)	(Rooms)	(KSF)	(KSF)	(Rooms)		(KSF)	(KSF)	(Rooms)	Determinatio																	
8			Balance	0	1,010.00	276.29	577					0	1,010.00	276.29	577				0	1,010.00	276.29	577																		
t	1	6/11/2021	60 Unit Replaceme	3260	0.00	0.00	0	Residential	0	0	0	-3260	1,010.00	276.29	577	417.06	135.32	177	0	592.94	140.97	400	-3260																	
Г	2	5/19/2022	927 Long Beach Bl	75	0.00	0.00	0	Residential	0	0	0	-3335	1,010.00	276.29	577	23.61	0.00	0	0	569.33	140.97	400	-3335																	
T	3	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
	4	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
1	5	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
Ľ	6	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
	7	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
	8	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
l.	9	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
8.	10	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
1	11	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
1	12	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
1.	13	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
Ŀ	14	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
L	15	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
ų.,	16	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
L	17	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
1.	18	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
ł	19	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
L	20	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
Į.	21	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
Į.	22	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
Į.	23	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
Ł	24	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
	25	1/0/1900		0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	
ĩ.	26	1/0/1900	0	0	0.00	0.00	0	0	0	0	0	-3335	1,010.00	276.29	577	0.00	0.00	0	0	569.33	140.97	400	0																	