Westside Gateway Project

Downtown Plan EIR Addendum

Prepared for
City of Long Beach

June 2019

ESA

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Prepared for
City of Long Beach

June 2019

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WESTSIDE GATEWAY PROJECT

EIR Addendum

Introduction/Background

This document is an addendum to the Certified City of Long Beach Downtown Plan Program Environmental Impact Report (Certified PEIR) (SCH No. 2009071006) prepared for the City of Long Beach (City), which was approved by City Council in November 2011. The Certified PEIR analyzes the potential environmental impacts that may result from the implementation of the Downtown Plan, which covers an area of approximately 719 acres, including the project site for the proposed Westside Gateway Project (proposed project) located at 600 West Broadway. In accordance with the California Environmental Quality Act (CEQA), this addendum analyzes the proposed project for the City of Long Beach to determine whether the project would result in any new significant environmental impacts or a substantial increase in the severity of impacts identified in the Certified PEIR.

The Certified PEIR analyzed the adoption and implementation of the Long Beach Downtown Plan that would replace the existing land use, zoning, and planned development districts as the land use and design document for all future development in the Downtown Plan Project area. The Certified PEIR assumed that full implementation of the Downtown Plan could increase the density and intensity of existing Downtown land uses by allowing up to (1) approximately 5,000 new residential units; (2) 1.5 million square feet (sf) of new office, civic, cultural, and similar uses; (3) 384,000 sf of new retail; (4) 96,000 sf of restaurants; and (5) 800 new hotel rooms. The additional development assumed in the Downtown Plan could occur over a 25-year time period, ending in 2035. The approved Downtown Plan and Certified PEIR are also referred to hereafter as the "Approved Project."

As described above and in more detail below, the proposed project would be developed within the Downtown Plan area and would replace an existing surface parking lot with seven structures, including two residential towers (21 and 40 stories in height), four residential buildings (5 to 7 stories in height with 1 partial level of subterranean parking), and a parking structure (9 above-ground levels, 1 subterranean level). The proposed project would include a total of 756 dwelling units, a 3,000 sf market), 1,510 parking spaces, 153 bicycle spaces, and 152 storage units. The proposed project would also include 76,680 sf of residential common open space, 21,456 sf of residential private open space, and 12,491 sf of public open space.

CEQA Authority for an Addendum

The Certified PEIR includes all statutory sections required by CEQA, comments received on the Draft EIR, responses to comments on the Draft EIR, and supporting technical appendices. CEQA

establishes the type of environmental documentation required when changes to a project occur after an EIR is certified. Specifically, CEQA Guidelines Section 15164(a) states that:

> *The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*

CEQA Guidelines Section 15162 requires a Subsequent EIR when an MND has already been adopted or an EIR has been certified and one or more of the following circumstances exist:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
    a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment but the project proponents decline to adopt the mitigation measure or alternative.

Likewise, California Public Resources Code (PRC) Section 21166 states that unless one or more of the following events occur, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency:

1. Substantial changes are proposed in the project which will require major revisions of the environmental impact report;
2. Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; or

3. New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

As demonstrated by the analysis herein, the proposed project would not result in any additional significant impacts, nor would it substantially increase the severity of previously anticipated significant impacts. Rather, all of the impacts associated with the proposed project would be within the envelope of impacts addressed in the Certified EIR and would not constitute a new or substantially increased significant impact. Based on this determination, the proposed project does not meet the requirements for preparation of a Subsequent EIR pursuant to CEQA Guidelines Section 15162.

Project Details and Background

1. Project Title

Westside Gateway Project

2. Lead Agency Name and Address

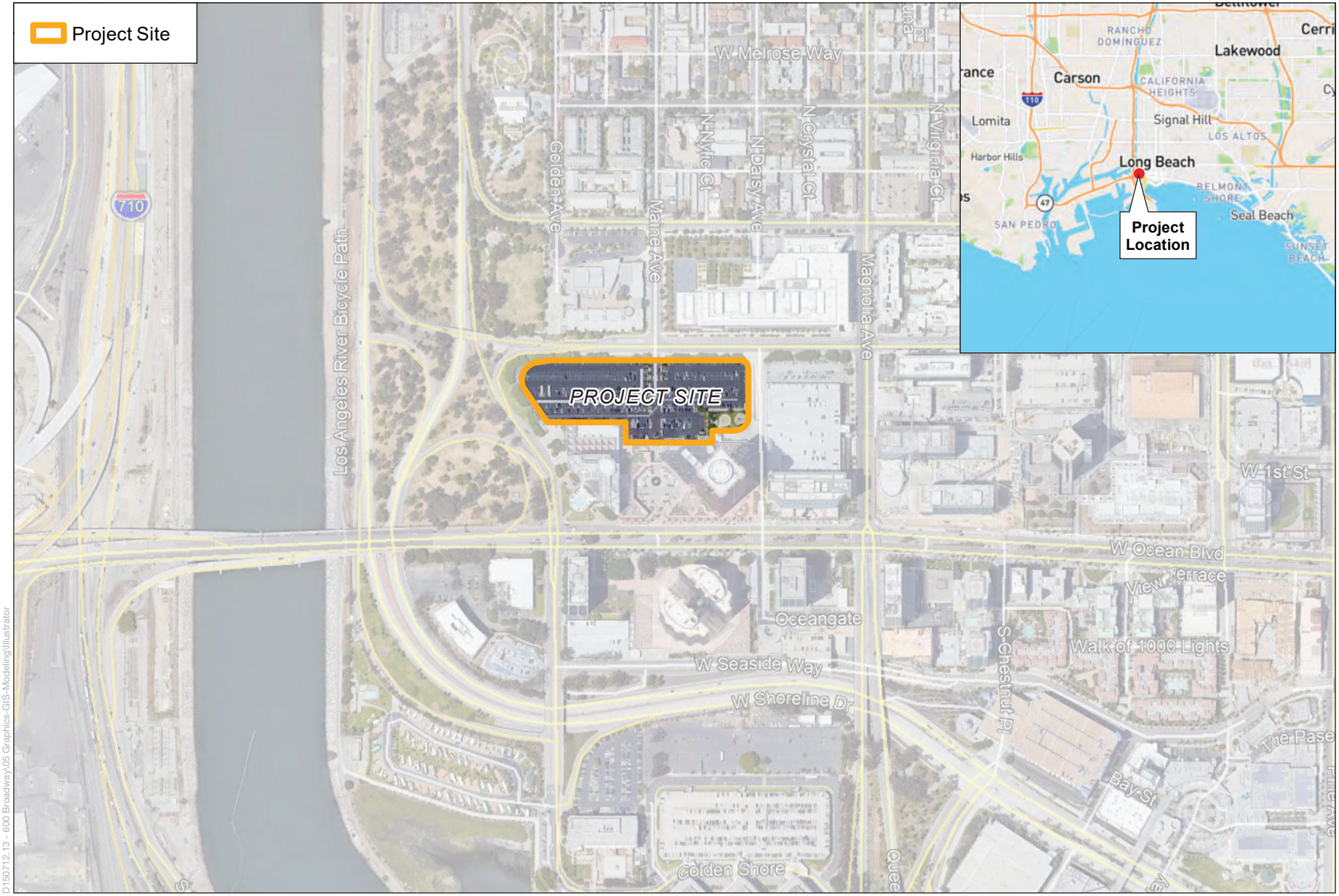
City of Long Beach
Development Services Department
333 West Ocean Boulevard, 5th Floor
Long Beach, California 90802

3. Contact Person and Phone Number

Christopher Koontz, Planning Bureau Manager,
333 W. Ocean Blvd., 5th Floor
Long Beach, California 90802
562.570.6288, Christopher.Koontz@longbeach.gov

4. Project Location and Existing Site Conditions

The 5.59-acre project site is located at 600 West Broadway in the City of Long Beach. As shown in **Figure 1**, *Project Location*, the project site is east of Golden Avenue, south of West Broadway, west of World Trade Center Drive, and north of the Hilton Long Beach Hotel, World Trade Center office complex, and Ocean Boulevard. Surrounding uses include Cesar Chavez Elementary School and the Governor George Deukmejian Courthouse, and residential uses to the north, the Superior Court of California Parking Garage, federal government offices, and the City of Long Beach Police Station and Fire Station No. 1 to the east, and the Santa Cruz Park and Los Angeles River to the west. Regional access to the project is provided by Interstate 710 (I-710), which runs north–south approximately 0.25 miles to the west of the project site and the Pacific Coast Highway (State Route 1), which runs east–west approximately 1.4 miles north of the project site. Additional regional access is provided by the Metro Blue Line (soon to be renamed Metro A Line), with the 1st Street Station located approximately 0.3 miles east of the project site, which travels to and from downtown Los Angeles. As shown in **Figure 2**, *Existing Conditions*, the project site is currently occupied by a surface parking lot.



SOURCE: Studioneleven, 2019

Westside Gateway Project

Figure 1
Project Location

ESA

D150712.13 - 600 Broadway\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Studioneleven, 2019

Westside Gateway Project

Figure 2
Existing Conditions

ESA

5. Project Sponsor's Name and Address

Maple Multi-Family Land CA, LP
c/o Trammell Crow Residential
5790 Fleet Street, Suite 140
Carlsbad, California 92008

6. General Plan Designation

Mixed Use (LUD No. 7)

7. Zoning

Downtown Plan Planned Development District (PD-30)

8. Project Description and Background

Downtown Plan and Certified PEIR (Approved Project)

The Downtown Plan, adopted in January 2012, outlines the development and design standards for Downtown Long Beach. The Downtown Plan covers an area of approximately 719 acres and adopts zone reclassifications and design guidelines, replacing existing land use plans and zoning regulations for the Downtown Plan area. The Downtown Plan includes a series of guiding principles such as: developing a distinctive downtown skyline; promoting Downtown Long Beach as the heart of the City; encouraging infrastructure focused on walking, bicycling, and public transit; diversifying the economy, promoting job growth, and tourism; promoting bold architecture, planning, and construction that utilizes green building technology, sustainable energy, and quality building practices; and incorporating aspects of a global city.

The Downtown Plan is divided into six unique Character Areas: North Pine, Civic Center, Business and Entertainment Area, Willmore Historic District, West End, and East Village. The project site is within the West End, which is located in the west side of Downtown, east of I-710, Santa Cruz Park, and Cesar Chavez Park. This district is defined by low-rise, single- and multifamily residential uses, and neighborhood amenities like churches and schools. This district represents the traditional neighborhoods with walkable streets and diverse housing types that characterize much of the City. The Downtown Plan states that architectural design standards west of the Downtown core should promote high-quality residential development with a minimum streetwall, landscaped setbacks, parkways, and street trees to enhance the pedestrian environment. The Downtown Plan's Figure 2-2, *Connectivity Network Map*, shows this area as being very close to the Metro Blue Line, Long Beach Transit and Metro bus stops, Aqua Bus and Aqua Link, Passport Routes, pedestrian connections, key mobility streets, and existing bike routes, including one on West Broadway, next to the project site.

The Downtown Plan also includes specific development standards and guidelines required for all new developments in the Downtown Plan area, such as: zoning, permitted land uses, intensity and height standards, development incentives, parking standards, transportation management, and open space and design standards. Full implementation of the Downtown Plan would increase the density and intensity of existing Downtown land uses by allowing up to (1) approximately 5,000 new residential

units; (2) 1.5 million sf of new office, civic, cultural, and similar uses; (3) 384,000 sf of new retail; (4) 96,000 sf of restaurants; and (5) 800 new hotel rooms, over a 25-year time period.

The Certified PEIR analyzes the potential environmental impacts that may result from the adoption and implementation of the Downtown Plan. The Certified PEIR provides a programmatic level of environmental impact analysis for a broad array of environmental topics for the entire Downtown Plan area. The Certified PEIR analyzes the impacts of an estimated buildout scenario of residential units, offices, retail uses, restaurants, and hotel rooms. The Certified PEIR determined the Downtown Plan would cause significant and unavoidable impacts to the following resource areas: Aesthetics (Shade and Shadow), Air Quality (construction and operation), Cultural Resources (Historic), Greenhouse Gases, Noise (construction vibration), Population and Housing, Public Services, Transportation and Traffic, and Utilities and Service Systems (Solid Waste). All other resources areas were determined to have impacts that were either less than significant or less than significant with mitigation. **Table 1**, *Certified PEIR Impacts and Mitigation Measures*, includes a list of the impact statements the Certified PEIR determined required mitigation measures.

Proposed Project

As shown in Figure 1, *Project Location*, and **Figure 3**, *Site Plan*, the proposed project would develop a mixed-use residential development in the Downtown Plan area. The proposed project would replace an existing surface parking lot with seven structures, including two residential towers (21 and 40 stories in height), four residential buildings (5 to 7 stories in height with 1 partial level of subterranean parking), and a parking structure (9 above-ground levels, 1 subterranean level). The proposed project would include a total of 756 dwelling units that would range from studios to three-bedroom lofts, a 3,000 sf market, 1,510 parking spaces, 153 bicycle spaces, and 152 storage units. **Table 2**, *Proposed Development*, provides a summary of the uses, number of units, total area, and height of the proposed development. As described in Table 2, the project's residential component would consist of 1,035,741 sf of residential uses, 694,804 of parking, and 110,627 sf of open space (76,680 sf of residential common open space, 21,456 sf of residential private open space, and 12,491 public commercial open space). The proposed project's gross building area would be approximately 1,431,145 sf, including parking and exterior areas, and the subtraction of 302,400 sf of exempt garage square footage and the floor area ratio (FAR) would be 5.9. **Figures 4 through 8** depict the conceptual site plan and floor plans of the proposed project.

Elevations for the proposed project are provided in **Figure 9**, *Elevations*, and illustrate the relative scale of the project and the relationship between the seven proposed building sections. Tower 1 would include one level of subterranean parking. The ground floor would consist of the lobby, mail room, a 1,300 sf game room, a bike station, and a bike mechanic area. Levels 2 through 21 would consist of one- and two-bedroom units and residential amenities, such as a swimming pool and pool room on the 21st level. In total, Tower 1 would develop 135 units and would be 21 stories in height.

Building C would include one level of subterranean parking. The ground floor would consist of a lobby and multiple studio, one-bedroom, and two-bedroom units. Levels 2 through 7 would consist of studio, one-bedroom, two-bedroom, and three-bedroom units and private decks and mezzanine on the roof. In total, Building C would develop 151 units and would be 7 stories in height.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Aesthetics	
Impact AES-2 Development of future projects within the Downtown Plan Project area would result in new sources of light and glare due to the increased height and scale of future development, as well as from the increased proportion of glazing on building façades and potential use of reflective materials such as aluminum and glass typical of contemporary design in comparison to existing styles of development from previous eras. This is, in part, a desired outcome in creating a vibrant urban environment, a key objective of the proposed project. This is considered a Class II, significant but mitigable impact. The mitigation comes in the form of existing Site Plan review and design review procedures.	**Mitigation Measure AES-2(a) Lighting Plans and Specifications.** Prior to the issuance of building permits for new large development projects, the applicant shall submit lighting plans and specifications for all exterior lighting fixtures and light standards to the Development Services Department for review and approval. The plans shall include a photometric design study demonstrating that all outdoor light fixtures to be installed are designed or located in a manner as to contain the direct rays from the lights onsite and to minimize spillover of light onto surrounding properties or roadways. All parking structure lighting shall be shielded and directed away from residential uses. Rooftop decks and other similar amenities are encouraged in the Plan. Lighting for such features shall be designed so that light is directed so as to provide adequate security and minimal spill-over or nuisance lighting. **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. **Mitigation Measure AES-2(c) Light Fixture Shielding.** Prior to the issuance of building permits for development projects within the Downtown Plan Project area, applicants shall demonstrate to the Development Services Department that all night lighting installed on private property within the project site shall be shielded, directed away from residential and other light-sensitive uses, and confined to the project site. Rooftop lighting, including rooftop decks, security lighting, or aviation warning lights, shall be in accordance with Airport/Federal Aviation Administration (FAA) requirements. Additionally, all lighting shall comply with all applicable Airport Land Use Plan (ALUP) Safety Policies and FAA regulations. **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.
Impact AES-3 Development projects that include high-rise structures as encouraged by the Downtown Plan would cast shadows onto adjacent properties, particularly in the wintertime when shadows extend the farthest from a tall structure and are the most extreme. Because shadows from these development projects would fall on sensitive residential, public gathering, and school uses within the Downtown Plan Project area for more than 3 hours during the winter months, shadow impacts would be Class I, significant and unavoidable.	**Mitigation Measure AES-3 Shadow Impacts.** Prior to the issuance of building permits for any structure exceeding 75 feet in height or any structure that is adjacent to a light sensitive use and exceeds 45 feet in height, the applicant shall submit a shading study that includes calculations of the extent of shadowing arches for winter and equinox conditions. If feasible, projects shall be designed to avoid shading of light sensitive uses in excess of the significance thresholds outlined in this EIR. If avoidance of shadows exceeding significance thresholds is determined to be infeasible, the shadow impact will be disclosed as part of a project environmental impact report (EIR).
Air Quality	
Impact AQ-1 Construction activities associated with development envisioned under the proposed Downtown Plan would generate emissions of criteria air pollutants and ozone	**Mitigation Measure AQ-1(a)** To reduce short-term construction emissions, the City shall require that all construction projects that would require use of heavy-duty (50 horsepower [hp] or more), off-road vehicles to be used during construction shall require their contractors to implement the Enhanced Exhaust Control Practices (listed below) or whatever mitigation measures are recommended by SCAQMD at the time individual portions of the site undergo construction, including those specified in the

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
precursors. Because of the large size of the Plan area, construction-generated emissions of VOCs and NO_X, both ozone precursors, and PM_{10} and $PM_{2.5}$ would exceed SCAQMD-recommended thresholds and would substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS. Thus, construction-related emissions of criteria air pollutants and precursors could violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, and/or conflict with air quality planning efforts. This would result in a significant adverse impact on air quality. Impacts would be Class I, significant and unavoidable.	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 NO_2, CO, PM_{10}, and $PM_{2.5}$ to assess the impact at nearby sensitive receptors. The LST analysis shall be performed in accordance with applicable SCAQMD guidance that is in place at the time the analysis is performed. The project-level analysis shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur. **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 on- and off-site; • Reroute construction trucks away from congested streets or sensitive receptor areas;

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	• Appoint a construction relations officer to act as a community liaison concerning onsite construction activity including resolution of issues related to PM_{10} 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: o 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. o 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. o Post-January 1, 2015: All offroad 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 clean up 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

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Impact AQ-2 Operational area- and mobile-source emissions from implementation of the proposed Downtown Plan would exceed all applicable SCAQMD-recommended thresholds, and would result in or substantially contribute to emissions concentrations that exceed the NAAQS or CAAQS. This would result in a significant adverse impact on air quality. Impacts would be Class I, significant and unavoidable.	**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.
Impact AQ-4 Implementation of the proposed Downtown Plan would result in exposure of receptors to short- and long-term emissions of TACs from onsite and offsite stationary and mobile sources. Impacts from short-term construction, long-term onsite stationary sources, and offsite mobile-sources would be Class III, less than significant. Impacts from Port of Long Beach and offsite stationary sources, and onsite mobile sources would be Class I, significant and unavoidable.	**Mitigation Measure AQ-4(a)** The following measures shall be implemented to reduce exposure of sensitive receptors to operational emissions of TACs: • Proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located away from existing and proposed onsite sensitive receptors such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0. • Where necessary to reduce exposure of sensitive receptors to an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0, proposed commercial and industrial land uses that would host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. • Signs shall be posted in at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by the California Office of Administrative Law in January 2005. • Proposed facilities that would require the long-term use of diesel equipment and heavy-duty trucks shall develop a plan to reduce emissions, which may include such measures as scheduling activities when the residential uses are the least occupied, requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	• 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. Drycleaning 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.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Impact AQ-6 Temporary, short-term construction and long-term operation of the Project could result in the frequent exposure of sensitive receptors to substantial objectionable odor emissions. Impacts from short-term construction would be Class III, less than significant. Impacts from long-term operation would be Class II, significant and mitigable.	**Mitigation Measure AQ-6** The following mitigation measures shall be implemented to control exposure of sensitive receptors to operational odorous emissions. The City shall ensure that all project applicant(s) implement the following measures: • The City shall consider the odor-producing potential of land uses when reviewing future development proposals and when the exact type of facility that would occupy areas zoned for commercial, industrial, or mixed-use land uses is determined. Facilities that have the potential to emit objectionable odors shall be located as far away as feasible from existing and proposed sensitive receptors. • Before the approval of building permits, odor-control devices shall be identified to mitigate the exposure of receptors to objectionable odors if a potential odor producing source is to occupy an area zoned for commercial land use. The identified odor-control devices shall be installed before the issuance of certificates of occupancy for the potentially odor-producing use. The odor-producing potential of a source and control devices shall be determined in coordination with SCAQMD and based on the number of complaints associated with existing sources of the same nature. • Truck loading docks and delivery areas shall be located as far away as feasible from existing and proposed sensitive receptors. • Signs shall be posted at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by California's Office of Administrative Law in January 2005. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) • Proposed commercial and industrial land uses that have the potential to host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) In addition, mitigation measures identified under AQ-4(b) to reduce indoor exposure to TACs would also result in a reduction in the intensity of offensive odors from the surrounding odor sources.
Cultural Resources	
Impact CR-1 Adoption of the proposed Downtown Plan may result in redevelopment of properties considered to be eligible for listing on the National Register or the California Register, or that is determined eligible for listing as a City Landmark or Landmark District. Compliance with mitigation measures identified herein would provide an opportunity to avoid or reduce impacts to historic properties. However, it may not be feasible to fully implement the Downtown Plan without impacting historic resources. Therefore, the impact would be Class I, significant and unavoidable.	**Mitigation Measure CR-1(a)** The City shall encourage the designation as local landmarks of 20 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. **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): <u>Notification of Historic Preservation Staff</u> Historic Preservation staff in the City Development Services Department shall be notified upon receipt of any demolition permit or building permit for alteration of any property listed in the Historic Survey Report or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z) <u>Determination of Need for Historic Property Survey</u>

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	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.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Impact CR-2 Due to the lack of natural ground surfaces in the Project area, no surveys can be conducted prior to onset of demolition or other ground-disturbing activities. The potential exists for such activities to encounter and damage archaeological resources. This impact would be Class II, significant and mitigable.	**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.
Impact CR-3 Due to the lack of natural ground surfaces in the Project area, no surveys can be conducted prior to onset of demolition or other ground-disturbing activities. The potential exists for such activities to encounter and damage paleontological resources. This impact would be Class II, significant and mitigable.	**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.
Geology and Seismicity	
Impact Geo-1 Seismically induced ground shaking could damage existing and proposed structures in the Plan area and could expose people or structures to potential substantial risk of loss, injury, or death. Compliance with mitigation measures identified herein would reduce impacts to a Class II, significant and mitigable impact.	**Mitigation Measure Geo-1** New construction or structural remodeling of buildings proposed within the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Impact Geo-2 Seismic activity could induce ground shaking that results in liquefaction that could cause structural failure and potential substantial risk of loss, injury, or death. Compliance with mitigation measures identified herein would reduce impacts to a Class II, significant and mitigable impact.	**Mitigation Measure Geo-2** Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.
Impact Geo-3 The potential exists within the Plan area to encounter expansive soils or soils that are unstable or would become unstable as a result of new development. These conditions could result in onsite or offsite lateral spreading or subsidence. Compliance with mitigation measures identified herein would reduce impacts to a Class II, significant and mitigable impact.	**Mitigation Measure Geo-3** Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. For areas where the expansion index is found to be greater than 20, grading and foundation designs shall be engineered to withstand the existing conditions. The expansion testing may be omitted if the grading and foundations are engineered to withstand the presence of highly expansive soils.
Greenhouse Gas Emissions	
Impact GHG-1 Construction activities associated with implementation of the proposed Downtown Plan would result in increased generation of GHG emissions. These emissions would be temporary and short-term and would decline over time as new regulations are developed that address medium- and heavy-duty on-road vehicles and off-road equipment under the mandate of AB 32. Impacts would be Class I, significant and unavoidable.	**Mitigation Measure GHG-1(a) Implement Mitigation Measure AQ-1**. 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-Generated GHG Emissions.** To further reduce construction-generated GHG emissions, the project applicant(s) of all public and private developments shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction, 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. 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:

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures

	• Improve fuel efficiency from construction equipment:
	  ○ reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort),
	  ○ perform equipment maintenance (inspections, detect failures early, corrections),
	  ○ train equipment operators in proper use of equipment,
	  ○ use the proper size of equipment for the job, and
	  ○ 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.

Impact GHG-2 Implementation of the proposed Downtown Plan over the long term would result in increased generation of GHGs, which would contribute considerably to cumulative GHG emissions. Impacts would be Class I, significant and unavoidable.	**Mitigation Measure GHG-2(a) Implement Mitigation Measure AQ-3**. Implementation of the mitigation measures described in Section 4.2, which would reduce operational emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The operational mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts. **Mitigation Measure GHG-2(b) Implement Additional Measures to Reduce Operational GHG Emissions**. For each increment of new development within the Project area requiring a discretionary approval (e.g., tentative subdivision map, conditional use permit, improvement plan), measures that reduce GHG emissions to the extent feasible and to the extent appropriate with respect to the state's progress at the time toward meeting GHG emissions reductions required by the California Global Warming Solutions Act of 2006 (AB 32) shall be imposed, as follows: • 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

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	goal of 6.6 CO_2e/SP/year, if it is feasible to do so. The feasibility of potential GHG reduction measures shall be evaluated by the City at the time each phase of development is proposed to allow for ongoing innovations in GHG reduction technologies and incentives created in the regulatory environment. • For each increment of new development, the project applicant shall obtain a list of potentially feasible GHG reduction measures to be considered in the development design from the City. The City's list of potentially feasible GHG reduction measures shall reflect the current state of the regulatory environment, which will continuously evolve under the mandate of AB 32. The project applicant(s) shall then submit to the City a mitigation report that contains an analysis demonstrating which GHG reduction measures are feasible for the associated reduction in GHG emissions, and the resulting CO_2e/SP/year metric. The report shall also demonstrate why measures not selected are considered infeasible. The mitigation report must be reviewed and approved by the City for the project applicant(s) to receive the City's discretionary approval for the applicable increment of development. In determining what measures should appropriately be imposed by a local government under the circumstances, the following factors shall be considered: o The extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the Project site are projected to decrease over time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted in the future by ARB or other public agency pursuant to AB 32, or by EPA; o The extent to which mobile-source GHG emissions, which at the time of writing this PEIR comprise a substantial portion of the state's GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length; o The extent to which GHG emissions emitted by the mix of power generation operated by SCE, the electrical utility that will serve the Project site, are projected to decrease pursuant to the Renewables Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation; o The extent to which replacement of CCR Title 24 with the California Green Building Standards Code or other similar requirements will result in new buildings being more energy efficient and consequently more GHG efficient; o The extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies, and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB's implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions; o The extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, effecting cost-benefit analyses that determine economic feasibility; and o Whether the total costs of proposed mitigation for GHG emissions, together with other mitigation measures required for the proposed development, are so great that a reasonably prudent property 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). <u>Energy Efficiency</u>

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	○ 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. <u>Water Conservation and Efficiency</u> ○ 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. ○ 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. ○ 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 single-family detached residences and parking lots and driveways of multi-family residential uses, with pervious surfaces. Possible designs include Hollywood drives (two concrete strips with vegetation or aggregate in between) and/or the use of porous concrete, porous asphalt, turf blocks, or pervious pavers. <u>Solid Waste Measures</u> ○ 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. ○ Provide education and publicity about reducing waste and available recycling services. <u>Transportation and Motor Vehicles</u> ○ 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).

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	○ 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.
Hazards and Hazardous Materials	
Impact Haz-1 The 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. Therefore, hazardous materials impacts to residences, schools, or other properties would not be expected to result from transport, use, or disposal of hazardous materials from businesses anticipated to locate within the Downtown Plan Project area. However, many future construction projects would involve full or partial demolition of existing structures, some of which, due to their age, may contain asbestos and lead-based paints and materials. Compliance with mitigation measures identified herein would reduce impacts to Class II, significant and mitigable.	**Mitigation Measure Haz-1(a)** Prior to issuance of a demolition or renovation permit, a lead-based paint and asbestos survey shall be performed by a licensed sampling company. The lead-based paint survey shall be prepared for any structures pre-dating 1982; an asbestos survey shall be performed for asbestos-containing insulation for any structure pre-dating 1986; and an asbestos survey shall be performed for asbestos-containing drywall for all structures for which drywall is to be removed. All testing procedures shall follow California and federal protocol. The lead-based paint and asbestos survey report shall quantify the areas of lead-based paint and asbestos-containing materials pursuant to California and federal standards. **Mitigation Measure Haz-1(b)** Prior to any demolition or renovation, onsite structures that contain asbestos must have the asbestos-containing material removed according to proper abatement procedures recommended by the asbestos consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only asbestos trained and certified abatement personnel shall be allowed to perform asbestos abatement. All asbestos-containing material removed from onsite structures shall be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. Following completion of the asbestos abatement, the asbestos consultant shall provide a report documenting the abatement procedures used, the volume of asbestos-containing material removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party and a copy shall be submitted to the City of Long Beach prior to issuance of a demolition or construction permit. **Mitigation Measure Haz-1(c)** Prior to the issuance of a permit for the renovation or demolition of any structure, a licensed lead-based paint consultant shall be contracted to evaluate the structure for lead-based paint. If lead-based paint is discovered, it shall be removed according to proper abatement procedures recommended by the consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only lead-based paint trained and certified abatement personnel shall be allowed to perform abatement activities. All lead-based paint removed from these structures shall be hauled and disposed of by a transportation company licensed to transport this type of material. In addition, the material shall be taken to a landfill or receiving facility licensed to accept the waste. Following completion of the lead-based paint abatement, the lead-based paint consultant shall provide a report documenting the abatement procedures used, the volume of lead-based paint removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party, with a copy submitted to the City of Long Beach prior to issuance of a demolition or construction permit.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Impact Haz-3 Historic activity involving industrial uses and storage of hydrocarbons, heavy metals, and acids on properties within the Project area may have contaminated onsite soils and/or groundwater quality. Impacts relating to potential contamination are considered Class II, significant and mitigable.	**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 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 activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Hydrology and Water Quality	
Impact Hydro-1 Construction activities associated with future development of residential, hotels, offices, and other uses could result in discharges of urban pollutants into the City drainage system. This would include runoff from grading and excavation; fuel, lubricants, and solvents from construction vehicles and machinery; and trash and other debris. This would result in a significant adverse impact on water quality. Impacts would be Class II, significant and mitigable.	**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.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Impact Hydro-2 Future development would generate various urban pollutants such as soil, herbicides, and pesticides that could adversely affect surface water and groundwater quality in the Project area watershed. This would result in a significant adverse impact on water quality. Impacts would be Class II, significant and mitigable.	**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.
Impact Hydro-3 The increased land use intensity of future residential and commercial uses allowed by the proposed Downtown Plan could increase pervious surfaces and result in an increased volume of stormwater discharges into the existing storm drain infrastructure. This would result in a significant adverse impact on the local hydrologic system. Impacts would be Class II, significant and mitigable.	**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.
Noise	
Impact Noise-1 Implementation of the proposed Downtown Plan would create noise from construction activities that would expose sensitive land uses to temporary or periodic substantial noise level increases. While there is a potential for a significant adverse noise impact, compliance with mitigation measures identified herein would reduce impacts to Class II, significant and mitigable.	**Mitigation Measure Noise-1(a)** The following measures shall be applied to proposed construction projects that are determined to have potential noise impacts from removal of existing pavement and structures, site grading and excavation, pile driving, building framing, and concrete pours and paving: • All internal combustion-engine-driven equipment shall be equipped with mufflers that are in good operating condition and appropriate for the equipment. • "Quiet" models of air compressors and other stationary construction equipment shall be employed where such technology exists. • Stationary noise-generating equipment shall be located as far as reasonable from sensitive receptors when sensitive receptors adjoin or are within 150 feet of a construction site. • Unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes) shall be prohibited. • Foundation pile holes shall be predrilled, as feasible based on geologic conditions, to minimize the number of impacts required to seat the pile. • Construction-related traffic shall be routed along major roadways and away from noise-sensitive receptors. • Construction activities, including the loading and unloading of materials and truck movements, shall be limited to the hours specified in the City Noise Ordinance (Section 8.80.202). • Businesses, residences, and noise-sensitive land uses within 150 feet of construction sites shall be notified of the construction. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of the complaint and response procedure. • Each project implemented as part of the Plan shall designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. A telephone number for the liaison shall be conspicuously posted at the construction site. • If two or more noise complaints are registered, the liaison, or project representative, shall retain a City-approved noise consultant to conduct noise measurements at the locations that registered the complaints. The noise measurements shall be conducted for a minimum of 1 hour and shall include 1-minute intervals. The consultant shall prepare a letter report summarizing the measurements and potential measures to reduce noise levels to the maximum extent feasible. The letter report shall include all measurement and calculation data used in determining impacts and resolutions. The letter report shall be provided to code enforcement for determining the adequacy and if the recommendations are adequate. **Mitigation Measure Noise-1(b)** The City will require the following measures, where applicable based on noise level of source, proximity of receptors, and presence of intervening structures, to be incorporated into contract specifications for construction projects within 300 feet of existing noise-sensitive land uses (including, but not limited to residences, schools, hospitals/nursing homes, churches, and parks) implemented under the proposed Plan: • Temporary noise barriers shall be constructed around construction sites adjacent to, or within 150 feet of, operational business, residences, or other noise-sensitive land uses. Temporary noise barriers shall be constructed of material with a minimum weight of 4 pounds per square foot with no gaps or perforations. Noise barriers may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. If a project-specific noise analysis determines that the barriers described above would not be sufficient to avoid a significant construction noise impact, a temporary sound control blanket barrier, shall be erected along building façades facing construction sites. This mitigation would only be necessary if conflicts occurred that were irresolvable by proper scheduling and other means of noise control were unavailable. The sound blankets are required to have a minimum breaking and tear strength of 120 pounds and 30 pounds, respectively. The sound blankets shall have a minimum sound transmission classification of 27 and noise reduction coefficient of 0.70. The sound blankets shall be of sufficient length to extend from the top of the building and drape on the ground or be sealed at the ground. The sound blankets shall have a minimum overlap of 2 inches.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Impact Noise-2 Implementation of the proposed Downtown Plan would include construction activities that would include vibrations sources, including pile driving. This would result in a significant adverse impact on vibration. Impacts would be Class I, significant and unavoidable.	**Mitigation Measure Noise-2(a)** 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. **Mitigation Measure Noise-2(b)** Any construction activity that generates vibration exceeding the "vibration perception threshold" as specified in Municipal Code Section 8.80.200 at any school shall be scheduled at a time when school is not in session.
Impact Noise-5 The proposed Downtown Plan would allow the location of sensitive receptors in areas that would exceed the standards identified for the applicable land use by the Noise Element of the Long Beach General Plan. While there is a potential for a significant adverse impact related to noise compatibility, compliance with mitigation measures identified herein would reduce impacts to Class II, significant and mitigable.	**Mitigation Measure Noise-5** In areas where new residential development would be exposed than L_{dn} of greater than 65 dBA, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following: • Utilize site planning to minimize noise in shared residential outdoor activity areas by locating the areas behind the buildings or in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible. • Provide mechanical ventilation in all residential units proposed along roadways or in areas where noise levels could exceed 65 dBA L_{dn} so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 45 dBA L_{dn}. • Install sound-rated windows and construction methods to provide the requisite noise control for residential units proposed along roadways or in areas where noise levels could exceed 70 dBA L_{dn}.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

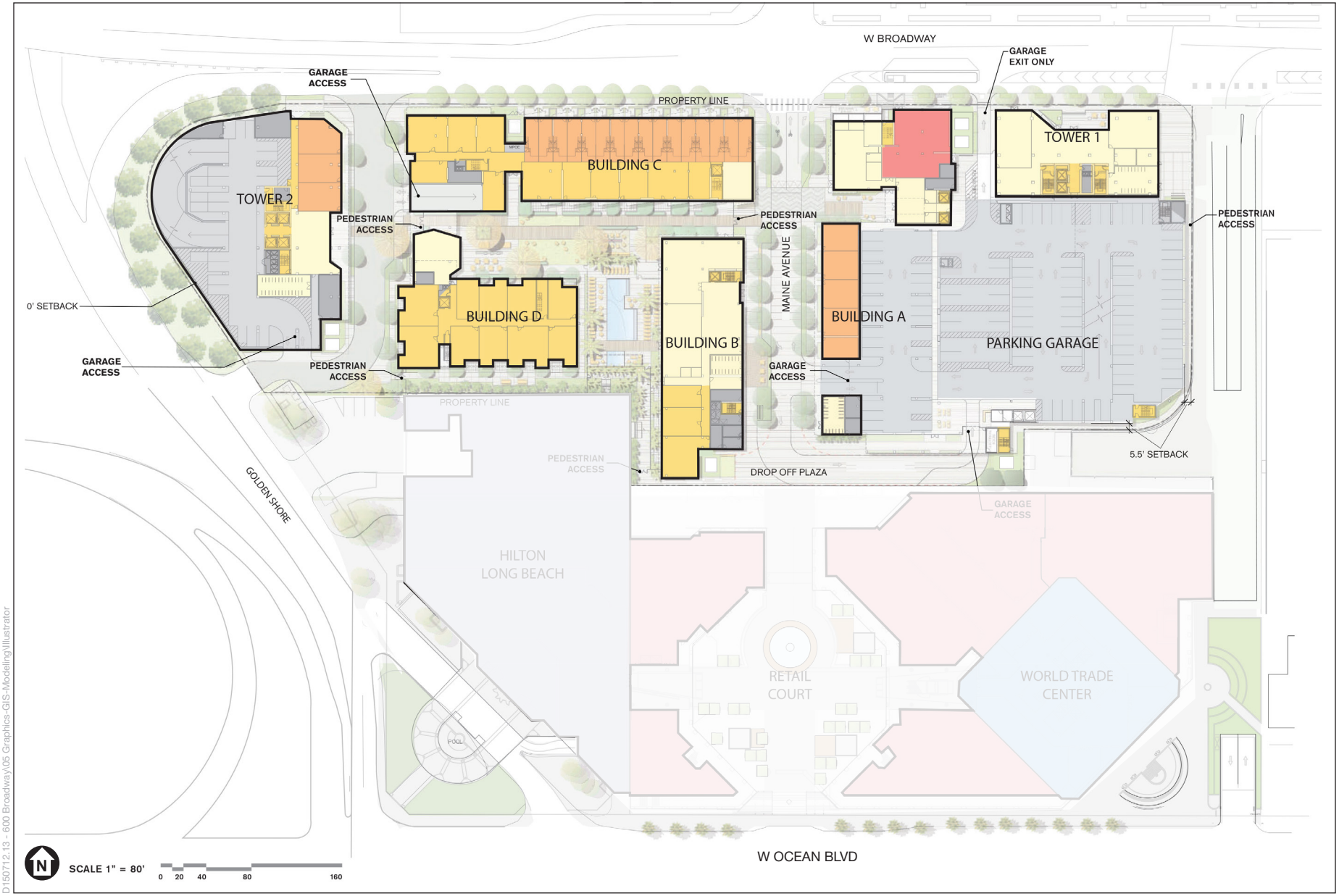
Impact	Mitigation Measures
Impact Noise-6 The Plan would allow the development of new residential uses adjacent to existing commercial and retail uses. In addition, new residential uses may be proposed adjacent to or sometimes within the same building as noise-generating commercial uses. Noise levels resulting from existing and proposed noise-generating uses (i.e., office and retail uses) could expose such noise-sensitive uses to noise levels in excess of the City's or Noise Ordinance limits. This would be a potentially significant impact and mitigation measures have been identified that would reduce this impact to Class II, significant and mitigable.	**Mitigation Measure Noise-6** In areas where new residential development would be located adjacent to commercial uses, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following: • Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses. • Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible. • Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.
Transportation and Traffic	
Impact Traf-1 The proposed Downtown Plan, in combination with cumulative traffic growth, would result in a significant impact at 16 intersections. Partial mitigation is available for that impact, but physical constraints make expansion of the roadway cross-sections difficult. This would result in a significant adverse impact to traffic and transportation. Impacts would be Class I, significant and unavoidable.	**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: o Alamitos Avenue north of Ocean Boulevard o Pine Avenue north of Ocean Boulevard o Pacific Avenue north of Ocean Boulevard o 7th Street from I-710 to Alamitos Avenue

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
	○ 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) Traffic Calming and Pedestrian Amenities.** Appropriate traffic calming and pedestrian amenities shall be provided in conjunction with development projects. Potential improvements include corner curb extensions, enhanced paving of crosswalks, and pedestrian-activated signals at mid-block crossings to make it easier for pedestrians to cross the street and to make them more visible to motorists. Other potential improvements include wider sidewalks in locations where the existing sidewalks are less than 10 feet wide, pedestrian-scale street lights, and street furniture (City of Long Beach 2005). **Mitigation Measure Traf-1(e)** Currently, due to on-street parking, there is only one lane of travel on Alamitos Avenue in the southbound direction between 3rd Street and Broadway. Parking spaces on the west side of Alamitos Avenue will be removed, the street will be restriped and reconstructed, a bike lane will be added in each direction of travel, and the street will provide for two travel lanes in each direction plus exclusive left turn lanes from 7th Street to Ocean Boulevard. Traffic signal enhancements to implement the Alamitos Avenue improvements shall also be implemented as needed. **Mitigation Measure Traf-1(f)** Developments in the project area will be required to coordinate with area transit providers to accommodate and encourage transit use by residents and patrons. For non-residential sites, appropriate programs and facilities will be included to encourage car and van pooling, provide information on transportation alternatives, and encourage trip reduction strategies in accordance with the City's TDM policies for non-residential development.

TABLE 1
CERTIFIED PEIR IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measures
Utilities and System Services	
Impact Utilities-3 Buildout of the proposed project would incrementally increase solid waste disposal treatment demand in the City. Based on LACSD's operation of the Mesquite Regional Landfill, which is permitted for up to 20,000 tons per day for approximately 100 years, adequate landfill capacity exists to accommodate solid waste disposal needs of the proposed Project. In addition, mitigation measures are identified that would reduce the Project's solid waste impacts. Therefore, the impact on solid waste disposal systems would be considered a Class II, significant but mitigable impact.	**Mitigation Measure Utilities-3(a)** All construction related to Project implementation shall include verification by the construction contractor that all companies providing waste disposal services recycle all demolition and construction-related wastes. The contract specifying recycled waste service shall be submitted to the City Building Official prior to approval of the certificate of occupancy. **Mitigation Measure Utilities-3(b)** In order to facilitate onsite separation and recycling of construction related wastes, all construction contractors shall provide temporary waste separation bins onsite during demolition and construction. **Mitigation Measure Utilities-3(c)** All future developments in the Project area shall include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and all other recyclable materials. Materials from these bins shall be collected on a regular basis consistent with the City's refuse disposal program. **Mitigation Measure Utilities-3(d)** All Project area residents and commercial tenants shall be provided with educational materials on the proper management and disposal of household hazardous waste, in accordance with educational materials made available by the Los Angeles County Department of Public Works.



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SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 3
Site Plan

ESA

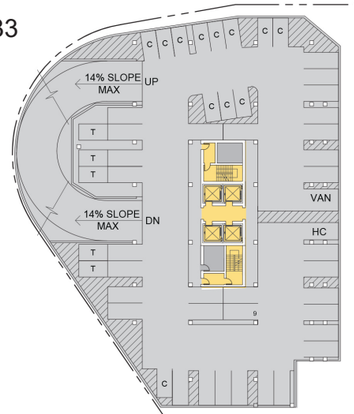
TABLE 2
PROPOSED DEVELOPMENT

Type of Use	Units	Area (sf)	Height (Stories)
Residential			
Tower 1	135 dwelling units	208,641	239 feet 4 inches (21 stories)
Tower 2	204 dwelling units	381,987	426 feet (40 stories)
Building A	146 dwelling units	149,804	87 feet 0 inches (7 stories)
Building B	68 dwelling units	85,205	79 feet 6 inches (6 stories)
Building C	151 dwelling units	208,059	85 feet 0 inches (7 stories)
Building D	52 dwelling units	52,381	65 feet 4 inches (5 stories)
Commercial			
Market	—	3,000	
Leasing space		2,850	
Parking			
Tower 1	—	11,348	1 level of subterranean parking
Tower 2	—	212,380	3 levels of subterranean parking and 4 levels of above grade parking
Building A	—	22,607	2 levels of above grade parking
Parking Structure	—	398,133	93 feet 4 inches (9 stories, 1 level of subterranean parking)
Open Space			
Residential Common Outdoor (ground-level, courtyard, and outdoor decks)	—	52,115	—
Residential Common Indoor (residential amenities such as a game room, pool room, wellness center, and lobby)	—	24,565	—
Residential Private Outdoor	—	21,456	—
Commercial (public ground)	—	12,491	—
Total	**756 units**	**1,431,145**[a]	**—**

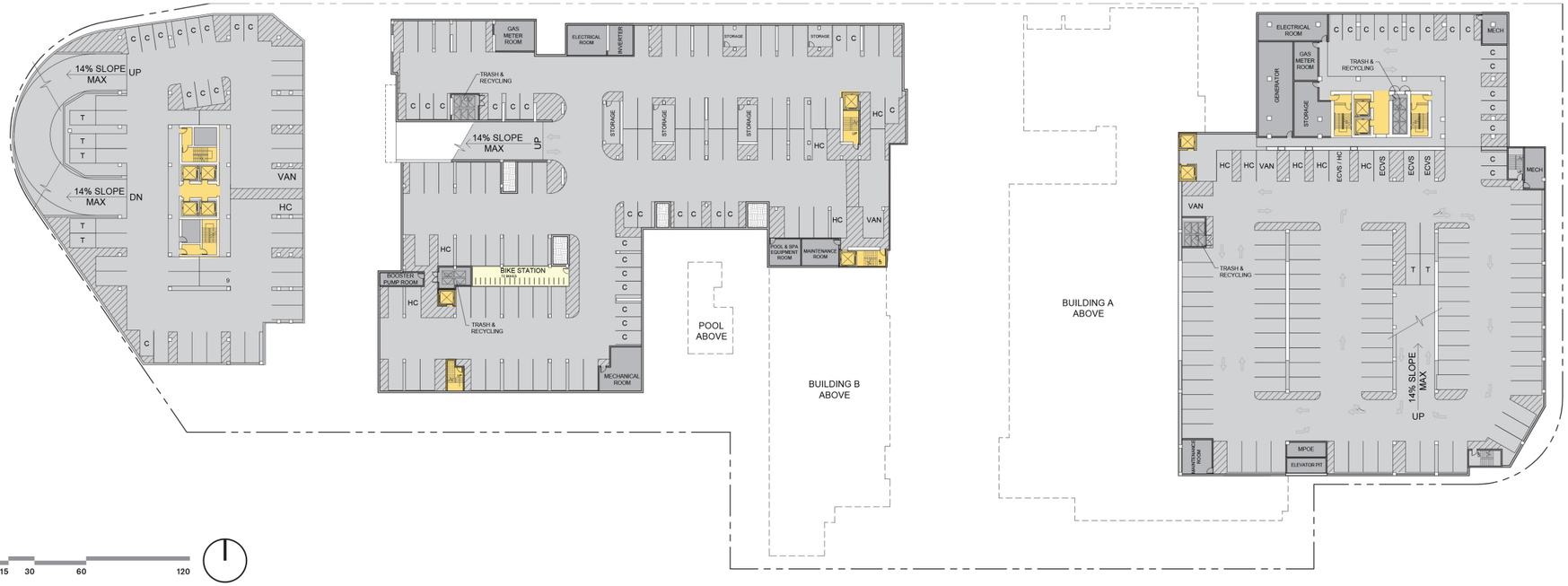
SOURCE: Studioeleven, 2019.

NOTE:
[a] Includes the subtraction of 302,400 sf of exempt garage square footage.

Level B2-B3



Level B1



SCALE 1" = 60'

0 15 30 60 120

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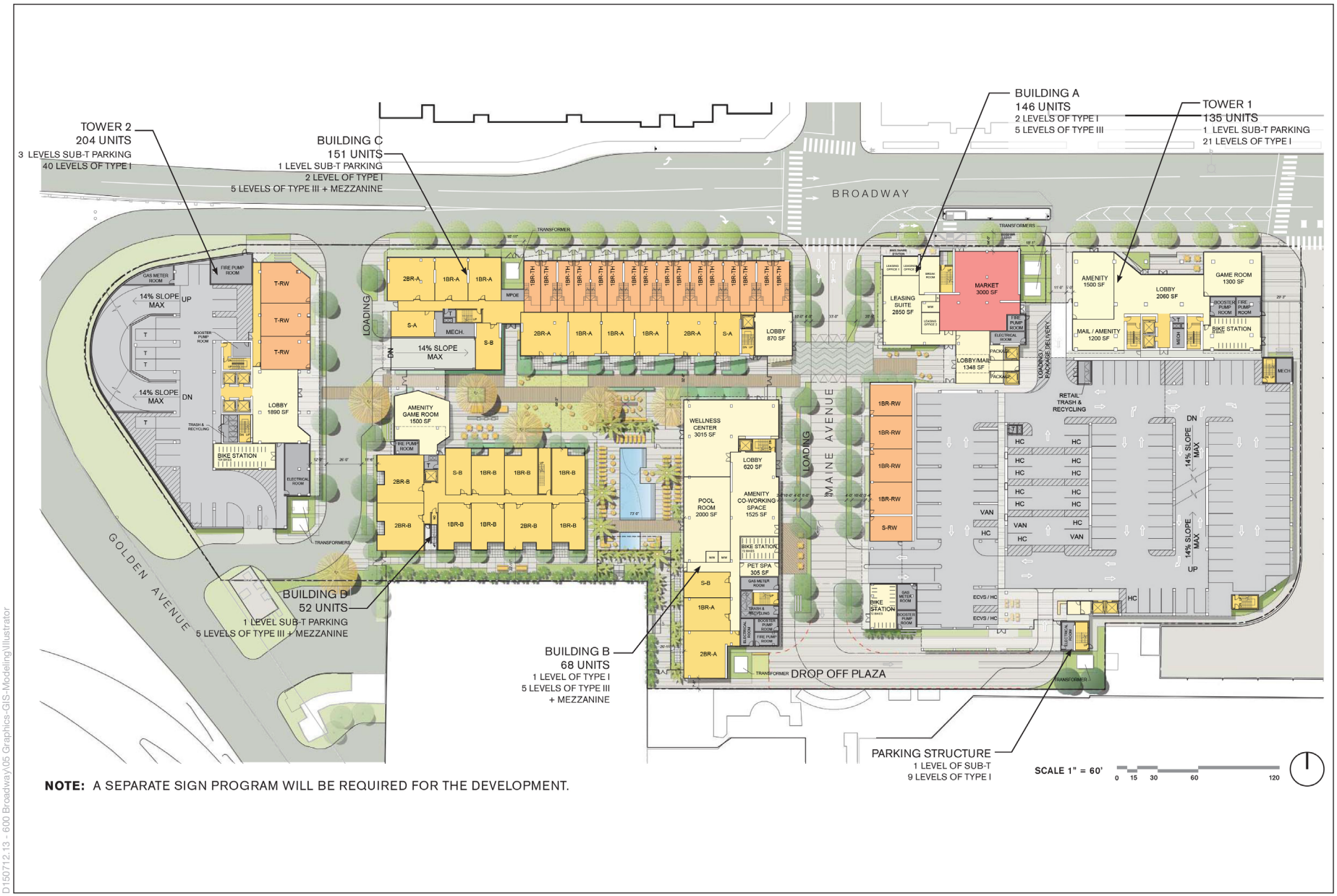
SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 4
Parking Levels B1-B3

ESA



NOTE: A SEPARATE SIGN PROGRAM WILL BE REQUIRED FOR THE DEVELOPMENT.

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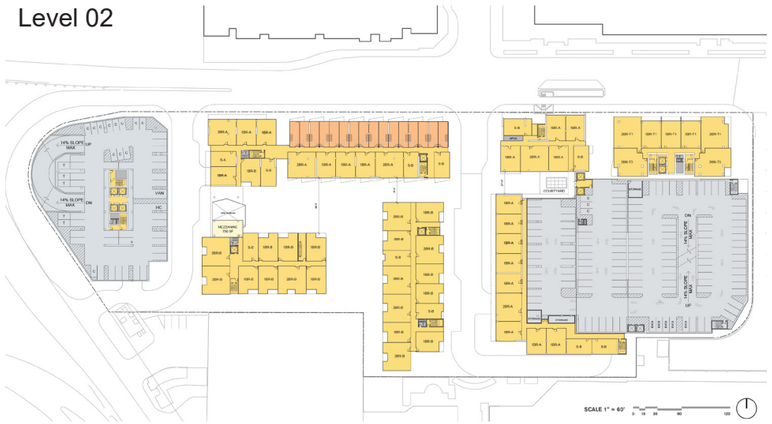
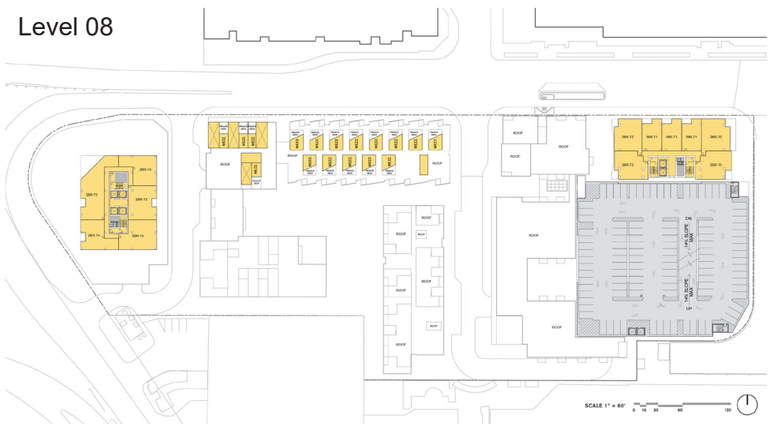
SOURCE: Studioeleven, 2019

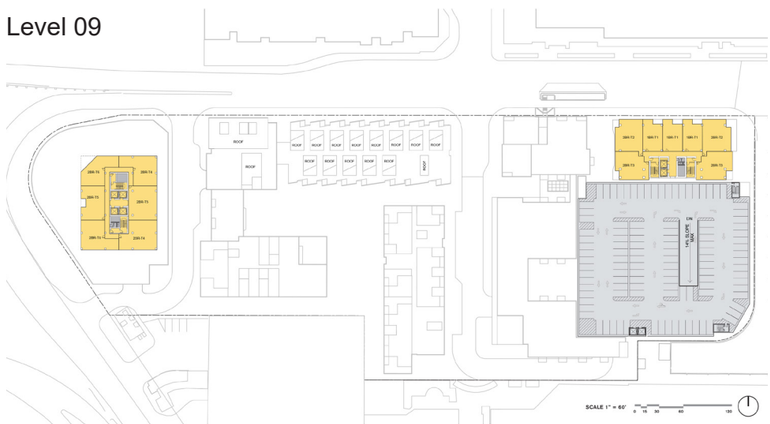
Westside Gateway Project

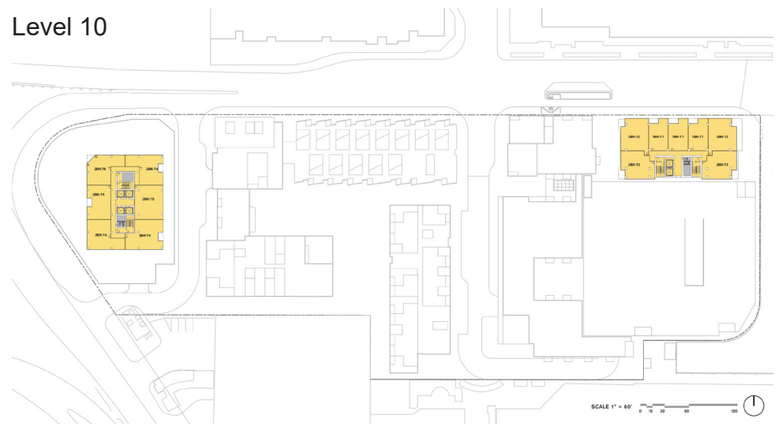
Figure 5
Street Level FLoor Plan

ESA









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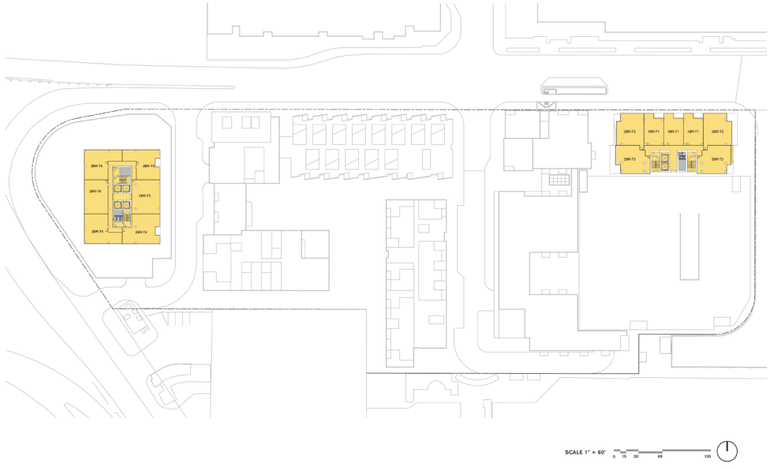
SOURCE: Studioeleven, 2019

Westside Gateway Project

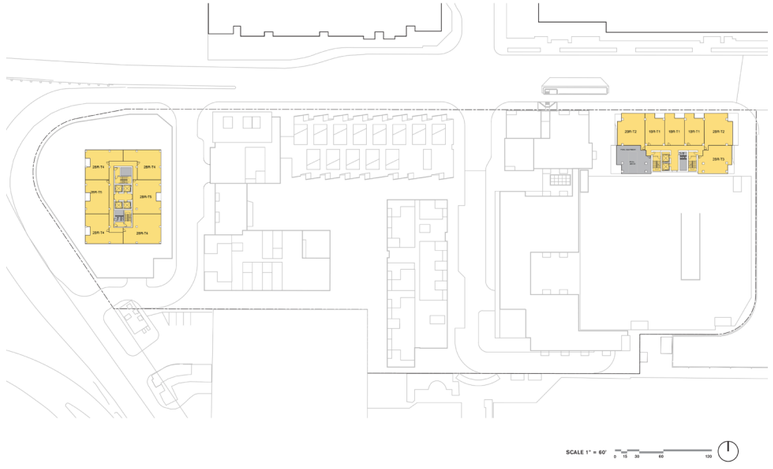
Figure 6
Floor Plans for 2nd - 10th floors

ESA

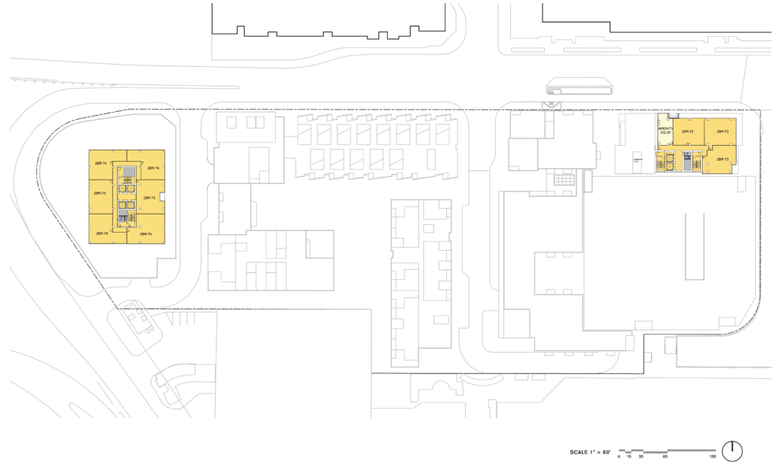
Level 11-19



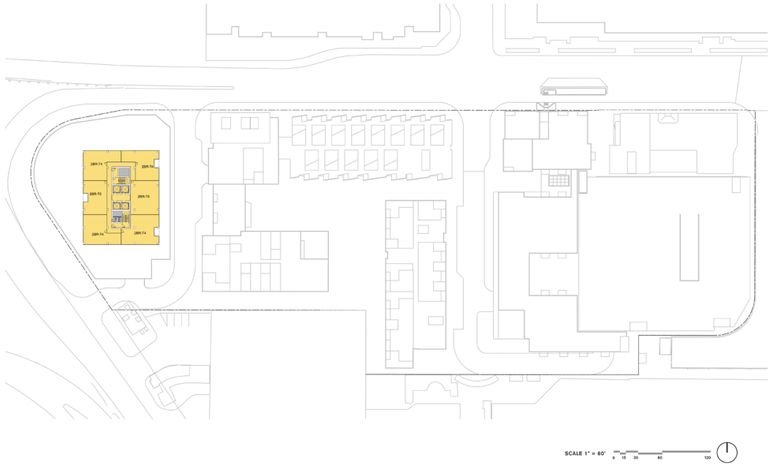
Level 20



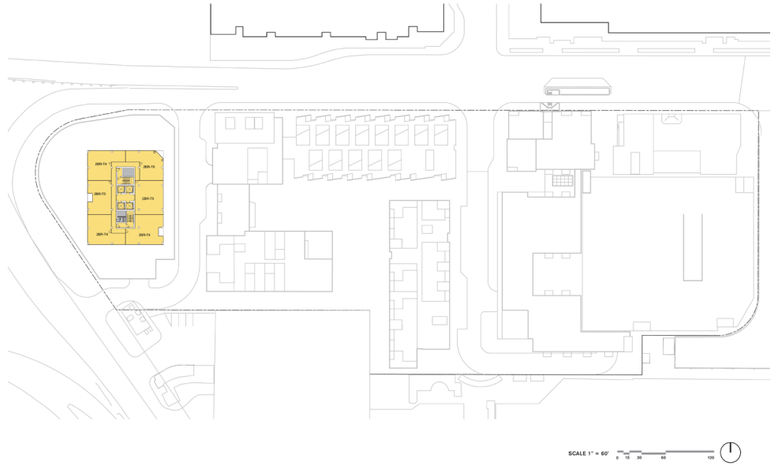
Level 21



Level 22-23



Level 34-40



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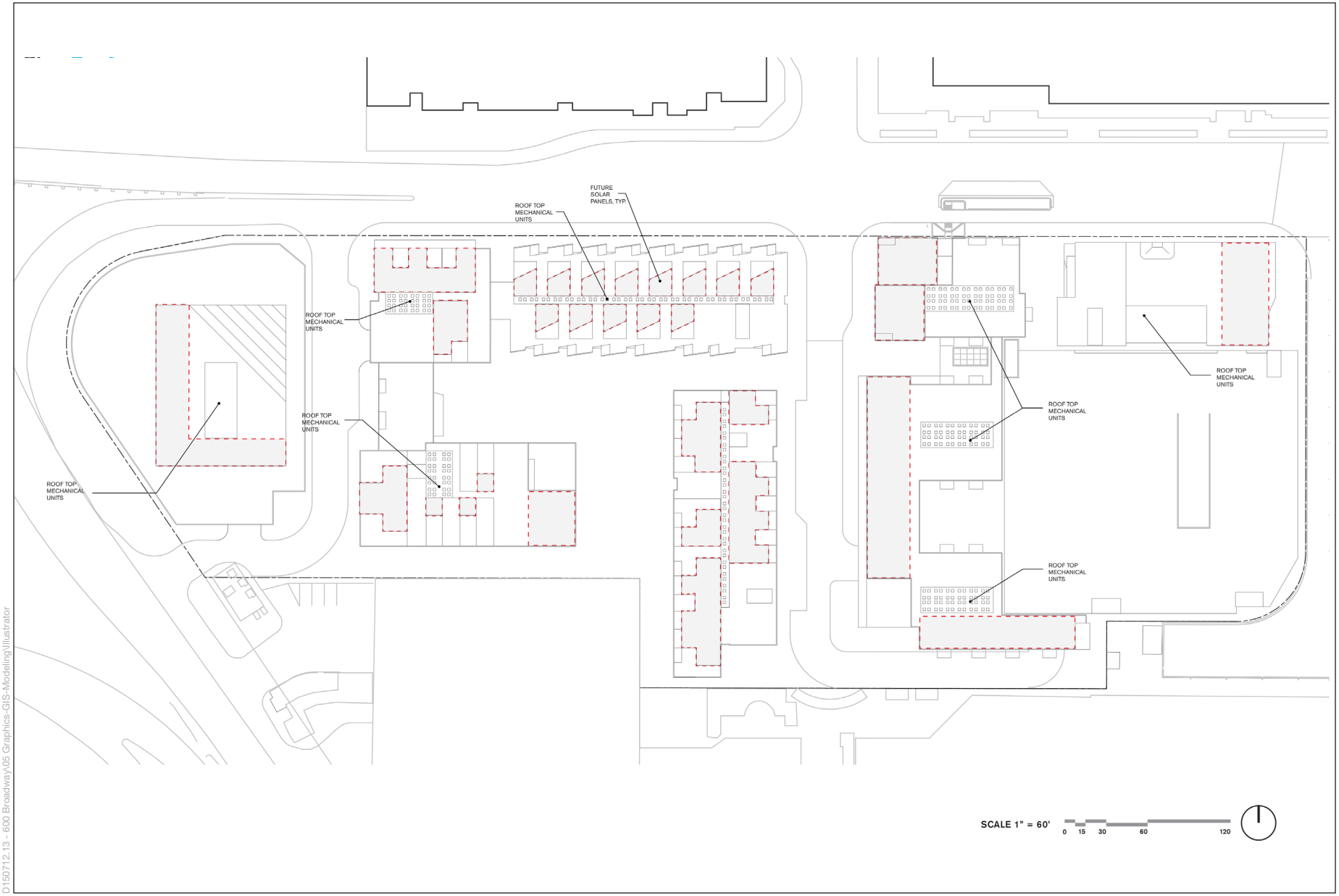
SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 7
Floor Plans for 11th - 40th floors

ESA



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SOURCE: Studioeleven, 2019

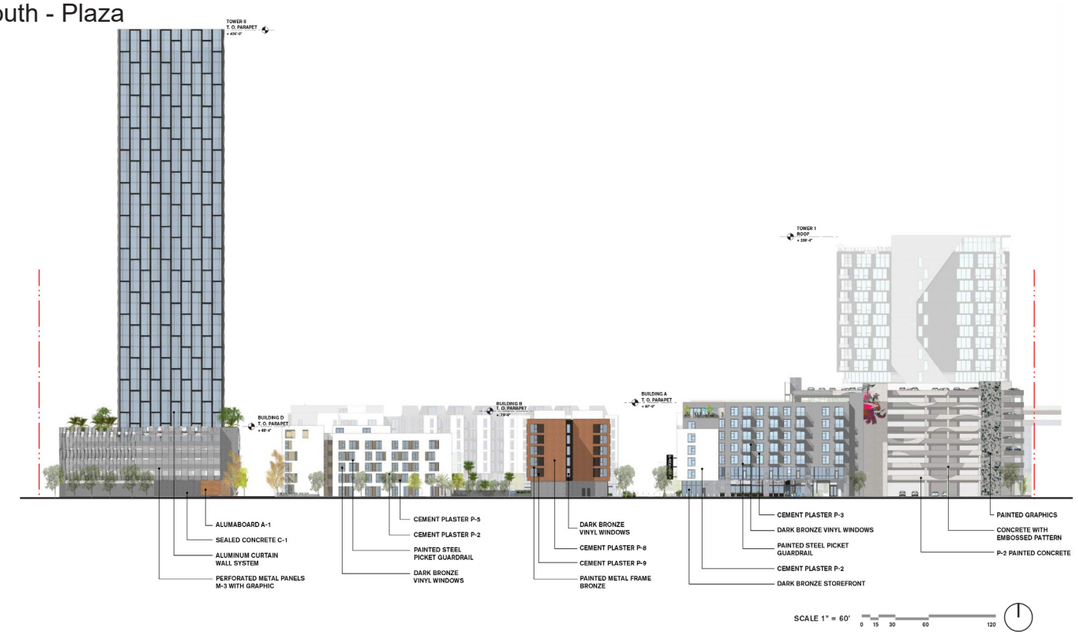
Westside Gateway Project

Figure 8
Roof Plan

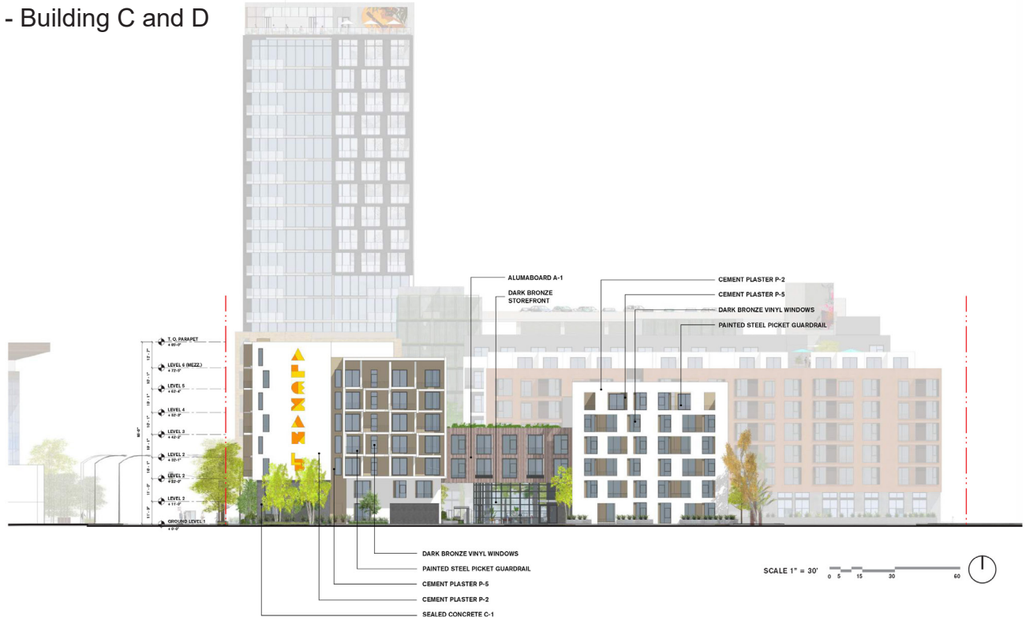
ESA

North - Broadway

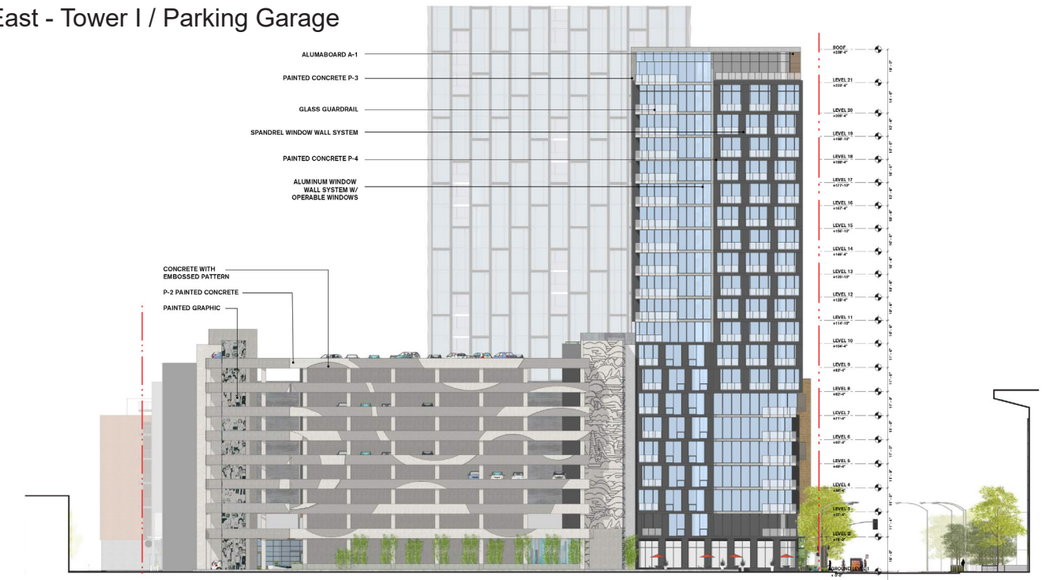
South - Plaza



West - Building C and D



East - Tower I / Parking Garage



SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 9
Elevations

Tower 2 would include three levels of subterranean parking. The ground floor would include additional parking, a bike station, the lobby, a service area, and three live-work studios. Levels 2 through 4 would consist of more parking stalls, and levels 5 through 40 would consist of two-bedroom units and residential amenities such as decks. In total, Tower 2 would develop 204 units and would be 40 stories in height.

Building A's ground floor would consist of a 3,000 sf market, a bike station, leasing offices and suites, the lobby and mail room, and parking. Level 2 would consist of parking and residential units. Levels 3 through 7 would consist of studio, one-bedroom, and two-bedroom units and resident amenity spaces such as a courtyard and sky deck and sky lounge. In total, Building A would develop 146 units and would be 7 stories in height.

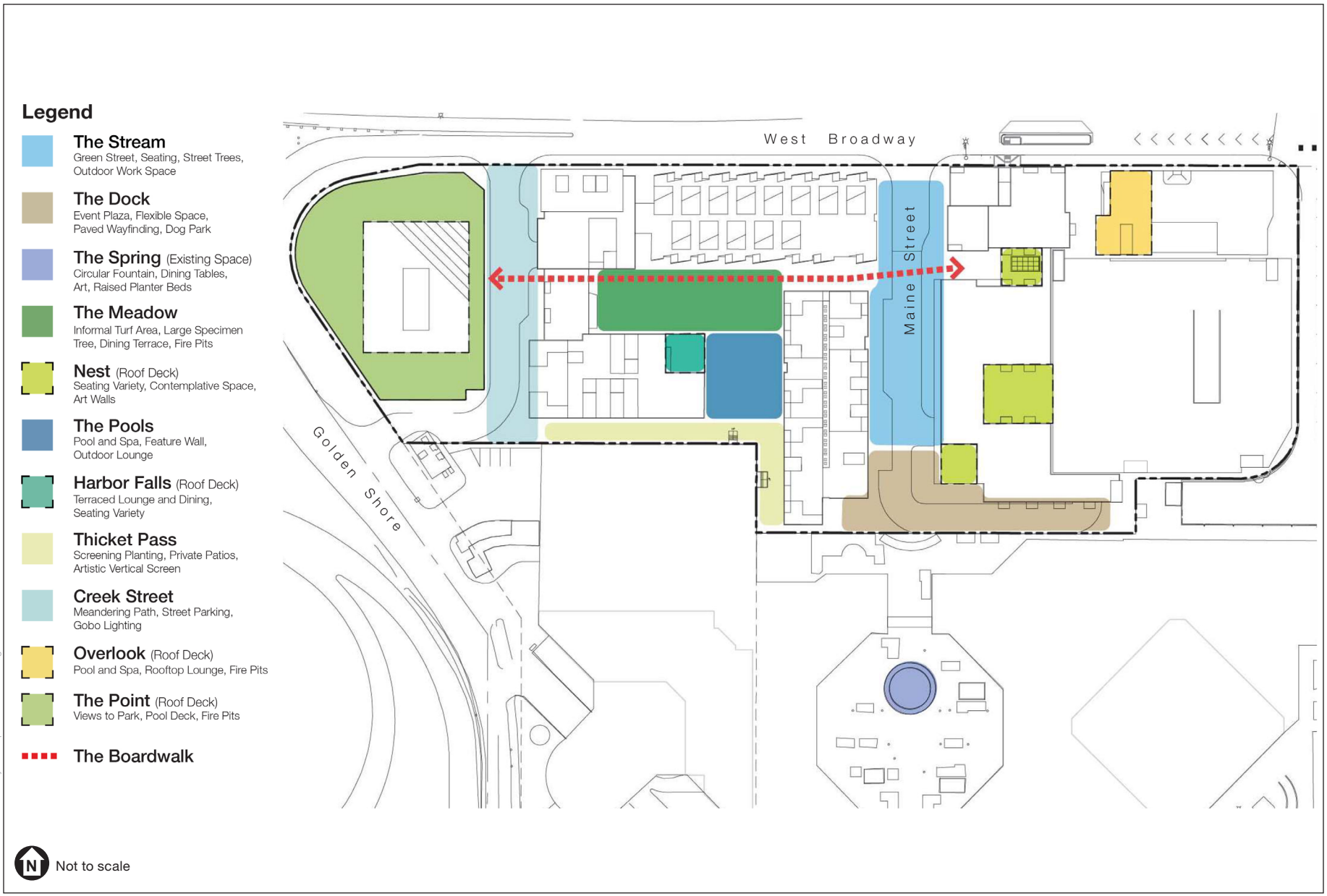
Building B's ground floor would consist of a 3,015 sf wellness center, a pool room, bike station, pet wash room, the lobby and amenity co-working space. The ground-floor would also include studio, one-bedroom, and two-bedroom units. Levels 2 through 6 would consist of studio, one-bedroom, two-bedroom, and three-bedroom units and private decks and mezzanine on the roof. In total, Building B would develop 68 units and would be 6 stories in height.

Building D would include one level of subterranean parking. The ground floor would consist of a 1,500 sf community game room and multiple studio, one-bedroom, and two-bedroom units. Levels 2 through 5 would consist of studio, one-bedroom, and two-bedroom units and residential amenities such as a mezzanine on the second level and decks on the fourth and fifth levels as well as the roof. In total, Building D would develop 52 units and would be 5 stories in height.

Open Space and Landscaping

The proposed project would provide 110,627 sf of open space, including 76,680 sf of residential common open space (indoor and outdoor), 21,456 sf of residential private open space, and 12,491 sf of commercial open space and landscaping, as shown in **Figure 10**, *Landscape Program*, and **Figure 11**, *Planting Plan*. As shown on Table 2, *Proposed Development*, residents would have access to 52,115 sf of common outdoor space, including ground-level open space, which includes landscaping, pathways, ground-level courtyards, and roof-level outdoor decks, pools, and mezzanine, and 24,565 sf of common indoor space, which includes ground-floor lobbies and residential amenity spaces such as bike stations, game rooms, pet wash room, and wellness center, for a total of 76,680 sf of common open space. The proposed project also includes 21,456 sf of private open space for residents and 12,491 sf of public ground-level open space.

As shown in Figure 10, the project would also include a Landscape Program that includes green streets, seating, street trees, outdoor work space through the center of the project site. An event plaza, which has been designated as "the Dock," would be located on the southern portion of the site that includes paved wayfinding, and a dog park. On the central western portion of the site, the project would include another open space area designated as "the Meadow," an informal turf area with large specimen trees, dining terrace, and fire pits, and pools and spas below it, as well as a feature wall and outdoor lounge. Below the pools would be a privacy screening painting, private patios and an artistic vertical screen. On the western portion of the site would be meandering part, street parking and gobo lighting. The project site would also include a series of roof decks with seating varieties, contemplative spaces, art walls, fire pits, and views to the park and pool deck.



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SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 10
Landscape Program

ESA

As shown on Figure 11, the project would also include a Planting Plan for planting trees, shrubs, and lawn around the ground level of the project site. Trees would include *Betula nigra* ricer birch, *Tavebuia chrysotricha* golden trumpet tree, *Tristania conferta* Brisbane box, and the *Washingnia robusta mexina* fan palm, among others. Shrubs and groundcover would include *Agave attenuate* fox tail agave, *berberis repens* creeping barberry, *Dietes bicolor* fortnight lily, and *Hydrangea querifolia* oakleaf Hydrangea, among others.

Parking and Access

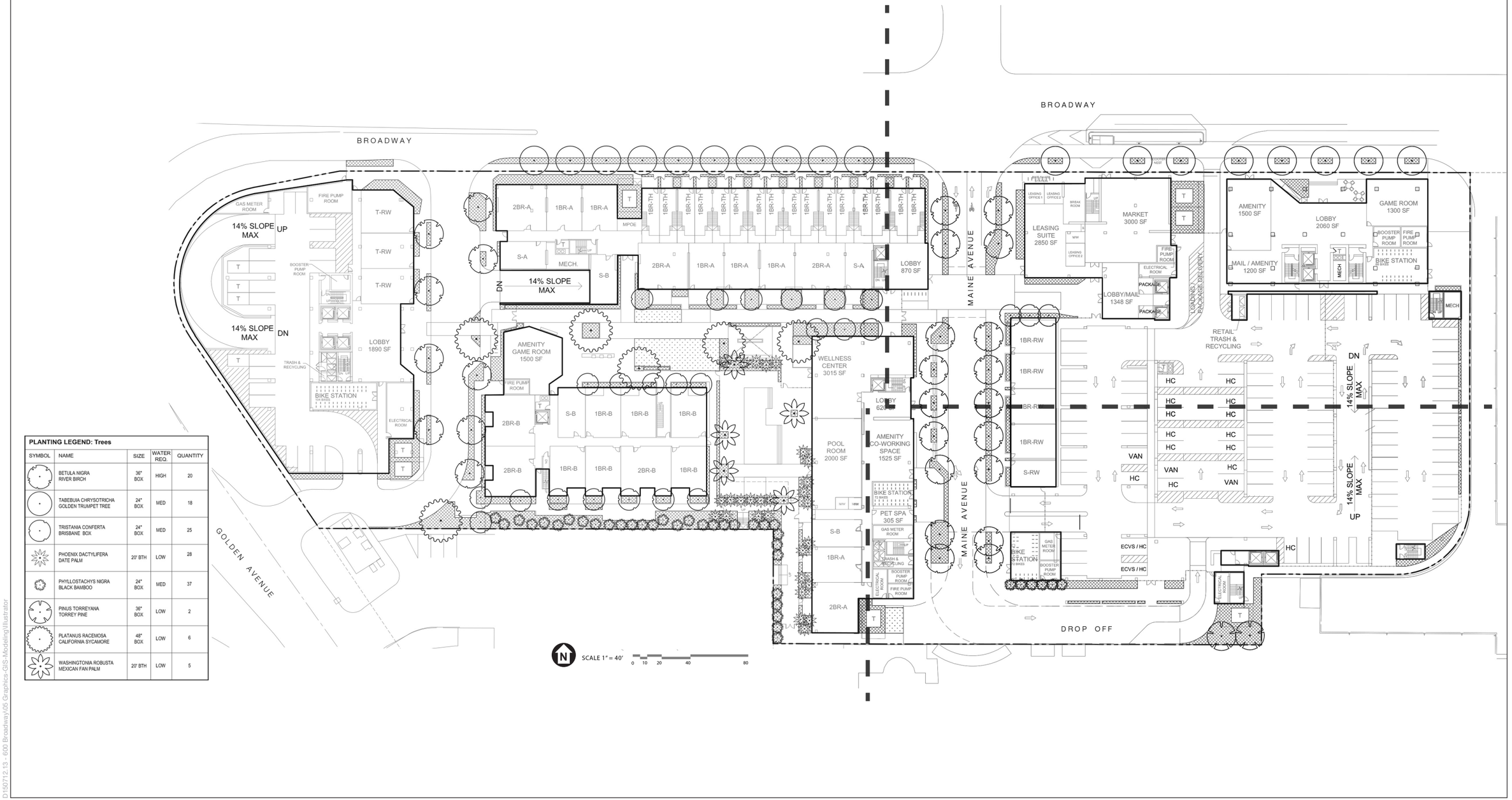
The Downtown Plan requires one vehicle parking space per each residential unit, plus one additional guest vehicle parking space for every four residential units. Thus, the project is required to provide 945 parking spaces for the project's residential uses (756 for dwelling units and 189 for guests). The project is also required to provide an additional 659 parking spaces to replace the existing parking for adjacent hotel and office uses that would be removed as part of the project. A total of 1,604 parking vehicle parking spaces are required to accommodate both the replacement parking and the required parking for the project's residential units.[1]

However, pursuant to the Transportation System Demand Management section of the Downtown Plan (page 50), there are several strategies available that developers may employ in order to reduce the number of vehicular parking stalls required, including joint use (shared parking) and transit/bicycle/pedestrian system improvements. A Parking Study (Appendix A) was prepared for the proposed project that summarizes in part, that approximately one-half of the required guest parking stalls (94 parking stalls) can be shared with the replaced office parking (659 parking stalls). Any reduction in the number of stalls for a project located within the Downtown Plan area is subject to the discretion of the Site Plan Review Committee.

The proposed project includes 851 vehicle parking spaces for the project's residential uses (756 for dwelling units and 95 for guests) and an additional 659 vehicle parking spaces to replace the existing parking for hotel and office uses that would be removed as part of the proposed project. Therefore, the project would provide a total of 1,510 vehicle parking spaces, including 828 standard stalls, 17 Americans with Disabilities Act compliant (ADA) stalls, and 6 ADA van accessible stalls for residential uses; and 645 standard stalls, 11 ADA standard stalls, and 3 ADA van-accessible stalls for non-residential uses. Refer to Appendix A of this addendum for further details related to parking.

Bicycle parking is also provided as part of the proposed project. The Downtown Plan requires a minimum of one bicycle parking stall for each five dwelling units and one bicycle parking stall for each 5,000 sf of commercial building area. The proposed 756 dwelling units would require a minimum of 152 bicycle parking stalls and a minimum of one bicycle parking stall is required for the commercial component of the project. The proposed project exceeds the bicycle parking requirements and would provide a total of 153 bicycle parking stalls, which includes 152 bicycle parking stalls for the residential units and 1 stall for commercial/short term use.

[1] As summarized in the Parking Study (Appendix A of this addendum) development within the Downtown Plan area with less than 6,000 sf of retail uses are exempt from providing parking for those uses. Ancillary uses would not generate additive parking demand since they are intended for the exclusive use of residents.



PLANTING LEGEND: Trees

SYMBOL	NAME	SIZE	WATER REQ.	QUANTITY
	BETULA NIGRA RIVER BIRCH	36" BOX	HIGH	20
	TABEBUIA CHRYSOTRICHA GOLDEN TRUMPET TREE	24" BOX	MED	18
	TRISTANIA CONFERTA BRISBANE BOX	24" BOX	MED	25
	PHOENIX DACTYLIFERA DATE PALM	20' BTH	LOW	28
	PHYLLOSTACHYS NIGRA BLACK BAMBOO	24" BOX	MED	37
	PINUS TORREYANA TORREY PINE	36" BOX	LOW	2
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE	48" BOX	LOW	6
	WASHINGTONIA ROBUSTA MEXICAN FAN PALM	20' BTH	LOW	5

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SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 11
Planting Plan

ESA

Vehicular access to the main parking structure would be provided via Maine Avenue, which bisects the project site and would include two entrances to the parking structure. Vehicles would exit the parking structure onto West Broadway or out onto Maine Avenue. The parking structure would include nine above-ground levels and one subterranean level. The subterranean level would extend below Tower 1. In total, the parking structure would provide 1,046 vehicle parking spaces. Vehicular access to the parking in Tower 2 would be provided via Golden Shore Drive and West Broadway. In total the parking in Tower 2 would provide 344 vehicle parking spaces and 41 bicycle parking spaces. Access to subterranean parking under Buildings C and D would be accessed from Golden Shore Drive and West Broadway. This subterranean parking would provide 102 parking spaces and 20 bicycle parking spaces.

Comparison of Approved and Proposed Project

For the purposes of this addendum, the Approved Project is used as a baseline for the analysis. As described above, full implementation of the Downtown Plan would increase the density and intensity of existing Downtown land uses by allowing up to (1) approximately 5,000 new residential units; (2) 1.5 million sf of new office, civic, cultural, and similar uses; (3) 384,000 sf of new retail; (4) 96,000 sf of restaurants; and (5) 800 new hotel rooms, over a 25-year time period.

The Downtown Plan development standards include height incentive areas. The Downtown Plan's Figure 3-2, *Height Areas and Minimum Streetwall*, shows project site is within the Height Incentive Area, which allows for a maximum permitted height of 240 feet and FAR of 8.0. In addition, the Height Incentive Area would allow increases in maximum height and FAR up to a maximum height of 500 feet and a FAR of 11.0, if a project met certain criteria, as outlined in Table 3-4, *Development Incentives*, of the Downtown Plan. The purpose of bonuses is to incentivize the provision of certain project attributes such as sustainable features, provision of additional open space, and rehabilitation of certain existing buildings. Table 3-4 describes the specific incentives available for this area the Height Inventive Area, such as having a LEED Certification or equivalent process; implementing green or eco roofs which reduce stormwater runoff, lower energy, and provide open space; meeting or exceeding 25 percent of the project's energy needs with renewable energy; providing public open space in excess of the required standards; and/or rehabilitating historic buildings.

The proposed project would provide a total of 756 new residential units, which is within land use density evaluated in the Approved Project. As described in Table 2, *Proposed Development*, Tower 1 would be 21 stories (approximately 239 feet 4 inches) and Tower 2 would be 40 stories (approximately 426 feet). Building A would be 7 stories (approximately 87 feet 0 inches). Building B would be 6 stories (approximately 79 feet 6 inches). Building C would be 7 stories (approximately 85 feet 0 inches) and Building D would be 5 stories (approximately 65 feet 4 inches). The parking structure would be 9 stories (approximately 93 feet 4 inches). Given the proposed elevation of Tower 2 (approximately 426 feet), The project will provide the required incentives specified by the Downtown Plan (p. 48–49) for an allowable building height of up to 500 feet.

The Downtown Plan zoning includes standards for ground-floor pedestrian oriented uses such as "Main" or "Secondary" designated streets. The purpose of such streets is to further encourage active

land uses in certain areas such as restaurants, retail stores, entertainment, dining, services, etc. to provide a vibrant, pedestrian-oriented experience throughout much of the day. On Main or Secondary-designated streets, 100 percent of the ground-floor street fronts should contain active uses. The Downtown Plan's Figure 3-1, *Zoning Standards Map Downtown Neighborhood Overlay and Areas of Required Pedestrian-Oriented Uses*, identifies two areas as future "Pedestrian-Oriented Use: Secondary Streets" within the project site.

As a part of this addendum, an analysis of each environmental issue analyzed as a part of the Approved Project will be provided and will focus on the potential changes in environmental impacts due to the proposed project. Specifically, the analysis of each environmental issue provided below will first summarize the findings of the Approved Project and then analyze the potential physical effects of the proposed project. The impacts attributable to the proposed project are then compared to the analysis and findings within the Approved Project to determine if such impacts are within the envelope of impacts documented in the Approved Project. Mitigation measures identified for the Approved Project (identified in Table 1) would apply to the proposed project, as would the adopted Mitigation Monitoring and Reporting Programs for that PEIR.

9. Surrounding Land Uses and Setting

The project site is located in the West End, as identified in the Downtown Plan, of Downtown Long Beach. Surrounding uses include Cesar Chavez Elementary School and the Governor George Deukmejian Courthouse, and residential uses to the north, the Superior Court of California Parking Garage, federal government offices, and the City of Long Beach Police Station and Fire Station No. 1 to the east, and the Santa Cruz Park and Los Angeles River to the west. Directly south of the project site is the Hilton Long Beach Hotel and the World Trade Center office complex.

10. Required Approvals

The following approvals are required as a part of this project:

1. Site Plan Review
2. Tentative Map

The City of Long Beach is the lead agency and the approvals of other public agencies are not required.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☒ Noise
☐ Population/Housing	☒ Public Services	☒ Recreation
☒ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

Determination

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an environmental impact report is required.

☒ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. 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 NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

Environmental Checklist

This section addresses each of the environmental issues discussed in the Certified PEIR and subsequent CEQA documents to determine if the currently proposed project has the potential to create new significant impacts or a result in a substantial increase in the severity of a significant impact as compared to what was identified in the Certified PEIR and subsequent CEQA documents. Additionally, impacts are compared to existing on-the-ground conditions. As described above, the approved Downtown Plan and Certified PEIR are also referred to as the "Approved Project." Topics that were scoped out in the Certified PEIR's Initial Study, hereby referred to simply as Certified PEIR, are included in this analysis.[2]

I. Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project"*
1.	**AESTHETICS**—Would the project:		
a)	Have a substantial adverse effect on a scenic vista?	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☒
e)	Result in shadow impacts?	☐	☒

Discussion

The project is a mixed-use project on an infill site in a transit priority area. Under CEQA, aesthetic impacts of such a project are not considered significant impacts on the environment. The analysis below is thus provided for informational purposes.

a) Scenic Vista

The Certified PEIR determined that the Downtown Plan would result in less-than-significant impact to scenic vista.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to scenic vista that was not previously considered.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

[2] In accordance with *CEQA Guidelines* Section 15164(a), this Addendum tiers off of the analysis and conclusions found in the Certified PEIR. Thus, this Addendum relies on the thresholds published at the time of the Certified PEIR's adoption in 2011.

b) Scenic Resources

The Certified PEIR determined that the Downtown Plan would result in no impact to scenic resources.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Furthermore, there are no officially designated scenic highways in the vicinity of the project site (Caltrans, 2011). Thus, the proposed project would not result in an impact to scenic resources that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

c) Visual Character

As described in the Certified PEIR, the visual character of the Downtown Plan area would be altered through the introduction of additional high-rise structures and full-block complexes at locations within the Downtown Plan area. However, with implementation of the Downtown Plan's Design Guidelines and the City's Design Review process, future development would be compatible with existing development patterns and enhance the visual environment. Thus, the Certified PEIR determined that impacts would be less than significant.

The proposed project would replace an existing surface parking lot with two high-rise structures (21- and 40-stories in height), four mid-rise structures (5- to 7-stories in height with 1 partial level of subterranean parking), and a parking structure (9 above-ground levels, 1 subterranean level), which would alter the visual character of the Downtown area by adding high rise structures on a previously paved ground level parking lot. The development of a 21- tower and a 40-story tower, in particular, have the potential to alter the visual character of the Downtown skyline, which can be seen from many directions including the highlands of Central Long Beach and Signal Hill and the South Waterfront and Port. However, the proposed project is surrounded by existing skyscrapers such as the World Trade Center, located immediately south of the project site. Thus, the project's impacts to the Downtown skyline would be only partially visible from certain angles. Additionally, as stated in the Certified PEIR, the proposed project would be required to be in compliance with the Downtown Plan's Design Guidelines and implement the City's Design Review process; thus, would contribute to its overall goals of promoting the development of a distinctive Downtown skyline, while enhancing the visual environment of Downtown. The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to visual character that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

d) Light and Glare

As described in the Certified PEIR, future development within the Downtown Plan area would introduce new sources of light and glare due to the increased height and scale of future development. Projects would also increase the proportion of glazing on building façades and potential use of reflective materials. Potential sources of lighting include the windows of the residential units and ground-floor commercial/institutional space, and spillover of light onto the street from the illumination of the high-rise structures and podium development during the nighttime hours. Glare sources also include the sun's reflection from metallic or glass surfaces on vehicles parked in surface parking lots and along the roadways. The introduction of such materials would be a potentially significant impact. However, this impact would be reduced through the implementation of Certified PEIR Mitigation Measures AES-2(a), Lighting Plans and Specifications; AES-2(b), Building Material Specifications; AES-2(c), Light Fixture Shielding; and AES-2(d), Window Tinting, identified in Table 1.

The proposed project would develop two high-rise structures (21- and 40-stories in height), four mid-rise structures (5- to 7-stories in height with 1 partial level of subterranean parking), and a parking structure (9 above-ground levels, 1 subterranean level), which would introduce new sources of light and glare due to the increased development on the project site. The proposed project would feature predominately energy saving LED lighting and minimum foot candles would be provided for safety throughout the project site. Lighting within the walkways, interior courtyards, and amenity areas would be designed by an architectural lighting designer and include features such as gobo lighting on the creek path on western portion of the site and festoon lighting on the dining terrace and fire pit area known as "the Meadow." Exterior lighting would emphasize the pedestrian entrances, the street front uses, and the residential building amenities. Lighting for ground floor market space would contribute to the larger design and would not detract from the architectural integrity of the project. As noted in the Certified PEIR, increased light and glare is, in part, a desired outcome in creating a vibrant urban environment, a key objective of the Downtown Plan. While the proposed project would increase light and glare in the Downtown Plan area, it would not allow for development at a greater density or intensity than previously considered in the Certified PEIR. Furthermore, as described above, the proposed project would be required to implement Mitigation Measures AES-2(a) through AES-2(d) from the Certified PEIR, identified in Table 1; thus, any potential impacts from light and glare would be reduced.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

e) Shade and Shadow

As described in the Certified PEIR, development projects that include high-rise structures, as encouraged by the Downtown Plan, would cast shadows onto adjacent properties, particularly in the wintertime when shadows extend the farthest from a tall structure and are the most extreme. For a project to generate a significant shadow impact, it must increase shadows cast upon shadow-sensitive uses. Shadow-sensitive uses are defined 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. Shadow impacts are considered significant if shadow-sensitive uses would be shaded by proposed structures for more than three hours between late October and early April (including the Winter Solstice, which typically occurs on December 21, and the Spring Equinox, which typically occurs on March 20), or for more than four hours between early April and late October (including the Summer Solstice expected to occur on June 21, and the Fall Equinox expected to occur on September 23). Since shadows caused by the development of high-rise structures have the potential to fall on sensitive uses within the Downtown Plan area for more than three hours during the winter months, shadow impacts in the Certified PEIR were determined to be significant and unavoidable. Nevertheless, the Certified PEIR requires implementation of Mitigation Measure AES-3, Shadow Impacts, identified in Table 1, which requires a shading study to be completed to disclose potential impacts.

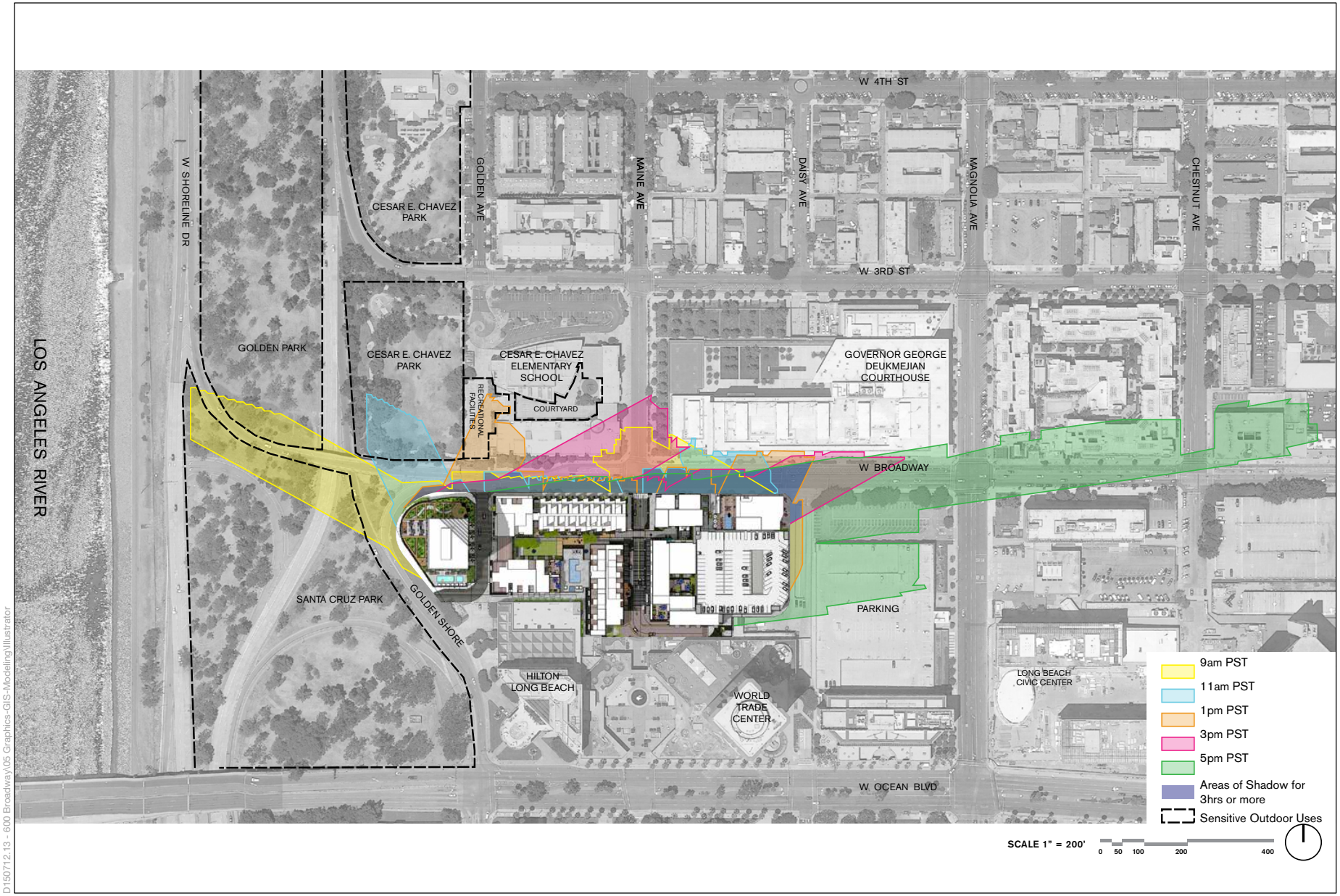
The proposed project would develop two high-rise structures (21- and 40-stories in height), four mid-rise structures (5- to 7-stories in height with 1 partial level of subterranean parking), and a parking structure (9 above-ground levels, 1 subterranean level). The 40-story high-rise building would reach 426 feet in overall height with the elevator tower and mechanical equipment area on the roof. Due to the development of new high-rise structures the proposed project would modify shading patterns surrounding the project site and has the potential to create shading impacts. In accordance with Mitigation Measure AES-3, Shadow Impacts, a shading study was completed for the proposed project and results are illustrated in Figures 12 through 15, below. The sensitive receptors that surround the project site include Golden Park, Cesar E. Chavez Park, and the Cesar E. Chavez Elementary School's recreational facilities and courtyard, all located north of the project site, across W. Broadway, as well as Santa Cruz Park located west of the project site, across Golden Shore.

Figure 12, *Winter Solstice*, depicts off-site shadow impacts for sensitive receptors traveling gradually from west to east during the winter solstice between the hours of 9 a.m. and 3 p.m. As shown in Figure 12, the proposed project would cast shadows on relatively small portions of two sensitive receptors for more than three hours during the winter solstice, including the southeast edge of Cesar E. Chavez Park and the southwest and southeast edges of Cesar E. Chavez Elementary School's recreational facilities. The shadow created by the proposed project during the winter solstice would primarily shade W. Broadway, which is not considered a sensitive receptor.

Figure 13, *Spring Equinox*, depicts off-site shadow impact for sensitive receptors traveling gradually from west to east during the spring equinox between the hours of 9 a.m. and 5 p.m. As shown in Figure 13, the proposed project would not cast shadows on any sensitive receptors for more than three hours during the spring equinox. The shadow created by the project site during the spring equinox would primarily shade W. Broadway, which is not considered a sensitive receptor.

Figure 14, *Summer Solstice*, depicts off-site shadow impacts for sensitive receptors traveling gradually from west to east during the summer solstice between the hours of 9 a.m. and 5 p.m. As shown in Figure 14, the proposed project would not cast shadows on any sensitive receptors for more than three hours during the summer solstice. The shadow created by the project site during the summer solstice would primarily shade over a small portion of the project site, which is not considered a sensitive receptor.

Figure 15, *Fall Equinox*, depicts off-site shadow impacts for sensitive receptors traveling gradually from west to east during the fall equinox between the hours of 9 a.m. and 5 p.m. As shown in Figure 15, the proposed project would not cast shadows on any sensitive receptors for more than four hours during the fall equinox. The shadow created by the project site during the fall equinox would primarily shade W. Broadway, which is not considered a sensitive receptor.



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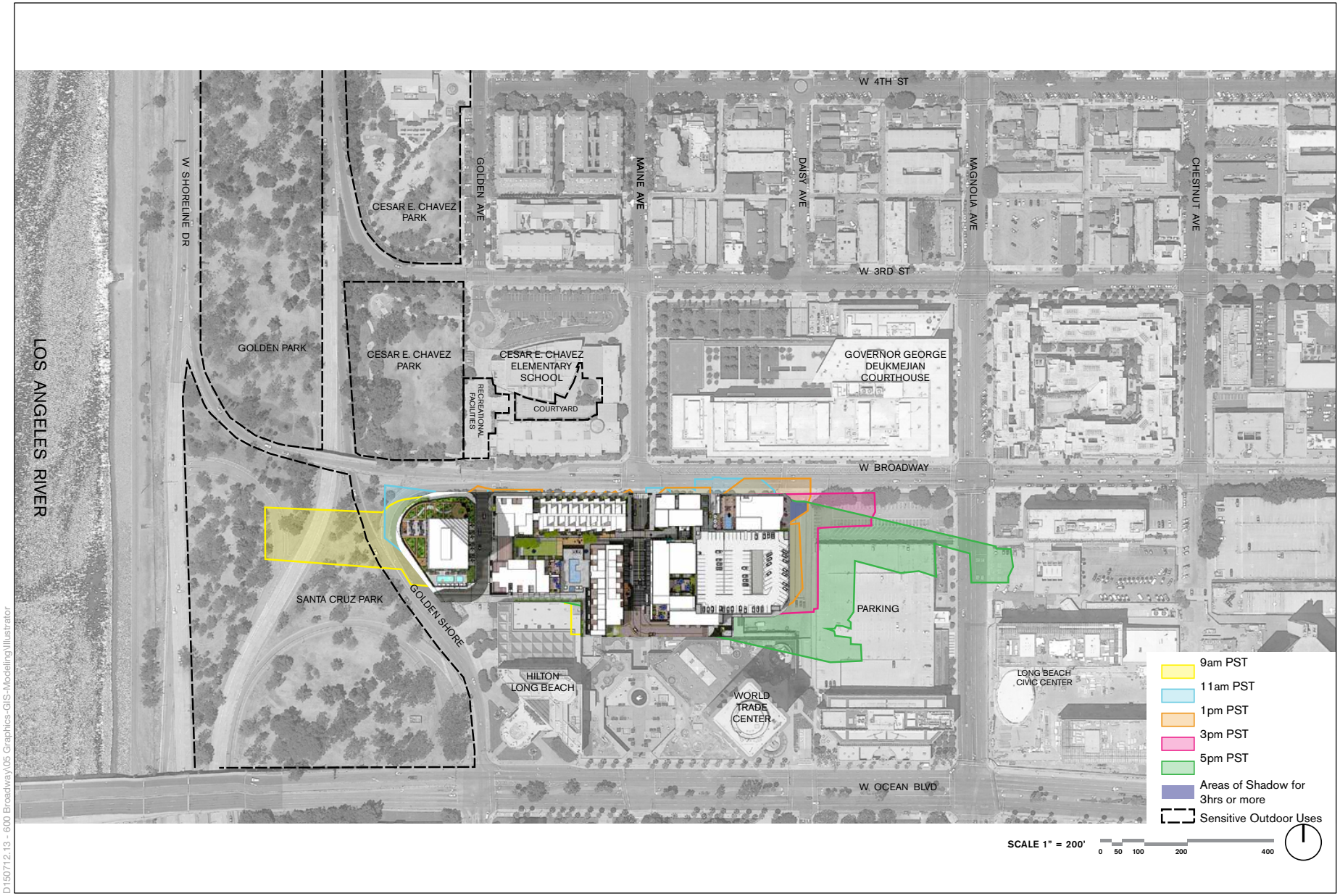
SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 12

Spring Equinox

ESA



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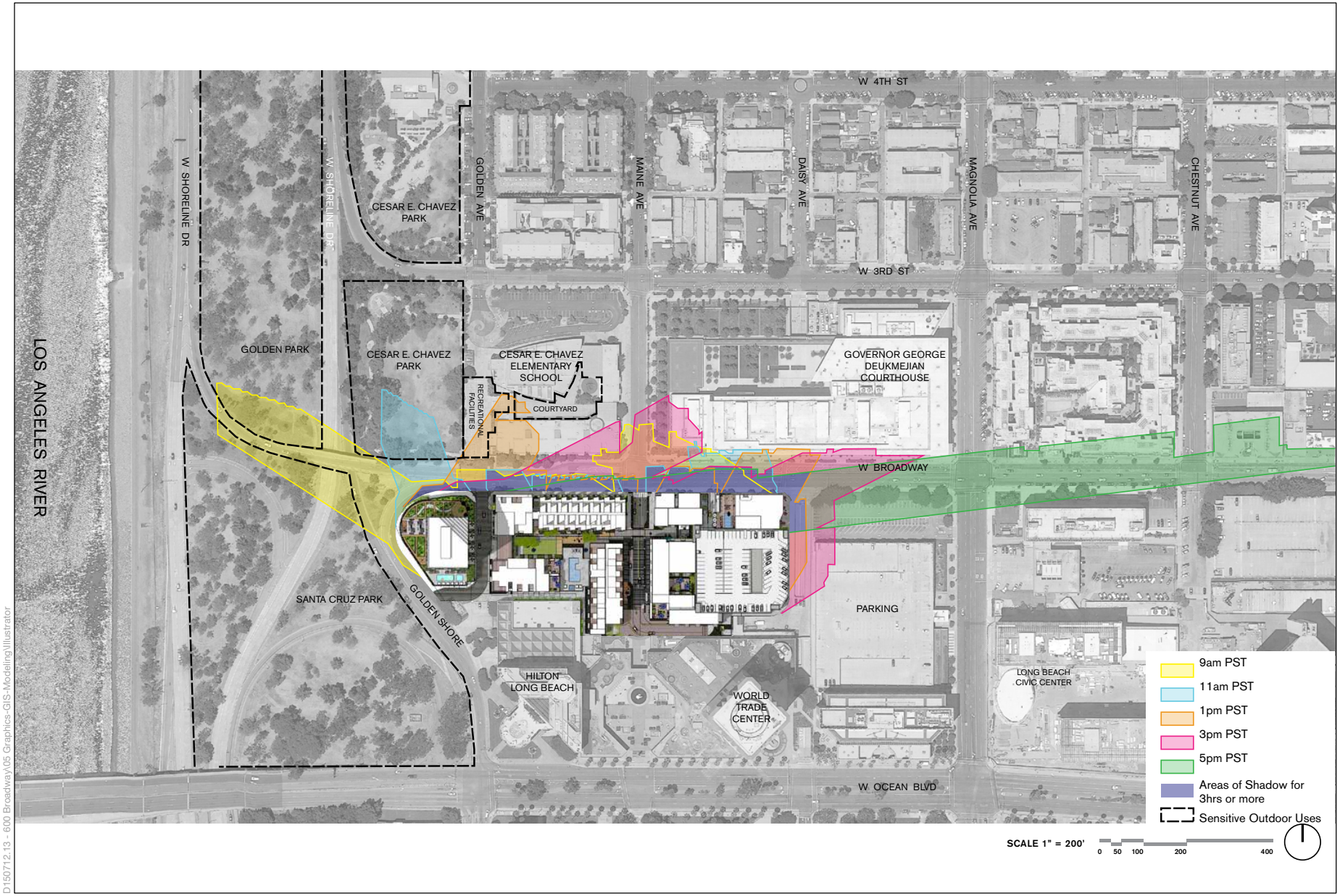
SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 13

Summer Solstice

ESA



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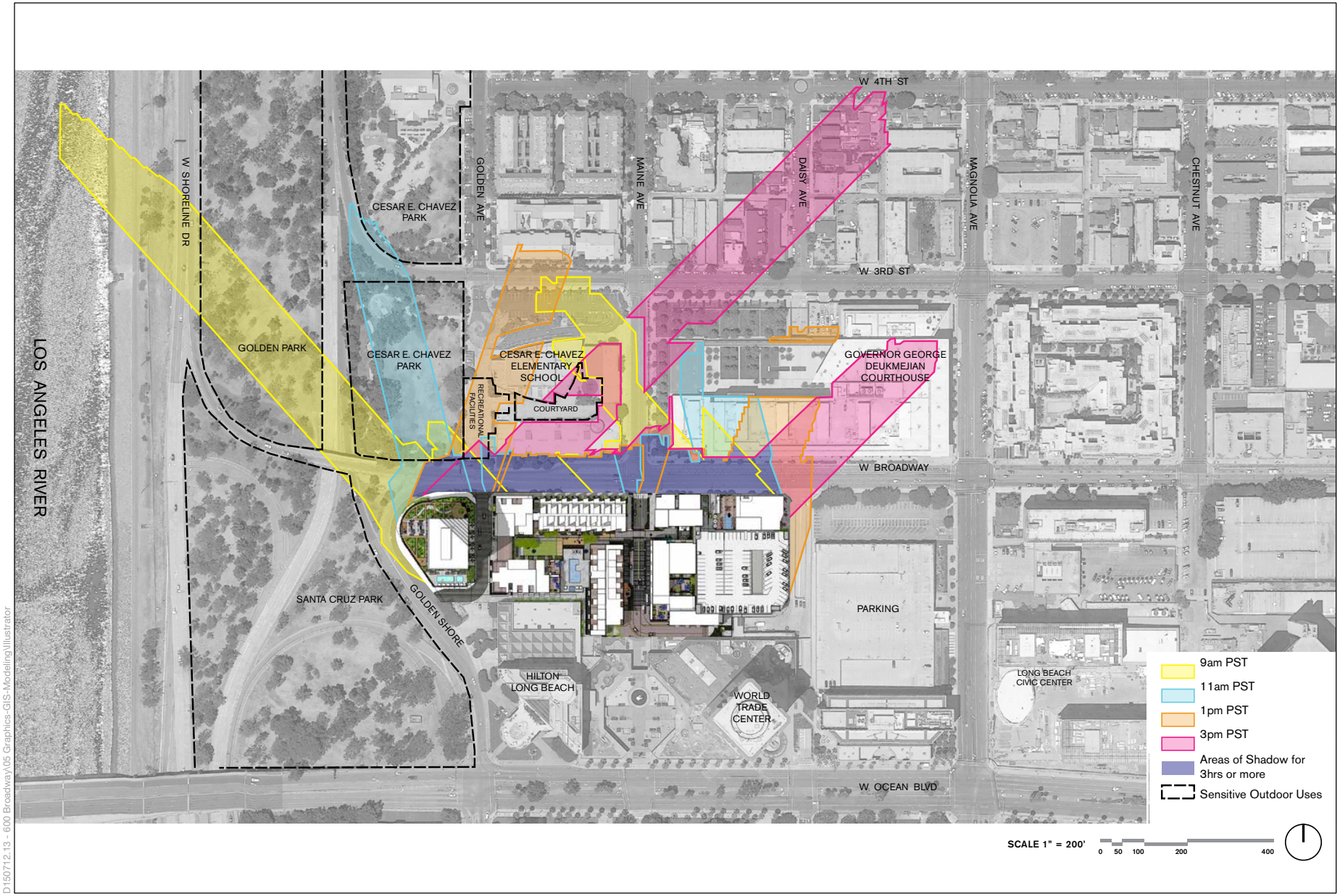
SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 14

Fall Equinox

ESA



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SOURCE: Studioeleven, 2019

Westside Gateway Project

Figure 15

Winter Solstice

ESA

The proposed project would create new shadows that would impact small portions of the Cesar E. Chavez Park and Cesar E. Chavez Elementary School's recreational facilities, both shade-sensitive receptors, during the Winter Solstice for a period of more than three hours. However, this impact would be limited to the southeast edge of Cesar E. Chavez Park and the southwest and southeast edges of Cesar E. Chavez Elementary School's recreational facilities, both very small portions of the edges of these sensitive receptors. In addition, in accordance with Certified PEIR Mitigation Measure AES-3, owners and tenants of sensitive receptor properties would be required to be notified of the pending shadowing impacts. Nevertheless, given that portions of the nearby sensitive receptors would be shadowed for three hours or more, the proposed project would have a significant and unavoidable aesthetic impact on shadow-sensitive resources surrounding the project site, consistent with the findings of the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions identified in the Certified PEIR; thus, impacts would be significant and unavoidable.

II. Agriculture and Forestry Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
2. AGRICULTURAL AND FOREST RESOURCES—In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:		
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☒

Discussion

a–e) Agricultural and Forest Resources

The Certified PEIR determined that the Downtown Plan would result in no impact to agricultural and forest resources.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to agricultural and forest resources that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

III. Air Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
3.	**AIR QUALITY**—Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:		
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☒
e)	Create objectionable odors affecting a substantial number of people?	☐	☒

Discussion

The Downtown Plan was determined to be consistent with the applicable air quality plan because it would not increase the allowable density in the Downtown Area from densities allowed under the General Plan. The Certified PEIR determined that the Downtown Plan is consistent with the growth assumptions contained in the Air Quality Management Plan (AQMP), which is the air quality plan for the region.

The Certified PEIR determined that buildout of the Downtown Plan would result in significant and unavoidable impacts with regard to construction and operational air quality emissions. As discussed in the Certified PEIR Section 4.2, *Air Quality*, construction pursuant to the Downtown Plan and resulting emissions would exceed South Coast Air Quality Management District (SCAQMD) regional significance thresholds for volatile organic compounds (VOC), carbon monoxide (CO), nitrogen oxides (NO_X), respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). Even

with compliance with applicable SCAQMD rules and mitigation measures specified in the Certified PEIR and identified in Table 1, emissions would still exceed SCAQMD's applicable significance thresholds. Therefore, the Certified PEIR found impacts from construction pursuant to the Downtown Plan would be significant and unavoidable. The Certified PEIR found that implementation of the Downtown Plan would result in significant and unavoidable long-term operational impacts from operational emissions due to increased vehicle trips and associated emissions. However, during operation of the Downtown Plan, traffic generated as the result of full buildout is not predicted to result in the formation of localized CO hotspots at impacted roadway intersections.

The Certified PEIR concluded construction- and operations- related significant and unavoidable emissions attributable to development envisioned under the Downtown Plan, along with other reasonably foreseeable future projects in the Basin as a whole, would continue to contribute to long-term increases in emissions that would exacerbate existing and projected non-attainment. The Certified PEIR stated that compliance with applicable SCAQMD rules and Mitigation Measures AQ-1(a) and AQ-1(b) would reduce construction-related emissions of criteria air pollutants and ozone precursors. However, emissions associated with development under the Downtown Plan would still exceed SCAQMD's applicable significance thresholds. Thus, the Certified PEIR found implementation of the Downtown Plan would contribute to a significant and unavoidable cumulative air quality impact.

With respect to toxic air contaminants (TACs), the land uses analyzed in the Certified PEIR would not include substantial sources of long-term TAC emissions. However, the Certified PEIR identified potential impacts with regard to TAC exposure resulting from the exposure to dry cleaning operations using perchloroethylene, TACs from the Port of Long Beach (POLB) and stationary sources in the vicinity of the Downtown Plan area, and proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks). Mitigation measures would reduce concentrations of TAC that sensitive receptors would be exposed to for time spent indoors and would disclose to those considering residing in the Downtown Plan area the potential risks involved. However, the mitigation would not reduce exposure of sensitive receptors to substantial pollutant concentrations for time spent outdoors and the impact would be considered significant and unavoidable.

Odors from construction pursuant to the Downtown Plan were found to be less than significant. Commercial uses such as truck deliveries and development of convenience uses that may include sources of odorous emissions during operation of the Downtown Plan, and the Downtown Plan's proximity to the diesel sources associated with the POLB were found to be potentially significant. Mitigation would reduce impacts from odor to a less-than-significant level.

The proposed project would be required to implement Mitigation Measures AQ-1 through AQ-6, identified in Table 1. However, Mitigation Measure AQ-2 has been revised for the project as follows:

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.

a) 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.

b) 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.

c) The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day.

d) The City shall ensure that all commercial developments include shower and locker facilities for employees to encourage bicycle, walking, and jogging as options for commuting.

e) 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.

f) 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.

g) 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.

Clarification for the Westside Gateway Project: *This mitigation measure is intended to reduce energy use. The project would be required to meet the Title 24 energy efficiency standards in effect at the time of building permit issuance, which may be more stringent than the current standards. The Title 24 energy efficiency standards are updated approximately every three years. The 2019 Title 24 energy efficiency standards were adopted in 2019 and will become effective in 2020 (CEC 2019a). These standards will improve upon the current standards for residential and nonresidential buildings and may result in an equal or more effective reduction in energy and completely or partially replace the mitigation measure. The project shall comply with the energy reduction requirements of this mitigation measure or provide evidence to the satisfaction of the City that the Title 24 energy efficiency standards in effect at the time of building permit issuance result in an equal or more effective reduction in energy.*

a) Air Quality Plans

The 2007 Air Quality Management Plan was applicable to the Downtown Plan at the time of the analysis. Since then, the 2012 AQMP and then the 2016 AQMP has been adopted by the SCAQMD and the California Air Resource Board (CARB). United States Environmental Protection Agency (USEPA) approval of the 2016 AQMP is pending, but is a necessary requirement before the 2016 AQMP can be incorporated into the State Implementation Plan (SIP). Until such time as the 2016 AQMP is approved by the USEPA, the 2012 AQMP remains the applicable AQMP for federal air quality planning purposes. However, for the purpose of CEQA, this addendum considers the 2016 AQMP, because it has been fully approved in California. Projects that are consistent with the regional population, housing, and employment forecasts identified by Southern California Association of Governments (SCAG) are considered to be consistent with the AQMP growth projections, since the forecast assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the SCAG's regional forecast projections, and thus, also with the AQMP growth projections.

The proposed project's construction-related emissions would be temporary in nature, lasting only for the duration of the construction period, and would not have a long-term impact on the region's ability to meet state and federal air quality standards. Furthermore, the proposed project would be required to comply with applicable SCAQMD rules and regulations for new or modified sources. For example, the proposed project must comply with SCAQMD Rule 403 for the control of fugitive dust during construction. According to the SCAQMD, the application of water to disturbed areas two times a day has a control efficiency of 55 percent. Moreover, to reduce DPM emissions, the proposed project would utilize a low- emissions construction fleet meeting the current emission standards of CARB's In-Use Off-Road Diesel Vehicle Regulation (C.C.R. Title 13, Section 2449). All contractors using off-road diesel equipment are subject to the Regulations and are responsible for compliance with the Regulations. In addition, the proposed project would incorporate construction emission control measures as specified in the Certified PEIR. In particular, Certified PEIR Mitigation Measure AQ-1(a) requires that the project 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 [of the Downtown Plan Certified PEIR]. According to this measure, 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. Incorporation of Certified PEIR Mitigation Measure AQ-1(a) into the project, and by meeting the applicable SCAQMD rules and regulations, project construction activities would be consistent with the goals and objectives of the AQMP to improve air quality in the Basin.

The number of households within the City of Long Beach is anticipated to increase by approximately 18,200 households, or approximately 4 percent between 2012 and 2040. As was quoted in the PERI, SCAG anticipated that the City of Long Beach will have a total of 194,284 households and 572,614 residents by 2035 (SCAG 2008). The proposed project's net increase of 756 dwelling units would be well within the SCAG's household growth forecast for the City of

Long Beach between 2012 and 2040. Therefore, the proposed project is consistent with the regional growth projections for the Long Beach City Subregion.

In addition to population growth projections, the SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained within baseline emissions inventory in the 2016 AQMP. The proposed project is consistent with the smart growth policies of the 2016–2040 RTP/SCS, which promote an increase in housing density within close proximity to High-Quality Transit Areas (HQTA). An HQTA is defined as a generally walkable transit village or corridor within one half-mile of a well-serviced transit stop or a transit corridor with 15- minute or less service frequency during peak commute hours. The proposed project would concentrate new development within a half of a mile (walking distance) of several Long Beach Transit and Commuter Express lines that run along major corridors such as W. Ocean Boulevard, W. Broadway, and Queens Way, and connect to other major regions of the Long Beach area. Thus, the project site's location provides opportunities for residents and guests to use public transit to reduce vehicle trips. The project site is also located in a Transit Priority Area as defined by Public Resources Code Sections 21099 and 21064.3. Reports by the California Department of Transportation and SCAG have found that focusing development in areas served by transit can result in local, regional and statewide benefits including reduced air pollution and energy consumption. The proposed project's close proximity to other commercial/retail land uses and regional transit would result in fewer trips and a reduction to the proposed project's VMTs as compared to the base trip rates for similar stand-alone land uses that are not located in close proximity to transit. Thus, because the proposed project would be consistent with the growth projections and regional land use planning policies of the 2016–2040 RTP/SCS, the proposed project would not conflict with or obstruct implementation of the 2016 AQMP, and proposed project impacts would be less than significant.

As the 2016 RTP/SCS is incorporated into the 2016 AQMP, the project would be consistent with the latest air quality plan. Because the project would be consistent with land use designations and with projected growth under the Downtown Plan, which would not exceed growth projections for the region, and VMT reduction measures, there would be no impact not identified in the Certified PEIR with respect to AQMP consistency and growth projections.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would result in less impacts than the Certified PEIR's significant and unavoidable impact; thus, impacts would be less than significant with mitigation.

b) Air Quality Standards

The Certified PEIR did not perform quantitative emissions calculations for the construction emissions from individual implementing projects, but conservatively assumed 10 percent of buildout of the Downtown Plan per year. These emissions could exceed SCAQMD significance thresholds even with implementation of mitigation, resulting in a significant and unavoidable impact. Thus, construction emissions specific to the project were evaluated for this addendum.

Since the preparation of the Certified PEIR, the methodology used to calculate project-level emissions has been updated with more recent vehicle and equipment fleet mixes, and newer emissions control technology. Construction and operational emissions in the Certified PEIR were analyzed using the URBEMIS model. Currently, the SCAQMD does not recommend using the URBEMIS model for CEQA analyses and instead recommends the California Emissions Estimator Model (CalEEMod). The CalEEMod model (Version 2016.3.2) contains updated vehicle fleet data (EMFAC2014) which is based on vehicle registration data from the California Department of Transportation (Caltrans). The CalEEMod model also employs construction equipment data to reflect newer, more efficient equipment and better emissions control technology. In addition, fugitive dust emissions equations have been updated with the most recent United States Environmental Protection Agency (US EPA) AP-42 emission factors.

As shown in **Table 3**, *Unmitigated Regional Construction Emissions*, the maximum daily construction emissions of VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ would be below the SCAQMD regional mass daily thresholds and the construction emissions estimates within the Certified PEIR, and there would be no new significant impact.

As identified in the Certified PEIR, following buildout of the Downtown Plan, regional operational emissions would exceed SCAQMD significance thresholds even with implementation of mitigation, resulting in a significant and unavoidable impact. Operational emissions generated from the project were analyzed and compared to the Certified PEIR.

The analysis of stationary and mobile operational source emissions was performed with the CalEEMod model and compared to pollutant emissions from the Certified PEIR. The analysis of mobile source emissions is based on data provided by the project traffic study. Area source emissions are based on SCAQMD-recommended values for natural gas consumption, landscaping equipment emissions, and consumer product and architectural coating usage. As shown in **Table 4**, *Unmitigated Regional Operational Emissions*, operational emissions from the project would not exceed the SCAQMD's regional mass daily threshold or the operational emissions estimated in the Certified PEIR. Thus, operation of the project would not result in any new significant operational air quality impacts nor would it result in a substantial increase in the severity of impacts compared to those identified in the Certified PEIR.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would result in less impacts than the Certified PEIR's significant and unavoidable impact; thus, impacts would be less than significant with mitigation.

TABLE 3
UNMITIGATED REGIONAL CONSTRUCTION EMISSIONS

Emission Source	Emissions in Pounds per Day					
	ROG	NO_X	CO	SO2	PM_{10}	$PM_{2.5}$
Site Clearing						
On-Site Fugitive Dust	--	--	--	--	5.55	2.99
On-Site Off-Road (Diesel Equipment)	3.83	37.68	24.76	0.04	2.04	1.91
Off-Site Hauling/Vendor/Worker Trips	0.30	7.15	2.23	0.02	0.70	0.21
Total Emissions	***4.13***	***44.83***	***26.99***	***0.06***	***8.29***	***5.11***
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Grading/Excavation						
On-Site Fugitive Dust	--	--	--	--	2.78	1.50
On-Site Off-Road (Diesel Equipment)	2.43	26.39	16.05	0.03	1.27	1.17
Off-Site Hauling/Vendor/Worker Trips	0.80	25.50	5.93	0.07	1.86	0.57
Total Emissions	***3.23***	***51.89***	***21.98***	***0.10***	***5.91***	***3.24***
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Building Construction						
On-Site Off-Road Diesel Equipment	2.82	24.04	22.04	0.04	1.43	1.36
Off-Site Hauling/Vendor/Worker Trips	4.56	21.53	34.42	0.13	10.25	2.85
Total Emissions	***7.38***	***45.57***	***56.46***	***0.17***	***11.68***	***4.21***
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Architectural Coating						
On-Site Architectural Coating	51.50	--	--	--	0.00	0.00
On-Site Off-Road Diesel Equipment	2.48	18.67	23.74	0.04	1.05	1.05
Off-Site Hauling/Vendor/Worker Trips	0.74	0.48	5.42	0.02	1.80	0.49
Total Emissions	***54.72***	***19.15***	***29.16***	***0.06***	***2.85***	***1.54***
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Paving						
On-Site Off-Road Diesel Equipment	1.26	12.92	14.65	0.02	0.68	0.62
Off-Site Hauling/Vendor/Worker Trips	0.07	0.05	0.51	<0.01	0.17	0.05
Total Emissions	***1.33***	***12.97***	***15.16***	***0.02***	***0.85***	***0.67***
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: Parker Environmental Consultants, 2018. See Appendix B, *Air Quality, GHG, and Energy Analysis*, of this addendum for detail.

NOTE: Calculations assume compliance with SCAQMD Rule 403 – Fugitive Dust and Rule 1113 – Architectural Coatings. Calculation sheets are provided in Appendix B of this addendum.

TABLE 4
UNMITIGATED REGIONAL OPERATIONAL EMISSIONS

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summertime (Smog Season) Emissions						
Area Sources	16.97	0.72	62.66	<0.01	0.35	0.35
Energy Sources	0.21	1.76	0.75	0.01	0.14	0.14
Mobile Sources	8.22	41.25	108.53	0.39	31.44	8.62
Total Project Site Emissions:	***25.40***	***43.73***	***171.94***	***0.40***	***31.93***	***9.11***
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Potentially Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Wintertime (Non-Smog Season) Emissions						
Area Sources	16.97	0.72	62.66	<0.01	0.35	0.35
Energy Sources	0.21	1.76	0.75	0.01	0.14	0.14
Mobile Sources	7.82	42.10	101.66	0.37	31.44	8.62
Total Project Site Emissions:	***25.00***	***44.58***	***165.07***	***0.38***	***31.93***	***9.11***
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Potentially Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: Parker Environmental Consultants, 2018. See Appendix B, *Air Quality, GHG, and Energy Analysis*, of this addendum for detail.

c) Cumulative

The SCAQMD's project-specific and cumulative significance thresholds are the same, and projects that exceed the project-specific significance thresholds are considered to be cumulatively considerable. Projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant (SCAQMD 2003). The Certified PEIR found that construction- and operations- related emissions attributable to development envisioned under the Downtown Plan would be significant and unavoidable, along with other reasonably foreseeable future projects in the Basin as a whole, the Certified PEIR found implementation of the Downtown Plan would continue to contribute to long-term increases in emissions that would exacerbate existing and projected non-attainment, thus, would contribute to a significant and unavoidable cumulative air quality impact.

As discussed above, construction and operational emissions from the proposed project would not exceed the applicable project-specific thresholds and would be consistent with all air quality plans. Furthermore, SCAQMD's localized significance thresholds would not be exceeded, as described in the next section. Therefore, the proposed project cumulative contribution to air quality impacts would not be cumulatively considerable.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would be consistent with the analysis; however, impacts would be less than those identified in the Certified PEIR. Thus, the proposed project's cumulative impacts would be less than significant.

d) Sensitive Receptors

The proposed project is located within 25 meters of residential uses and across the street from an elementary school (Cesar Chavez Elementary School). Therefore, pursuant to Mitigation Measure AQ-1(b) of the Certified PEIR, a project-level localized significance analysis has been conducted based on the SCAQMD *Final Localized Significance Threshold Methodology* (SCAQMD 2008a). Localized construction emissions presented in **Table 5**, *Localized Construction Emissions*, take into account the applicable and feasible portions of Mitigation Measures AQ-1(a) and SCAQMD applicable rules and regulations, including SCAQMD Rule 403 for fugitive dust. Implementation of these mitigation measures would result in a reduction of fugitive dust (PM_{10}) and equipment exhaust (such as NO_X, PM_{10}, and $PM_{2.5}$), such that regional project-related construction emissions would not exceed the SCAQMD significance thresholds during construction. Localized emissions during construction would be below the SCAQMD localized significance thresholds. Therefore, the project would not result in new significant construction air quality impacts and would not result in a substantial increase in the severity of impacts compared to those identified in the Certified PEIR. Detailed air quality worksheets are provided in Appendix B, *Air Quality, GHG, and Energy Analysis*, of this addendum.

TABLE 5
LOCALIZED CONSTRUCTION EMISSIONS

	Total On-Site Emissions (Pounds per Day)			
Construction Phase[a]	**NO_X[b]**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Site Clearing	37.68	24.76	7.59	4.90
Grading/Excavation	26.39	16.05	4.05	2.67
Building Construction	24.04	22.04	1.43	1.36
Architectural Coatings	18.67	23.74	1.05	1.05
Paving	12.92	14.65	0.68	0.62
SCAQMD Localized Thresholds	**96**	**1,071**	**9**	**6**
Potentially Significant Impact?	**No**	**No**	**No**	**No**

SOURCE: Parker Environmental Consultants, 2018. See Appendix B, *Air Quality, GHG, and Energy Analysis*, of this addendum for detail.

NOTES:

[a] The localized thresholds for all phases are based on a receptor distance of 25 meters in SCAQMD's SRA 4 for a project site of three acres. Thresholds for a three-acre site were estimated using linear regression.

[b] The localized thresholds listed for NO_X in this table takes into consideration the gradual conversion of NO_X to NO_2, and are provided in the mass rate look-up tables in the "Appendix C – Mass Rate LST Look-up Tables" document prepared by the SCAQMD. As discussed previously, the analysis of localized air quality impacts associated with NO_X emissions is focused on NO_2 levels as they are associated with adverse health effects.

With respect to localized CO hotspots, for the project, the peak intersection traffic for intersections affected by the project would be consistent with those anticipated in the Certified PEIR, based on the project's consistency with the development standards established in the Certified PEIR. The peak intersection traffic expected by the existing plus project condition is 4,434 vehicles per hour, at the intersection of Magnolia Avenue and Ocean Boulevard. This is less than the maximum cumulative traffic analyzed in the Certified PEIR of 6,000 vehicles per hour. As CO concentrations at intersections are directly influenced by peak hour traffic flow, the project would result in lower CO concentrations compared to those anticipated for the project site in the Certified PEIR.

Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations and is consistent with the findings in the Certified PEIR. The project would not result in any new significant operational air quality impacts nor result in a substantial increase in the severity of CO impacts compared to those identified in the Certified PEIR.

With respect to TACs, the land uses analyzed in the Certified PEIR would not include substantial sources of long-term TAC emissions. The Certified PEIR found that implementation of the Downtown Plan would have less than significant impacts from short-term construction, long-term onsite stationary sources and offsite mobile-sources. However, the Certified PEIR identified potential impacts with regard to TAC exposure resulting from the exposure to dry cleaning operations using perchloroethylene, TACs from the Port of Long Beach (POLB) and offsite stationary sources in the vicinity of the Downtown Plan area, and onsite mobile sources associated with proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks). Mitigation measures would reduce concentrations of TAC that sensitive receptors would be exposed to for time spent indoors and would disclose to those considering residing in the Downtown Plan area the potential risks involved. However, the mitigation would not reduce exposure of sensitive receptors to substantial pollutant concentrations for time spent outdoors and the impact would be considered significant and unavoidable.

The commercial land uses associated with the project consist of varies commercial retail uses, dry cleaning facilities, if any, would not use perchloroethylene. The commercial land uses would not require more than 100 trucks per day, or 40 trucks equipped with Transport Refrigeration Units (TRUs). Furthermore, construction of the project would be required to minimize air pollutant emissions via implementation of Certified PEIR Mitigation Measure AQ-1(a), which includes enhanced exhaust control practices on off-road vehicle and off-road construction equipment. Thus, the project is not expected to 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. Therefore, as described in Mitigation Measure AQ-4(a) of the Certified PEIR, a site-specific project-level HRA is not required.

While minor incidental TAC emissions from sources, such as solvents, and maintenance materials, could result from the project, these TAC emissions sources would not result in substantial exposures to on- or off-site sensitive receptors that would result in an exceedance of health risk standards. The project would therefore not result in new significant impacts and would not result in a substantial increase in the severity of impacts compared to those identified in the Certified PEIR.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would be consistent with the analysis; however, impacts would be less than those identified in the Certified PEIR. Thus, the proposed project's impacts would be less than significant with mitigation.

e) Odors

The project would not introduce any new sources of odors not previously considered and analyzed in the Certified PEIR. Furthermore, the proposed land uses are not typical odor-generating uses (e.g., landfill, sewage treatment, etc.). Therefore, the project would not result in any new significant odor impacts nor would it result in a substantial increase in the severity of impacts compared to

those identified in the Certified PEIR. Furthermore, the proposed project would be required to implement Mitigation Measures AQ-6 from the Certified PEIR, identified in Table 1; thus, any potential odors generated by the project would be minimized.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

IV. Biological Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
4.	**BIOLOGICAL RESOURCES**—Would the project:		
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and 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, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒

Discussion

a–f) Biological Resources

The Certified PEIR determined that the Downtown Plan would result in no impact to biological resources.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. The project site is currently developed with a surface parking lot and there are no trees on the site. Therefore, the project site does not provide suitable nesting habitat for migratory birds. Thus, the proposed project would not result in an impact to biological resources that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

V. Cultural Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
5.	**CULTURAL RESOURCES**—Would the project:		
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒

Discussion

a) Historic Resources

As discussed in the Certified PEIR, adoption of the Downtown Plan may result in redevelopment of properties considered to be eligible for listing on the National Register or the California Register, or that is determined eligible for listing as a City Landmark. The Historic Survey Report—prepared for the Certified PEIR—identified 58 properties presently listed as local landmarks within the Downtown Plan area. Compliance with Mitigation Measures CR-1(a) through CR-1(b), identified in Table 1, would provide an opportunity to avoid or reduce impacts to historic properties. However, it is not feasible to fully implement the Downtown Plan without impacting historic resources. Therefore, the Certified PEIR found that impacts to historic resources would be significant and unavoidable.

The proposed project would replace an existing surface parking lot with seven structures, including two residential towers, four residential buildings, and a parking structure that includes subterranean levels. No properties listed in Tables 4.3-2 and 4.3-3 of the Certified PEIR, which identify all potentially historic resources, are located within the project vicinity. The project site contains no historical resources as identified in the Certified PEIR and, therefore, would not affect any potentially historic resources. As such, the proposed project would not cause an adverse change to a historic resource.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would result in less impacts than the Certified PEIR's significant and unavoidable impact; thus, impacts would be less than significant with mitigation.

b–d) Archeological Resources, Paleontological Resources, and Human Remains

As discussed in the Certified PEIR, due to the lack of natural ground surfaces in the project area, no surveys would be conducted prior to onset of demolition or other ground-disturbing activities. Nearly

all properties (with the exception of parks and natural resource preserves) have been previously disturbed by grading and other prior development activities. Therefore, near-surface archeological or paleontological resources, or human remains, on previously developed properties that may have existed are likely to have been disturbed or removed. Despite this, the potential still exists for development activities to encounter and damage archaeological or paleontological resources, or encounter human remains and, thus, impacts would be potentially significant. However, impacts would be mitigated by complying with Mitigation Measures CR-2(a) through CR-2(c), as well as Mitigation Measure CR-3(a) and Mitigation Measure CR-3(b), of the Certified PEIR, and identified in Table 1.

The proposed project would replace an existing surface parking lot with seven structures, including two residential towers, four residential buildings, and a parking structure that includes subterranean levels. The development would be constructed in accordance with the standard engineering practices and design criteria specified in the Certified PEIR. Given the subterranean parking that would be provided as a part of the project, excavation would occur up to a depth of approximately 38 feet. Although the project site has been previously developed with parking lots and commercial buildings, the proposed project would require excavation to depths where undisturbed soils may be encountered. This creates the potential for a significant impact to archaeological or paleontological resources, or human remains. However, the proposed project would be required to implement Mitigation Measures CR-2(a) through CR-3(b) from the Certified PEIR, identified in Table 1, which would require archaeological monitoring during ground-disturbing activities; preparation of treatment plans, notices, and reports for unearthed resources; and coordination with agencies such as California Register of Historic Resources and the National Register of Historic Places, the County Coroner, and the Native American Heritage Commission. Thus, any potential impacts to archaeological or paleontological resources, or human remains, would be mitigated.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

VI. Geology and Soils

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
6. GEOLOGY AND SOILS—Would the project:		
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☒
ii) Strong seismic ground shaking?	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☒
iv) Landslides?	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒
e) 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?	☐	☒

Discussion

a.i–iii) Seismically Induced Ground Shaking

As described in the Certified PEIR, seismically induced ground shaking could damage existing and proposed structures in the Downtown Plan area and could expose people or structures to potential substantial risk of loss, injury, or death. 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 Downtown Plan Project area. Several other fault zones located within approximately 5 to 30 miles have the potential to impact the project area. The Plan area is located at an elevation of approximately 30 feet above mean sea level with essentially flat topography. Groundwater associated with sea level has recently been encountered at between 29 and 35 feet below ground level (City of Long Beach, 2010). These conditions create the potential for substantial adverse effects associated with seismic activity. However, this impact would be reduced through the implementation of Certified PEIR Mitigation Measures Geo-1, identified in Table 1.

The proposed project would replace an existing surface parking lot with seven structures, including two residential towers, four residential buildings, and a parking structure that includes subterranean levels. The development would be constructed in accordance with the standard engineering practices and design criteria specified in the Certified PEIR. The nearest faults to the project site are associated with the Newport Inglewood fault system located approximately 2.67 miles northeast from the project

site. No active faults with the potential for surface fault rupture are known to pass directly beneath the site; thus, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low. Furthermore, the proposed project would be required to implement Mitigation Measure Geo-1 from the Certified PEIR, identified in Table 1, which requires new construction to be engineered to withstand the expected ground acceleration that may occur at the project site, taking into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. The proposed project would also comply with applicable provisions of the most recent Uniform Building Code adopted by the City of Long Beach. Thus, with implementation of Certified PEIR Mitigation Measure Geo-1, any potential impacts associated with seismically induced ground shaking would be reduced and impacts would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

a.iv) Landslides

The Certified PEIR determined that the Downtown Plan would result in no impact to the risk of loss, injury, or death involving landslides.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. The proposed project would adhere to standard engineering practices specified in the Certified PEIR and would not alter the extent of developed lands. Thus, the proposed project would not result in impacts associated with landslides that were not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

b) Soil Erosion

The Certified PEIR determined that the Downtown Plan would result in less-than-significant impact associated with soil erosion or the loss of topsoil. The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. The proposed project would adhere to standard engineering practices specified in the Certified PEIR and would not alter the extent of developed lands. Thus, the proposed project would not result in impacts associated with landslides that were not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

c) Liquefaction

As described in the Certified PEIR, seismic activity could induce ground shaking that could cause structural failure and potential subsidence risk of loss, injury, or death. The Seismic Safety Element maps a portion of the Downtown Plan area, immediately adjacent to the Los Angeles River, as an area of highest potential impact. However, even within the central Downtown area, groundwater may occur at depths of 20 feet and subterranean structures, such as parking garages and basements, could extend to depths at which groundwater is encountered. This creates the potential for a significant impact associated with liquefaction at the project site. However, the Certified PEIR found this impact would be reduced through the implementation of Mitigation Measure Geo-2, identified in Table 1.

The proposed project would replace an existing surface parking lot with seven structures, including two residential towers, four residential buildings, and a parking structure that include subterranean levels. The new structures would be developed according to standard engineering practices and design criteria specified in the Certified PEIR. The project would excavate to a maximum depth of approximately 38 feet, to accommodate the subterranean parking levels of the proposed development, including foundation. In accordance with the recommendation of the Southern California Earthquake Center and with Mitigation Measure Geo-2, development in the Downtown Plan area would require a geotechnical investigation for development 20 feet or more, below grade, prior to the issuance of building permits to adequately address liquefaction. Thus, in order to comply with the Certified PEIR requirements, the proposed project would conduct a geotechnical investigation prior to the issuance of building permits. If potentially significant liquefaction impacts are discovered, the project would reduce them by implementing the appropriate recommended techniques, such as: developing a specialized design of foundations by a structural engineer, removing or treating liquefiable soils to reduce the potential for liquefaction, draining 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. Given that the project would be developed according to standard engineering practices and design criteria specified in the Certified PEIR and would implement Mitigation Measure Geo-2, impacts would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

d) Expansive or Unstable Soils

As described in the Certified PEIR, the potential exists within the Downtown Plan area to encounter expansive soils or soils that are unstable or would become unstable as a result of new development. These conditions could result in onsite or offsite lateral spreading or subsidence. Although native soils in the Downtown Plan area typically have low expansion potential, soil characteristics vary widely and clay deposits may occur on the project site. This variation creates the potential for a significant impact associated with expansive or unstable soils in the Downtown Plan area. However, this impact would be reduced through the implementation of Mitigation Measure Geo-3 identified in Table 1.

The proposed project would replace an existing surface parking lot with seven structures, including two residential towers, four residential buildings, and a parking structure. The development would

be constructed in accordance with the standard engineering practices and design criteria specified in the Certified PEIR. In addition, the proposed project would implement Mitigation Measure Geo-3, which would require the potential presence of expansive or unstable soils at the project site to be evaluated in a soil analysis, prior to the issuance of building permits. This soils analysis would determine whether the soils encountered at the project site have a low or high potential for expansion. If expansive soils are encountered, grading and foundation designs would be engineered to withstand the existing conditions. Given that the project would be developed according to standard engineering practices and design criteria specified in the Certified PEIR and would implement Mitigation Measure Geo-3, impacts would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

e) Wastewater Disposal

The Certified PEIR determined that the Downtown Plan would result in no impact to the risk associated with soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. The proposed project would adhere to standard engineering practices and design criteria specified in the Certified PEIR and would be served by the City's sewage disposal system. Thus, the proposed project would not result in impacts associated with wastewater disposal that were not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

VII. Greenhouse Gas Emissions

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
7.	**GREENHOUSE GAS EMISSIONS**—Would the project:		
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒

Discussion

As discussed in Certified PEIR Section 4.5, *Greenhouse Gas Emissions*, the Downtown Plan would result in significant and unavoidable impacts with regard to construction and operational greenhouse gas (GHG) emissions. The Certified PEIR calculated GHG emissions resulting from

construction and operational activities. These emissions were compared to ARB's statewide target of 6.6 metric tons CO_2e per service population per year. The Certified PEIR concluded the anticipated growth and increased density in the Plan Area that the Downtown Plan would result in significant and unavoidable GHG emission impacts. Mitigation Measures GHG-1(a) through GHG-2(b) are applicable to the project and are identified in Table 1.

a) Greenhouse Gas Emission Impacts

Since the preparation of the Certified PEIR, methodology used to calculate project-level emissions have been updated with more recent vehicle and equipment fleet mixes, and newer emissions control technology. Construction and operational GHG emissions in the Certified PEIR were analyzed using the URBEMIS model. Currently, the SCAQMD does not recommend using the URBEMIS model for CEQA analyses and is now recommending the CalEEMod model. The CalEEMod model contains updated vehicle fleet data (EMFAC2014) which is based on vehicle registration data from Caltrans. The CalEEMod model also contains updated construction equipment data to reflect newer, more efficient equipment and better emissions control technology.

As identified in the Certified PEIR, GHG emissions from individual implementing projects could exceed thresholds, resulting in a significant and unavoidable impact, even after implementation of Mitigation Measures GHG-1(a) through GHG-1(b). Thus, construction and operational GHG emissions generated from the project were analyzed and compared to the Certified PEIR. The analysis of stationary and mobile operational source emissions was also performed with the CalEEMod model.

The project would result in the emission of GHGs during construction and operation. Emission of GHGs during construction are a small contributor to the overall GHG emissions associated with the Certified PEIR, and the project would result in GHG emissions consistent with other land uses analyzed in the Certified PEIR. Operational GHG emissions from the project would be less than the Certified PEIR as the project would develop a portion of the Downtown Plan Area. Construction GHG emissions for the project are expected to be similar to the emissions presented in the Certified PEIR on an annual basis. As a result, total GHG emissions from the project would be similar to or less than the Certified PEIR.

The SCAQMD *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* recognizes that construction-related GHG emissions from projects "occur over a relatively short-term period of time" and that "they contribute a relatively small portion of the overall lifetime project GHG emissions" (SCAQMD 2008b). The guidance recommends that construction project GHG emissions should be "amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies" (SCAQMD 2008b). In accordance with SCAQMD guidance, GHG emissions from construction have been amortized over the 30-year lifetime of the project.

As shown in **Table 6**, *Greenhouse Gas Emissions*, total project emissions of 8,785 CO_2e MTY would be approximately 4.6 percent of the total GHG emissions of entire Downtown Plan as estimated in the Certified PEIR. The project's GHG efficiency of 4.06 metric tons of CO_2e per service population per year ($MTCO_2/SP/year$) is better than the Certified PEIR's estimation of

9.6 $MTCO_2$/SP/year and is below the 6.6 $MTCO_2$/SP/year significance threshold used in the Certified PEIR. The service population is equal to the sum of residents and employees of the project.

TABLE 6
ESTIMATED PROJECT GENERATED CO_2E EMISSIONS (METRIC TONS PER YEAR)

Emissions Source	Project in the Absence of GHG Reduction Plans and Associated Regulations ($MTCO_2e$/year)	Proposed Project ($MTCO_2e$/year)	Percent Reduction[a]
Area	13.08	13.08	0%
Energy	2,477.10	2,477.10	0%
Mobile (Motor Vehicles)	6,055.99[b]	5,776.33	5%
Waste	176.47	88.24	50%
Water	384.16	329.49	14%
Construction Emissions[c]	101.26	101.26	--
Proposed Project Total	***9,208.06***	***8,785.50***	***5%***
Anticipated Service Population Service Population		**2,163**	
CO_2e Efficiency Metric, $MTCO_2$/SP/year		**4.06**	
Significance Threshold Used in the Certified EIR, $MTCO_2$/SP/year		**6.6**	
Exceed Threshold?		**No**	

SOURCE: Parker Environmental Consultants, 2018. See Appendix B, *Air Quality, GHG, and Energy Analysis*, of this addendum for detail.

NOTES:
[a] The Percent Reduction is not a quantitative threshold of significance, but shows the efficacy of the project's compliance with the various regulations, plans and policies that have been adopted with the intent of reducing GHG emissions.
[b] Since the mobile trips already incorporates trip reductions when running CalEEMod program, the GHG emissions prior to reductions was taken by multiplying the ratio of trips prior to reductions with net reduced trips.
[c] The total construction GHG emissions were amortized over 30 years and added to the operation of the project.

Total project emissions would not exceed the service population significance threshold in the Certified PEIR. Therefore, the project GHG emissions would not result in a substantial increase in the severity of GHG impacts previously identified in the Certified PEIR for the Downtown Plan. Calculation details are provided in Appendix B of this addendum. Furthermore, the proposed project would be required to implement Mitigation Measures AQ-1, AQ-2, GHG-1(a) and GHG-1(b) from the Certified PEIR, identified in Table 1; thus, any potential GHG emission impacts would be reduced.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would be consistent with the analysis; however, impacts would be less than those identified in the Certified PEIR. Thus, the proposed project's impacts would be less than significant with mitigation.

b) Applicable Plans, Policies, or Regulations

The project incorporates a number of characteristics that would reduce GHG emissions by increasing energy-efficiency beyond the minimum requirements, reducing indoor and outdoor water demand, and installing energy-efficient appliances and equipment. The project would also incorporate characteristics that would reduce transportation-related GHG emissions by locating

residential uses near mass transit, thereby encouraging alternative forms of transportation and pedestrian activity. These measures are consistent with the City's Sustainable City Action Plan policy and goals.

The project would be developed consistent with the Downtown Plan's land uses and development standards. The project would be located in a planned mixed-use district well served by existing and planned mass transit options. The project is also consistent with the City's 2013 Mobility Plan Element of the General Plan, which seeks to concentrate a mix of uses within walking distance. In addition, the project would support the transit-oriented development (TOD) designation of the Downtown Plan area through the placement of residential uses within walking distance to other commercial retail land uses. New plans, such as the SCAG's 2016–2040 RTP/SCS, were adopted subsequent to the Certified PEIR, the proposed project would be consistent with these new plans including the new RTP/SCS by placing residential and commercial uses, including retail and restaurant, in close proximity to the 1st Street Metro Blue Line station and numerous bus lines, which will likely further reduce the VMT related GHG emissions compared to the Certified PEIR.

The project would employ mandatory and voluntary design features consistent with, at a minimum, the water conservation, energy conservation, waste reduction, and other requirements of the CALGreen Code, the project would also implement an operational recycling program during the life of the project. As shown in Table 6, all these project characteristics would reduce the project's GHG emissions by approximately 5 percent. The percent reduction calculated above is not a quantitative threshold of significance, but shows the efficacy of the proposed project's compliance with the various regulations, plans, and policies that have been adopted with the intent of reducing GHG emissions in furtherance of the State's GHG reduction targets under SB 32. Therefore, the project would not conflict with applicable plans, policies, or regulation to reduce GHG emissions.

The project's GHG impacts are within the scope of the impacts identified in the Certified PEIR. Therefore, the project would not result in a substantial increase in the severity of GHG impacts previously identified in the Certified PEIR for the Downtown Plan and would be less than significant. Furthermore, the proposed project would be required to implement Mitigation Measures AQ-2, GHG-2(a), and GHG-2(b) from the Certified PEIR, identified in Table 1; thus, any potential GHG emission impacts would be reduced.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

VIII. Hazards and Hazardous Materials

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
8.	**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?	☐	☒
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒
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?	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒

Discussion

a-b) Transport, Use, Disposal, or Release of Hazardous Materials

As described in the Certified PEIR, the types of commercial and residential land uses envisioned for the Downtown Plan area would not typically contain businesses involved in the transport, use, or disposal of substantial quantities of hazardous materials. Therefore, hazardous material impacts to residences, schools, or other properties would not be expected to result from transport, use, or disposal of hazardous materials from business anticipated to locate within the Downtown Plan area. However, future development projects within the Downtown Plan area may involve the demolition of existing structures, some of which, may contain asbestos and lead-based paint materials. Additionally, the historic activity involving industrial uses and storage of hydrocarbons, heavy metals, and acids on properties within the Downtown Plan area may have contaminated onsite soils and/or groundwater quality. Any disturbances to ground surfaces associated with new development may disturb surface or near-surface contaminants, and excavation and transport of such contaminants could result in exposure of workers to public health hazards. This creates the potential for significant impacts associated with the transport, use, disposal, upset or accidental release of hazardous materials. These impacts would be reduced with the implementation of Mitigation

Measures Haz-1(a) through Haz-1(c) identified in Table 1, which would require that all demolition, renovation, and excavation projects survey and remove any lead or asbestos found in their project sites in accordance with proper abatement procedures in compliance with California, Federal OSHA, and SCAQMD requirements. The materials would be hauled to a licensed receiving facility by a certified transportation company and an abatement report submitted to the City, prior to the issuance of construction or demolition permits. Additionally, implementation of Mitigation Measures Haz-3(a) through Haz-3(c), identified in Table 1, would require all projects to prepare and implement a contingency plan, coordinate with local regulatory agencies for review and approval of remedial activities, prepare a report, and conduct soil and groundwater sampling assessments.

The proposed project would be located on a site currently occupied by a surface parking lot and, thus, would not require demolition of structures that may contain lead or asbestos, or other hazardous materials. The Phase I Environmental Site Assessment (Appendix C1, *Phase I Environmental Site Assessment*, of this addendum) conducted on March 8, 2018, by Hilmann Consulting determined that the project site was formerly developed with two gasoline service stations and two former dry-cleaning establishments. The Limited Phase II Subsurface Investigation Reports (Appendix C2, *Phase II Environmental Site Assessment*, of this addendum) conducted on March 30, 2018, by Hilmann Consulting, included soil and soil gas sampling to identify potential contamination from petroleum hydrocarbons and volatile organic compounds (VOC) as a result of former site uses, in accordance with Mitigation Measure Haz-3(b). Results of soil sampling indicated no detectable levels of petroleum hydrocarbons or VOC in any of the samples selected for laboratory analysis. Results from soil gas sampling indicated no detectable concentrations of VOC in soil gas. No further actions were recommended. Given the conclusions from the Phase I and II reports and that no structures would be demolished, the project's impact potential related to hazardous materials resulting from transport, use, or disposal would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

c) Hazardous Materials near Schools

As discussed in the Certified PEIR, a total of six schools are located within the Downtown Plan area and three others are within 0.25 mile. Demolition, renovation, or excavation activities within 0.25 mile of these schools could expose children to release of hazardous materials, particularly which walking to and from school and during time spent outside classrooms.

Cesar Chavez Elementary School is within 0.25 mile of the project site. Due to excavation activities associated with the proposed project, there is the potential for school children to be exposed to hazardous materials, particularly when walking to and from school and during time spent outside classrooms. However, the proposed project would not require demolition of structures that may contain lead or asbestos, or other hazardous materials. Additionally, results from the soil and soil gas sampling conducting in the Limited Phase II Subsurface Investigation Reports (Appendix C2 of this addendum) for the project site indicated no detectable levels of petroleum hydrocarbons or VOC and no detectable concentrations of VOC in soil gas. Given the conclusions from the Phase I and II reports

and that no structures would be demolished, the project's impact potential related to emitting or handling hazardous materials near schools would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

d) Hazardous Sites

As described in the Certified PEIR, it is possible that projects in the Downtown Plan area would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would pose a potentially significant impact to risks associated with contaminated sites. However, Mitigation Measures Haz-1(a) through Haz-1(c) and Mitigation Measures Haz-3(a) through Haz-3(c), identified in Table 1, would require that all demolition, renovation, and excavation projects perform surveys to determine whether hazardous materials exist on the project sites and would require the project to remove the materials in accordance with proper abatement procedures.

The Phase I Environmental Site Assessment (Appendix C1 of this addendum) and Limited Phase II Subsurface Investigation Reports (Appendix C2 of this addendum) conducted for the project site do not identify the site as being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Additionally, a search in the EnviroStor Database shows that there are no cleanup sites within 1,000 feet of the project site (EnviroStor Database, 2019). Thus, based on available surveys to-date, impacts relating to Government Code Section 65962.5 are less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

e, f) Airport Safety

The Certified PEIR determined that the Downtown Plan would result in no impact to airport safety.

The proposed project would be within the development parameters considered in the Certified PEIR and would be approximately 4 miles from the nearest airport/airstrip. Thus, the proposed project would not result in an impact to airport safety that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

g) Emergency Preparedness

The Certified PEIR determined that the Downtown Plan would result in no impact to emergency preparedness.

The proposed project would be within the development parameters considered in the Certified PEIR and would not alter existing street patterns. Thus, the proposed project would not result in an impact to emergency preparedness that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

h) Wildlands

The Certified PEIR determined that the Downtown Plan would result in no impact to wildland resources.

The proposed project location does not contain wildlands nor is it adjacent to wildlands. Thus, the proposed project would not result in an impact to wildland resources that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

IX. Hydrology and Water Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
9.	**HYDROLOGY AND WATER QUALITY**—Would the project:		
a)	Violate any water quality standards or waste discharge requirements?	☐	☒
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☒
c)	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 of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☒
e)	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒
f)	Otherwise substantially degrade water quality?	☐	☒
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☒
h)	Place within a 100-year flood hazard area structures that 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 the failure of a levee or dam?	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☒

Discussion

a, e, f) Water Quality and Waste Discharge

Construction Activities

As discussed in the Certified PEIR, construction activities associated with future developments could result in discharges of urban pollutants into the City drainage systems. This would include runoff from excavation and grading; fuel, lubricants, and solvents from construction vehicles and machinery; and trash and other debris. These factors would potentially result in a significant adverse impact on water quality. However, construction impacts would be reduced with the implementation of Mitigation Measure Hydro-1, identified in Table 1, which will determine the need for the developer to prepare a Storm Water Pollution Prevention Plan (SWPPP) and require the implementation of BMPs or equivalent measures to reduce erosion and sedimentation and control pollutant runoff to the maximum extent practicable. Thus, with implementation of Mitigation Measure Hydro-1 impacts were determined to be less than significant with mitigation.

Similar to the proposed Certified PEIR, construction activities within the project site would be required to comply with all local, state, and federal requirements pertaining to preservation of water quality and reduction of runoff, including BMPs and compliance with the County Standard Urban Stormwater Mitigation Plan (SUSMP). In addition, the proposed project would be required to implement Mitigation Measure HYD-1, as needed. Thus, with implementation of Mitigation Measures Hydro-1, development of the proposed project would not result in significant impacts to water quality of waste discharge during construction and impacts would be less than significant with mitigation.

Operational Activities

As discussed in the Certified PEIR, future development in the Downtown Plan area would generate various urban pollutants such as soil, herbicides, and pesticides that could adversely affect surface water and groundwater quality in the project area watershed. These factors would potentially result in a significant impact on water quality. However, operational impacts would be reduced through the implementation of Mitigation Measure Hydro-2, identified in Table 1, which will determine the need for the developer to prepare a Standard Urban Stormwater Mitigation Plan (SUSMP). Thus, with implementation of Mitigation Measure Hydro-2 impacts were determined to be less than significant with mitigation.

The proposed project would incrementally increase the population density in the Downtown Plan area and would create the potential for new impacts caused by contaminated waste runoff. However, the proposed project is located within the Downtown Plan area and, therefore, is accounted for in the analysis and determination of environmental impacts to water quality and waste discharge. With implementation of Mitigation Measures Hydro-2, development of the proposed project would not result in significant impacts to water quality of waste discharge during operation and impacts would be less than significant with mitigation.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

b) Groundwater Supply and Recharge

As discussed in the Certified PEIR, future development within the Downtown Plan area would result in an incremental increase in water demand due to the intensification of development in the Plan area. Although the majority of the City's water supply consists of imported water purchased from the Metropolitan Water District of Southern California, a significant portion is extracted from the local groundwater basin.

The proposed project would be located on a previously developed site currently occupied by a relatively impervious surface parking lot. The proposed project would excavate to a maximum depth of approximately 38 feet to accommodate the subterranean parking garage component of the proposed development, including foundation. Implementation of landscaping improvements, including native vegetation and shade trees, within the project site would decrease the amount of impervious surfaces from existing conditions. Therefore, the proposed project would increase the

amount of groundwater recharge and would not substantially deplete groundwater supplies or interfere with ground water recharge.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

c, d) Drainage Patterns

As discussed in the Certified PEIR, future development within the Downtown Plan area would result in an incremental increase in water usage due to the intensification of development in the Plan area. Although the Plan area is substantially urbanized, the Downtown Plan would convert areas of relatively low-intensity development into more intensely developed land. This conversion would create a potentially significant impact to existing drainage patterns for projects located within the Plan area. However, operational impacts would be reduced through the implementation of Mitigation Measure Hydro-3, identified in Table 1, which would 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 project site is currently developed with a paved surface parking lot. As such, the site is almost entirely impervious to drainage. Adjacent areas are also predominately built-out and there are no streams or rivers. While development of the project site would modify existing drainage patterns, the drainage on the site would ultimately drain to the same existing storm drain system. Therefore, the proposed project would not substantially increase the amount of impervious surfaces or significantly alter the existing drainage pattern of the area resulting in substantial erosion or siltation onsite or in the project vicinity. Furthermore, the proposed project would be required to implement Mitigation Measure Hydro-3 from the Certified PEIR, identified in Table 1; thus, any potential drainage impacts would be reduced.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

g–j) Flooding, Seiche, Tsunami, and Mudflow

The Certified PEIR determined that the Downtown Plan would result in no impact to risks associated with flooding, or inundation by seiche, tsunami, or mudflow.

The proposed project would be within the development parameters considered in the Certified PEIR and would be located within the boundaries of the Downtown Plan. Thus, the proposed project would not result in an impact to risks related to flooding, seiche, tsunami, or mudflows that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

X. Land Use and Planning

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
10.	**LAND USE AND LAND USE PLANNING**—Would the project:		
a)	Physically divide an established community?	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☒

Discussion

a) Community

The Certified PEIR determined that the Downtown Plan would result in less-than-significant impact to community cohesion.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to community division that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

b) Land Use Change

As described in the Certified PEIR, future development within the Downtown Plan area is subject to consistency with the Land Use Element of the Long Beach General Plan, which designates the majority of the Downtown Plan area as LUD No. 7 Mixed Use District and PD-30 zoning region, which allows for a mix of commercial and high density residential uses. The Certified PEIR determined that since the Downtown Plan would adopt updated plans and development regulations, future development subject to the Plan would be consistent with the existing and planned zoning and development district regulations. No other land use plans or regulations exist within the Plan area. Thus, the Downtown Plan would result in a less than significant impact to land use compatibility.

The proposed project would be located within the area designated in the Downtown Plan as LUD No. 7 Mixed Use District and within the PD-30 zoning region, which allows a mix of commercial and high density residential uses, entertainment and visitor –serving commercial uses, and a mix of other moderate to high-density residential uses with ground-floor storefronts, live/work spaces, and arts-related uses. Furthermore, the Downtown Plan's Figure 3-2, *Height Areas and Minimum Streetwall*, shows project site is within the Height Incentive Area, which allows for a maximum permitted height of 240 feet and FAR of 8.0. In addition, the Height Incentive Area would allow increases in maximum height and FAR up to a maximum height of 500 feet and a FAR of 11.0, if

a project met certain criteria, as outlined in Table 3-4, *Development Incentives*, of the Downtown Plan. In conformance with the Downtown Plan, the proposed project would develop a mix of commercial uses, including retail and restaurant, within the height restriction for the area, and, therefore, would be consistent with the Downtown Plan's planned development district regulations and impacts would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

c) Habitat Conservation

The Certified PEIR determined that the Downtown Plan would result in no impact to habitat conservation.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to habitat conservation that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

XI. Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
11. MINERAL RESOURCES—Would the project:		
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☒

Discussion

a, b) Mineral Resources

The Certified PEIR determined that the Downtown Plan would result in no impact to mineral resources.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to mineral resources that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

XII. Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
12. NOISE—Would the project result in:		
a) Exposure of persons to or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☒

Discussion

a) General Plans, Noise Ordinances or Applicable Standards

Construction

The Certified PEIR determined that the Downtown Plan could expose nearby sensitive receptors to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies that would result in potentially significant impact. Mitigation Measures Noise-1(a) and Noise-2(b) proposed in the Certified PEIR would reduce construction noise levels to less-than-significant impact.

As stated in the Certified PEIR, the City's Noise Element of the General Plan and the City's Municipal Code regulate noise in the project area. The City's Municipal Code, summarized in Certified PEIR, Section 4.9.1, establishes requirements for exterior noise. All project construction activities must be conducted in compliance with the City's Municipal Code, which limits construction activities to between the hours of 7 a.m. to 7 p.m. on weekdays and federal holidays, 9 a.m. to 6 p.m. on Saturdays, and no construction on Sunday. Project activity is prohibited unless a special permit is approved by the City's Noise Control Officer. Per the City's Municipal Code, Chapter 8.80.130, it is unlawful for any person to willfully make or continue, or cause to be made or continued, a loud, unnecessary or unusual noise which disturbs the peace and quiet of any

neighborhood or which causes any discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

As indicated in the Certified PEIR, the highest construction noise levels during typical construction activities would be generated during grading excavation and foundation work, with lower noise levels occurring during building construction. Maximum noise levels of 85 to 90 dBA L_{max} at a distance of 50 feet could occur during the noisiest phases of construction activity. However, typical hourly average construction-generated noise levels would be approximately 80 dBA L_{eq} measured at a distance of 50 feet from the noise-generating activity. The Certified PEIR stated that pile driving can produce very high noise levels on the order of 95 to 100 dBA at 50 feet, which are difficult to control (FTA 2006).

According to the Certified PEIR, Section 4.9.2, noise levels during typical construction activities would attenuate with distance at rate of 6 dB per doubling of distance between the noise source and the sensitive receptors. Noise levels may be attenuated an additional 3.0 to 5.0 dB by a first row of houses/buildings and 1.5 dB for each additional row of houses in built-up environments (FHWA 1978). These factors generally limit the distance construction noise travels and ensure noise impacts from construction are localized. The Certified PEIR concluded that project construction would result in a potentially significant construction impact: however, implementation of Mitigation Measures Noise-1(a) through Noise-1(b), which would require specific conditions during construction activities, such as construction of temporary noise barriers and/or the use of equipment mufflers, would reduce the noise impacts to less than significant.

Project construction would require the use of similar types of heavy-duty equipment that were considered in the Certified PEIR (refer to the Certified PEIR, Appendix E, Table 9). Construction noise levels at the nearest sensitive receptor (Hilton Long Beach) is anticipated to reach 72 dBA Leq during site grading and building construction and 84 dBA Leq during foundation work, exceeding the significance criterion of 65 dBA; therefore, resulting in a potentially significant construction noise impact as in the Certified PEIR. As stated in the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment*, it is recommended to avoid using high impact pile drivers and instead use alternative equipment to reduce noise levels. Consistent with this recommendation, project construction would not utilize pile drivers. Furthermore, the project would implement Mitigation Measures Noise-1(a) and Noise-1(b) proposed in the Certified PEIR, which would further reduce impacts. Mitigation Measure Noise-1(a) requires the use of mufflers for internal combustion engines, employment of "quiet" models of stationary equipment, location of stationary equipment away from sensitive receptors, and the pre-drilling of pile holes. Mitigation Measure Noise-1(b) requires the use of temporary noise barriers. With the implementation of mitigation proposed in the Certified PEIR and the avoidance of pile drivers, construction noise levels at the nearest sensitive receptor would be mitigated to 61 dBA Leq during site grading and building construction and 63 dBA Leq during foundation work. Mitigated noise levels would not exceed the significance criterion of 65 dBA. All other sensitive receptors would be located at greater distances from the project site and would therefore be exposed to lower construction noise levels due to distance attenuation. Thus, project construction noise would not exceed the construction noise levels already identified and disclosed in the Certified PEIR, would not exceed the significance criterion of 65 dBA, and impacts would be less than significant.

In addition, the proposed project would be within the development parameters considered in the Certified PEIR, and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in a noise impact related to exceeding noise standards that was not previously considered in the Certified PEIR.

The proposed project would be required to implement Mitigation Measures Noise-1(a) and Noise-1(b) from the Certified PEIR, identified in Table 1. In addition, project construction would not alter the City's Noise Ordinance provisions or be exempt from local noise controls.

Operation

The Certified PEIR determined that noise sources typically associated with commercial land uses include mechanical equipment operations, parking lot noise (e.g., opening and closing of vehicle doors, people talking, car alarms), delivery activities (e.g., use of forklifts, hydraulic lifts), trash compactors, and air compressors. As stated in the Certified PEIR, noise from such equipment can reach intermittent levels of approximately 90 dBA, 50 feet from the source. The nearest sensitive receptor (Hilton Long Beach), located approximately 50 feet from the project site, could be exposed to noise levels of up to 90 dBA from project operations. These elevated noise levels, which have the potential to be generated by commercial uses within mixed use land use designations, would expose nearby noise sensitive land uses (e.g., residential units and schools) to excessive noise levels that violate the City Noise Ordinance. Thus, point source noise levels associated with commercial land uses could potentially expose nearby existing and future noise sensitive receptors to excessive noise levels that violate the City Noise Ordinance. As a result, this impact was identified to be potentially significant. Mitigation Measure Noise-6 identified within the Certified PEIR requires that the line-of-sight to mechanical equipment be blocked by placing commercial HVAC equipment within mechanical equipment rooms where possible and the use of localized noise barriers or rooftop parapet walls. Mitigation Measure Noise-6 also requires the placement of loading/unloading areas where commercial buildings would shield loading/unloading noise from sensitive receptors. Additionally, sound barriers shall be constructed where needed. Implementation of Mitigation Measure Noise-6 would reduce this impact to less than significant.

Project operations would generate noise from project-related increase in roadway traffic and from mechanical equipment operations, parking lot noise (e.g., opening and closing of vehicle doors, people talking, car alarms), delivery activities (e.g., use of forklifts, hydraulic lifts), trash compactors, and air compressors. As indicated in section c. below, the project's operational noise level impacts would be the same or less than the noise impacts disclosed in the Certified PEIR.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would result in less impacts than identified in the Certified PEIR; thus, impacts would be less than significant with mitigation.

b) Groundborne Vibration

Construction

The Certified PEIR determined that project construction would require the use of heavy-duty equipment construction equipment including pile driving (refer to the Certified PEIR, Appendix E, Table 9), which would generate vibration levels exceeding thresholds. The Certified PEIR

determined that construction vibration during implementation of the Downtown Plan would result in a potentially significant impact from ground-borne vibration of heavy construction equipment. However, the Certified PEIR concluded that the use of administrative controls (such as scheduling construction activities with the highest potential to produce perceptible vibration to hours with least potential to affect nearby properties) would reduce perceptible vibration to a minimum. However, pile-driving and other substantial vibration impact equipment (e.g., jackhammers) during construction would result in a significant and unavoidable impact in the Certified PEIR.

Project construction would require the use of similar typical heavy-duty equipment construction equipment, as required in the Certified EIR (refer to the Certified PEIR, Appendix E, Table 9). Pile driving would not occur. Pile drilling or displacement is not an impact equipment and generates lower vibration levels than pile driving. According to the FTA *Transit Noise and Vibration Impact Assessment*, vibration levels generated from construction dissipate rapidly with distance, as shown in **Table 7**, *Vibration Source Levels for Construction Equipment*.

TABLE 7
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Approximate Peak Particle Velocity (PPV) (inches/second)				
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Pile Driver (Impact-typical)	0.644	0.228	0.173	0.124	0.081
Caisson Drilling	0.089	0.031	0.024	0.017	0.011
Large Bulldozer	0.089	0.031	0.024	0.017	0.011
Loaded Trucks	0.076	0.027	0.020	0.015	0.010
Jackhammer	0.035	0.012	0.009	0.007	0.004
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

Pile drilling or displacement, shown as caisson drilling in Table 7, generates vibration levels that are similar to large bulldozer equipment and only slightly greater than vibrations caused by loaded trucks.

The structures adjacent to or near the project site's boundary are assumed to be FTA Building Category I (reinforced-concrete, steel, or timber [no plaster]). According to the California Department of Transportation (Caltrans) *Transportation and Construction Vibration Guidance Manual*, the threshold for potential structural damage to Category I structures is 0.5 inches per second peak particle velocity (in/sec PPV) for continuous/frequent intermittent vibration sources. The threshold for distinct perceptibility with respect to human annoyance is 0.04 in/sec PPV for continuous/frequent intermittent sources, such as construction.

The nearest vibration-sensitive land uses (i.e., structures) and their distances to the project site would be the Hilton Hotel building parking garage, adjacent to the project site boundary to the south; the World Trade Center parking garage, approximately 32 feet to the south; the Internal Revenue Building parking garage, approximately 62 feet to the west across Magnolia Avenue; and

the Superior Courthouse and the Cesar E. Chavez Elementary School, approximately 96 feet and 112 feet, respectively, to the north across West Broadway.

For human annoyance, as shown in Table 7, at a reference distance of 25 feet, vibration levels from construction equipment that would be used for the project would exceed the human annoyance threshold of 0.04 in/sec PPV, except for a small bulldozer. However, the project land uses within 25 feet are the building parking garages (to the south), which are not inhabited, i.e., not applicable human annoyance. At reference distance of 50 feet, the equipment vibration levels would not exceed the human annoyance threshold of 0.04 in/sec PPV. Therefore, project construction vibration would not result in a human annoyance impact, and would be a less than significant impact.

For structural damage, as shown in Table 7, at a reference distance of 25 feet, vibration levels from construction equipment that would be used for the project would not exceed the structural damage threshold of 0.3 in/sec PPV. However, the Hilton Hotel building parking garage is adjacent to the project site boundary, i.e., a distance of less than 25 feet (0–25 feet), therefore, project construction equipment (including pile driving) would potentially exceed the structural damage threshold of 0.3 in/sec PPV, which would be a potentially significant impact. Therefore, the proposed project would be required to implement the Mitigation Measure Noise-2 from the Certified PEIR, identified in Table 1.

The Certified PEIR concluded that there would be significant and unavoidable construction vibration impacts due to the use of pile drivers. However, the project would drill piles and avoid the use of pile drivers. Therefore, the project would result in construction vibration-related structural damage and human annoyance impacts that would be less than the impacts disclosed in the Certified PEIR. Impacts would be less than significant.

Operation

The Certified PEIR determined that operational land uses would create vibration sources, which typically do not generate substantial vibrations at the source and attenuated with distance, and would be required to comply with the City's Municipal Code. Vibration impacts with respect to operation would result in a less-than-significant impact.

The project's day-to-day operations would include typical commercial-grade stationary mechanical and electrical equipment, such as air handling units, condenser units, and exhaust fans, that would produce vibration. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the proposed parking area. Ground borne vibration generated by each of the above-mentioned equipment and activities would generate approximately up to 0.0039 in/sec PPV at locations adjacent (within 50 feet) to the project site.[3] The potential vibration levels from all project operational sources at the closest receptor (located approximately 50 feet from the site) would be less than the significance criteria for building damage and human annoyance of 0.3 in/sec

[3] FTA, *Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, Section 7.2.1, May 2006, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf. VdB can be converted to in/sec PPV using the formula provided in Section 12.2.1.

PPV and 0.04 in/sec PPV, respectively. Therefore, vibration impacts with respect to operation would not result in an impact not identified in the Certified PEIR.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would result in less impacts than those identified in the Certified PEIR; thus, impacts would be less than significant with mitigation.

c) Permanent Increases in Ambient Noise Levels

The Certified PEIR determined that the implementation of the Downtown Plan would generate traffic volumes, which would increase traffic noise levels directly attributable to the project. However, noise from increased traffic from the implementation of the Downtown Plan would increase noise levels by 1 dB over future traffic noise without the project, which would be less-than-significant.

The project would generate traffic volumes, which would increase traffic noise levels somewhat on local roadways. Vehicular traffic on W. Broadway is the primary noise source around the project site. Existing (2018) average daily traffic (ADT) volumes for W. Broadway are 9,990 ADT. Based on this traffic volume, Cesar Chavez Elementary School is currently exposed to traffic noise levels of approximately 64 dBA Leq (67 dBA Ldn). According to Caltrans, a change in noise level of 3 dB is considered a just-perceivable change in noise level (Caltrans, 2013). Therefore, a threshold of a 3 dB would be considered a significant increase in traffic noise. For a 3 dB increase in traffic volumes to occur, ADT volumes would have to double (FHWA, 1978). The project would generate approximately 3,924 ADT (LL&G 2019), resulting in a future plus project noise level of 65 dBA Leq (68 dBA Ldn). The increase in traffic noise would be less than 3 dBA. Therefore, impacts to traffic noise would be less than significant.

As discussed under Issue a), the Certified PEIR determined that noise sources typically associated with stationary sources from commercial land uses include mechanical equipment operations, parking lot noise (e.g., opening and closing of vehicle doors, people talking, car alarms), delivery activities (e.g., use of forklifts, hydraulic lifts), trash compactors, and air compressors. As stated in the Certified PEIR, noise from such equipment can reach intermittent levels of approximately 90 dBA, 50 feet from the source. These elevated noise levels, which have the potential to be generated by commercial uses within mixed use land use designations, would expose nearby noise sensitive land uses (e.g., residential units and Cesar Chavez Elementary School) to excessive noise levels that violate the City Noise Ordinance. Thus, point source noise levels associated with commercial land uses could potentially expose nearby existing and future noise sensitive receptors to excessive noise levels that violate the City Noise Ordinance. As a result, this impact was identified to be potentially significant. Mitigation Measure Noise-6 identified within the Certified PEIR would require site-specific noise studies to provide appropriate site-specific mitigation measures, which would reduce this impact to less than significant.

Similar to the Certified EIR, the project operations would generate noise from project-related stationary sources such as mechanical equipment operations, parking lot noise (e.g., opening and closing of vehicle doors, people talking, car alarms), delivery activities (e.g., use of forklifts, hydraulic lifts), trash compactors, and air compressors. Similar to the Certified EIR, operational

noise levels associated with commercial land uses could potentially expose nearby existing and future noise sensitive receptors to excessive noise levels that violate the City Noise Ordinance. As a result, this impact was identified to be potentially significant. Mitigation Measure Noise-6 identified within the Certified PEIR would require site-specific noise studies to provide appropriate site-specific mitigation measures, which would reduce this impact to less than significant. Therefore, the project's operational noise level impacts would be the same or less than the noise impacts disclosed in the Certified PEIR. Therefore, impacts would be less than significant, similar to the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant with mitigation.

d) Temporary Increases in Ambient Noise Levels

As discussed under Issue a), the Certified PEIR determined that project construction would result in a temporary substantial ambient noise level increase, resulting in a potentially significant impact, requiring mitigation measures Noise-1(a) and Noise-1(b) (construction best management practices and temporary noise barriers) proposed in the Certified PEIR to reduce construction noise levels to less-than-significant impact.

The proposed project construction would require the use of similar heavy duty diesel-powered equipment with high noise level characteristics, as required in the Certified EIR. Although construction noise would be localized to the project site and immediate vicinity during construction, noise sensitive receptors in proximity to the project site could be intermittently exposed to temporary elevated levels of construction noise throughout project construction. This is a potentially significant impact. Certified PEIR Mitigation Measure Noise-1(a) requires the use of mufflers for internal combustion engines, employment of "quiet" models of stationary equipment, location of stationary equipment away from sensitive receptors, and the pre-drilling of pile holes. Mitigation Measure Noise-1(b) requires the use of temporary noise barriers. With implementation of Certified PEIR Mitigation Measures Noise-1(a) and Noise-1(b), noise levels associated with construction would be reduced to less than significant. Therefore, impacts would be the same or less than identified in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the PEIR; thus, impacts would be less than significant with mitigation.

e, f) Aircraft Noise

The Certified PEIR determined that the Downtown Plan would not be located in proximity to an airport or airstrip and, therefore, would not be located within an ALUCP and would not expose workers or residents to excessive noise levels from aircraft.

The project would be within the development parameters considered in the Certified PEIR. Thus, the proposed project would not result in an impact from aircraft noise that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

XIII. Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
13. 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)?	☐	☒
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?	☐	☒

Discussion

a) Population Growth

As discussed in the Certified PEIR, the Downtown Plan is intended to accommodate substantial population growth in the Downtown Plan area with the proposed addition of 5,000 dwelling units. Based on the City average of 2.90 persons per household (City of Long Beach 2010), the proposed 5,000 dwelling units would generate a net increase of approximately 13,500 new residents. The SCAG projections estimated the City's population growth to be 6 percent during 2005 to 2015 and increase another 3 percent during 2015 to 2020. This represents an annual growth rate of less than 1 percent per year over the next two decades. According to the 2008 SCAG projections, the City was expected to increase in population to approximately 503,251 residents by 2010 and exceed 572,000 residents by 2035. The Downtown Plan area is expected to increase in population to approximately 70,091 residents by 2010 and nearly 80,000 residents by 2035. Thus, projected population increase in Downtown Plan is within the SCAG projections for the City. 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, because implementation of the Downtown Plan would increase population growth substantially, the impact of this growth was determined to be significant and unavoidable.

The proposed project would develop two residential towers and four residential buildings, which would include a total of 756 residential dwelling units. Based on the City average of 2.90 persons per household, the project would introduce approximately 2,193 residents to the population.[4] The proposed project's dwelling units and residential population is equivalent to approximately 15 percent of the projected 5,000 dwelling units and 16 percent of the expected 13,500 new residents expected to result from implementation of the Downtown Plan. The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Additionally, the proposed

[4]The project's estimated residents were calculated by multiplying the City average of 2.90 persons per household by the number of proposed dwelling units (2.9 x 756 = 2,192.4) rounded up to the nearest person.

project would be within the SCAG projections for the Downtown Plan area and the City. Thus, the project's impacts would be less than significant, resulting in less than impacts that those identified in the Certified PEIR.

CONCLUSION: **Less Impact as "Approved Project."** The proposed project would result in less impacts than those identified in the Certified PEIR; thus, impacts would be less than significant.

b, c) Household Displacement

As discussed in the Certified PEIR, implementation of the Downtown Plan would occur over a period of 25 years or longer and would potentially result in the displacement of existing housing and people, primarily housed in medium density multifamily dwelling units. Although new development would occur at higher densities and with more modern housing, frequently as part of a mixed-use development, residents 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, housing displacement impacts were determined to be significant and unavoidable.

The proposed project would be developed on a site containing a surface parking lot. Therefore, the proposed project would not require the demolition of existing residential dwellings and, thus, would not result in the displacement of people or housing. Therefore, no new impacts would occur with development of the proposed project and impacts would be less than identified in the Certified PEIR.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project would result in less impacts than those identified in the Certified PEIR; thus, impacts would be less than significant.

XIV. Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
14. PUBLIC SERVICES—Would the project:		
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:		
i) Fire protection?	☐	☒
ii) Police protection?	☐	☒
iii) Schools?	☐	☒
iv) Parks?	☐	☒
v) Other public facilities?	☐	☒

Discussion

a.i) Fire Protection

As discussed in the Certified PEIR, fire protection services would be provided by the Long Beach Fire Department (LBFD), which maintains 24 fire stations in addition to its headquarters near Long Beach Airport. The LBFD employs a total of 527 fire fighters with 133 suppression fire fighters on duty at all times. Additionally, structural fire suppression in the Downtown Plan area would receive response from four stations and approximately 27 firefighters (City of Long Beach 2010). The standard established by the National Fire Protection Association for response to emergency calls is 6 minutes from call initiation to arrival on-scene of the first appropriate unit 90 percent of the time. The LBFD currently meets these standards (City of Long Beach 2010).

The closest fire station to the project site is Fire Station 1, located at 237 Magnolia Avenue, across the street and east of the project site's eastern boundary. Fire Station 1 maintains a staff of fourteen fire fighters (City of Long Beach 2010). The proposed project's addition of 756 residential units would incrementally increase the need for fire services at the project site. However, the project site is already served by Fire Station 1 and the proposed project would adhere to all Fire Prevention Bureau codes and regulations, including access, sprinklers, placement of fire hydrants and fire flows, in accordance with the LBMC. Long Beach allocates funding to the LBFD during the annual budget process, the amount of which is based on cumulative development and the changing needs of the City. Through this process, funding for additional staffing and equipment needs would be addressed as the needs arise. Any proposed development within the Downtown Plan area would be required to pay fees pursuant to the Fire Facilities Impact Fee, as amended, in Chapter 18.23 of the LBMC. These fees would be used to finance the construction of additional fire facilities or improvements to current facilities. Furthermore, although the LBMC requires all buildings with occupiable floors more than 75 feet above ground to provide emergency helipads, the project would qualify for an exemption from this requirement by providing life safety alternatives as detailed in the LBFD's Fire Prevention

Requirement No. 1.016A Guidance document (LBFD 2017). Therefore, no new impacts would occur from implementation of the proposed project.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

a.ii) Police Protection

As discussed in the Certified PEIR, police protection services would be provided by the Long Beach Police Department (LBPD), which maintains 40 sworn officers in the Downtown Plan area and approximately 800 sworn officers in the entire City (City of Long Beach 2010). LBPD's average response time for Priority One emergency calls is 4.2 minutes, meeting the target response time of 5 minutes. The Downtown Plan would incrementally increase demands on the LBPD and may require expansion facilities or replacement of existing facilities. However, as stated in the Certified PEIR, funding for the LBPD is not tied to individual development projects. Therefore, provided that additional funding is provided to the LBPD to support any expanded operations, the Downtown Plan's impact on police protection services would be less than significant.

The proposed project would provide 756 residential units, thereby increasing the demand for police protection services near the project site. However, the proposed project would include security features such as lighting and security personnel that would help reduce the likelihood of crime on the project site. Additionally, the Police Headquarters and South Division within the Downtown Plan area is approximately 594 feet east of the project site's eastern boundary, which is likely to deter crime within the project site and vicinity with the increased presence of police officers in the area. Any proposed development within the Downtown Plan area would be required to pay fees pursuant to the Police Facilities Impact Fee, as amended, in Chapter 18.22 of the LBMC. These fees would be used to finance the construction of additional fire facilities or improvements to current facilities. Given the sufficient funding for the LBPD and timely police response times, as indicated in the Downtown Plan, there would be sufficient police protection services would be available to serve the project site and no new facilities would be required. As such, no new impacts would occur from implementation of the proposed project.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

a.iii) Schools

The Downtown Plan area is within the boundaries of the Long Beach Unified School District (LBUSD), which operates 52 elementary schools, 23 middle and K–8 schools, and 12 high schools. The total district enrollment for the 2005–2006 school year was approximately 83,691 students (City of Long Beach 2010). As discussed in the Certified PEIR, the Downtown Plan would generate an estimated 670 school-age students, which could adversely affect school facilities. However, each individual project within the Downtown Plan area would be required to pay the applicable required State-mandated school impact fees under the provisions of SB 50. Therefore, impacts to school facilities and services in the Downtown Plan area would be reduced to a less-than-significant level.

The proposed project would contribute to the Downtown Plan's addition of 5,000 residential dwellings by providing 756 new residential units. This would generate approximately 56 new elementary school students, 16 new middle school students, and 30 new high school students.[5] However, as indicated in the Long Beach Unified School District Facility Master Plan Update in 2016, LBUSD is continuing to experience a period of declining student enrollment as a result of the community's slow growth residential population, declining birth rates, and aging population since 2003-04, resulting in excess capacity at some of the campuses. Additionally, the project's corresponding incremental increase in demand for schooling services would be mitigated by the proposed project's contribution to the State-mandated school impact fees. With the existing capacity and the payment of impact fees, the proposed project's impact on school services would also be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

a.iv) Parks and Recreation

As discussed in the Certified PEIR, the City of Long Beach is currently deficient in parkland by about 820 acres. With new development in the Downtown Plan area, the deficiency would likely increase with each subsequent project. The increased demand for recreational opportunities associated with the Downtown Plan would place additional stress on the City's recreation system. To reduce this stress, individual project approvals within the Downtown Plan area would be required to pay a park and recreation facilities impact fee. Although the collection of required fees would mitigate some of the overburden on the recreation system, it is not expected to be enough to meet the established standard in the City's General Plan of 8 acres of parkland per 1,000 residents. Therefore, the Certified PEIR found that the impact on park and recreation facilities from new development would be significant and unavoidable.

The proposed project would add approximately 2,193 residents to the Downtown Plan area; thereby, increasing the demand for parks and recreation services and facilities near the project site. The proposed project would provide 110,627 sf of open space or 45 percent of the proposed projects footprint, including 76,680 sf of residential common open space (indoor and outdoor), 21,456 sf of residential private open space, and 12,491 commercial open space and landscaping. The open space provided by the project exceeds the 20 percent open space requirement, as indicated in Table 3-4 of the Downtown Plan. Additionally, as discussed in the Certified PEIR, the proposed project would be required to pay a park and recreation facilities impact fee. Therefore, no new impacts on park and recreation facilities would occur from implementation of the proposed project.

[5] According to the Certified PEIR for the Downtown Plan, 0.074 new elementary school students, 0.021 new middle school students, and 0.039 new high school students are generated with each additional residential unit. Therefore, the proposed project would add an additional 56 elementary school students (0.074 x 756 = 56); 16 middle school students (0.021 x 756 = 16); and 30 high school students (0.039 x 756 = 30).

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be significant and unavoidable.

a.v) Libraries and Other Public Facilities

The Downtown Plan area is service by the Long Beach Public Library (LBPL) system, which is staffed by approximately 250 personnel at the Main library located in Downtown and the 11 branch libraries. Buildout of the Downtown Plan would incrementally increase demand for library services in the City, and may cause demands for library services to exceed the capacity of the Main Library and at branch libraries that serve the Downtown Plan Area. However, as stated in the Certified PEIR, funding for the LBPL is not tied to individual development projects. Therefore, provided that additional funding is provided to the LBPL to support any expanded operations, the Downtown Plan's impact on library services would be less than significant.

Consistent with the Certified EIR, development of the proposed project would increase the demand for library services in the Downtown Plan area. However, as stated in the Certified PEIR, funding allocated to the LBPL to maintain adequate levels of service is not directly tied to individual development projects. The City has the authority to construct new facilities to serve the Downtown Plan project area and, as such, the environmental impact of such construction would not be a result of individual development projects such as the proposed project. Therefore, no new impacts would occur with development of the proposed project.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

XV. Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
15. RECREATION:		
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☒

Discussion

a, b) Park and Recreation Resources

Refer to Section a.iv, *Parks and Recreation*, under Public Services, for a discussion on this topic.

XVI. Transportation/Traffic

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
16.	**TRANSPORTATION/TRAFFIC**—Would the project:		
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒
e)	Result in inadequate emergency access?	☐	☒
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☒

Discussion

The discussion of potential impacts related to transportation and traffic is based on the *Revised Traffic Impact Analysis – Alexan Long Beach Apartments* (TIA), prepared by Linscott, Law & Greenspan, Engineers on February 12, 2019. The TIA is provided in Appendix D, *Traffic Impact Analysis*. The proposed project would be required to pay a fair-share contribution to be determined in consultation with the City to implement Mitigation Measures Traf-1(a) through Traf-1(f), identified in Table 1.

a) Plans, Ordinances, and Policies

The Certified PEIR identified significant impacts at 16 intersections in the Downtown Plan area. Partial mitigation was identified to mitigate those impacts, but physical constraints at some locations make expansion of the roadway cross-sections difficult. Therefore, impacts at eight intersections were identified as significant and unavoidable.

The traffic study prepared for the Certified PEIR analyzed 28 Traffic Analysis Zones (TAZs). The proposed project is located within TAZ #4, which was evaluated in the Certified PEIR with an assumed combination of land uses (i.e., residential, office, retail, restaurant, and hotel) that would generate a total of 521 AM peak hour trips, 567 PM peak hour trips, and 7,039 daily trips. As calculated in the TIA, the proposed project would generate a total of 382 AM peak hour trips, 315 PM peak hour trips, and 3,924 daily trips. The boundaries of TAZ #4 encompass one approved project (500 W. Broadway Apartments), which includes 142 residential units and 5,162 sf of retail uses. The

TIA prepared for that project indicated that it would generate a total of 93 AM peak hour trips, 162 PM peak hour trips, and 1,837 daily trips.[6] With the implementation of the proposed project and other cumulative projects within TAZ #4, the traffic zone would generate a total of approximately 475 new AM peak hour trips, 477 new PM peak hour trips, and 5,761 new daily trips. Based on this data, the traffic zone would generate fewer trips as compared to the Certified PEIR.

Furthermore, the TIA included an impact evaluation for 12 intersections in the vicinity of the project site, nine of which were evaluated in the Certified PEIR including: Golden Shore Avenue/ Ocean Boulevard, Magnolia Avenue/ 3rd Street, Magnolia Avenue/ Broadway, Magnolia Avenue/ Ocean Boulevard, Pacific Avenue/ 3rd Street, Pacific Avenue/ Broadway, Pacific Avenue/ Ocean Boulevard, Long Beach Boulevard/ Broadway, and Long Beach Boulevard/ Ocean Boulevard.

As shown in Table 10, *Level of Service Comparison and Project Impacts*, of the Certified PEIR's traffic study, of the nine intersections evaluated in both the TIA for the proposed project and the traffic study for the Certified PEIR, the following four were identified in the Certified PEIR as having a significant impact before mitigation:

- Magnolia Avenue/Ocean Boulevard
- Pacific Avenue/Broadway
- Pacific Avenue/Ocean Boulevard
- Long Beach Boulevard/Ocean Boulevard

According to Table 12, *Year 2035 With Project Intersection Operating Conditions With Mitigation*, of the Certified PEIR's traffic study, after mitigation one intersection would have a significant and unavoidable impact (Magnolia Avenue/Ocean Boulevard), while the impact for the other three intersections would be reduced to a less-than-significant level with implementation of Mitigation Measure Traf-1(b), which would implement an Adaptive Traffic Control System (ATCS) along several Downtown corridors. ATCS is a traffic signal control software program that provides fully adaptive traffic signal control based on real-time traffic conditions.

The TIA for the proposed project evaluated the effect of construction and operational project trips on existing traffic conditions and on future traffic conditions, taking into account growth in traffic due to other known development projects in the surrounding area as well as overall ambient growth in background traffic. As part of this evaluation, the TIA estimated added the vehicle trips that would be generated by the proposed project (see above) to the study intersections based on traffic distribution assumptions that considered the following:

- The site's proximity to major traffic carriers and regional access routes;
- Physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns;
- Presence of traffic congestion in the surrounding vicinity; and

[6] *600 W. Broadway Apartments TIA*, prepared by LLG, dated July 2017.

- Ingress/egress availability at the project site, plus parking layout and allocation within the subject property

Once project traffic had been added to the appropriate study intersections, a level of service analysis was conducted to determine whether the addition of project traffic would cause intersection operations to deteriorate to an unacceptable level of service (LOS D), or otherwise add vehicle delay that would exceed thresholds established by the City. The TIA concluded that traffic generated by construction and operation of the proposed project at the 12 study intersections would not exceed the City's LOS standard and/or significant impact criteria and the impact would, therefore, be less than significant. Therefore, no new potentially significant intersection impacts not identified in the Certified PEIR are expected.

CONCLUSION: **Less Impact than "Approved Project."** The proposed project's contribution to traffic conditions at the four study intersections would be less than significant. However, the impacts identified in the Certified PEIR at eight intersections outside of the proposed project's study area would remain significant and unavoidable.

b) Congestion Management Programs

As noted in the Certified PEIR, the intersections of Alamitos Avenue/7th Street and Alamitos Avenue/Ocean Boulevard are the only Downtown Plan area intersections that are designated as CMP arterial monitoring locations. The traffic study prepared for the Certified PEIR concluded that development of the Downtown Plan would result in a significant impact at both intersections because it would increase intersection delay by two percent or more. Considering right-of-way constraints and the potential for significant secondary impacts to pedestrians and bicyclists that could occur as a result of roadway widening, no feasible mitigation measures were identified to mitigate the significant CMP impacts. Therefore, the Certified PEIR's CMP impact at these intersections was identified as significant and unavoidable.

The TIA performed a CMP analysis for intersections and freeways using the guidelines specified in the *2010 Congestion Management Program* (Los Angeles County Metropolitan Transportation Authority, 2010). Based on CMP thresholds of significance criteria, the proposed project would result in a less-than-significant impact to designated CMP arterial intersection and freeways.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would significant and unavoidable.

c) Air Traffic Patterns

The Certified PEIR determined that the Downtown Plan would result in no impact to air traffic patterns.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to air traffic patterns that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

d) Hazardous Design Features

The Certified PEIR determined that the Downtown Plan would result in no impact to hazardous conditions due to a design feature or incompatible uses.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not result in an impact to hazardous conditions due to a design feature or incompatible uses that was not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

e) Emergency Access

As noted in the Certified PEIR, the Downtown Plan would not alter through-traffic operations for emergency vehicles nor would it eliminate existing roads or cause more circuitous access conditions. Downtown Long Beach is served by a standard grid roadway system that provides multiple alternative emergency access routes. The Downtown Plan does not propose alteration to the roadway system and, therefore, emergency access would continue as it does under existing conditions and there would be no additional impacts to routes of travel for emergency vehicles. Therefore, impacts were identified as less than significant.

As discussed above, the proposed project would be primarily accessed via the existing Maine Avenue/Broadway intersection (Driveway A), which connects to the parking structure. Secondary access to the project site would also be provided via one proposed outbound-only right-turn only driveway (Driveway B) on Broadway, east of Maine Avenue. Secondary vehicular access to the project site would be provided via one proposed right-turn only driveway on Broadway (Driveway C) west of Maine Avenue, and one proposed right-turn only driveway (Driveway D) on Golden Avenue. Pedestrian access to both the residential and retail components of the project would be provided via building entries/exits located on the streets bordering the project site. The proposed project would not alter through-traffic operations for emergency vehicles or eliminate existing roads or cause more circuitous access conditions. Therefore, no impact beyond that identified in the Certified PEIR would occur.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

f) Public Transit, Bicycle, or Pedestrian Facilities

The Certified PEIR determined that the Downtown Plan would not conflict with adopted policies, plans, or programs supporting alternative transportation.

The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. Thus, the proposed project would not introduce any conflicts with adopted policies, plans, or programs supporting alternative transportation that were not previously considered in the Certified PEIR.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would not be significant.

XVII. Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
17. UTILITIES AND SERVICE SYSTEMS—Would the project:		
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☒

Discussion

a, b, e) Wastewater

As discussed in the Certified PEIR, buildout of the Downtown Plan would incrementally increase wastewater disposal demand in the City due to the increased demand for wastewater disposal and the increase in development activity in the Downtown Plan area. However, development projects built within the Downtown Plan area would generate an estimated 2.55 mgd of wastewater per day at peak flow, which would account for approximately 0.6 percent of the combined 400 mgd design capacity of the Joint Water Pollution Control Plant (JWPCP) and the Long Beach Reclamation Plant's (LBWRP) 25 mgd capacity. Due to sufficient capacity levels, the Certified PEIR determined that the Downtown Plan's impacts to wastewater would be less than significant.

The proposed project would be served by the Sanitation Districts of Los Angeles County (Districts). According to the District's evaluation of the project site, wastewater flow originating from the proposed project would discharge to a local sewer line, for conveyance to the District's De Forest Avenue Trunk Sewer. The Districts' 36-inch diameter trunk sewer has a capacity of 39.4 million gallons per day (mgd) and conveyed a peak flow of 7 mgd when last measured in 2017. The wastewater generated by the proposed project would be treated at the JWPCP, which has a capacity of 400 mgd and currently produces an average recycled water flow of 254.7 mgd. The proposed project would include 756 dwelling units and 3,000 sf of market space. These proposed uses would result in an average wastewater flow of 118,557 gallons per day (see Appendix H, *LACSD Will Serve Letter*, of this addendum). The District's determined that it would provide service up to the levels that are legally permitted. Furthermore, a connection fee would be applied to the proposed project. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee would be required before a permit to connect to the sewer is issued. Therefore, in accordance with the Certified PEIR and the District's evaluation for the proposed project, the project's wastewater impacts would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

c) Storm Drain Resources

Refer to Section IX, Hydrology and Water Quality, of this document for discussion of the proposed project's impacts to the City's storm drain system.

d) Water Supply and Demand

As discussed in the Certified PEIR, buildout of the Downtown Plan would incrementally increase water supply and demand in the City. Due to the increased demand for water supply and the increase in development activity in the Downtown Plan area, the impact on water supply and demand would be considered potentially significant. However, the Certified PEIR evaluated the Long Beach Water Department (LBWD)'s capabilities and determined that the LBWD would have the resources to meet the demand of future projects in the Downtown Plan area. Therefore, development projects built within the Downtown Plan area that conform to the provisions of the Plan have been anticipated by the LBWD and impacts would be less than significant.

Water Code Section 10912(a) and (b) and SB 610 require that a Water Supply Assessment (WSA) be prepared if the development is expected to demand an amount of water equivalent to or greater than the amount of water needed for 500 dwelling units. Given that there are 756 dwelling units proposed as a part of the project, which would exceed the 500 dwelling unit threshold under SB 610, a WSA was required for the proposed project. Two WSAs were prepared for the proposed project that estimate water use under the assumption that each new dwelling unit would use an amount of water equal to that of a typical Long Beach single family home. The first WSA, *Water Supply Assessment*, prepared by LBWD in November 2018 (Appendix G1 of this addendum), evaluated that 756 dwelling units would generate 196.6 acre-feet per year (AFY) and the 3,000 sf of proposed commercial office building space would generate approximately 1.6 AFY for a project-

wide total water demand of 198.1 AFY. The second WSA, *Water Supply Assessment Alexan Long Beach Project*, prepared by Stetson Engineers in November 2018 (Appendix G2 of this addendum), estimated water use totaled 202 AFY, which includes water for the 756 dwelling units (197 AFY), commercial use (3 AFY), and irrigation (2 AFY). Although both figures are relatively similar, due to its slightly more conservative approach, this analysis is based on the higher figure from the WSA prepared by prepared by Stetson Engineers.

Both WSAs anticipate adequate water supplies would be available for the proposed project. LBWD projected water demands, including the project, during normal, single- and multiple-dry water years from 2020 to 2040 are all showing surplus water supply. This finding is based on total demand from the 2015 UWMP, LBWD's rights to a reliable supply of groundwater, continued success with water conservation programs, expanded use of recycled water, the Metropolitan Water District of Southern California (MWD) shortage allocation plan that guarantees 100 gallons per capita per day at the retail level, and LBWD's preferential rights to water from the MWD, per Section 135 of the Metropolitan Water District Act. Therefore, in accordance with the LBWD's evaluation for the proposed project, water supply impacts would be less than significant.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

f, g) Solid Waste Disposal

As discussed in the Certified PEIR, buildout of the Downtown Plan would incrementally increase solid waste disposal treatment demand in the City. However, the City has one of the highest landfill diversion rates of any large city in the United States, with an estimated 69 percent of the City's trash diverted from disposal through recycling, reuse, and waste reduction as of 2006 (the most recent year reported). Following collection, refuse within the City is transported directly to landfills or to landfills following combustion in the Southeast Resource Recovery Facility (SERRF), a publicly owned solid waste management facility. SERRF applies mass burn technology to reduce the volume of solid waste entering landfills by 80 percent this technology, generates electricity for operation of the SERRF and residual electricity is available for purchase by Southern California Edison (SCE) for use throughout the City and State. SERRF processes an average of 1,290 tons of municipal solid waste per day with a daily capacity for 1,380 tons. It has processed over 3.5 million tons of solid waste since it first opened and has reduced the volume of solid waste entering landfills by over 4 million cubic yards.

Based on Los Angeles County Sanitation District's (LACSD) operation of the Mesquite Regional Landfill, which is permitted for up to 20,000 tons per day for approximately 100 years, adequate landfill capacity exists to accommodate solid waste disposal needs of the Downtown Plan. Due to the increased demand for solid waste disposal treatment and the increase in development activity in the Downtown Plan area, the impact on solid waste disposal systems would be considered potentially significant. However, this impact would be reduced to less than significant levels by implementing the Certified PEIR's Mitigation Measures Utilities-3(a) through Utilities-3(d), identified in Table 1.

The proposed project would generate solid waste during construction and operation. However, as indicated in the Certified PEIR, it is expected that a large percentage of the project's refuse would be diverted from disposal through recycling, reuse, and waste reduction, including combustion in the SERRF. The proposed project would be within the development parameters considered in the Certified PEIR and would not allow for development at a greater density/intensity than previously considered. The proposed project would also follow all applicable solid waste policies and objectives that are required by law, statute, or regulation and would be required to implement Mitigation Measures Utilities-3(a) through Utilities-3(d) from the Certified PEIR, which would implement recycling measures for all construction-related wastes in coordination with the City Building Official, as well as recycling bins and educational materials to encourage recycling and proper management and disposal of household hazardous waste. Thus, any potential impacts to solid waste disposal services would be reduced. Therefore, no new impacts would occur with implementation of the proposed project.

CONCLUSION: **Same Impact as "Approved Project."** The proposed project would be consistent with the analysis and conclusions presented in the Certified PEIR; thus, impacts would be less than significant.

XVIII. Mandatory Findings of Significance

Issues (and Supporting Information Sources):		*Potentially Significant Impact Not Identified in the "Approved Project"*	*Same or Less Impact than Identified in the "Approved Project*
18.	**MANDATORY FINDINGS OF SIGNIFICANCE**:		
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒
b)	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒

Discussion

a) Environmental Resources

As discussed in Section IV, Biological Resources, of this document, no impacts to rare or endangered species habitats or eliminate important examples of the major periods of California history or prehistory are expected and therefore, no impact to environmental resources would occur and further study of this issue is not warranted.

b) Cumulative Impacts

To support the analysis of cumulative impacts in the Draft EIR for the project, a list of 62 related projects that are planned or under construction in the Downtown Plan area was compiled. The Certified PEIR determined the Downtown Plan would cause significant and unavoidable project-level and cumulative impacts to the following resource areas: Aesthetics (Shade and Shadow), Air Quality (construction and operation), Cultural Resources (Historic), Greenhouse Gases, Noise (construction vibration), Population and Housing, Public Services (Parks and Recreation), and Transportation and Traffic. Additionally, the Certified PEIR determined the Downtown Plan would cause cumulatively considerable impacts to Utilities and Service Systems (Solid Waste). Similar to the PEIR, significant and unavoidable project-level and cumulative impacts were identified for Aesthetics (Shade and Shadow), Public Services (Parks and Recreation), and Transportation and Traffic as well as cumulatively considerable impacts to Utilities and Service Systems (Solid Waste). While these impacts are significant and unavoidable, they would not introduce impacts that are greater than what was originally considered in the PEIR. Thus, considering the conclusions of this addendum, the proposed project conforms with all of the conclusions provided in the Certified PEIR and there would be no additional cumulative impacts. A more detailed cumulative discussion is included below.

Aesthetics (Shade and Shadow)

The proposed project would replace an existing surface parking lot with two high-rise structures (21- and 40-stories in height), four mid-rise structures (5- to 7-stories in height with 1 partial level of subterranean parking), and a parking structure (9 above-ground levels, 1 subterranean level). The introduction of the project's two high-rise structures would shade portions of the nearby shadow-sensitive receptors for three hours or more, and result in a significant and unavoidable impact on shadow-sensitive resources surrounding the project site. The proposed project in combination with other planned or pending buildings of greater height and massing in and near the Downtown area has the potential to cast significant shadows to shadow-sensitive receptors. Although, the shadow effects of individual buildings on light-sensitive uses would need to be addressed on a case-by-case basis (since shading is dependent on building height, massing, location, and the existing conditions in the immediately surrounding uses), the only shadow mitigation available to reduce shadowing is to lower the height of proposed buildings, which would not be feasible in every instance and could require heights that would be below the height allowed by the Downtown Plan. Given that the shade and shadow impacts from the proposed project would be significant and unavoidable, the project's shade and shadow impact in combination with the shade and shadow impacts from other cumulative projects, all of which include high-rise structures, will likely exacerbate this impact in locations near these cumulative project sites. Therefore, the project's cumulative shade and shadow impacts would be cumulatively considerable.

Public Services (Parks and Recreation)

The proposed project would increase the demand for parks and recreation services and facilities near the project site by adding approximately 2,193 residents to the Downtown Plan area, which currently does not meet the established standard in the City's General Plan of 8 acres of parkland per 1,000 residents. While the proposed project would provide 45 percent of the project's footprint as open space and be required to pay a park and recreation facilities impact fee, the project impacts were determined to be significant and unavoidable, consistent with the PEIR. The project, in

combination with other cumulative projects in the Downtown Plan, would result in a cumulative increase in population that would also increase the demand for parks and recreational facilities. Similar to the project, all new developments in the City are either required to provide onsite park facilities or pay in-lieu fees to offset this increase. With collection of required fees on all new development and use of these fees to provide needed new facilities, cumulative impacts to parks and recreation would result in new park and open space amenities, but not in sufficient quantities to meet the citywide goal of 8 acres of open space per 1,000 residents. Therefore, the project's contribution to cumulative park and recreation impacts is cumulatively considerable.

Traffic and Transportation

The traffic study prepared for the Certified PEIR analyzed 28 Traffic Analysis Zones (TAZs). The proposed project is located within TAZ #4, which was evaluated in the Certified PEIR with an assumed combination of land uses (i.e., residential, office, retail, restaurant, and hotel) that would generate a total of 521 AM peak hour trips, 567 PM peak hour trips, and 7,039 daily trips. With the implementation of the proposed project and other cumulative projects within TAZ #4, the traffic zone would generate a total of approximately 475 new AM peak hour trips, 477 new PM peak hour trips, and 5,761 new daily trips. Based on this data, the traffic zone would generate fewer trips as compared to the Certified PEIR.

Cumulative impacts related to traffic and transportation are represented by the 2035 traffic analysis presented above in Section XVI. Transportation/Traffic. Since the proposed project would add traffic to intersections identified in the Certified PEIR as being significant impacted by plan area growth, it would be required to pay a fair-share contribution to implement Mitigation Measures Traf-1(a) through Traf-1(f) from the Certified PEIR, which would reduce many of the intersection impacts identified in the Certified PEIR to less-than-significant levels. However, even with implementation of mitigation, some of the intersection impacts would remain significant and unavoidable. Therefore, consistent with the Certified PEIR, the proposed project's cumulative traffic and transportation impacts would be cumulatively considerable.

Utilities and Service Systems (Solid Waste)

The proposed project would generate solid waste during construction and operation; however impacts would be mitigated to less than significant with implementation of Mitigation Measures Utilities-3(a) through Utilities-3(d) from the Certified PEIR, which would implement recycling measures for all construction-related wastes in coordination with the City Building Official, as well as recycling bins and educational materials to encourage recycling and proper management and disposal of household hazardous waste. At a cumulative level, however, solid waste generation from the project in combination with other cumulative projects would increase the need for waste disposal capacity. Future development projects would be required to participate in recycling programs similar to the project, thus reducing the amount of solid waste to be disposed of at landfills. However, the precise solutions to meeting the need for additional landfill capacity are not known and are the responsibility of other agencies, Therefore, the incremental contribution of solid waste from the project, in addition to solid waste generated by related cumulative projects, would be cumulatively considerable even after implementation of the mitigation measures. Therefore, consistent with the Certified PEIR, the project's cumulative solid waste impacts would be cumulatively considerable.

c) Human Impacts

Generally, impacts to human beings are more specifically focused on impacts associated with air quality, hazards and hazardous materials, and noise impact. As discussed in the previous sections, the proposed project would not result, either directly or indirectly, in adverse hazards related to air quality, or hazardous materials. Although the Certified PEIR concluded that there would be cumulatively significant impacts related to cumulative increase in traffic noise, the project's contribution would not be cumulatively considerable. Therefore, the proposed project would not result in adverse hazards related to noise. Compliance with applicable rules and regulations along with implementation of appropriate mitigation measures would reduce potential impacts on human beings to a less-than-significant level.

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