Public Review Draft • March 2015

OCEANAIRE APARTMENT PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for:
City of Long Beach

Prepared by:
RBF Consulting
A Michael Baker International Company

PUBLIC REVIEW DRAFT

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Oceanaire Apartment Project

LEAD AGENCY:

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March 2015

JN 143594

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1.0 INTRODUCTION

The proposed Oceanaire Apartment Project involves development of a 216-unit multi-family/mixed-use apartment complex on an approximate 1.76-acre site located at 150 West Ocean Boulevard in the City of Long Beach. The proposed project site is currently used for surface parking and is surrounded by residential, commercial, retail, and institutional uses. The proposed project would consist of a nine-level apartment building that would include two levels of parking.

Following preliminary review of the proposed project, the City of Long Beach determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects associated with the project, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with CEQA (Public Resources Code Sections 21000-21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR), the City of Long Beach, acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine whether the proposed project would have a significant environmental impact. If the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration (or Mitigated Negative Declaration) for that project. Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Section 21080, Public Resources Code).

The environmental documentation, which is ultimately approved and/or certified by the City of Long Beach in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document, and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required.

1.2 PURPOSE

Section 15063 of the *CEQA Guidelines* identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
- Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- Discussion of ways to mitigate significant effects identified, if any;

- Examination of whether the project is consistent with existing zoning, plans, and other applicable land use controls; and

- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.3 INCORPORATION BY REFERENCE

The references outlined below were utilized during preparation of this Initial Study. The documents are available for review at the City of Long Beach Development Services Department, located at 333 West Ocean Boulevard, 5th Floor, Long Beach, California 90802.

- *City of Long Beach General Plan* (Updated October 2013). The purpose of the General Plan is to provide a general, comprehensive, and long-range guide for community decision-making. The City of Long Beach General Plan consists of the following elements, adopted on various dates: Historic Preservation; Open Space; Housing; Air Quality; Mobility Element; Land Use; Seismic Safety; Local Coastal Program; Noise; Public Safety; Conservation; and Scenic Routes. The individual elements identify goals and policies for existing and future conditions within the City of Long Beach.

- *City of Long Beach Municipal Code (Codified through Ordinance No. ORD-14-0005, enacted May 20, 2014, Supplement No. 5)*. The *Long Beach Municipal Code* (LBMC) consists of regulatory, penal, and administrative ordinances of the City of Long Beach. It is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies. Volume II (Title 20, *Subdivisions*) and Volume III (Title 21, *Zoning*) of the LBMC identifies land uses permitted and prohibited according to the zoning designation of particular parcels.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

PROJECT LOCATION

The 1.76-acre project site is located within the southwestern portion of the City of Long Beach (City), on the southern side of West Ocean Boulevard, between South Pine Avenue and Pacific Avenue, within Los Angeles County, California; refer to Exhibit 2-1, *Regional Location*. The site is located at 150 West Ocean Boulevard, at the southeast corner of the intersection of West Ocean Boulevard and Pacific Avenue; refer to Exhibit 2-2, *Site Vicinity*.

EXISTING CONDITIONS

The project site has been previously disturbed and is located within an urbanized area. The majority of the site is currently paved and utilized as a surface parking lot. The site has previously been graded and the majority of the topography is flat. Approximately a quarter of the site (the northern portion, adjacent to West Ocean Boulevard) is vacant with an elevation of approximately 20 feet above the surface parking lot to the south. This portion of the project site is part of the existing Victory Park – the grassy area setbacks along the southern side of West Ocean Boulevard, between Alamitos Avenue and Magnolia Avenue. The western half of the Victory Park portion of the project site is covered by low-lying weeds, bushes, and shrubs, and slopes downward to the south towards the surface parking lot; while the eastern half is paved, includes a retaining wall that separates the surface parking lot to the south, and is adjoined to the sidewalk along West Ocean Boulevard to the north. Access to the project site is provided via a 160-foot driveway at the northeast portion of the project site, along West Ocean Boulevard. Existing on-site lighting consists of five pole-mounted security lights dispersed throughout the center portion of the property. The site also includes landscaping and mature trees along the western border of the property and is surrounded on all sides by chain link fencing or railing.

SURROUNDING LAND USES

- *Surrounding Uses to the North*. West Ocean Boulevard is to the immediate north of the project site. Just north of West Ocean Boulevard is a 23-story commercial building. To the immediate east of the 23-story commercial building is the Rock Bottom restaurant.

- *Surrounding Uses to the South*. West Seaside Way is to the immediate south of the project site. Just south of West Seaside Way is a shopping center consisting of retail uses and restaurants.

- *Surrounding Uses to the East*. The 14-story Ocean Center Building is located to the immediate east of the project site, and primarily consists of commercial uses in addition to parking, retail, and restaurant uses.

- *Surrounding Uses to the West*. Pacific Avenue is to the immediate west of the project site. Just west of Pacific Avenue is a 10-story commercial building and a six-story multi-family residential development.

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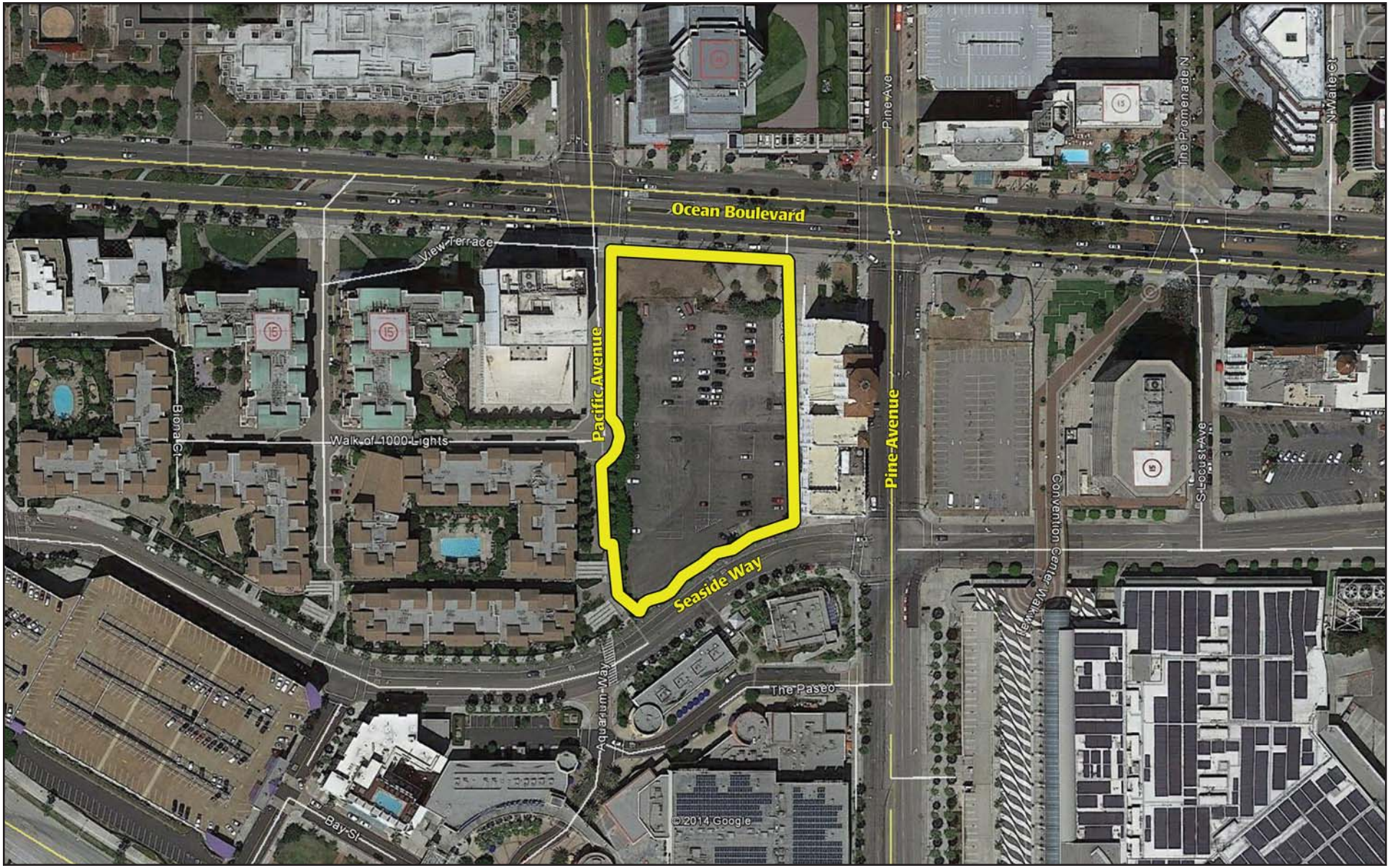
Regional Location

Exhibit 2-1



Source: Google Earth, November 2014.

- Project Boundary

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Site Vicinity

Exhibit 2-2

EXISTING GENERAL PLAN AND ZONING DESIGNATIONS

The City's General Plan designates the project site as a Mixed Use District (LUD No. 7).[1] A combination of land uses intended for this district include, but are not limited to, employment centers such as retail, offices, medical facilities; high density residences; visitor-serving facilities; personal and professional services; or recreational facilities.

The City's Zoning Ordinance designates the project site as Planned Development District 6 (PD-6), Subarea 4.[2] The PD designation allows for flexible development plans to be prepared for areas of the City which may benefit from the formal recognition of unique or special land uses and the definition of special design policies and standards not otherwise possible under conventional zoning district regulations. Purposes of the planned development district include permitting a compatible mix of land uses, allowing for planned commercial areas and business parks, and encouraging a variety of housing styles and densities. According to the LBMC, the PD-6 District, *Downtown Shoreline*, is to exhibit the following characteristics:

- A mixture of public and private uses of a variety of land use types;
- Significant public access through and around uses, whether public or private, and to coastal resources;
- An emphasis on uses of recreational or recreational access nature;
- Strong land use interactions and access connections with the downtown;
- An urban park-like setting with a variety of strolling, bicycling, and active and passive recreational areas, interesting water features and abundant landscaping; and
- The highest quality of development.

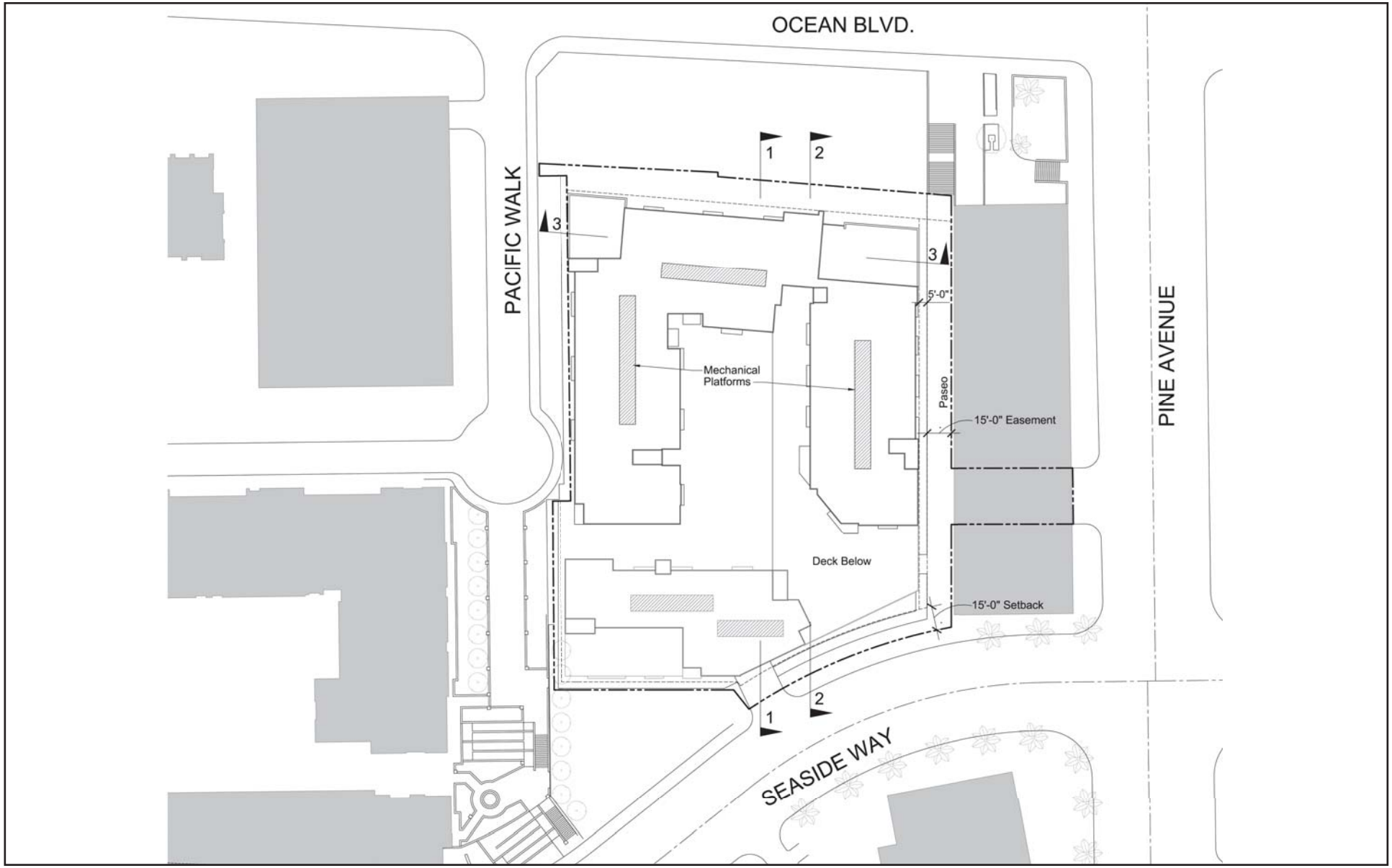
2.2 PROPOSED PROJECT

The project proposes a 216-unit multi-family/mixed-use apartment complex on the 1.76-acre site.[3] The project would include a single structure that would consist of seven levels along West Ocean Boulevard and five levels along West Seaside Way, above a two-level parking structure with ingress/egress along West Seaside Way. The apartment structure would reach a maximum height of 85 feet above West Ocean Boulevard grade and 106.5 feet above West Seaside Way grade. The apartment units would include a mixture of studios, and one-, two-, and three-bedroom configurations. Additionally, the project proposes to implement improvements at Victory Park on the northern portion of the project site along West Ocean Boulevard as well as a dog and fitness park on the southwest corner of the project site (refer to Exhibit 2-3, *Site Plan*).

[1] City of Long Beach. *General Plan*, *Land Use Element*, April 1997.

[2] City of Long Beach Municipal Code. *Volume III, Title 21, Chapter 25, Division VII, Planned Development Districts – Procedure.*

[3] The project site has an allowable density of 176 units (100 units/acre). However, the project applicant is applying the 100 units/acre standard to the entire Subarea 4, not the project site. Approval of this project, plus all other pending Subarea 4 projects, would not result in a subarea density exceeding 100 units/acre. Thus, density is conforming.



Source: Togawa Smith Martin, Inc.; October 31, 2014.

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INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Site Plan

Exhibit 2-3

Primary components associated with the various levels of the project are as follows:

- *Parking Levels (Bottom Levels)*. The project includes two levels of parking. The bottom level, P2, would be at grade with West Seaside Way, and the first level, P1, would be one story above the P2 level. Approximately 4,660 square feet of parking would be located under Victory Park on the northern portion of the project site. P1 would provide 205 secured residential parking spaces and P2 would provide 162 secured residential parking spaces and 39 secured guest parking spaces. Ancillary facilities on this level would include storage, bicycle parking, mechanical rooms, and trash receptacles. Ingress and egress points to the parking levels will be located along West Seaside Way.

- *First Level (Ground Level)*. The first level would provide a combination of 34 apartment units (three studios, 20 one-bedroom units, and 11 two-bedroom units), a residential lobby, a breezeway, a courtyard, and 3,600 square feet of amenity space of which 1,500 square feet of that space would be designed as flex space for potential commercial uses. The apartment units on the first level include three studios, 20 one-bedroom units, and 11 two-bedroom units.

- *Second Level*. The second level of the project would consist of 38 apartment units (three studios, 21 one-bedroom units, 13 two-bedroom units and one three-bedroom unit). This level would also include a storage facility for swimming pool equipment.

- *Third Level*. The third level would include 32 apartment units (two studios, 16 one-bedroom units, 13 two-bedroom units and one-three-bedroom unit). This level would also include a swimming pool with a spa and 2,300 square feet of amenity space with a fitness center and clubhouse on the southeastern portion of the structure.

- *Fourth Level*. The fourth level would include 34 apartment units (two studios, 16 one-bedroom units, 15 two-bedroom units, and one three-bedroom unit).

- *Fifth Level*. The fifth level would include 31 apartment units (one studio, 12 one-bedroom units, 17 two-bedroom units, and one three-bedroom unit) and a roof deck.

- *Sixth Level*. The sixth level would include 25 apartment units (one studio, nine one-bedroom units, 14 two-bedroom units and one three-bedroom unit).

- *Seventh Level*. The seventh level would include 22 apartment units (one studio, eight one-bedroom units, 11 two-bedroom units, and two three-bedroom units) and two roof decks.

- *Roof*. The roof would consist of mechanical platforms and a deck.

For a depiction of the individual floor plans, refer to Appendix A, *Floor Plans*.

In addition, Table 2-1, *Project Development Summary*, provides a summary of development characteristics by dwelling unit type.

Table 2-1
Project Development Summary

Zone
Downtown Shoreline Planned Development District (PD-6) - Subarea 4
Lot Area - 1.76 Acres (76,842 sf Approximately)

Maximum Density - 216 Units
Proposed Density - 216 Units (897 sf average)

S1 (560 sf) -	6 Units	(2.7%)	- 3,360 sf
S2 (560 sf) -	7 Units	(3.2%)	- 3,920 sf
1B1 (639 sf) -	20 Units	(9.7%)	- 12,780 sf
1Bc (614 sf) -	18 Units	(8.3%)	- 11,052 sf
1B2 (713 sf) -	51 Units	(23.6%)	- 36,363 sf
1B3 (692 sf) -	2 Units	(0.9%)	- 1,384 sf
1B4 (651 sf) -	4 Units	(1.8%)	- 2,604 sf
1B5 (945 sf) -	5 Units	(2.3%)	- 4,725 sf
1B7 (890 sf) -	2 Units	(0.9%)	- 1,780 sf
2B1 (1,045 sf) -	33 Units	(15.2%)	- 34,485 sf
2Bc (1,211sf) -	4 Units	(1.8%)	- 4,844 sf
2B2 (1,247 sf) -	9 Units	(4.2%)	- 11,223 sf
2B3 (1,125 sf) -	14 Units	(6.5%)	- 15,750 sf
2B4 (1,130 sf) -	4 Units	(1.8%)	- 4,520 sf
2B5 (1,240 sf) -	12 Units	(5.6%)	- 14,880 sf
2B7 (1,181 sf) -	6 Units	(2.8%)	- 7,086 sf
2B8 (1,044 sf) -	5 Units	(2.3%)	- 5,220 sf
2B9 (1,131 sf) -	7 Units	(3.2%)	- 7,917 sf
3B1 (1,361 sf) -	6 Units	(2.8%)	- 8,166 sf
3B2 (1,834 sf) -	1 Units	(0.4%)	- 1,834 sf
		NRSF	193,893 sf

Proposed Building Area

**P2 Parking Level - Basement	- (67,612 sf)
P1 Parking Level - Basement	- (62,942 sf)
Ground Floor	- 41,308 sf
***Second Floor	- 43,785 sf
Third Floor	- 36,338 sf
Fourth Floor	- 36,330 sf
Fifth Floor	- 35,641 sf
Sixth Floor	- 29,073 sf
Seventh Floor	- 25,964 sf
(*excludes basement parking) Total	- 248,439 sf*
**P2 Parking Contingency if needed	- (10,452 sf)
*** Covered Exterior Corridor Included	- (3,207 sf)

Proposed FAR - 3.23
248,439 sf / 76,842 sf = 3.23

Maximum Height - 420'-0"
150 ft within 30ft of Ocean Blvd. Property Line
Proposed Height (Zoning Code Interpretation)
Ocean Blvd. - 80'-10" (top of roof)
Seaside Way - 79'-8" (top of roof)

Setbacks Required/Provided
Ocean Blvd. - 80'-0" plus additional 4,042 sf of park area
Seaside Way - 15'-0"
Side Yards - 0'-0" (If adjoining structure is no closer than 8'-0"
Easement - 15'-0" along Eastern property line

Parking Summary
Parking Required = 455 Spaces
Parking Provided = 406 Spaces

Access to the project would be provided via West Seaside Way and West Ocean Boulevard. Access via West Seaside Way would include ingress and egress points to the parking structure, and access via West Ocean Boulevard would include pedestrian access from Victory Park.

As noted above, several landscaped open air courtyards would be incorporated into the proposed project. The primary central courtyard on the ground level would include a fountain pool, lounge areas, and private patios/seating areas. Another courtyard area would be located on the third level and include a swimming pool, spa, built-in bar, lounge areas, private patio/seating areas, a fitness center, and clubhouse. Additionally, the project proposes to implement improvements at Victory Park on the northern portion of the project site, along West Ocean Boulevard. Improvements at Victory Park include leveling the topography, constructing an open turf area and hardscapes, landscaping (including planters and accent trees), and providing public amenities including trash receptacles, a drinking fountain, concrete seat walls, monument signage, public art, a stage/performance area, and pedestrian access to the apartment complex to the west. The project also proposes a dog and fitness park on the southwest corner of the project. Improvements at the dog and fitness park would include a fenced area for dogs including dog washing stations and a fitness area including rubber play surfaces, fitness equipment, benches and a slide.

As shown in Exhibits 2-4a through 2-4d, *Building Elevations* and Exhibit 2-5, *Visual Rendering*, the proposed project would feature contemporary architectural features, including wood siding, fiber cement board, wood screens, metal handrails, and anodized aluminum windows and doors. The project would also include an extensive range of landscaping treatments that would include a mixture of trees, shrubs, vines, and groundcover. While the majority of landscaping would occur within the boundaries of Victory Park, landscaping would also be provided on all perimeters of the proposed building; refer to Exhibit 2-6, *Landscape Plan*.

SITE ACCESS

Two access driveways would be provided on Seaside Way for the project site via an entrance and an exit to the parking garage. The existing right-in/right-out only access driveway on Ocean Boulevard will become a pedestrian paseo, and the proposed project would not have vehicular access on Ocean Boulevard. To ensure safe and adequate ingress and egress is provided at the project site, a southbound stop sign would be installed along Seaside Way for project egress, and an eastbound left turn lane would be provided along Seaside Way for project ingress.

LAND SWAP

As part of the proposed project, the City and the project applicant (Lennar) propose a land swap within the southwestern portion of the project site (where the project proposes a dog and fitness park). The City of Long Beach currently owns property located along Seaside Way, west of Pine Avenue, Assessor Parcel Number 7278-005-916 (City Parcel). The City Parcel measures approximately 8,280 square feet and is currently being utilized as a surface parking lot. The project applicant currently owns the property adjacent to the City Parcel, also known as 150 East Ocean Boulevard, Assessor Parcel Number 7278-005-150 (Lennar Parcel). As part of design process, the City and project applicant have determined that both the park and the project would be better served if the City Parcel and Lennar Parcel could be reconfigured for optimal development. As such, a swap of approximately 1,840 square feet of the Lennar Parcel in exchange for 1,839 square feet of the City Parcel is proposed. In addition to the property exchange, the City would grant a 10-foot easement along the northern boundary of the City

Parcel to allow for adequate ventilation of Lennar's proposed parking structure to the north of the City Parcel. This land swap would only result in changes in property ownership, and would not involve physical improvements for the Oceanaire Apartment Project beyond what has been described above within this project description.

PROJECT PHASING AND CONSTRUCTION

The project is proposed to be constructed in a single phase, with construction anticipated to commence in mid- 2015 and completed in late 2016 to early 2017. Project opening would occur at the completion of construction in late 2016 to early 2017.

2.3 DISCRETIONARY ACTIONS

The City of Long Beach is the Lead Agency under CEQA and has discretionary authority over the proposed project. The project would be subject to various City permits and approvals, including, but not limited to:

- Adoption of a Final Mitigated Negative Declaration;
- Site Plan Review; and
- Coastal Development Permit.[4]

The project would also require administrative approvals from the City for issuance of grading, building, and occupancy permits as well as connection permits from utility providers.

In addition, review of this project may be required from other responsible agencies, including but not limited to, the South Coast Air Quality Management District (SCAQMD) and the Los Angeles Regional Water Quality Control Board (RWQCGB).

[4] The City's Coastal Zone Map shows that the majority of the project site falls within the "Appealable Area". Therefore, any person may appeal the City's determination by requesting a referral of the matter to the Executive Director of the Coastal Commission. If the determination of the Executive Director differs from that of the City, then the matter shall be resolved by a hearing before the Coastal Commission.

Source: Togawa Smith Martin, Inc.; October 31, 2014.

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Building Elevation (From Ocean Boulevard)

Exhibit 2-4a

Source: Togawa Smith Martin, Inc.; October 31, 2014.

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Building Elevation (From Pacific Avenue)

Exhibit 2-4b

Source: Togawa Smith Martin, Inc.; October 31, 2014.

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Building Elevation (From Seaside Way)

Exhibit 2-4c

Source: Togawa Smith Martin, Inc.; October 31, 2014.

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Building Elevation (From Eastern Boundary of Project Site)

Exhibit 2-4d

Source: Togawa Smith Martin, Inc.; October 31, 2014.

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Visual Rendering

Exhibit 2-5

Source: Togawa Smith Martin, Inc.; October 31, 2014.

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Landscape Plan

Exhibit 2-6

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3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1.	**Project Title:** Oceanaire Apartment Project
2.	**Lead Agency Name and Address:** City of Long Beach 333 West Ocean Boulevard, 5th Floor Long Beach, California 90802
3.	**Contact Person and Phone Number:** Mr. Craig Chalfant, Planner 562.570.6368
4.	**Project Location:** Southeast corner of West Ocean Boulevard and Pacific Avenue. The project site has an address of 150 West Ocean Boulevard.
5.	**Project Sponsor's Name and Address:** Mr. Ethen Thacher Lennar Multifamily Communities 25 Enterprise, Suite 305 Aliso Viejo, CA 92656
6.	**General Plan Designation:** The project site is designated as a Mixed Use District (LUD No. 7) by the *City of Long Beach General Plan*.
7.	**Zoning:** The project site is zoned Planned Development District 6 (PD-6), Subarea 4 by the *City of Long Beach Zoning Ordinance*.
8.	**Description of the Project:** Refer to Section 2.2, *Project Characteristics*.
9.	**Surrounding Land Uses and Setting:** West Ocean Boulevard is to the immediate north of the project site. Just north of West Ocean Boulevard is a 23-story commercial building and the Rock Bottom restaurant. West Seaside Way is to the immediate south of the project site. Just south of West Seaside Way is a shopping center consisting of retail uses and restaurants. The 14-story Ocean Center Building is located to the immediate east of the project site, and primarily consists of commercial uses in addition to parking, retail, and restaurant uses. Pacific Avenue is to the immediate west of the project site. Just west of Pacific Avenue is a 10-story commercial building and a six-story multi-family residential development. Refer to Section 2.1, *Project Location and Setting*.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement):** Refer to Section 2.3, *Discretionary Actions*.

3.2 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" or "Less Than Significant Impact With Mitigation Incorporated," as indicated by the checklist on the following pages.

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

3.3 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

The City of Long Beach finds that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	____
The City of Long Beach finds that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4.0 have been added. A NEGATIVE DECLARATION will be prepared.	✓
The City of Long Beach finds that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	____
The City of Long Beach finds that the proposal MAY have a significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	____

Signature	City of Long Beach Agency
Craig Chalfant Printed Name	March 2015 Date

3.4 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Long Beach in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- *No Impact*. The development will not have any measurable environmental impact on the environment.

- *Less Than Significant Impact*. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- *Less Than Significant Impact With Mitigation Incorporated*. The development will have the potential to generate impacts, which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- *Potentially Significant Impact*. The development could have impacts, which may be considered significant, and therefore additional analysis is required to identify mitigation measures that could reduce potentially significant impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

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4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study.

4.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			✓	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c. Substantially degrade the existing visual character or quality of the site and its surroundings?		✓		
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?		✓		

a) *Have a substantial adverse effect on a scenic vista?*

Less Than Significant Impact. The proposed project would have a less than significant impact on scenic vistas. The City's General Plan identifies freeways, regional corridors, boulevards, major avenues, minor avenues, neighborhood connectors, local streets, port-related streets, and scenic routes. The proposed project is located along Ocean Boulevard, which is classified as a scenic route. The primary scenic resources along Ocean Boulevard are the views to the south toward the harbor and ocean, which include views of the Queen Mary ocean liner and the Downtown skyline.

Although the project site is located along a scenic route, no views of the harbor, ocean, or Queen Mary ocean liner are afforded within the vicinity of the project site. The project is located within the Downtown and would affect the visible skyline. In order to adequately analyze potential impacts from these scenic views, RBF prepared photosimulations from specific Key View locations along Ocean Boulevard.

Key Views represent public views from both the public right-of-way and publicly accessible areas located within the viewshed of the proposed project. Key Views that may be impacted by the proposed project were determined in consultation with City staff and through site reconnaissance. Characteristics for each Key View are defined within foreground, middleground, and/or background views. Characteristics located within foreground views are located at close range and tend to dominate the view. Characteristics located within middleground views are distinguishable, yet not as sharp as those characteristics located in the foreground views. Features located within the background views have few details and distinctions in landform and surface features. The emphasis of background views is an outline or edge. Objects in the background eventually fade to obscurity with increasing distance.

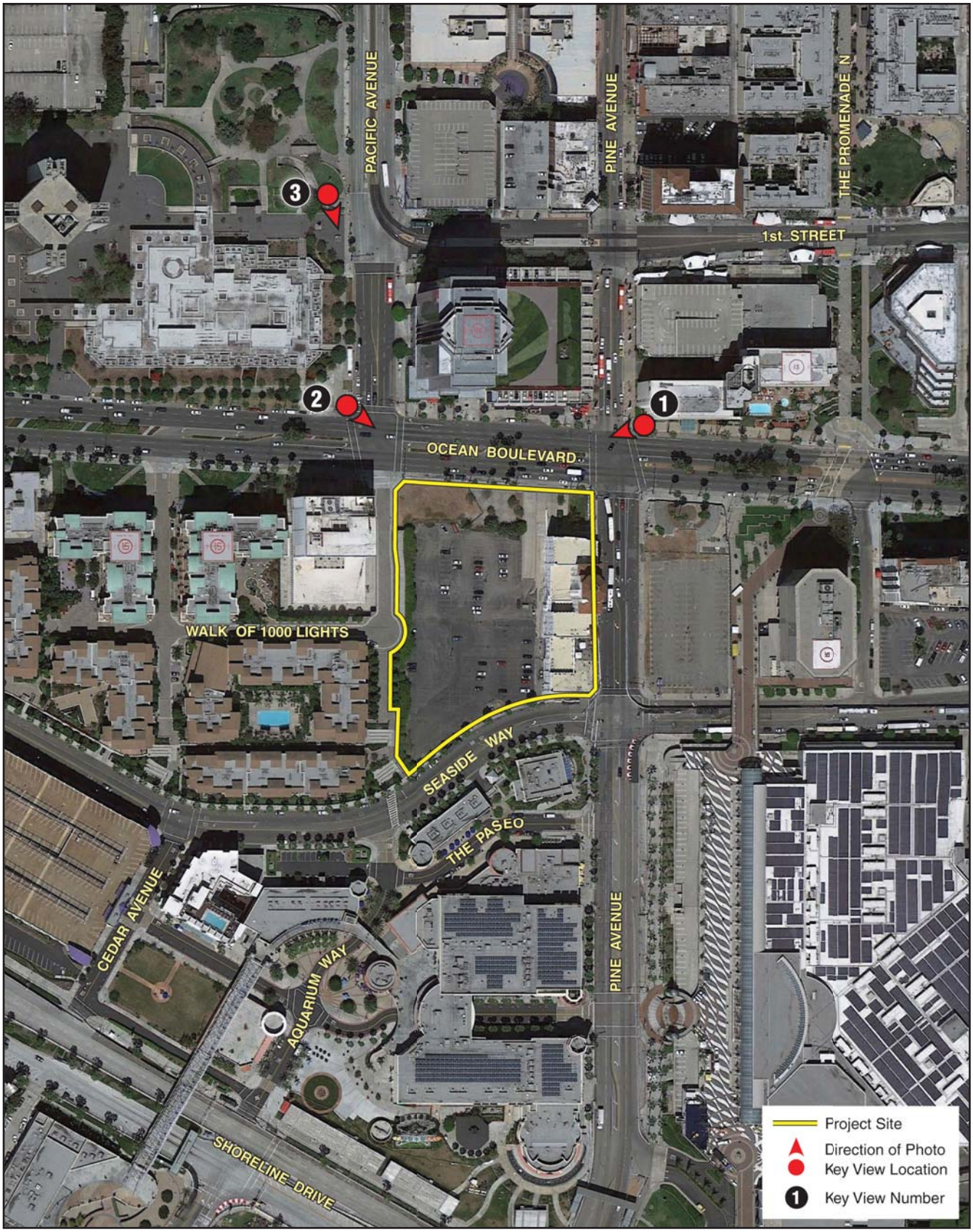
RBF staff visited the site to take photographs and make observations from Key Views. The camera locations were recorded utilizing Global Positioning System (GPS) equipment. A Fuji G-617 Panoramic camera with a 1:8/105 millimeter lens was selected as the primary photographic source, as it yields an accurate representation of human visual perception. Backup photos were also taken using a Nikon D1X digital camera with a fixed 50 millimeter lens.

Three Key Views were selected for this analysis. Exhibit 4.1-1, *Key View Locations Map*, illustrates the locations of the selected Key Views. These particular Key Views are situated along Ocean Boulevard as well as in the vicinity of Lincoln Park. Key View selection was conducted in consultation with City staff, based on designated views per the General Plan as well as the existing topography, structures, and vegetation. The intent of analyzing these Key Views is to depict potential impacts to scenic views and vistas as well as changes to the character/quality of the area as a result of the proposed project. Refer to the Visual Character section below for a discussion of the project's visual impacts pertaining to the degradation of character/quality. For the purposes of visual impacts to the designated scenic view of the Downtown skyline along Ocean Boulevard, Key Views 1 and 2 are analyzed. For potential scenic vistas of the Downtown skyline, as seen from stationary public views at Lincoln Park, Key View 3 is considered.

Key View 1. Views from Key View 1 (approximately 29 feet above mean sea level [msl]) are afforded from the northbound sidewalk of Ocean Boulevard, to the northeast of the project site looking west; refer to Exhibit 4.1-2, *Key View 1*. These views encompass the Downtown skyline mostly to the south of Ocean Boulevard. No views to the ocean and harbor are afforded. With construction of the proposed project, the new structure (located in foreground views) would appear to be lower in height than those structures to the east and west. Although increased at the project site, no increased building height along the overall visible skyline would result. The skyline at the project site would appear similar in character to that visible to the east and west.

Key View 2. Views from Key View 2 (approximately 29 feet above msl) are afforded from the northbound sidewalk of Ocean Boulevard, to the northwest of the project site looking southeast; refer to Exhibit 4.1-3, *Key View 2*. These views encompass the Downtown skyline mostly to the south of Ocean Boulevard. No views to the ocean and harbor are afforded. With construction of the proposed project, the new structure (located in foreground views) would appear to be slightly lower in height than those structures to the east. Although increased at the project site, no increased building height along the overall visible skyline would result. The skyline at the project site would appear similar in character to that visible to the east.

Key View 3. Views from Key View 3 (approximately 32 feet above msl) are afforded from Lincoln Park, to the north of the project site; refer to Exhibit 4.1-4, *Key View 3*. These views encompass a small portion of the Downtown skyline mostly to the south of Ocean Boulevard. No views to the ocean and harbor are afforded. With construction of the proposed project, the new structure (located in middleground views) would appear to be lower in height than those structures to the west. Although increased at the project site, proposed building height would not extend above the visible skyline to the west. Thus, the skyline at the project site would appear similar in character to that visible to the west.



Source: Google Earth Pro Aerial; April 17, 2013.

NOT TO SCALE

RBF CONSULTING A Baker Company

03/15 • JN 143594

OCEANAIRE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Key View Locations Map

Exhibit 4.1-1

EXISTING CONDITION

PROPOSED CONDITION

NOT TO SCALE

RBF CONSULTING
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OCEANAIRE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Key View 1

Exhibit 4.1-2

EXISTING CONDITION

PROPOSED CONDITION

NOT TO SCALE

RBF CONSULTING
A Baker Company

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OCEANAIRE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Key View 2

Exhibit 4.1-3

EXISTING CONDITION

PROPOSED CONDITION

NOT TO SCALE

RBF CONSULTING
A Baker Company

03/15 • JN 143594

OCEANAIRE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Key View 3

Exhibit 4.1-4

As depicted on Exhibit 4.1-2 through Exhibit 4.1-4, although increased at the project site, the proposed structure would not extend above the visible skyline surrounding the project site. The project would be consistent with the urbanized nature that exists along Ocean Boulevard. Although the project would construct a 106.5-foot (seven-story) structure, the structure would not extend above the surrounding structures, as seen along Ocean Boulevard. Thus, the proposed project would result in less than significant impacts to the visible skyline as seen from scenic views along Ocean Boulevard and potential scenic vistas at Lincoln Park.

Mitigation Measures: No mitigation measures are required.

b) ***Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

No Impact. The project site is not located along a designated state scenic highway.[5] Further, there are no scenic resources, including California Historic Landmarks, National Historic Landmarks, or Historic Districts, present on the site.[6] Therefore, project implementation would not damage any scenic resource (i.e., trees, rock outcroppings, or historic buildings) within the viewshed of a state scenic highway. No impact would result in this regard.

Mitigation Measures: No mitigation measures are required.

c) ***Substantially degrade the existing visual character or quality of the site and its surroundings?***

Less Than Significant Impact With Mitigation Incorporated.

Short-Term Construction

Construction activities would be completed in a single phase over the course of approximately 17 months. During this time, project construction activities would temporarily disrupt views across the project site from surrounding areas, since graded surfaces, construction debris, construction equipment, and truck traffic would be visible. Impacts in this regard would be temporary in nature and would cease upon project completion. However, these activities would be exposed to surrounding motorists, pedestrians, bicyclists, and residents. Mitigation Measure AES-1 would require that construction staging areas be sited as far away from nearby residents as feasible, and that opaque screening material be used to shield public views toward the site throughout the construction process. Therefore, with implementation of the recommended Mitigation Measure AES-1, the visual character or quality of the site would not be substantially degraded during short-term project construction and impacts in this regard would be less than significant.

Long-Term Operations

Development of the proposed project would construct a new building (up to seven stories in height) with new landscaping and park improvements; refer to Exhibits 2-4a through 2-4d, *Building Elevations*, Exhibit 2-5, *Visual Rendering*, and Exhibits 4.1-2 through 4.1-4, *Key Views*. The new structure would feature contemporary architectural elements (e.g., wood siding, fiber

[5] California Department of Transportation website. *Los Angeles County*. Available at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/. Accessed on October 7, 2014.
[6] Long Beach General Plan. *Historic Preservation Element*. June 2010.

cement board, wood screens, metal handrails, and anodized aluminum windows and doors). The proposed Landscape Concept Plan would include a mixture of trees, shrubs, vines, and groundcover, including enhanced landscaping along the perimeter; refer to Exhibit 2-6, *Landscape Plan*. Improvements at Victory Park include grading, constructing an open turf area and hardscapes, and landscaping (including planters and accent trees). As part of the public park improvements, new trash receptacles, a drinking fountain, concrete seat walls, monument signage, public art, and a stage/performance area would be installed. Pedestrian access from Victory Park to the adjacent apartment complex to the west would also be installed. In addition to the Victory Park improvements, the project would also construct a dog and fitness park on the southwest corner of the project site. Improvements at the dog and fitness park would include a fenced area for dogs (with dog washing stations) and a fitness area (with rubber play surfaces, fitness equipment, benches, and a slide).

The project would be consistent with provisions of the City's Zoning Ordinance, which establishes development standards that would ensure that the proposed project would be compatible with surrounding uses. The proposed project would be consistent with the City's building setback and height requirements. Development of the site would be subject to the City's discretionary review process, including review of development plans and discretionary permits, to ensure the project is consistent with General Plan policies as well as the Zoning Ordinance. Therefore, with implementation of the City's discretionary review process, the project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be less than significant in this regard.

Mitigation Measures:

AES-1 Construction equipment staging areas shall be located, to the greatest extent feasible, away from nearby existing residential uses, and shall utilize appropriate screening (i.e., temporary fencing with opaque material) to shield public views of construction equipment and material. Prior to issuance of a grading permit, the City Engineer shall verify that staging locations are identified on final grading/ development plans and that appropriate perimeter screening is included as a construction specification.

d) ***Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?***

Less Than Significant Impact With Mitigation Incorporated. There are two primary sources of light: light emanating from building interiors that pass through windows and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Depending upon the location of the light source and its proximity to adjacent light sensitive uses, light introduction can be a nuisance, affecting adjacent areas and diminishing the view of the clear night sky.

The proposed project is located within a developed area of the City. Currently, light is being emitted from the project site as a result of security lighting in the surface parking lot and vehicle headlights accessing the parking lot as well as at the driveway at Ocean Boulevard in the northeastern portion of the project site. Additionally, areas surrounding the project site are urbanized and contain various sources of light and glare. Specifically, light and glare in the project area is generated from the light emanating from building interiors and light from exterior sources (i.e., parking lot lighting, building illumination, and security lighting) associated with the adjacent commercial, retail, and residential land uses. Light and glare caused by car headlights

and street lighting associated with Ocean Boulevard, Pine Avenue, and Seaside Way further influence lighting in the project area.

Implementation of the proposed project would not result in nighttime lighting during construction, as no nighttime construction activities are proposed. However, new sources of light would be introduced during operation of the proposed project, including light from residential interiors passing through windows, security lighting from building exteriors, landscape lighting, and street lighting along the perimeter of the project site.

Compliance with Mitigation Measure AES-2 would minimize the project's lighting impacts through the use of lighting design, shielding, direction, and siting techniques to minimize spillover onto adjacent properties. All lighting would be required to utilize directional lighting techniques (without compromising site safety or security) that direct light downwards and minimize light spillover onto adjacent light sensitive receptors. Landscape lighting levels would be required to respond to the type, intensity, and location of use. Lighting requirements for the safety and security of pedestrians and vehicular movements would be anticipated. Implementation of Mitigation Measure AES-2 would ensure that long-term (operational) light and glare impacts as a result of the project would be reduced to less than significant levels.

Vehicle headlights are another source of nighttime lighting. The proposed ingress/egress would be moved from Ocean Boulevard to Seaside Way, across from existing commercial uses. These existing commercial uses do not front Seaside Way and are not considered light sensitive in this regard. No new headlight conditions would be introduced such that sensitive receptors would be impacted. Thus, impacts in this regard would be less than significant.

Mitigation Measures:

AES-2 The project applicant shall ensure that any exterior lighting does not spill over onto the adjacent uses. Prior to issuance of any building permit, the project applicant shall prepare and submit an Outdoor Lighting Plan to the City of Long Beach Development Services Department, for review and approval, that includes a footcandle map illustrating the amount of light from the proposed project at adjacent light sensitive receptors. All exterior light fixtures (including street lighting) shall be shielded or directed away from adjoining uses. Landscape lighting levels shall respond to the type, intensity, and location of use. Safety and security for pedestrians and vehicular movements shall be anticipated.

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4.2 AGRICULTURE 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 by the California Air Resources Board. Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
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 122220(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 forest land to non-forest use?				✓

a) ***Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

No Impact. The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[7] In addition, no farmland or agricultural activity exists on or in the vicinity of the project site. Therefore, project implementation would not result in the conversion of farmland to non-agricultural use.

Mitigation Measures: No mitigation measures are required.

[7] California Department of Conservation. *Farmland Mapping and Monitoring Program*. Available at: http://www.conservation.ca.gov/dlrp/FMMP/Pages/Index.aspx. Accessed October 8, 2014.

b) ***Conflict with existing zoning for agricultural use, or a Williamson Act contract?***

No Impact. The project site is zoned PD-6, and does not include any zoning for agricultural use. The project site is not under a Williamson Act contract. Therefore, project implementation would not conflict with existing zoning for agricultural use or a Williamson Act contract.

Mitigation Measures: No mitigation measures are required.

c) ***Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 122220(g)), timberland as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

No Impact. The project site is not occupied by or used for forest land or timberland purposes and is not zoned Timberland Production. Therefore, no impact to forest land or timberland would occur as a result of the proposed project.

Mitigation Measures: No mitigation measures are required.

d) ***Result in the loss of forest land or conversion of forest land to non-forest use?***

No Impact. The project site is not occupied by or used for forest land. Therefore, no impact to forest land would occur as a result of the proposed project.

Mitigation Measures: No mitigation measures are required.

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?***

No Impact. No farmland, agricultural, or forest land activity exists on or in the vicinity of the project site. The project would not result in environmental changes that would convert farmland to non-agricultural use or forest land to non-forest land use. Therefore, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4.3 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:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

a) *Conflict with or obstruct implementation of the applicable Air Quality Management Plan or Congestion Management Plan?*

Less Than Significant Impact. The proposed project is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). The SCAQMD is one of 35 air quality management districts, and is responsible for preparing and implementing an Air Quality Management Plan (AQMP). The most recent AQMP was adopted in February 2013, and it is intended to bring the Basin into attainment with federal health-based standards for fine particulate matter ($PM_{2.5}$) by 2014 and implements the adopted 8-hour ozone (O_3) control plan.

According to the *CEQA Air Quality Handbook*, in order to determine consistency with the SCAQMD AQMP, two main criteria must be addressed.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations?

Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of a project's pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency. As discussed in Impact Statement 4.3(d), below, localized concentrations of carbon monoxide (CO), nitrogen oxides (NO_X), and fugitive dust (PM_{10} and

$PM_{2.5}$) would be less than significant during project operations. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations. Because reactive organic gases (ROGs) are not a criteria pollutant, there is no ambient standard or localized threshold for ROGs. Due to the role ROG plays in ozone formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

b) Would the project cause or contribute to new air quality violations?

As discussed in Impact Statement 4.3(b), operation of the proposed project would result in emissions that would be below the SCAQMD operational thresholds. Therefore, the proposed project would not have the potential to cause or affect a violation of the ambient air quality standards.

c) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

The proposed project would result in less than significant impacts with regard to localized concentrations during project operations. As such, the proposed project would not delay the timely attainment of air quality standards or 2012 AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and Southern California Association of Government's (SCAG) air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the 2012 AQMP. Determining whether or not a project exceeds the assumptions reflected in the 2012 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

In the case of the 2012 AQMP, three sources of data form the basis for the projections of air pollutant emissions: the City's *General Plan*, SCAG's *Growth Management* Chapter of the *Regional Comprehensive Plan* (RCP), and SCAG's *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS). The RTP/SCS also provides socioeconomic forecast projections of regional population growth. The project site is designated PD-6, Subarea 4, which is intended to permit a wide range of high density residential and mixed use development uses. The project proposes a multi-family residential development. Therefore, the proposed project is considered consistent with the *General Plan*, and is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RCP. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City. Additionally, as the SCAQMD has incorporated these same projections into the 2012 AQMP, it can be concluded that the proposed project would be consistent with the projections.

b) Would the project implement all feasible air quality mitigation measures?

Compliance with all feasible emission reduction measures identified by the SCAQMD would be required as identified in Response 4.3(b). As such, the proposed project would meet this 2012 AQMP consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth in the AQMP?

The proposed project would serve to implement various City and SCAG policies. The proposed project is located within a developed portion of the City, and is considered to be an infill development in the vicinity of a mix of uses including residential, retail and commercial.

In conclusion, the determination of 2012 AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the Basin. The proposed project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. Also, the proposed project would be consistent with the goals and policies of the AQMP for control of fugitive dust. As discussed above, the proposed project would also be consistent with SCAQMD and SCAG's goals and policies and is considered consistent with the 2012 AQMP.

Mitigation Measures: No mitigation measures are required.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant Impact With Mitigation Incorporated.

Short-Term Emissions

Future construction of the project site would generate short-term air quality impacts. Construction equipment would include concrete/industrial saws, excavators, off-highway trucks, dozers, loaders, rollers, pavers, forklifts, and tractors. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared utilizing CalEEMod. Refer to Appendix B, *Air Quality/Greenhouse Gas Data*, for the CalEEMod outputs and results. Table 4.3-1, *Construction Related Emissions*, presents the anticipated daily short-term construction emissions.

Table 4.3-1
Construction Related Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 1						
Unmitigated Emissions	15.03	164.95	103.33	0.22	19.94	12.21
Mitigated Emissions[2,3]	5.62	94.57	105.47	0.22	7.40	4.63
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Is Threshold Exceeded After Mitigation?	***No***	***No***	***No***	***No***	***No***	***No***
Year 2						
Unmitigated Emissions	59.57	67.88	49.06	0.11	5.73	3.53
Mitigated Emissions[2,3]	55.45	35.59	56.43	0.11	3.69	2.14
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Is Threshold Exceeded After Mitigation?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
1. Emissions were calculated using CalEEMod, as recommended by the SCAQMD.
2. The reduction/credits for construction emission mitigations are based on mitigation included in the CalEEMod model and as typically required by the SCAQMD through Rule 403. The mitigation includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; limit speeds on unpaved roads to 15 miles per hour; and use of CARB Tier 3 Engines.
3. Refer to Appendix B, *Air Quality/Greenhouse Gas Data*, for assumptions used in this analysis.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways (including demolition as well as construction activities). Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading, excavation and construction is expected to be short-term and would cease upon project completion. Additionally, most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} (particulate matter smaller than 10 microns) generated as a part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. Fine Particulate Matter ($PM_{2.5}$) is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and sulfur oxides (SO_X) combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Mitigation Measure AQ-1 would implement dust control techniques (i.e., daily watering), limitations on construction hours, and adherence to SCAQMD Rules 402 and 403 (which require watering of inactive and perimeter areas, track out requirements, etc.), to reduce PM_{10} and $PM_{2.5}$ concentrations. As depicted in Table 4.3-1, total PM_{10} and $PM_{2.5}$ emissions would not exceed the SCAQMD thresholds during construction. Therefore, impacts would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, employee commutes to the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in Table 4.3-1, construction equipment and worker vehicle exhaust emissions would exceed the established SCAQMD threshold for unmitigated NO_X emissions by approximately 64.95 pounds per day during the first year of construction. As NO_X emissions are primarily generated by engine combustion in construction equipment, haul trucks, and employee commuting, requiring the use of newer construction equipment with better emissions controls would reduce short-term NO_X emissions. Therefore, Mitigation Measure AQ-2 would be required to ensure that the development associated with the proposed project utilizes diesel construction equipment that complies with Tier 3-level emissions standards during all construction phases. Adherence to Mitigation Measure AQ-2 would reduce construction-related NO_X emissions to below the established SCAQMD threshold. Impacts in this regard would be less than significant with mitigation incorporated.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. In accordance with the methodology prescribed by the SCAQMD, the ROG emissions associated with paving and architectural coating have been quantified with the CalEEMod model. Based on the modeling, the proposed project would not result in an exceedance of ROG emissions and impacts would be considered less than significant.

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board (CARB) in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to*

Contain Naturally Occurring Asbestos Report (August 2000), serpentinite and ultramafic rocks are not known to occur within the project area. Thus, there would be no impact in this regard.

Total Daily Construction Emissions

In accordance with the SCAQMD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. CalEEMod allows the user to input mitigation measures such as watering the construction area to limit fugitive dust. Mitigation measures that were input into CalEEMod allow for certain reduction credits and result in a decrease of pollutant emissions. Reduction credits are based upon studies developed by CARB, SCAQMD, and other air quality management districts throughout California, and were programmed within CalEEMod. As indicated in Table 4.3-1, CalEEMod calculates the reduction associated with recommended mitigation measures.

As indicated in Table 4.3-1, impacts would be less than significant for all criteria pollutants during construction, with the exception of NO_X emissions during the first year of construction. As a result of exceeding the SCAQMD NO_X emissions threshold, the project would be required to implement Mitigation Measure AQ-2, ensuring the project utilizes diesel construction equipment that complies with Tier 3-level emissions standards during all phases of construction. Furthermore, implementation of standard SCAQMD measures (required by Mitigation Measure AQ-1) would further reduce PM_{10} and $PM_{2.5}$ emissions during construction. Thus, construction related air emissions would be less than significant with mitigation incorporated.

Long-Term Emissions

Mobile Source Emissions

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM_{10}, and $PM_{2.5}$). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

According to the *Traffic Impact Analysis* prepared for the proposed project, the proposed project would generate approximately 1,436 daily trips. Table 4.3-2, *Long-Term Operational Air Emissions*, presents the anticipated mobile source emissions. As shown in Table 4.3-2, unmitigated emissions generated by vehicle traffic associated with the proposed project would not exceed established SCAQMD thresholds. Impacts from mobile source air emissions would be less than significant.

Area Source Emissions

Area source emissions would be generated due to an increased demand for natural gas associated with the development of the proposed project. The primary use of natural gas producing area source emissions by the project would be for consumer products, architectural coating, and landscaping. As shown in Table 4.3-2, area source emissions from the proposed project would not exceed SCAQMD thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Energy Source Emissions

Energy source emissions would be generated as a result of electricity and natural gas (non-hearth) usage associated with the proposed project. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As shown in Table 4.3-2, energy source emissions from the proposed project would not exceed SCAQMD thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Table 4.3-2
Long-Term Operational Air Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Source Emissions	13.12	1.07	70.94	0.17	8.73	8.73
Energy Emissions	0.06	0.54	0.23	0.00	0.04	0.04
Mobile Emissions	5.60	16.55	66.93	0.17	11.47	3.23
Total Emissions	***18.79***	***18.16***	***138.10***	***0.35***	***20.25***	***12.01***
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Is Threshold Exceeded? (Significant Impact?)	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
1. Based on CalEEMod modeling results, worst-case seasonal emissions for area and mobile emissions have been modeled.
2. Refer to Appendix B, *Air Quality/Greenhouse Gas Data*, for assumptions used in this analysis.

Mitigation Measures:

AQ-1 Prior to issuance of any Grading Permit, the City Engineer shall confirm that the Grading Plan and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;
- Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;
- Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;
- All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;

- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;

- Track-out devices such as gravel bed track-out aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes. Alternatively a wheel washer shall be used at truck exit routes;

- On-site vehicle speed shall be limited to 15 miles per hour;

- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; and

- Trucks associated with soil-hauling activities shall avoid residential streets and utilize City-designated truck routes to the extent feasible.

AQ-2 Before issuance of each Grading Permit, the construction contractor shall provide evidence to the City Engineer that the following measures would be implemented during construction:

- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NOX emissions requirements.

- During Project construction, all internal combustion engines/construction, equipment operating on the project site shall meet EPA-Certified Tier 3 emissions standards, or higher according to the following:

  - All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road 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.

  - 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.

c) ***Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?***

Less Than Significant Impact With Mitigation Incorporated. With respect to the proposed project's construction-related air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2012 AQMP pursuant to Federal Clean Air Act (FCAA) mandates. As such, the proposed project

would comply with SCAQMD Rule 403 requirements, and implement all feasible mitigation measures (Mitigation Measure AQ-1 and Mitigation Measure AQ-2). Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. In addition, the proposed project would comply with adopted 2012 AQMP emissions control measures. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted 2012 AQMP emissions control measures) would also be imposed on construction projects throughout the Basin, which would include related projects.

As discussed previously, the proposed project would not result in long-term air quality impacts, as emissions would not exceed the SCAQMD adopted operational thresholds. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, cumulative operational impacts associated with implementation of the proposed project would be less than significant.

Mitigation Measures: Refer to Mitigation Measure AQ-1 and Mitigation Measure AQ-2. No additional mitigation is required.

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact With Mitigation Incorporated. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Sensitive receptors near the project site include surrounding residences adjacent to the west of the project site. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds (LSTs) for construction and operations impacts (area sources only). The CO hotspot analysis following the LST analysis addresses localized mobile source impacts.

Localized Significance Thresholds

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST screening lookup tables for one, two, and five acre projects emitting CO, NO_X, $PM_{2.5}$, or PM_{10}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The project is located within Sensitive Receptor Area (SRA) 4, South Coastal LA County.

Construction

Based on the SCAQMD guidance on applying LSTs, the project would disturb approximately two acres of land per day. Therefore, the LST thresholds for two acres were utilized for the construction LST analysis. As the nearest sensitive uses are adjacent to the project site, the LST value for 25 meters was utilized, as this is the most conservative option the methodology allows. Table 4.3-3, *Localized Significance of Construction Emissions*, shows the localized unmitigated and mitigated construction-related emissions. It is noted that the localized emissions presented in Table 4.3-3 are less than those in Table 4.3-1 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust), and do not include off-site emissions (i.e., from hauling activities). As seen in Table 4.3-3, mitigated on-site emissions would not exceed the LSTs for SRA 4.

Table 4.3-3
Localized Significance of Construction Emissions

Source	Pollutant (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction				
Year 1[1]				
Total Unmitigated On-Site Emissions	94.33	53.11	13.06	8.64
Total Mitigated On-Site Emissions	41.23	48.65	3.28	2.57
Localized Significance Threshold[3]	*82*	*842*	*7*	*5*
Thresholds Exceeded?	***No***	***No***	***No***	***No***
Year 2[2]				
Total Unmitigated On-Site Emissions	61.09	27.84	2.71	2.53
Total Mitigated On-Site Emissions	29.82	27.84	1.39	1.39
Localized Significance Threshold[3]	*82*	*842*	*7*	*5*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Notes:
1. For construction Year 1, the grading phase emissions are presented as the worst case scenario.
2. For construction Year 2, the building construction phase emissions are presented as the worst case scenario.
3. The Localized Significance Threshold was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately 2 acres; therefore the 2-acre threshold was used), the total acreage for operational (uses the 2-acre threshold), the distance to sensitive receptors, and the source receptor area (SRA 4).

Operations

As seen in Table 4.3-4, *Localized Significance of Operational Emissions*, project-related unmitigated operational area source emissions would be negligible and would be below the LSTs. Therefore, operational LST impacts would be less than significant in this regard.

Table 4.3-4
Localized Significance of Operational Emissions

Source	Pollutant (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Operational				
Unmitigated Area Source Emissions	0.21	18.00	0.10	0.10
Localized Significance Threshold[2]	*82*	*842*	*2*	*1*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Note:
1. The proposed project does not include hearths.
2. The Localized Significance Threshold was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the total acreage, the distance to sensitive receptors, and the source receptor area (SRA 4).

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.).

The SCAQMD requires a quantified assessment of CO hotspots when a project increases the volume-to-capacity ratio (also called the intersection capacity utilization) by 0.02 (two percent) for any intersection with an existing level of service LOS D or worse. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersections.

The City is located in the South Coast Air Basin, which is designated as an attainment/maintenance area for the Federal CO standards and an attainment area for State standards. There has been a decline in CO emissions even though vehicle miles traveled on U.S. urban and rural roads have increased. On-road mobile source CO emissions have declined 24 percent between 1989 and 1998, despite a 23 percent rise in motor vehicle miles traveled over the same 10 years. California trends have been consistent with national trends; CO emissions declined 20 percent in California from 1985 through 1997 while vehicle miles traveled increased 18 percent in the 1990s. Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

A detailed CO analysis was conducted in the *Federal Attainment Plan for Carbon Monoxide* (CO Plan) for the SCAQMD's 2003 Air Quality Management Plan. The locations selected for microscale modeling in the CO Plan are worst-case intersections in the SCAB, and would likely experience the highest CO concentrations. Thus, CO analysis within the CO Plan is utilized in a comparison to the proposed project, since it represents a worst-case scenario with heavy traffic volumes within the SCAB.

Of these locations, the Wilshire Boulevard/Veteran Avenue intersection experienced the highest CO concentration (4.6 parts per million [ppm]), which is well below the 35-ppm 1-hr CO Federal standard. The Wilshire Boulevard/Veteran Avenue intersection is one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately

100,000 vehicles per day. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection, it can be reasonably inferred that CO hotspots would not be experienced at any intersections within the City of Long Beach near the project site due to the low volume of traffic (1,436 daily trips) that would occur as a result of project implementation. Therefore, impacts would be less than significant in this regard.

Parking Level Hotspots

Carbon monoxide concentrations are a function of vehicle idling time, meteorological conditions, and traffic flow. Therefore, parking areas (and particularly subterranean parking areas) tend to be of concern regarding CO hotspots, as they are enclosed spaces with frequent cars operating in cold start mode. Approximately 406 parking spaces would be constructed on two levels of the project. The proposed project would be required to comply with the ventilation requirements of the International Mechanical Code (Section 403.5 [Public Garages]), which requires that mechanical ventilation systems for public garages to operate automatically upon detection of a concentration of carbon monoxide of 25 ppm by approved detection devices. The 25 ppm trigger is the maximum allowable concentration for continuous exposure in any eight hour period according to the American Conference of Governmental Industrial Hygienists.[8] Impacts in regards to parking structure CO hotspots would be less than significant.

Mitigation Measures: Mitigation Measures: Refer to Mitigation Measure AQ-1 and Mitigation Measure AQ-2. No additional mitigation is required.

e) *Create objectionable odors affecting a substantial number of people?*

Less Than Significant Impact. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors.

Construction activity associated with the project may generate detectable odors from heavy-duty equipment exhaust. Construction related odors would be short-term in nature and cease upon project completion. Any impacts to existing adjacent land uses would be short-term, as previously noted, and are considered less than significant given the project size.

Mitigation Measures: No mitigation measures are required.

[8] INTEC Controls, *Carbon Monoxide (CO) Detection and Control Systems for Parking Structures, Guidelines for the Design Engineer*, http://www.inteccontrols.com/pdfs/CO_Parking_Garage_Design_ Guidelines.pdf.

4.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

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?***

No Impact. The project site has been previously disturbed and is located within an urbanized area. The site has been previously graded, and is currently paved and utilized for surface parking. No endangered, rare, threatened, or special status plant species (or associated habitats) or wildlife species designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), or California Native Plant Society (CNPS) are known to occur on site. Project implementation would not result in a substantial adverse effect, either directly or through habitat modifications, on any sensitive species.

Mitigation Measures: No mitigation measures are required.

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?***

No Impact. There is no riparian habitat or other sensitive natural communities present on the project site. As noted above, the site has been graded and is paved for use as a surface parking lot. Project implementation would not significantly impact any riparian habitat or other sensitive natural community.

Mitigation Measures: No mitigation measures are required.

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, costal, etc.) through direct removal, filling, hydrological interruption, or other means?***

No Impact. There are no federally protected wetlands present on the project site. Project implementation would not impact federally protected wetlands through direct removal, filling, hydrological interruption or other means.

Mitigation Measures: No mitigation measures are required.

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?***

No Impact. The project site and surrounding areas are completely developed and/or disturbed. The project site is surrounded by urban uses on all four sides; therefore, the site does not function as a wildlife movement corridor. Project implementation would not interfere 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.

Mitigation Measures: No mitigation measures are required.

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

No Impact. No biological resources are located within the project site. No policies or ordinances would apply to the project pertaining to biological resources, other than Long Beach Municipal Code Chapter 14.28, *Trees and Shrubs*. Chapter 14.28 contains regulations on tree and shrub planting, removal, and maintenance, including the protection of all trees located along the street, alley, court, or other public place during construction activities. Any removal of City trees or plantings within the West Ocean Boulevard right-of-way would be conducted with City approval and would be replaced in accordance with City standards. The project is expected to result in a beneficial impact in regards to landscaping and beautification in the project area, primarily due to the improvements associated with Victory Park within the northern portion of the site.

Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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?***

No Impact. According to the U.S. Fish and Wildlife Service's Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) Planning Areas in Southern California Map[9], the proposed project is not located within a Habitat Conversation Plan or Natural Community Conservation Plan. No other approved local, regional, or state habitat conversation plans apply to the site. Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

[9] U.S. Fish and Wildlife Service's HCP/NCCP Planning Areas in Southern California Map website, http://www.fws.gov/carlsbad/HCPs/documents/CFWO_HCPMapPlanning10_08.pdf, accessed October 8, 2014.

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4.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?			✓	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?		✓		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d. Disturb any human remains, including those interred outside of formal cemeteries?			✓	

a) ***Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?***

Less Than Significant Impact. The proposed project would not result in a substantial adverse change in the significance of a historical resource. The site exists within a highly developed area and the project site has been completely disturbed and graded. In addition, there are no structures on-site. Thus, the project would not have the potential to cause a substantial adverse change in the significance of a historical resource, and no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

b) ***Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?***

Less Than Significant Impact With Mitigation Incorporated. The project exists within a highly developed area and the project site has been completely disturbed and graded. No known archaeological resources exist within the boundaries of the site. However, the site may have a sensitivity to unknown resources due to its proximity to the Los Angeles River and the Pacific Ocean. Although it is not expected that archaeological resources would be encountered during construction due to previous disturbance at the site, the project would require excavation to remove the existing surface parking lot and implement structural foundations and the proposed parking levels. As such, Mitigation Measure CUL-1 is provided in the unlikely event such resources are discovered during the grading and excavation process. Upon implementation of the recommended mitigation measure, impacts would be less than significant.

Mitigation Measures:

CUL-1 If evidence of subsurface archaeological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Long Beach Development Services Department. With direction from the Development Services Department, an archaeologist certified by the County of Los Angeles shall be retained to evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted,

the archaeologist shall collect the resource and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition and extent of the resources), final mitigation recommendations, and cost estimates.

c) ***Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Less Than Significant Impact With Mitigation Incorporated. As noted 4.5(b), the site exists within a highly developed area and the project site has been completely disturbed and graded. No known paleontological resources exist within the boundaries of the site. Although it is not expected that paleontological resources would be encountered during construction, the project would require excavation for project improvements. Thus, ground-disturbing activities could unearth undocumented subsurface paleontological resources. As such, Mitigation Measure CUL-2 is provided in the unlikely event such resources are discovered during the grading and excavation process. Upon implementation of the recommended mitigation measure, impacts would be less than significant.

Mitigation Measures:

CUL-2 If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Long Beach Development Services Department. With direction from the Development Services Department, a paleontologist certified by the County of Los Angeles shall evaluate the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.

d) ***Disturb any human remains, including those interred outside of formal cemeteries?***

Less Than Significant Impact. No conditions exist that suggest human remains are likely to be found on the project site. Due to the level of past disturbance on-site, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or disturbance activities. If human remains are found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendant.” If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains until the County coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be considered less than significant.

Mitigation Measures: No mitigation measures are required.

4.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) 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.				✓
2) Strong seismic ground shaking?		✓		
3) Seismic-related ground failure, including liquefaction?		✓		
4) 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 California Building Code, creating substantial risks to life or property?		✓		
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				✓

The analysis of Geology and Soils is largely based on the findings and recommendations provided in the *Report of Geotechnical Exploration* (*Geotechnical Exploration*), conducted by Leighton and Associates, Inc. in April 2014.[10]

a) ***Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

1) ***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.***

No Impact. Southern California, including the project area, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that

[10] Leighton and Associates, Inc. *Report of Geotechnical Exploration*. Project No. 10594.001. April 11, 2014.

have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone.

According to the *Geotechnical Exploration*, there are no known active faults beneath the site and the site is not within a designated Alquist-Priolo Earthquake Fault Zone. As such, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

2) Strong seismic ground shaking?

Less Than Significant Impact With Mitigation Incorporated. Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for residents and structures, categorized either as primary or secondary hazards. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Primary hazards can also induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

The *Geotechnical Exploration* included a summary of earthquakes occurring for the time period between 1800 and 2012. Within that time frame 1,012 earthquakes were found within a 100-mile radius of the site. Of these earthquakes, the closest was located offshore 1.2 miles south of the site, and occurred on August 4, 1933. Based on its epicentral location, the suspect fault is the Newport-Inglewood Fault Zone (NIFZ) which registered a 4.0 magnitude and induced recorded peak ground acceleration (PGA) of 0.121g. At least five earthquakes with magnitude of 4.9 or greater have been associated with the NIFZ since 1920, including the March 11, 1933 magnitude 6.3 Long Beach earthquake.

As such, the project would be subject to hazards related to strong seismic ground shaking. Based on this potential for ground shaking, the *Geotechnical Exploration* includes numerous design recommendations to ensure an adequate factor of safety in the event of a major seismic event. These design recommendations relate to site earthwork and preparation, grading, foundation design, and the establishment of adequate seismic design parameters under the 2013 California Building Code (CBC). Mitigation GEO-1 incorporates these design recommendations; as such, impacts in this regard would be less than significant.

Mitigation Measures:

GEO-1 Prior to Grading or Building Permit issuance, the Grading and Building Plan, construction contracts, and specifications shall demonstrate compliance with the recommendations set forth in the *Report of Geotechnical Exploration* (Leighton and Associates, April 2014) prepared for the project that pertain to geological hazards. These recommendations pertain to site earthwork and preparation, grading, foundation design, and the establishment of adequate seismic design parameters under the 2013 California Building Code (CBC). The *Report of Geotechnical Exploration* is included in Appendix C of this document and is incorporated by reference into this mitigation measure.

3) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact With Mitigation Incorporated. Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soils to behave as a viscous liquid. Susceptibility to liquefaction is based on geologic and geotechnical data. River channels and floodplains are considered most susceptible to liquefaction, while alluvial fans have a lower susceptibility. Depth to groundwater is another important element in the susceptibility to liquefaction. Groundwater shallower than 30 feet results in high to very high susceptibility to liquefaction, while deeper water results in low and very low susceptibility.

The *Geotechnical Exploration* prepared for the project states that the potential for liquefaction at the project site is low. In addition, Mitigation Measure GEO-1 would implement the various design recommendations incorporated within the *Geotechnical Exploration* to minimize risks related to geological hazards, including liquefaction. Thus, impacts in this regard would be less than significant.

Mitigation Measures: Refer to Mitigation Measure GEO-1. No additional mitigation is required.

4) Landslides?

Less Than Significant Impact. Based on the State of California Seismic Hazard Zones Map for the Long Beach Quadrangle, the project site is not location within an area that has been identified by the State as being potentially susceptible to seismically induced landslides. Furthermore, the Seismic Safety Element of the City's General Plan does not designate the project area as an area with "Relatively Steep Slopes." In addition, the *Geotechnical Exploration* found that geologic conditions do not pose a major constraint related to slope stability for the project. Consequently, there is a low potential for landslides to occur on or near the proposed project site as a result of the proposed development. Therefore, there would be a less than significant impact associated with the exposure of people or structures to potential substantial adverse effects involving landslides.

Mitigation Measures: No mitigation measures are required.

b) *Result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact. The primary concern in regards to soil erosion or loss of topsoil would be during the construction phase of the project. Grading and earthwork activities associated with project construction activities would expose soils to potential short-term erosion by wind and water. All demolition and construction activities within the City would be subject to compliance with the CBC. Further, the project would be subject to compliance with the requirements set forth in the National Pollutant Discharge Elimination System (NPDES) Storm Water General Construction Permit for construction activities; refer to Response 4.9(a). The NPDES Storm Water General Construction Permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP), which would identify specific erosion and sediment control Best Management Practices (BMPs) that would be implemented to protect storm water runoff during construction activities. Compliance with the CBC and NPDES requirements would minimize effects from erosion and ensure consistency with the RWQCB Water Quality Control Plan. Following compliance with City's Municipal Code, the CBC, and NPDES requirements, project implementation would result in a less than significant impact regarding soil erosion.

Mitigation Measures: No mitigation measures are required.

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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

Less Than Significant Impact With Mitigation Incorporated. The proposed project site is located within a seismically-active area. As stated within Response 4.6(a)(3), impacts related to liquefaction would be mitigated to a less than significant level and as demonstrated in Response 4.6(a)(4), the project site would not be subject to earthquake-induced landslides.

According to the *Geotechnical Exploration*, subsidence is not expected to pose a constraint to long term performance of the proposed structures. In addition, due to the low potential for liquefaction at the site, the potential for lateral spreading is also considered low. Mitigation Measure GEO-1 would implement the various design recommendations incorporated within the *Geotechnical Exploration* to minimize risks related to geological hazards. Thus, impacts in this regard would be less than significant.

Mitigation Measures: Refer to Mitigation Measure GEO-1. No additional mitigation is required.

d) ***Be located on expansive soil, as defined in Table 18-1-B of the 2013 California Building Code, creating substantial risks to life or property?***

Less Than Significant Impact With Mitigation Incorporated. Expansive soils are defined as soils possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). According to the *Geotechnical Exploration*, the on-site near surface soils in the surface parking lot area consist predominantly of silty sand to sand. The onsite soils are generally considered to have a low potential for expansion. Furthermore, the project area has been developed with a range of commercial, residential, and institutional uses and has not experienced hazards related to expansive soils. However, as stated, the proposed project would be designed and constructed in accordance with recommendations provided in the *Geotechnical Exploration*, which would minimize any impacts related to expansive soils. Impacts would be considered less than significant upon implementation of Mitigation Measure GEO-1.

Mitigation Measures: Refer to Mitigation Measure GEO-1. No additional mitigation is required.

e) ***Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

No Impact. The project would not involve the use of septic tanks or alternative wastewater disposal systems, and no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 regulations adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

GLOBAL CLIMATE CHANGE

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 400 million tons of carbon dioxide (CO_2) per year.[11] Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century. Methane (CH_4) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO_2, CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO_2 concentrations ranged from 180 to 300 parts per million. For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 parts per million in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range.

REGULATIONS AND SIGNIFICANCE CRITERIA

The Intergovernmental Panel on Climate Change (IPCC) developed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts per million CO_2 equivalent[12] (CO_2eq) concentration is required to keep global mean warming below two degrees Celsius, which in turn is assumed to be necessary to avoid significant levels of climate change.

[11] California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004,* 2006.

[12] Carbon Dioxide Equivalent – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets:

- 2010: Reduce GHG emissions to 2000 levels
- 2020: Reduce GHG emissions to 1990 levels
- 2050: Reduce GHG emissions to 80 percent below 1990 levels

Assembly Bill 32 (AB 32) requires that the California Air Resources Board (CARB) determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons (MT) of CO_2eq ($MTCO_2$eq).

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. In actuality, GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

In June 2008, the California Governor's Office of Planning and Research published a Technical Advisory, which provides informal guidance for public agencies as they address the issue of climate change in *CEQA* documents.[13] This is assessed by determining whether a proposed project is consistent with or obstructs the 39 Recommended Actions identified by CARB in its *Climate Change Scoping Plan* which includes nine Early Action Measures (qualitative approach). The Attorney General's Mitigation Measures identify areas were GHG emissions reductions can be achieved in order to achieve the goals of AB 32. As set forth in the California Governor's Office of Planning and Research Technical Advisory and in the proposed amendments to the *CEQA Guidelines* Section 15064.4, this analysis examines whether the proposed project's GHG emissions are significant based on a qualitative and performance based standard (*CEQA Guidelines* Section 15064.4(a)(1) and (2)).

South Coast Air Quality Management District Thresholds

On December 5, 2008, the SCAQMD adopted GHG significance thresholds for Stationary Sources, Rules, and Plans where the SCAQMD is lead agency. The threshold uses a tiered approach. A proposed project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from Senate Bill 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final *CEQA* document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For industrial stationary source projects, the SCAQMD adopted a screening threshold of 10,000 $MTCO_2$eq per year ($MTCO_2$eq/yr). This threshold was selected to capture 90 percent of the GHG emissions from these types of projects where the combustion of natural gas is the primary source of GHG emissions. The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact. Tier 4 consists of three decision tree options. Under the first option, the proposed project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual (BAU) emissions. Under the second option the proposed project would be excluded if it had early compliance with AB 32 through early implementation of California Air Resources Board's *Climate Change Scoping Plan*

[13] Governor's Office of Planning and Research, *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*, 2008.

measures. Under the third option, the proposed project would be excluded if it met sector based performance standards. However, the specifics of the Tier 4 compliance options were not adopted by the SCAQMD Board in order to allow further time to develop the options and coordinate with CARB's GHG significance threshold development efforts. Tier 5 would exclude projects that implement off-site mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

While not adopted by the SCAQMD Board, the guidance document prepared for the stationary source threshold also suggested the same tiered approach for residential and commercial projects with a 3,000 $MTCO_2eq/yr$ screening threshold. However, at the time of adoption of the industrial stationary source threshold, the SCAQMD felt additional analysis was required along with coordination with CARB's GHG significance threshold development efforts.

At the November 2009 meeting of the SCAQMD GHG working group, SCAQMD staff presented two options for screening thresholds for residential and commercial projects. The first option would have different thresholds for specific land uses. The proposed threshold for residential projects is 3,500 $MTCO_2eq/yr$, the commercial threshold is 1,400 $MTCO_2eq/yr$, and the mixed-use threshold is 3,000 $MTCO_2eq/yr$. The second option would apply the 3,000 $MTCO_2eq/yr$ screening threshold for all commercial/residential projects. Lead agencies would be able to select either option. These thresholds are based on capturing 90 percent of the emissions from projects and requiring them to comply with the higher tiers of the threshold (i.e., performance requirements or GHG reductions outside of the project) to not result in a significant impact.

SCAQMD staff also presented updates for compliance options for Tier 4 of the significance thresholds. The first option would be a reduction of 23.9 percent in GHG emissions over the base case. This percentage reduction represents the land use sector portion of the CARB's *Climate Change Scoping Plan's* overall reduction of 28 percent. This target would be updated as the AB 32 *Climate Change Scoping Plan* is revised. The base case scenario for this reduction still needs to be defined. Residual emissions would need to be less than 25,000 $MTCO_2eq/yr$ to comply with the option. Staff proposed efficiency targets for the third option of 4.6 $MTCO_2eq/yr$ per service population (population plus employment) for project level analysis and 6.6 $MTCO_2eq/yr$ for plan level analyses. For project level analyses, residual emissions would need to be less than 25,000 $MTCO_2eq/yr$ to comply with this option.

At the most recent meeting of the SCAQMD GHG working group, SCAQMD staff recommended extending the 10,000 $MTCO_2eq/yr$ industrial project threshold for use by all lead agencies. The two options for land-use thresholds were reiterated with a recommendation that lead agencies use the second, 3,000 $MTCO_2eq/yr$ threshold for all non-industrial development projects. Staff indicated that they would not be recommending a specific approach to address the first option of Tier 4, Percent Emissions Reduction Target. If lead agencies enquire about using this approach staff will reference the approach recommended by the San Joaquin Valley Air Pollution Control District and describe the challenges to using this approach. For the third option of Tier 4, SCAQMD staff re-calculated the recommended Tier 4 efficiency targets for project level analyses to 4.8 $MTCO_2eq/yr$ in 2020 and 3.0 $MTCO_2eq/yr$ in 2035. The recommended plan level analysis efficiency target remains 6.6 $MTCO_2eq/yr$ for 2020, but was lowered to 4.1 $MTCO_2eq/yr$ for 2035. SCAQMD staff also stated that they are no longer proposing to include a 25,000 $MTCO_2eq/yr$ maximum emissions requirement for compliance with Tier 4. Staff indicated that they hoped to bring the proposed GHG significance thresholds to the board for their December 2010 meeting; however, this did not occur.

For the proposed project, the 3,000 $MTCO_2eq/yr$ non-industrial screening threshold is used as the significance threshold in addition to the qualitative thresholds of significance set forth below from Section VII of *CEQA Guidelines* Appendix G.

City of Long Beach Sustainable City Action Plan

On February 2, 2010, the City adopted the Long Beach Sustainable City Action Plan (Plan). The Plan is intended to guide operational, policy, and financial decisions to create a more sustainable Long Beach, and includes seven chapters: Buildings and Neighborhoods, Energy, Green Economy and Lifestyle, Transportation, Urban Nature, Waste Reduction, and Water.

City of Long Beach Green Building Standards Code

According to Chapter 18.47 of the LBMC, "The City Council adopts and incorporates…the 2013 Edition of the California Green Building Standards Code, excluding sections, chapters, or appendices pursuant Section 18.47.040 [Appendices A4, A4, and A6.1]."

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant Impact. The proposed project would result in direct and indirect emissions of CO_2, CH_4, and N_2O, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct proposed project-related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from electricity consumption, water demand, and solid waste generation. Operational GHG estimations are based on energy emissions from natural gas usage and automobile emissions. The California Emissions Estimator Model (CalEEMod) relies upon trip data within the *Traffic Impact Analysis* prepared by RBF Consulting and project-specific land use data to calculate emissions. The proposed project includes the development of 216 residential units and 406 parking stalls. Table 4.7-1, *Estimated Greenhouse Gas Emissions*, presents the estimated CO_2, CH_4, and N_2O emissions of the proposed project. The CalEEMod outputs are contained within the Appendix B, *Air Quality/Greenhouse Gas Data*.

Table 4.7-1
Estimated Greenhouse Gas Emissions

Source	CO_2	CH_4		N_2O		Total $MTCO_2eq/yr$[3]
	MT/yr[1]	MT/yr[1]	$MTCO_2eq/yr$[2]	MT/yr[1]	$MTCO_2eq/yr$[2]	
Construction (amortized over 30 years)	73.19	0.02	0.50	0.00	0.00	73.69
Area Source	18.09	0.07	1.80	0.00	0.00	19.89
Energy	476.99	0.02	0.50	0.00	0.00	477.49
Mobile Source	2,151.00	0.09	2.30	0.00	0.00	2,153.3
Waste	20.17	1.19	29.80	0.00	0.00	49.97
Water Demand	85.11	0.46	11.50	0.01	3.00	99.61
Total Proposed Project-Related Emissions[3]	***2,873.95 $MTCO_2eq/yr$***					

Notes:
1. Emissions calculated using California Emissions Estimator Model.
2. Carbon dioxide equivalent values calculated using the United States Environmental Protection Agency Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/cleanenergy/energy-resources/calculator.html, accessed May 2013.
3. Totals may be slightly off due to rounding.

Refer to Appendix B, *Air Quality/Greenhouse Gas Data*, for detailed model input/output data.

Direct Proposed Project-Related Sources of Greenhouse Gases

Construction Emissions. Construction GHG emissions are typically summed and amortized over the lifetime of a project (assumed to be 30 years), then added to the operational emissions.[14] As seen in Table 4.7-1, the proposed project would result in 73.69 $MTCO_2eq/yr$ (amortized over 30 years).

Area Source. Area source emissions were calculated using CalEEMod and project-specific land use data. As noted in Table 4.7-1, the proposed project would result in 19.89 $MTCO_2eq/yr$ of area sources GHG emissions.

Mobile Source. CalEEMod relies upon trip data within the *Traffic Impact Analysis* and project specific land use data to calculate mobile source emissions. The proposed project would directly result in 2,153.3 $MTCO_2eq/yr$ of mobile source-generated GHG emissions; refer to Table 4.7-1.

Indirect Proposed Project-Related Sources of Greenhouse Gases

Energy Consumption. Energy consumption emissions were calculated using CalEEMod and project-specific land use data. Electricity would be provided to the project site via Southern California Edison. The proposed project would indirectly result in 477.49 $MTCO_2eq/yr$ due to energy consumption; refer to Table 4.7-1.

Water Demand. The proposed project's operations would result in a demand of approximately 19.3 million gallons of water per year. Emissions from indirect energy impacts due to water supply would result in 99.61 $MTCO_2eq/yr$; refer to Table 4.7-1.

Solid Waste. Solid waste associated with operations of the proposed project would result in 49.97 $MTCO_2eq/yr$; refer to Table 4.7-1.

Total Proposed Project-Related Sources of Greenhouse Gases

As shown in Table 4.7-1, the total amount of proposed project-related BAU GHG emissions from direct and indirect sources combined would total 2,873.95 $MTCO_2eq/yr$.

Although the proposed project's GHG emissions are below the 3,000 $MTCO_2eq/yr$ GHG threshold, the proposed project includes design features that would further reduce project-related GHG emissions. The proposed project would comply with *Title 24* requirements as well as the *California Green Building Code* standards. The project proposes to install energy efficient lighting and appliances throughout the project site. Light colored roofs and pavements would be incorporated into the project design. Additionally, the proposed project would install water efficient irrigation systems and landscapes, as well as incorporate water reducing features and fixtures into the buildings. Recycling bins would be provided in public areas throughout the project site. Due to the project site's location, existing public transportation options (bus service) are in proximity to the project site. The project site is served by Long Beach Transit (LBT) bus service, with multiple stops throughout the Downtown Shoreline area, including 27 bus stops within a 0.25-mile radius of the project site. The project would also include sidewalks along the entire site perimeter that would facilitate additional pedestrian use within the vicinity.

[14] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (http://www.aqmd.gov/hb/2008/December/081231a.htm).

Furthermore, the location of the project site within the Downtown Shoreline area enables on-site residents to be within walking distance to several services, thereby reducing daily vehicle trips.

Conclusion

As shown in Table 4.7-1, operational-related BAU emissions would be 2,873.95 $MTCO_2eq/yr$, which are below the 3,000 $MTCO_2eq/yr$ threshold. The proposed project's energy, transportation, water, and solid waste efficiency design features would further reduce project-related GHG emissions. Therefore, the proposed project would result in a less than significant impact with regard to GHG emissions.

Mitigation Measures: No mitigation measures are required.

b) ***Conflict with an applicable plan, policy, or regulations adopted for the purpose of reducing the emissions of greenhouse gases?***

Less Than Significant Impact. The City adopted its Sustainable City Action Plan (CAP) in February 2010 to guide operational, policy, and financial decisions within the City. While the CAP provides a sustainable framework for future developments within the City, the goals outlined in the City's CAP are primarily municipal in nature, and not project-specific. As discussed above, the project's operational-related BAU emissions would not exceed the 3,000 $MTCO_2eq/yr$ threshold. Furthermore, the project would include design features to would reduce GHG emissions from transportation, solid waste, water, and energy consumption. These design features are consistent with the City's CAP policies and goals, and would therefore not conflict with the City's efforts to reduce GHG emissions. Thus, a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact. Substantial risks associated with hazardous materials are not typically associated with residential and commercial uses. Minor cleaning products along with the occasional use of pesticides and herbicides for landscape maintenance of the project site are generally the extent of hazardous materials that would be routinely utilized on-site. Thus, as the presence and on-site storage of these materials are common for residential/commercial uses, impacts in this regard are less than significant.

Limited amounts of some hazardous materials could be used in the short-term during construction of the project, including standard construction materials (e.g., paints and solvents), vehicle fuel, and other hazardous materials. The routine transportation, use, and disposal of

these materials would be required to adhere to State and local standards and regulations for handling, storage, and disposal of these hazardous substances. With compliance with the existing State and local procedures that are intended to minimize potential health risks associated with their use or the accidental release of such substances, impacts associated with the handling, storage, and transport of these hazardous materials would be less than significant.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

No structures would be demolished as part of the proposed project, thus minimizing the potential for encountering asbestos-containing materials or lead-based paints. Construction activities associated with the project are not of the scope or nature to result in a significant impact related to foreseeable upset or accident related to hazardous materials.

Mitigation Measures: No mitigation measures are required.

c) ***Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

No Impact. The nearest school to the project site is the Cesar Chavez Elementary School, located approximately 0.45 miles northwest of the project site at 730 West 3rd Street. Project implementation is not anticipated to emit hazardous emissions or handle significant amounts of hazardous materials within 0.25-mile of an existing or proposed school. No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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?***

No Impact. Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) to compile and update a regulatory sites listing (per the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code. Section 65962.5 requires

the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations (CCR), to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

No public drinking water wells or solid waste facilities, operations, or disposal sites are located within the boundaries of the project site. The project site is also not listed in databases maintained by the SWRCB and DTSC and is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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?***

No Impact. The nearest airport to the project site is the Long Beach Airport, located approximately 3.75 miles to the northeast of the project site at 4100 Donald Douglas Drive. In addition, the project site is located outside of the Long Beach Airport Influence Area.[15] Therefore, no impact would occur.

Mitigation Measures: No mitigation measures are required.

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

No Impact. There are no private airstrips located within the vicinity of the proposed project, and no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

g) ***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Less Than Significant Impact. The proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Project construction activities could result in short-term temporary impacts to street traffic on Ocean Boulevard and Seaside Way to allow for construction of the proposed onsite improvements and ancillary utility connections. While temporary lane closures may be required, travel along surrounding roadways would remain open and would not interfere with emergency access in the site vicinity. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

[15] Los Angeles County Airport Land Use Commission. *Long Beach Airport, Airport Influence Area Map*. May 13, 2003.

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

No Impact. The proposed project site is located within a completely urbanized area that is void of any wildland areas. Thus, no impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4.9 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			✓	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or 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 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, which would result in flooding on- or off-site?			✓	
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
f. Otherwise substantially degrade water quality?			✓	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			✓	
h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?			✓	
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?			✓	

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

Less Than Significant Impact. As part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has established regulations under the NPDES program to control direct storm water discharges. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The City of Long Beach is within the jurisdiction of the Los Angeles RWQCB (LARWQCB).

Short-Term Construction

Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a SWPPP. The SWPPP would contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP would list BMPs the discharger would use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP would contain: a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

The project's construction activity would be subject to the State's General Construction Permit, as discussed above, because it involves clearing, grading, and disturbances to the ground such as stockpiling or excavation, and a construction site with 1.0 acre or greater of soil disturbance. More specifically, as part of the project's compliance with NPDES requirements, the project applicant would be required to prepare a Notice of Intent (NOI) for submittal to the Los Angeles RWQCB providing notification of intent to comply with the General Construction Permit. Additionally, the project applicant is required to prepare a SWPPP, which would be reviewed/approved by the City (or designee), for water quality construction activities on-site. A copy of the SWPPP would be made available and implemented at the construction site at all times. The SWPPP is required to outline the erosion, sediment, and non-storm water BMPs, in order to minimize the discharge of pollutants at the construction site. These BMPs would include measures to contain runoff from vehicle washing at the construction site, prevent sediment from disturbed areas from entering the storm drain system using structural controls (i.e., sand bags at inlets), and cover and contain stockpiled materials to prevent sediment and pollutant transport. Implementation of the BMPs would ensure runoff and discharges during the project's construction phase would not violate any water quality standards. Compliance with NPDES requirements would reduce short-term construction-related impacts to water quality to a less than significant level.

Long-Term Operations

The project would be regulated under the NPDES Phase I Municipal Stormwater Permits issued by the Los Angeles RWQCB for Long Beach.

Los Angeles RWQCB Requirements for Long Beach

Since 1990, operators of municipal separate storm sewer systems are required to develop a stormwater management program designed to prevent harmful pollutants from impacting water resources via stormwater runoff. The City of Long Beach owns and/or operates a large municipal separate storm sewer system (MS4) that conveys and ultimately discharges into

surface waters under the jurisdiction of the Los Angeles RWQCB. These discharges originate as surface runoff from the various land uses within the City's boundary. Untreated, these discharges contain pollutants with the potential to impair or contribute to the impairment of the beneficial uses in surface waters. Since 1999, the City's monitoring data and analyses in support of Total Maximum Daily Load (TMDL) development have identified pollutants of concern in discharges from the MS4. These pollutants of concern vary by receiving water. They generally include, but are not limited to, copper, lead, zinc, cadmium, PCBs, PAHs, pyrethroid pesticides, organophosphate pesticides fecal indicator bacteria, and trash.

On March 28, 2014, the Los Angeles RWQCB made effective Order No. R4-2014-0024, which renews the municipal NPDES permit. As prescribed in Order No. R4-2014-0024, *Water Discharge Requirements for Municipal Separate Storm Sewer System Discharges From The City of Long Beach*, the City of Long Beach shall develop and implement procedures to ensure that a discharger fulfills the following for non-storm water discharges to MS4s:[16]

- Notifies the City of Long Beach of the planned discharge in advance, consistent with requirements in Table 7 of Order No. R4-2014-0024 or recommendations pursuant to the applicable BMP manual;
- Obtains any local permits required by the City of Long Beach;
- Provides documentation to the City of Long Beach that it has obtained any other necessary permits of water quality certifications for the discharge;
- Conducts monitoring of the discharge, if required by the City of Long Beach;
- Implements BMPs and/or control measures as specified in Table 7 or in the applicable BMP manual(s) as a condition of the approval to discharge into the MS4; and
- Maintains records of its discharge to the MS4, consistent with requirements in Table 7 or recommendations pursuant to the applicable BMP manual.

In 2001, the City revised its Long Beach Storm Water Management Program (LBSWMP). The LBSWMP is a comprehensive program containing several elements, practices, and activities aimed at reducing or eliminating pollutants in storm water to the maximum extent possible. Furthermore, the City's NPDES and Standard Urban Storm Water Mitigation Plan (SUSMP) regulations contained in Chapter 18.61 of the LBMC state that:

A. The Building Official shall prepare, maintain, and update, as deemed necessary and appropriate, the NPDES and SUSMP Regulations Manual and shall include technical information and implementation parameters, alternative compliance for technical infeasibility, as well as other rules, requirements and procedures as the City deems necessary, for implementing the provisions of this chapter.

B. The Building Official shall develop, as deemed necessary and appropriate, in cooperation with other City departments and stakeholders, informational bulletins, training manuals and educational materials to assist in the implementation of this chapter.

[16] Los Angeles Regional Water Quality Control Board. *Order No. R4-2014-002, NPDES Permit No, CAS004003*. March 28, 2014.

While implementation of the proposed project has the potential to increase impervious surfaces beyond existing conditions, compliance with the requirements of the NPDES, SUSMP, Order No. R4-2014-0024, the City's LBSWMP, would minimize the potential for the proposed project to violate water quality standards or waste discharge requirements during long-term operations. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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)?***

Less Than Significant Impact. The proposed project site exists within a completely developed, urbanized area. According to the Seismic Safety Element of the City's General Plan, the project site's depth to groundwater is approximately 20 feet. The site does not currently affect groundwater directly (through pumping, wells, or injection), nor would the proposed project include any components that would directly affect groundwater.

However, the proposed project would result in an indirect impact to groundwater recharge since the project has the potential to increase impervious surfaces in comparison to existing conditions. Though this increase in impervious surface area may result in a slight decrease in absorption, this impact would not have the capacity to result in a net deficit in aquifer volume or lowering of the groundwater table. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Soil disturbance would temporarily occur during project construction due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, and grading. Disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project site.

The project would be subject to compliance with the requirements set forth in the NPDES Storm Water General Construction Permit for construction activities; refer to Response 4.9(a). Compliance with the NPDES, including preparation of a SWPPP would reduce the volume of sediment-laden runoff discharging from the site. Therefore, project implementation would not substantially alter the existing drainage pattern of the site during the construction process such that substantial erosion or siltation would occur.

The project would include the development of a 216-unit multi-family/mixed-use apartment complex. Given the nature of the proposed use and the urbanized project setting, long-term operation of the project would not have the potential to result in substantial erosion or siltation off-site. The project would maintain existing drainage patterns onsite, and would direct flows in a southerly direction towards Seaside Way towards an existing 72-inch reinforced concrete pipe (RCP) within the roadway. The project would not include large areas of exposed soils that

would be subject to runoff; rather, any unpaved areas would be improved with groundcover and landscaping to minimize the potential for erosion/siltation. In addition, as stated within Response 4.9(a), the project would also be subject to existing requirements of the NPDES, SUSMP, Order No. R4-2014-0024, and the City's LBSWMP. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The project site is generally flat and is located within an urbanized area. The project would implement a multi-family residential and mixed-use building, which would not require a substantial change in topography of the project site. Although the project has the potential to increase impervious surfaces over existing conditions, this increase would not result in flooding on- or off-site given the existing developed nature of the area and storm drain infrastructure in the vicinity. The majority of the existing project site is paved and utilized as a surface parking lot, and the project is not expected to result in substantial changes to drainage patterns or substantially increase surface runoff.

In addition, according to the Seismic Safety Element of the City's General Plan, the project site is not located in a "Flood Influence Area." As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. As noted in Response 4.9(d), the project area is generally flat, paved, and is utilized as a surface parking lot. While the proposed residential/mixed-use project may result in an increase in impervious surfaces beyond existing conditions, this increase would be minimal and is not expected to exceed the capacity of existing/planned storm water drainage systems. Adequate storm water drainage capacity is available for the project, as it would include on-site facilities that would direct flows to two 18-inch storm drains that connect to an existing 72-inch RCP within Seaside Way.

The project would not result in a substantial change in topography that would alter or change flow patterns in the project area. In addition, as depicted in Exhibit 2-6, the project would incorporate landscaping within the northern portion of the project site that would assist in reducing the amount of storm water traveling off-site. Impacts related to potential polluted runoff from the site are discussed in Response 4.9(a), above. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

f) ***Otherwise substantially degrade water quality?***

Less Than Significant Impact. The proposed project involves a residential/mixed-use development, which due to its scope and nature, would not otherwise substantially degrade water quality. Refer to Response 4.9(a). Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the project area, the project site is located within "Zone X", within an area protected by levees from the one percent annual chance flood.[17] Since this project area is outside of the 100-year flood hazard area, no impacts would result in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. As stated above in Response 4.9(g), the project site is located outside of the 100-year flood hazard area. Thus, a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. The failure of structures that might cause flooding, are dikes in the waterfront area of the City, flood-control dams upstream from the City, flood control dikes along river courses that pass through the City, and large water tanks. In the low-lying and harbor areas, two criteria have been established with respect to the potential seismic hazard reflected by dike failure. Areas that are at or below seas level, Mean Lower Low Water (MLLW) are considered most susceptible, and areas up to 5 feet above MLLW sea level are considered vulnerable for flooding at high tide levels.

Four major flood control dams lie upstream from the City. The Sepulveda Basin and Hansen Basin Flood-Control facilities both lie more than 30 miles upstream from the City on the Los Angeles River. The intervening ground though this reach is generally low and flat. Therefore, much of the flood waters, resulting from the failure of a levee or dam, would be expected to dissipate before reaching the City. However, based on Flood Inundation Maps prepared by the U.S. Army Corps of Engineers and the Seismic Safety Element of the City's General Plan, a failure of the Hansen Dam could cause extensive flooding in the northern and western portions of the City.

[17] Federal Emergency Management Agency, *Flood Insurance Rate Map #06037C1964F*. Effective Date, September 26, 2008.

The Whittier Narrows and the Santa Fe Basins lie 12 miles and 20 miles, respectively, above the northern boundary of the City. The Whittier Narrows Dam is responsible for control of both the San Gabriel and Rio Hondo rivers, and the Santa Fe Dam provides major control for the San Gabriel River. The San Gabriel River course runs along the eastern side of the City. The Rio Hondo River joins the Los Angeles River about five miles north of the City, which runs along the western side of the City. According to the Seismic Safety Element of the City's General Plan, in the event of a failure of the Whittier Narrows Dam, flooding would be most severe on the eastern portion of the City.

Because these dams impound water only during periods of infrequent high, seasonal precipitation, the probability of flooding due to coincidentally seismic induced or structural failure of these dams is considered very low. Furthermore, as stated in Response 4.9(d), the project site is not located in a flood influence area according to the Seismic Safety Element of the City's General Plan. Therefore, impacts in this regard would be less than significant for the project area.

Mitigation Measures: No mitigation measures are required.

j) *Inundation by seiche, tsunami, or mudflow?*

Less Than Significant Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. Due to the relatively flat and urbanized nature of the project area, mudflows are not anticipated to occur.

The project site is located within 0.5 miles of the Port of Long Beach and the Pacific Ocean. Due to the presence of the Palos Verdes Peninsula, Channel Islands, and the harbor breakwater, the City's coastline and harbor are somewhat protected (especially to the north and the west). However, due to the more open exposure to the south, the harbor and coastline are more vulnerable to tsunamis generated in the South Seas and offshore southern California. Published estimates of recurrence intervals indicate maximum wave heights of three to six feet for 50 and 100 year recurrence intervals.[18] Such events are not expected to cause major damage to on-shore features. According to the Seismic Safety Element of the City's General Plan, the project site is located within a "Tsunami and Seiche Influence Area." Furthermore, the State of California Tsunami Inundation Map for Emergency Planning for the Long Beach Quadrangle, the project site is situated within the tsunami inundation line.[19] However, the *Geotechnical Exploration* prepared by Leighton and Associates states that the amount of seaward development of the low lying harbor areas, the outer harbor, breakwater and coastal strand are expected to take the brunt of any large tsunami wave; therefore, the potential for a tsunami or seiche to affect the project site are considered low.[20] Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

[18] City of Long Beach General Plan. *Seismic Safety Element*. October 1988.
[19] California Geological Survey. *Tsunami Inundation Map for Emergency Planning*. Long Beach 7.5 Minute Quadrangl, Scale 1:24,000. March 2009.
[20] Leighton and Associates, Inc. *Report of Geotechnical Exploration*. Project No. 10594.001. April 11, 2014.

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4.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

a) ***Physically divide an established community?***

Less Than Significant Impact. The project site currently consists of a surface parking lot and is surrounded by residential, commercial, retail, and institutional uses. As noted above, the project site is designated as a Mixed Use District (LUD No. 7) in the City's General Plan, and is zoned PD-6, Subarea 4. The General Plan designation and zoning code enable flexible development plans for a compatible mix of land uses, and allows for planned commercial areas, business parks, and a variety of housing styles and densities. The project would be consistent with both the General Plan designation and zoning code.

The project would be consistent with the range of existing uses in the project area, and would not represent a feature capable of physically dividing an established community, and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

b) ***Conflict with 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, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

Less Than Significant Impact. As noted above, the City's General Plan designates the project site as a Mixed Use District (LUD No. 7). A combination of land uses intended for this district include, but are not limited to, employment centers such as retail, offices, medical facilities; high density residences; visitor-serving facilities; personal and professional services; or recreational facilities. No amendment to the General Plan would be required as part of the project; thus, the project is fully consistent and no conflicts with the General Plan would occur.

The City's Zoning Ordinance designates the project site as PD-6, Subarea 4. The PD designation allows for flexible development plans to be prepared for areas of the City which may benefit from the formal recognition of unique or special land uses and the definition of special design policies and standards not otherwise possible under conventional zoning district regulations. Purposes of the planned development district include permitting a compatible mix

of land uses, allowing for planned commercial areas and business parks, and encouraging a variety of housing styles and densities. As such, the project is consistent with the City's Zoning Ordinance and no conflicts would occur.

The project site is also subject to the City's Local Coastal Program (LCP). According to the City's LCP, the project site is located within the Downtown Shoreline, Subarea 4, which permits mixed-use developments of residential, office, retail, hotel and ancillary, supportive, and complimentary uses.[21] High-density residential uses are permitted with as much as 100 dwelling units per acre, but not to exceed 1,000 new residential units. While the project proposes to develop 216 residential dwelling units on a 1.76-acre lot (exceeding the permitted density in Subarea 4), the density limitation of 100 dwelling units per acre applies to the entirety of Subarea 4, and not the project site. Approval of this project, plus all other pending Subarea 4 projects, would not result in a subarea density exceeding 100 residential dwelling units per acre, or 1,000 new residential units. Thus, the project is conforming to the density standards of the LCP, and would be consistent with the permitted land uses. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

c) ***Conflict with any applicable habitat conservation plan or natural community conservation plan?***

No Impact. As noted in Response 4.4(f), above, the proposed project is not within or near any applicable conservation plan or natural community conservation plan, and no impacts would occur. Therefore, no mitigation measures are required.

Mitigation Measures: No mitigation measures are required.

[21] City of Long Beach General Plan. *Local Coastal Program*. July 1980.

4.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

a) ***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?***

No Impact. Historically, the primary mineral resources with the City has been oil and natural gas. However, oil and natural gas extraction have diminished over the last century as the resources have become depleted. Today, extraction operations continue, but on a reduced scale compared to past levels. No oil, gas, or mineral resources extraction occur in the vicinity of the project site. Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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?***

No Impact. Refer to Response 4.11(a).

Mitigation Measures: No mitigation measures are required.

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4.12 NOISE

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air, and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately three dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between three dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface an d the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of three dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound.

Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 PM and 7:00 AM. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.

REGULATORY FRAMEWORK

City of Long Beach

Municipal Code

The City's standards for governing environmental noise are set forth in Chapter 8.80 (Noise) of the LBMC. According to the LBMC, the project site is located within Receiving Land Use District Two. Table 4.12-1, *Long Beach Noise Limits*, summarizes the exterior and interior noise limits for the City's Receiving Land Use District Two.

Table 4.12-1
Long Beach Noise Limits

Land Use District	Exterior		Interior	
	Exterior Noise Level (Leq) 7 AM to 10 PM	Exterior Noise Level (Leq) 10 PM to 7 AM	Interior Noise Level (Leq) 7 AM to 10 PM	Interior Noise Level (Leq) 10 PM to 7 AM
District Two	60	55	45	35

Note: No person shall operate or cause to be operated any source of sound at any location within the incorporated limits of the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measures from any other property to exceed:

1. The noise standard for that land use district as specified in Table 4.12-1 for a cumulative period of more than thirty (30) minutes in any hour; or
2. The noise standard plus five (5) decibels for a cumulative period of more than fifteen (15) minutes in any hour; or
3. The noise standard plus ten (10) decibels for a cumulative period of more than five (5) minutes in any hour; or
4. The noise standard plus fifteen (15) decibels for a cumulative period of more than one (1) minute in any hour; or
5. The noise standard plus twenty (20) decibels or the maximum measured ambient, for any period of time.

Source: City of Long Beach Municipal Code, Section 8.80.160 and Section 8.80.170. 1977.

Section 8.80.202, *Construction Activity – Noise Regulations*, of the LBMC specifies the following construction-related noise standards:

> *The following regulations shall apply only to construction activities where a building or other related permit is required or was issued by the Building Official and shall not apply to any construction activities within the Long Beach harbor district as established pursuant to Section 201 of the City Charter.*
>
> *A. Weekdays and federal holidays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of 7:00 PM and 7:00 AM the following day on weekdays,*

except for emergency work authorized by the Building Official. For purposes of this Section, a federal holiday shall be considered a weekday.

B. Saturdays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of 7:00 PM on Friday and 9:00 AM on Saturday and after 6:00 PM on Saturday, except for emergency work authorized by the Building Official.

C. Sundays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity at any time on Sunday, except for emergency work authorized by the Building Official or except for work authorized by permit issued by the Noise Control Officer.

D. Owner's/employer's responsibility. It is unlawful for the landowner, construction company owner, contractor, subcontractor or employer of persons working, laboring, building, or assisting in construction to permit construction activities in violation of provisions in this Section.

E. Sunday work permits. Any person who wants to do construction work on a Sunday must apply for a work permit from the Noise Control Officer. The Noise Control Officer may issue a Sunday work permit if there is good cause shown; and in issuing such a permit, consideration will be given to the nature of the work and its proximity to residential areas. The permit may allow work on Sundays, only between 9:00 AM and 6:00 PM, and it shall designate the specific dates when it is allowed.

SIGNIFICANCE OF CHANGES IN TRAFFIC NOISE

An off-site traffic noise impact typically occurs when there is a discernible increase in traffic and the resulting noise level exceeds an established noise standard. In community noise considerations, changes in noise levels greater than 3 dB are often identified as substantial, while changes less than 1 dB will not be discernible to local residents. In the range of 1 to 3 dB, residents who are very sensitive to noise may perceive a slight change. In laboratory testing situations, humans are able to detect noise level changes of slightly less than 1 dB. However, this is based on a direct, immediate comparison of two sound levels. Community noise exposures occur over a long period of time and changes in noise levels occur over years (rather than the immediate comparison made in a laboratory situation). Therefore, the level at which changes in community noise levels become discernible is likely to be some value greater than 1 dB, and 3 dB is the most commonly accepted discernible difference. A 5 dB change is generally recognized as a clearly discernible difference.

As traffic noise levels at sensitive uses likely approach or exceed the applicable land use compatibility standard (refer to Table 4.12-1), a 3 dB increase as a result of the project is used as the increase threshold for the project. Thus, a project would result in a significant noise impact when a permanent increase in ambient noise levels of 3 dB occur upon project implementation and the resulting noise level exceeds the applicable exterior standard at a noise sensitive use.

EXISTING CONDITIONS

Stationary Sources

The project area is highly urbanized, consisting of primarily commercial and residential uses. The primary sources of stationary noise in the project vicinity are urban-related activities (i.e., mechanical equipment, parking areas, and pedestrians). The noise associated with these sources may represent a single-event noise occurrence, short-term or long-term/continuous noise.

Mobile Sources

The majority of the existing noise in the project area is generated from vehicle sources along Ocean Boulevard, Pine Avenue, Shoreline Drive, and Seaside Way. As shown in Table 4.12-2, *Existing Traffic Noise Levels*, mobile noise sources in the vicinity of the project site range from 54.0 to 62.9 dBA.

Mobile source noise was modeled using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108), which incorporates several roadway and site parameters. The model does not account for ambient noise levels. Noise projections are based on modeled vehicular traffic as derived from the *Traffic Impact Analysis* prepared by RBF Consulting. A 25-mph, 30-mph, 40-mph average vehicle speed was assumed for existing conditions based on empirical observations and posted maximum speeds along the roadway segments. Average daily traffic estimates were obtained from the *Traffic Impact Analysis*. Existing modeled traffic noise levels are shown in Table 4.12-2.

Table 4.12-2
Existing Traffic Noise Levels

Roadway Segment	Existing Conditions				
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour
Ocean Boulevard					
Golden Shore to Magnolia Avenue	33,600	62.9	171	79	37
Magnolia Avenue to Pacific Avenue	32,500	62.8	167	77	36
Pacific Avenue to Existing Driveway	31,900	62.7	165	76	35
Existing Driveway to Pine Avenue	31,900	62.7	165	76	35
Pine Avenue to Locust Avenue	31,000	62.6	162	75	35
Locust Avenue to Long Beach Boulevard	31,500	62.7	163	76	35
Long Beach Boulevard to Alamitos Avenue	33,200	62.9	169	79	36
Pine Avenue					
Broadway to Ocean Boulevard	6,400	55.7	56	26	12
Ocean Boulevard to Seaside Way	8,700	57.1	69	32	15
Seaside Way to Shoreline Drive	4,300	54.0	43	20	9
Shoreline Drive					
Chestnut Place to Pine Avenue	14,500	59.3	97	45	21
Seaside Way					
Pine Avenue to Project Entrance	6,100	55.5	55	25	12
Project Entrance to Project Exit	6,100	55.5	55	25	12

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

Noise Measurements

In order to quantify existing ambient noise levels in the project area, RBF Consulting collected noise measurements at four different locations. The noise measurement locations are summarized in Table 4.12-3, *Noise Measurement Locations*.

Table 4.12-3
Noise Measurement Locations

Site No.	Approximate Location	Land Use Description	Approximate Distance to Project Boundary (feet)
1	West of the project site between Cedar Avenue and Pacific Avenue	Multi-family residential, courtyard, cafe	275
2	Northern portion of project site along Ocean Boulevard	Victory Park, bus stop, public right-of-way	0
3	Along South Pine Avenue, north of Bay Street	Retail, restaurants	470
4	Center of Project Site	Surface parking lot	0

Source: RBF Consulting, October 2014.

Table 4.12-4, *Noise Measurements*, summarizes the ambient noise levels collected at the four measurement locations on October 16, 2014, between 11:00 AM and 12:30 PM. Based on field observations, the ambient noise in the vicinity of the project site is dominated by local passenger vehicles, medium and heavy trucks, public transportation (buses), and pedestrians.

Table 4.12-4
Noise Measurements

Site No.	Time Period (10 Minute Intervals)	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	Peak (dBA)
1	11:27 AM – 11:37 AM	53.5	47.4	67.5	88.6
2	11:42 AM – 11:52 AM	62.6	53.9	75.6	99.3
3	12:05 PM – 12:15 PM	61.5	51.6	73.8	97.0
4	12:20 PM – 12:30 PM	56.6	49.3	74.6	56.6

Source: RBF Consulting, October 16, 2014.

Meteorological conditions were slightly overcast skies, approximately 75 degrees Fahrenheit temperatures, with light wind speeds (2 to 4 miles per hour), and low humidity. Measured noise levels during the daytime measurements were 53.5, 62.6, 61.5, and 56.6 dBA L_{eq}. Noise monitoring equipment used for the ambient noise measurements consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for Type I (precision) sound level meters. The results of the field measurements are included in Appendix D, *Noise Data*.

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?***

Less Than Significant Impact With Mitigation Incorporated.

Short-Term Construction

Construction of the proposed project would include site preparation, building construction, and paving. Ground-borne noise and other types of construction-related noise impacts would typically occur during the initial construction phases. These phases of construction have the potential to create the highest levels of noise. Typical noise levels generated by construction equipment are shown in Table 4.12-5, *Maximum Noise Levels Generated by Construction Equipment*. It should be noted that the noise levels identified in Table 4.12-5 are maximum sound levels (L_{max}), which are the highest individual sound occurring at an individual time period. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

Table 4.12-5
Maximum Noise Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor[1]	L_{max} at 50 Feet (dBA)
Concrete Saw	20	90
Crane	16	81
Concrete Mixer Truck	40	79
Backhoe	40	78
Dozer	40	82
Excavator	40	81
Forklift	40	78
Paver	50	77
Roller	20	80
Tractor	40	84
Water Truck	40	80
Grader	40	85
General Industrial Equipment	50	85

Note:
1 – Acoustical use factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.
Source: Federal Highway Administration, *Roadway Construction Noise Model (FHWA-HEP-05-054)*, dated January 2006.

Construction activities would also cause increased noise along access routes to and from the site due to movement of equipment and workers. Site preparation would require the export of approximately 6,500 cubic yards of soil. However, substantial soil hauling is not anticipated to occur along local roadways due to the project site's proximity to East Ocean Boulevard (a major arterial) and Interstate 710. Impacts in this regard would be less than significant.

Construction noise would be acoustically dispersed throughout the project site and not concentrated in one area near adjacent sensitive uses. Pursuant to the City of Long Beach *Municipal Code*, all construction activities may only occur between the hours of 7:00 AM and 7:00 PM, Monday through Friday, and between the hours of 9:00 AM and 6:00 PM on Saturday. Construction activities are prohibited on Sundays and Federal holidays. Implementation of Mitigation Measure NOI-1 would further minimize impacts from construction noise as it requires construction equipment to be equipped with properly operating and maintained mufflers and other state required noise attenuation devices. Thus, a less than significant noise impact would result from construction activities.

Operational Noise Sources

Off-Site Mobile Noise

Future development generated by the proposed project would result in additional traffic on adjacent roadways, thereby increasing vehicular noise in the vicinity of existing and proposed land uses. According to the *Traffic Impact Analysis*, the proposed project would generate approximately 1,436 daily trips.

Existing Condition

The "Existing Without Project" and "Existing With Project" scenarios were compared. According to Table 4.12-6, *Existing With Project Traffic Noise Levels*, under the "Existing Without Project" scenario, noise levels would range from 54.0 to 62.9 dBA. Traffic noise levels under the "Existing With Project" scenario noise levels would range from 54.5 to 63.0 dBA. The highest noise levels would occur along Ocean Boulevard, with the highest noise level increase (0.8 dBA) occurring along Seaside Way. However, as this noise level increase is below 3.0 dBA, a less than significant impact would occur in this regard.

Future Condition

The "Future Without Project" and "Future With Project" scenarios were compared. According to Table 4.12-7, *Forecast Traffic Noise Levels*, under the "Future Without Project" scenario, noise levels would range from 55.6 to 63.3 dBA. Traffic noise levels under the "Future With Project" scenario noise levels would range from 55.9 to 63.3 dBA. The highest noise levels would occur along Ocean Boulevard, with the highest noise level increase (0.9 dBA) occurring along Seaside Way. However, as this noise level increase is below 3.0 dBA, a less than significant impact would occur in this regard.

Cumulative Mobile Source Impacts

A project's contribution to a cumulative traffic noise increase would be considered significant when the project exceeds both a combined effect exceeds perception level (i.e., auditory level increase) and incremental effects threshold. The following discusses the combined and incremental effects criteria:

Combined Effect. The cumulative with project noise level ("Future With Project") would cause a significant cumulative impact if a 3.0 dB increase over existing conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use.

Table 4.12-6
Existing With Project Traffic Noise Levels

Roadway Segment	Existing Without Project					Existing With Project					Difference In dBA @ 100 Feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour	
Ocean Boulevard											
Golden Shore to Magnolia Avenue	33,600	62.9	171	79	37	33,816	63.0	171	80	37	0.1
Magnolia Avenue to Pacific Avenue	32,500	62.8	167	77	36	32,716	62.8	167	78	36	0.0
Pacific Avenue to Existing Driveway	31,900	62.7	165	76	35	32,116	62.7	165	77	36	0.0
Existing Driveway to Pine Avenue	31,900	62.7	165	76	35	31,116	62.7	165	77	36	0.0
Pine Avenue to Locust Avenue	31,000	62.6	162	75	35	31,538	62.7	163	76	35	0.1
Locust Avenue to Long Beach Boulevard	31,500	62.7	163	76	35	32,039	62.7	165	77	36	0.0
Long Beach Boulevard to Alamitos Avenue	33,200	62.9	169	79	36	34,135	63.0	172	80	37	0.1
Pine Avenue											
Broadway to Ocean Boulevard	6,400	55.7	56	26	12	6,616	55.9	58	27	12	0.2
Ocean Boulevard to Seaside Way	8,700	57.1	69	32	15	9,670	57.5	74	35	16	0.4
Seaside Way to Shoreline Drive	4,300	54.0	43	20	9	4,768	54.5	46	22	10	0.5
Shoreline Drive											
Chestnut Place to Pine Avenue	14,500	59.3	97	45	21	14,860	59.4	99	46	21	0.1
Seaside Way											
Pine Avenue to Project Entrance	6,100	55.5	55	25	12	6,818	56.0	59	27	13	0.5
Project Entrance to Project Exit	6,100	55.5	55	25	12	7,536	56.3	62	29	13	0.8

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

Table 4.12-7
Forecast Traffic Noise Levels

Roadway Segment	Future Without Project					Future With Project					Difference In dBA @ 100 Feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour	
Ocean Boulevard											
Golden Shore to Magnolia Avenue	36,200	63.3	179	83	39	36,416	63.3	180	84	39	0.0
Magnolia Avenue to Pacific Avenue	35,200	63.1	176	82	38	35,416	63.2	177	82	38	0.1
Pacific Avenue to Existing Driveway	34,800	63.1	175	81	38	35,016	63.1	175	81	38	0.0
Existing Driveway to Pine Avenue	34,800	63.1	175	81	38	35,016	63.1	175	81	38	0.0
Pine Avenue to Locust Avenue	33,300	62.9	170	79	37	33,838	63.0	171	80	37	0.1
Locust Avenue to Long Beach Boulevard	34,100	63.0	172	80	37	34,639	63.1	174	81	38	0.1
Long Beach Boulevard to Alamitos Avenue	37,200	63.4	183	85	39	38,135	63.5	186	86	40	0.1
Pine Avenue											
Broadway to Ocean Boulevard	7,000	56.1	60	28	13	7,216	56.3	61	28	13	0.2
Ocean Boulevard to Seaside Way	10,700	58.0	80	37	17	11,670	58.4	84	39	18	0.4
Seaside Way to Shoreline Drive	6,200	55.6	55	26	12	6,668	55.9	58	27	13	0.3
Shoreline Drive											
Chestnut Place to Pine Avenue	19,000	60.5	117	54	25	19,360	60.6	118	55	25	0.1
Seaside Way											
Pine Avenue to Project Entrance	6,300	55.7	56	26	12	7,018	56.1	60	28	13	0.4
Project Entrance to Project Exit	6,300	55.7	56	26	12	7,736	56.6	64	30	14	0.9

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

Although there may be a significant noise increase due to the proposed project in combination with other related projects (combined effects), it must also be demonstrated that the project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed project. The following criteria have been utilized to evaluate the incremental effect of the cumulative noise increase.

Incremental Effects. The "Future With Project" causes a 1.0 dBA increase in noise over the "Future Without Project" noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon, and reduces as distance from the source increases. Consequently, only the proposed project and growth due to occur in the project site's general vicinity would contribute to cumulative noise impacts. Table 4.12-8, *Cumulative Noise Scenario*, lists the traffic noise effects along the affected roadway segment for "Existing," "Future Without Project," and "Future With Project," conditions, including incremental and net cumulative impacts.

Table 4.12-8
Cumulative Noise Scenario

Roadway Segment	Existing	Future Without Project	Future With Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference In dBA Between Existing and Future With Project	Difference In dBA Between Future Without Project and Future With Project	
Ocean Boulevard						
Golden Shore to Magnolia Avenue	62.9	63.3	63.3	0.4	0.0	***No***
Magnolia Avenue to Pacific Avenue	62.8	63.1	63.2	0.4	0.1	***No***
Pacific Avenue to Existing Driveway	62.7	63.1	63.1	0.4	0.0	***No***
Existing Driveway to Pine Avenue	62.7	63.1	63.1	0.4	0.0	***No***
Pine Avenue to Locust Avenue	62.6	62.9	63.0	0.4	0.1	***No***
Locust Avenue to Long Beach Boulevard	62.7	63.0	63.1	0.4	0.1	***No***
Long Beach Boulevard to Alamitos Avenue	62.9	63.4	63.5	0.4	0.1	***No***
Pine Avenue						
Broadway to Ocean Boulevard	55.7	56.1	56.3	0.6	0.2	***No***
Ocean Boulevard to Seaside Way	57.1	58.0	58.4	1.3	0.4	***No***
Seaside Way to Shoreline Drive	54.0	55.6	55.9	1.9	0.3	***No***
Shoreline Drive						
Chestnut Place to Pine Avenue	59.3	60.5	60.6	1.3	0.1	***No***
Seaside Way						
Pine Avenue to Project Entrance	55.5	55.7	56.1	0.6	0.4	***No***
Project Entrance to Project Exit	55.5	55.7	56.6	1.1	0.9	***No***

Notes: ADT = average daily traffic; dBA = A-weighted decibels
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

As indicated in Table 4.12-8, the noise levels under the *Combined Effects* criterion do not exceed 3.0 dBA, and noise levels under the *Incremental Effects* criterion do not exceed 1.0 dBA. Therefore, the proposed project, in combination with cumulative background traffic noise levels, would result in less than significant impacts.

On-Site Mobile Noise

The proposed project involves a 216-unit multi-family residential development. The primary source of noise that would potentially impact the project would be traffic noise along Seaside Way. The building façade along Seaside Way would be located 65 feet from the centerline of the roadway. At this distance, noise levels would be approximately 60.0 dBA CNEL (under Future With Project conditions, Seaside Way is expected to experience approximately 7,736 ADT). Utilizing a standard 24 dBA exterior-to-interior attenuation rate with windows closed, interior noise levels would be approximately 36 dBA, and would be below the City's 45 dBA interior noise standard.[22] Therefore, on-site mobile noise impacts would be less than significant.

Stationary Source Noise

Upon project completion, noise in the project area would not significantly increase. The proposed project proposes a multi-family residential use within a developed area. Stationary noise sources associated with the proposed project would include mechanical equipment and on-site amenities.

Typically, mechanical equipment noise is 55 dBA at 50 feet from the source. The nearest residential uses to the project site are the existing residents located approximately 25 feet to the west from the project site. Heating Ventilation and Air Conditioning (HVAC) units would be included on the roof of the structures, and would likely be located toward the center of the structures and be located behind a parapet. Thus, the proposed project would likely not result in additional noise impacts to nearby residents from HVAC units. Therefore, the nearest residents would not be directly exposed to substantial noise from on-site mechanical equipment. Impacts in this regard would be less than significant.

Furthermore, the project proposes public spaces including redevelopment of Victory Park on the northern portion of the project site, a passive recreation area on the southwestern portion of the project site, and an enclosed plaza located within the apartment complex. Redevelopment of Victory Park is not anticipated to generate excessive noise beyond existing conditions due to the continuous pedestrian and vehicular activities that occur along Ocean Boulevard. Noise sources associated with the passive park located on the southwestern portion of the project site would be minimal as the park would include limited recreational uses with no planned noise-generating amenities or events. The enclosed plaza within the apartment complex would also be limited in its noise-generating potential as noise would be attenuated by the apartment complex, preventing noise from going beyond the project site. Therefore, impacts would be less than significant in this regard.

Mitigation Measures:

NOI-1 Prior to Grading Permit issuance, the project applicant shall demonstrate, to the satisfaction of the City of Long Beach City Engineer, that the project complies with the following:

- Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices.

[22] United States Environmental Protection Agency, *Protective Noise Levels (EPA 550/9-79-100)*, November 1978.

- Property owners and occupants located within 200 feet of the project boundary shall be sent a notice, at least 15 days prior to commencement of construction of each phase, regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the project construction site. All notices and signs shall be reviewed and approved by the Development Services Department, prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints.

- Prior to issuance of any Grading or Building Permit, the Contractor shall provide evidence that a construction staff member will be designated as a Noise Disturbance Coordinator and will be present on-site during construction activities. The Noise Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the Public Works Department. All notices that are sent to residential units immediately surrounding the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator.

- Prior to issuance of any Grading or Building Permit, the project applicant shall demonstrate to the satisfaction of the City Engineer that construction noise reduction methods shall be used where feasible. These reduction methods include shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and electric air compressors and similar power tools.

- Construction haul routes shall be designed to avoid noise sensitive uses (e.g., residences, convalescent homes, etc.), to the extent feasible.

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

- Construction activities shall not take place outside of the allowable hours specified by the City's *Municipal Code* Section 8.80.202, *Construction Activity* (7:00 AM to 7:00 PM on weekdays and 9:00 AM to 6:00 PM on Saturdays; construction activities are not permitted on Sundays or legal holidays).

b) ***Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

Less Than Significant Impact. Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata,

and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. The vibration produced by construction equipment is illustrated in Table 4.12-9, *Typical Vibration Levels for Construction Equipment*.

Table 4.12-9
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second)
Large bulldozer	0.089
Loaded trucks	0.076
Small bulldozer	0.003

Notes:
1. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006. Table 12-2.
2. Calculated using the following formula:

$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

where: PPV (equip) = the peak particle velocity in inch per second of the equipment adjusted for the distance
PPV (ref) = the reference vibration level in inch per second from Table 12-2 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines*
D = the distance from the equipment to the receiver

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006.

The nearest structures to the project site are the adjacent commercial buildings to the west and east of the project site, and the multi-family residential development to the west of the project site. The adjacent structures are located approximately 25 feet away from the proposed project site. Groundborne vibration decreases rapidly with distance. As indicated in Table 4.12-9, based on the Federal Transit Administration (FTA) data, vibration velocities from typical heavy construction equipment operation that would be used during project construction range from 0.003 to 0.089 inch-per-second peak particle velocity (PPV) at 25 feet from the source of activity. With regard to the proposed project, groundborne vibration would be generated primarily during grading activities on-site and by off-site haul-truck travel. Although the adjacent structures are located approximately 25 feet of the project site, the proposed construction activities would not be capable of exceeding the 0.2 inch-per-second PPV significance threshold for vibration, as construction activities would be limited and would not be concentrated within 25 feet of the adjoining structures for an extended period of time. Therefore, vibration impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Refer to the "Long-Term Operational Impacts" discussion under Impact Statement 4.12(a).

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact With Mitigation Incorporated. Refer to the "Short-Term Construction Impacts" discussion under Impact Statement 4.12(a).

Mitigation Measures: Refer to Mitigation Measure NOI-1. No additional mitigation is required.

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

No Impact. The nearest airport to the project site is the Long Beach Airport, located approximately 3.75 miles to the northeast of the project site at 4100 Donald Douglas Drive. In addition, the project site is located outside of the Long Beach Airport Influence Area.[23] Therefore, no impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The project site is not located within the vicinity of a private airstrip or related facilities. Therefore, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

[23] Los Angeles County Airport Land Use Commission. *Long Beach Airport, Airport Influence Area Map*. May 13, 2003.

4.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			✓	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

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)?*

Less Than Significant Impact. A project could induce population growth in an area either directly, through the development of new residences or businesses, or indirectly, through the extension of roads or other infrastructure. As described in Section 2.0, *Project Description*, the project involves development of 216 residential dwelling units. Therefore, project implementation could induce direct population growth in the City through development of new residences.

As of January 2014, the average number of persons per household in the City of Long Beach is 2.82 persons per household.[24] However, this ratio considers all housing types within the City, including single-family residences, which typically attract and accommodate larger household sizes. A persons per household ratio of 2.0 more accurately reflects the average number of persons per household generated with similar types of mixed-use, high density developments consisting primarily of one and two-bedroom units within the City and other southern California communities. Based on an estimate of 2.0 persons per unit, the 216 dwelling units proposed by the project could generate an increase in the City's population of 432 persons. The potential population growth associated with the project would represent approximately 0.09 percent of the City's current population of 470,292 persons.[25]

Furthermore, the Southern California Association of Governments (SCAG) growth forecasts estimate the City's population will reach 534,100 residents by 2035, representing an increase of 63,808 residents from 2014 to 2035.[26] The project's potential population increase (432 residents) represents 0.7 percent of the anticipated 2035 population growth for the City. SCAG's regional growth projections are based upon long-range development assumptions (i.e., General Plans) of the relevant jurisdiction. In this situation, the proposed project is consistent with the City's General Plan and land use designation for the project site which intends for high

[24] State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2014, with 2010 Benchmark*. Sacramento, California, May 2014.
[25] Ibid.
[26] Southern California Association of Governments. *Adopted 2012 RTP Growth Forecast.* April 2012.

density residential uses (see Section 2.0, *Project Description*). Furthermore, as discussed in Response 4.10(b), the project would conform to the density standards of the LCP for Subarea 4. As the proposed project falls well within SCAG's population forecasts, and is consistent with both the City's General Plan and LCP, the project would not induce substantial population growth in the project vicinity and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The project site is currently occupied by a surface parking lot. No housing or structures exist on the project site. Therefore, project implementation would not displace any existing housing or necessitate the construction of replacement housing elsewhere. No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Refer to Response 4.13(b).

Mitigation Measures: No mitigation measures are required.

4.14 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?			✓	
2) Police protection?			✓	
3) Schools?			✓	
4) Parks?			✓	
5) Other public facilities?				✓

a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

1) Fire protection?

Less Than Significant Impact. The Long Beach Fire Department (LBFD) provides fire protection to the City, including the project site. The LBDF has 23 stations within the City. Table 4.14-1, *Fire Stations*, indicates the nearest fire stations to the project site

Table 4.14-1
Fire Stations

Fire Station	Location	Equipment	Approximate Distance to Project Site (miles)
Fire Station No. 2	1645 East 3rd Street	1250 gpm Pumper	1
Fire Station No. 3	1222 Daisy Avenue	1250 gpm Pumper	1

Source: City of Long Beach Fire Department. *Station Locations*.

The proposed project would result in the construction of a 216-unit multi-family/mixed-use apartment complex on the project site. While the project would result in an increase in population at the site, it is not expected that the construction of new or physically altered fire

facilities would be required. As noted above, there are two fire stations approximately one mile away from the project site, and 21 additional stations located within the City's boundaries. In addition, the proposed project would be subject to LBFD site/building plan review to ensure that the project meets City and LBFD requirements for fire safety. The proposed project would include features such as fire-resistant construction materials, fire alarm/sprinkler systems, and hydrants in accordance with City and LBFD standards. Upon compliance with existing City and LBFD design standards, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

2) Police protection?

Less Than Significant Impact. The Long Beach Police Department (LBPD) provides law enforcement services to the City, including the project site. The LBPD operates out of a central location at 400 West Broadway, which is approximately 0.25 miles northwest of the project site. Additionally, the LBPD South Division station is located approximately 0.22 miles to the northeast of the project site at 100 Long Beach Boulevard.

The proposed project would result in the construction of a 216-unit multi-family/mixed-use apartment complex on the site. While the project would result in an increase in population at the site, the development is expected to result in service calls typical of a residential facility. It is not expected that long-term operation of the project would require new or physically altered police facilities, the construction of which could cause significant environmental impacts. In addition, the project would be subject to site plan review by the City to ensure that it meets City requirements in regards to safety (e.g., nighttime security lighting) to minimize the potential for safety concerns. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

3) Schools?

Less Than Significant Impact. The project site is located within the Long Beach Unified School District (LBUSD). The proposed project would involve development of a 216-unit multi-family/mixed-use apartment complex, and would result in a direct increase in population on-site and the number of students within the project area.

Although the project would result in an increased demand for school services, the project would be subject to the requirements of Assembly Bill (AB) 2926 and Senate Bill (SB) 50, which allow school districts to collect impact fees from developers of new residential projects. According to Section 65996 of the California Government Code, development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." Thus, upon payment of required fees by the project applicant consistent with existing State requirements, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

4) Parks?

Less Than Significant Impact. According to the Open Space Element of the City's General Plan, the City has 92 parks encompassing 1,413 acres. There are 22 mini parks, nine greenway parks, 19 neighborhood parks, 13 community parks, El Dorado Regional Park, and 28

special use parks. Special use parks include the riverfront recreation vehicle campground, two special event parks (Queen Mary and Rainbow Lagoon), the Colorado Lagoon, the Shoreline/Riverfront, Santa Cruz Park, Victory Park, and nature centers and trails. As noted previously, the project would consist of the development of a 216-unit multi-family/mixed-use apartment complex, which would directly increase population in the project area. Additionally, the northern portion of the project site includes a section of Victory Park that extends along the developed properties on Ocean Boulevard. The western section of Victory Park that currently exists on the project site is partially vacant with low-lying weeds, bushes, and shrubs, and slopes downward to the south towards the surface parking lot; while the eastern section is paved, includes a retaining wall that separates the surface parking lot to the south, and is adjoined to the sidewalk along Ocean Boulevard to the north. While implementation of the project would impact this section of Victory Park, the project includes substantial improvements to this section of Victory Park, resulting in enhanced public access and recreation compared to existing conditions. As such, the project is expected to result in beneficial impacts in regards to onsite recreational opportunities.

While the project may result in an increase in park usage due to a direct increase in population, the project includes on-site recreational improvements along Victory Park. In addition, if determined applicable by the City, the project applicant would be subject to a Park Fee pursuant to Chapter 18.18 of the LBMC, *Park and Recreation Facilities Fees*. The Park Fee is imposed on new residential developments for the purpose of assuring that the park land and recreational facility standards established by the City are met with respect to the additional needs created by such development. The City may require the project applicant to pay the applicable Park Fees prior to issuance of a Certificate of Occupancy. As such, upon provision of onsite improvements at Victory Park, and payment of the Park Fees required for the project (if applicable), impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

5) Other public facilities?

No Impact. The nearest public facility to the project site is the Long Beach Public Library, located on the northwest corner of West Ocean Boulevard and Pacific Avenue, opposite the project site, at 101 Pacific Avenue. The project would involve development of a 216-unit multi-family/mixed-use apartment complex, and would not impact public facilities beyond those described above, including public libraries. Therefore, no impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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4.15 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			✓	

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

Less Than Significant Impact. Refer to Response 4.14(a)(4), above. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. The project proposes to implement improvements at Victory Park on the northern portion of the project site for public use. The impacts of these recreational improvements are analyzed within this environmental document. Refer also to Response 4.14(a).

Mitigation Measures: No mitigation measures are required.

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4.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

This section is based upon the *Traffic Impact Analysis* for the project prepared by RBF Consulting for the proposed project; refer to Appendix E, *Traffic Impact Analysis*. The purpose of the *Traffic Impact Analysis* is to evaluate potential project impacts related to traffic and circulation in the vicinity of the project site. The evaluation considers impacts on local intersections, roadways, and regional transportation facilities. The following analysis scenarios are evaluated in this study:

- Existing Plus Project;
- 2017 Cumulative No Project Conditions; and
- 2017 Cumulative Plus Project Conditions.

STUDY AREA

Based on discussions with City of Long Beach staff, the traffic analysis considers intersections as identified within Table 4.16-1, *Study Intersections*. Exhibit 4.16-1, *Study Intersection and Roadway Segment ADT Locations* indicates the locations of the study intersections analyzed

within the *Traffic Impact Analysis*. In addition, refer to Exhibit 4, *Existing Intersection Geometry* (as provided in Appendix E), which illustrates the existing intersection and roadway geometries.

Table 4.16-1
Study Intersections

Intersection #	Study Intersection
1	Golden Shore / Ocean Boulevard
2	Magnolia Avenue-Queens Way / Ocean Boulevard
3	Pacific Avenue / Ocean Boulevard
4	Pine Avenue / Ocean Boulevard
5	Locust Avenue / Ocean Boulevard
6	Long Beach Boulevard / Ocean Boulevard
7	Alamitos Avenue-Shoreline Drive / Ocean Boulevard
8	Pine Avenue / Broadway
9	Pine Avenue / Seaside Way
10	Pine Avenue / Shoreline Drive
11	Chestnut Place / Shoreline Drive
12	Existing Driveway / Ocean Boulevard – Existing driveway to be closed
13	Parking Exit / Seaside Way – Future intersection
14	Parking Entrance / Seaside Way – Future intersection

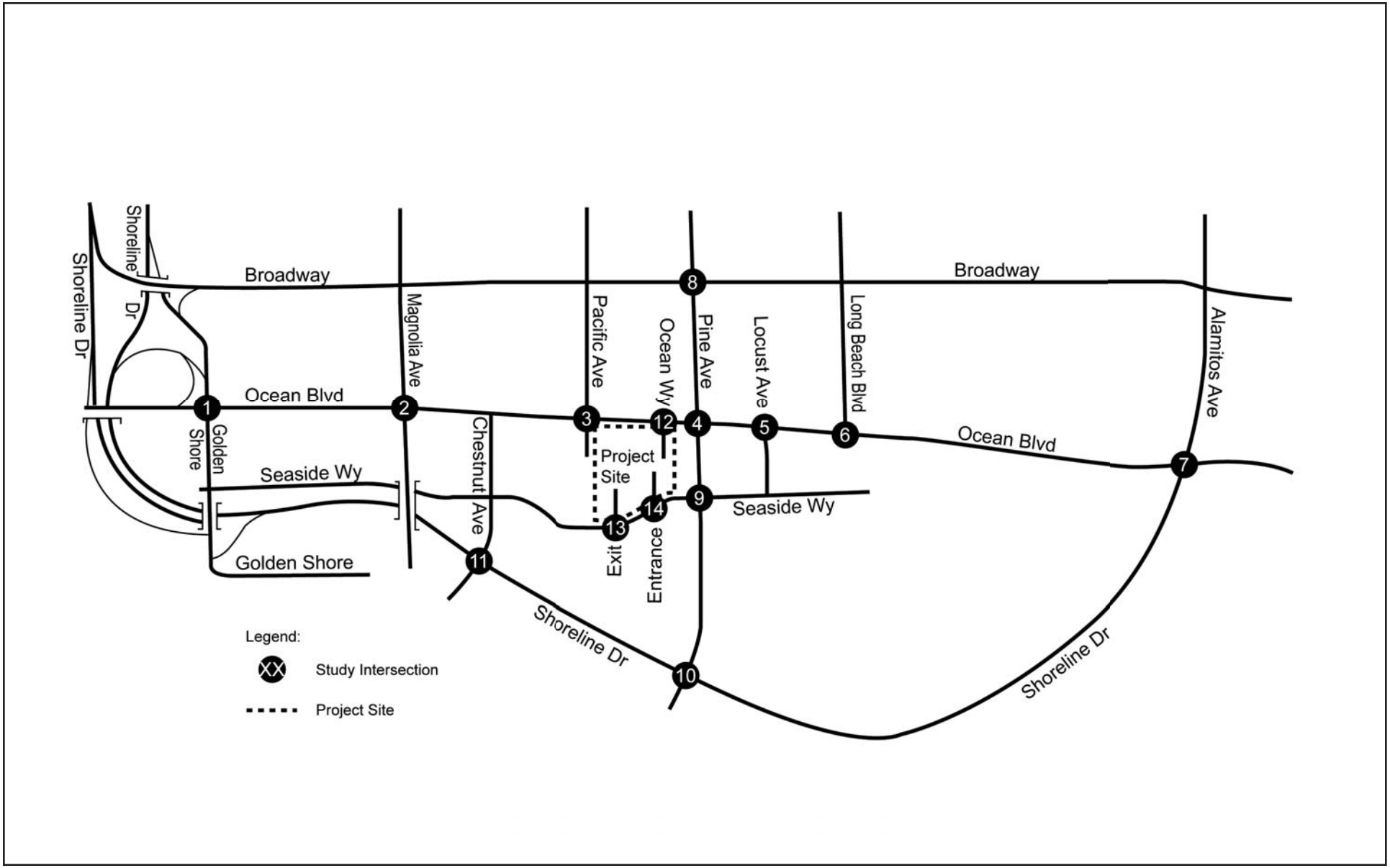
CITY ANALYSIS METHODOLOGY

Intersection Analysis Methodology

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Intersection Capacity Utilization (ICU) analysis method is utilized by the City of Long Beach to determine the operating LOS of signalized intersections. The ICU analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding volume to capacity (V/C) ratios shown in Table 4.16-2, *ICU-Based Signalized Intersection V/C and LOS Ranges*.

Table 4.16-2
ICU-Based Signalized Study Intersection V/C and LOS Ranges

V/C Ratio	LOS
≤ 0.60	A
0.61 to ≤ 0.70	B
0.71 to ≤ 0.80	C
0.81 to ≤ 0.90	D
0.91 to ≤ 1.00	E
> 1.00	F
Note: V/C Ratio = Volume to Capacity Ratio.	



NOT TO SCALE

RBF CONSULTING A Baker Company

03/15 • JN 143594

OCEANAIRE PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Study Intersection and Roadway Segment ADT Locations

Exhibit 4.16-1

THRESHOLDS OF SIGNIFICANCE AND PERFORMANCE CRITERIA

The relative impact of the added project traffic volumes was evaluated based on the existing and future 2017 cumulative conditions. The significance of the potential impacts of the project was evaluated using the City's LOS standards and impact criteria defined below:

- An unacceptable peak hour LOS (E or F) at any of the key intersections is projected. The City of Long Beach considers LOS D to be the minimum acceptable LOS for all intersections. The current LOS, if worse than LOS D (E or F), should also be maintained; and

- The project increases traffic demand at the study intersection by 2 percent of the capacity (ICU increase ≥ 0.020), causing or worsening LOS E or F (ICU ≥ 0.901). At un-signalized intersections, a significant impact is defined as a project that adds 2 percent or more traffic delay (seconds per vehicle) at an intersection operating at LOS E or F.

EXISTING ROADWAY SYSTEM

The characteristics of the roadway system in the vicinity of the project site are described below:

- *Ocean Boulevard* is a seven-lane divided roadway between Golden Shore and Magnolia Avenue, and a six-lane divided roadway east of Magnolia Avenue, traversing in an east-west direction. The posted speed along Ocean Boulevard is 30 miles per hour (mph) in the vicinity of the project site. On street parking is generally permitted along Ocean Boulevard except on the north side west of Magnolia Avenue and on the north side of the street between Pacific Avenue and Pine Avenue. Key signalized intersections are located along Ocean Boulevard at Golden Shore, Magnolia Avenue, Pacific Avenue, Pine Avenue, Locust Avenue, Long Beach Boulevard and Alamitos Avenue-Shoreline Drive.

- *Seaside Way* is a three-lane divided roadway west of the Queens Way Bridge, a four-lane divided roadway between Queens Way Bridge and Chestnut Place, a two-lane divided roadway between Chestnut Place and Pine Avenue, a four-lane divided roadway between Pine Avenue and Collins Way, and a three-lane divided roadway east of Collins Way, trending in an east-west direction. Seaside Way borders the project site to the south where the project access will be located. The posted speed limit along Seaside Way is 25 mph. On-street parking is generally prohibited along Seaside Way west of the Queens Way Bridge and generally permitted between the Queens Way Bridge and Pine Avenue. On-street parking is generally prohibited east of Pine Avenue except on the north side of the street east of Collins Way. A signalized intersection is located on Seaside Way at Pine Avenue.

- *Pine Avenue* is a four-lane divided roadway south of Ocean Boulevard and a two-lane divided roadway north of Ocean Boulevard, trending in a north-south direction. On-street parking is permitted between Ocean Boulevard and Seaside Way. On-street parking is prohibited north of Ocean Boulevard and south of Seaside Way.

EXISTING TRAFFIC CONDITIONS

To determine the existing operation of the study intersections, AM and PM peak hour intersection movement counts were collected. Available count data conducted in various

months (January, March, and November) of 2014 was compiled. Peak AM period intersection counts were collected from 7:00 AM to 9:00 AM, and PM peak period intersection counts were collected from 4:00 PM to 6:00 PM. The counts used in this analysis were taken from the highest hour within the peak period counted. It should be noted that the project site is currently being used as a paid-per-use parking lot with a right-in/right-out access driveway on Ocean Boulevard west of Pine Avenue. Detailed study intersection traffic count data sheets are contained within the *Traffic Impact Analysis* (provided as Appendix E).

Existing Conditions Peak Hour Intersection Level of Service

Table 4.16-3, *Existing Conditions AM and PM Peak Hour Intersection LOS*, summarizes existing conditions AM and PM peak hour LOS of the study intersections. As shown in Table 4.16-3, the study intersections are currently operating at an acceptable LOS (LOS D or better), except for the following intersection:

- Alamitos Avenue – Shoreline Drive at Ocean Boulevard – LOS E (AM)

Table 4.16-3
Existing Conditions AM and PM Peak Hour Intersection LOS

Study Intersection		Existing Conditions				
		Average Daily Traffic (ADT)	AM Peak Hour		PM Peak Hour	
			V/C	LOS	V/C	LOS
1	Golden Shore / Ocean Boulevard	33,600	0.517	A	0.632	B
2	Magnolia Avenue-Queens Way / Ocean Boulevard	32,500	0.654	B	0.650	B
3	Pacific Avenue / Ocean Boulevard	31,900	0.553	A	0.503	A
4	Pine Avenue / Ocean Boulevard	31,900	0.532	A	0.674	B
5	Locust Avenue / Ocean Boulevard	31,500	0.458	A	0.473	A
6	Long Beach Boulevard / Ocean Boulevard	31,500	0.517	A	0.483	A
7	Alamitos Avenue-Shoreline Drive / Ocean Boulevard	33,200	0.965	E	0.848	D
8	Pine Avenue / Broadway	6,400	0.437	A	0.726	C
9	Pine Avenue / Seaside Way	8,700	0.287	A	0.286	A
10	Pine Avenue / Shoreline Drive	4,300	0.342	A	0.477	A
11	Chestnut Place / Shoreline Drive	14,500	0.407	A	0.565	A
12	Existing Driveway / Ocean Boulevard	31,900	9.700	A	11.800	B

Note: V/C = volume to capacity ratio.
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

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?***

Less Than Significant Impact. The proposed project consists of a 216-unit apartment complex on an existing surface parking lot located at the southeast corner of the Ocean Boulevard and Pacific Avenue in the City of Long Beach. Access for the project site is planned via a full access driveway located along Seaside Way. The proposed project is planned to open in 2017. Impacts of the proposed project on the surrounding roadway system are analyzed below.

Project Trip Generation

To determine project trip generation of the proposed project, Institute of Transportation Engineers (ITE) Trip Generation (9th Edition, 2012) published trip generation rates were used. Table 4.16-4, *ITE Trip Rates for Proposed Project*, summarizes ITE trip generation rates used to calculate the number of trips forecast to be generated by the proposed project.

Table 4.16-4
ITE Trip Rates for Proposed Project

Land Use *(ITE Code)*	Units	AM Peak Hour Trip Rates			PM Peak Hour Trip Rates			Daily Trip Rate
		In	Out	Total	In	Out	Total	
Apartment (220)	du	0.10	0.41	0.51	0.40	0.22	0.62	6.65

Notes: du = dwelling units

Table 4.16-5, *Forecast Trip Generation of Proposed Project*, summarizes the forecast trip generation of the proposed project utilizing the ITE trip generation rates shown in Table 4.16-4.

Table 4.16-5
Forecast Trip Generation of Proposed Project

Land Use	AM Peak Hour Trip Generation			PM Peak Hour Trip Generation			Daily Trip Generation
	In	Out	Total	In	Out	Total	
216-Unit Apartment Complex	22	89	111	86	48	134	1,436

Notes: [1]Existing count at the driveway
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

As shown in Table 4.16-5, the proposed project is forecasted to generate approximately 1,436 daily trips, which include approximately 111 AM peak hour trips (22 inbound, 89 outbound) and 134 PM peak hour trips (86 inbound, 48 outbound) during a typical weekday.

Future Traffic Analysis

This section presents the future traffic forecast with the addition of trips generated by the project on the existing conditions including the background ambient growth. Future conditions with other cumulative developments are also considered. As noted above, the following future conditions are presented:

- Existing Plus Project;
- 2017 Cumulative No Project Conditions; and
- 2017 Cumulative Plus Project Conditions.

A background ambient growth rate of one percent per year is used to account for the growth of existing traffic when the project is anticipated to open in Year 2017.

The City of Long Beach has provided a list of nine cumulative developments to be included in the traffic analysis. The nine cumulative developments are summarized in Table 4.16-6, *Cumulative Development Traffic Generation Summary*. As shown in Table 4.16-6, the nine cumulative developments will generate approximately 12,794 daily trips with 778 AM peak hour trips and 1,116 PM peak hour trips.

Table 4.16-6
Cumulative Development Traffic Generation Summary

Cumulative			2-Way Daily	AM Peak			PM Peak		
No.	Project	Land Use		In	Out	Total	In	Out	Total
1	442 W. Ocean Blvd. Apartments	95 DU Apartments	632	10	38	48	38	21	59
2	300 Alamitos Ave. Medical Building	14,325 SF Medical Office Building and Senior Housing	518	27	7	34	14	37	51
3	Silversands	72-Room Hotel and 33 DU Apartments	807	25	30	55	35	28	63
4	125 Linden Ave. Mixed-Use Project	22 DU Apartments and 1,257 SF Retail	220	4	10	14	12	9	21
5	American Hotel	7,326 SF Office and 7,326 SF Restaurant	780	53	37	90	27	26	53
6	City Hall East	126 DU Apartments and 3,621 SF Retail	1,192	18	65	83	69	41	110
7	Ocean Center Building Reuse	81 DU Apartments, 5,000 SF Restaurant and 5,400 Retail	1,247	41	59	100	60	38	98
8	207 E. Seaside Way Apartments	113 DU Apartments	751	11	47	58	45	25	70
9	The Pike Outlet Conversion Project	Convert to Retail Outlet and New 9,852 SF Retail	2,266	41	22	63	85	124	209
10	Shoreline Gateway	445 DU condominium and 15,549 SF Retail	4,381	60	173	233	226	156	382
Total Cumulative Trips			**12,794**	**290**	**488**	**778**	**611**	**505**	**1,116**

Notes: du = dwelling units
SF = square feet
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

Existing Plus Project Conditions Intersection Analysis

Table 4.16-7, *Existing Plus Project Conditions Intersection Analysis*, summarizes the forecasted existing plus project conditions AM and PM peak hour LOS of the study intersections. As shown in Table 4.16-7, all existing and future study intersections are projected to operate at an acceptable LOS (LOS D or better), except for the following intersection:

- Alamitos Avenue – Shoreline Drive at Ocean Boulevard – LOS E (AM)

Table 4.16-7
Existing Plus Project Conditions Intersection Analysis

Study Intersection		Existing Conditions				Existing With Project				Increase in V/C		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
	Segment	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS			
1	Golden Shore / Ocean Boulevard	0.517	A	0.632	B	0.520	A	0.634	B	0.003	0.002	***No***
2	Magnolia Avenue-Queens Way / Ocean Boulevard	0.654	B	0.650	B	0.658	B	0.651	B	0.004	0.001	***No***
3	Pacific Avenue / Ocean Boulevard	0.553	A	0.503	A	0.557	A	0.505	A	0.004	0.002	***No***
4	Pine Avenue / Ocean Boulevard	0.532	A	0.674	B	0.546	A	0.709	C	0.014	0.035	***No***
5	Locust Avenue / Ocean Boulevard	0.458	A	0.473	A	0.459	A	0.477	A	0.001	0.004	***No***
6	Long Beach Boulevard / Ocean Boulevard	0.517	A	0.483	A	0.524	A	0.489	A	0.007	0.006	***No***
7	Alamitos Avenue-Shoreline Drive / Ocean Boulevard	0.965	E	0.848	D	0.984	E	0.858	D	0.019	0.010	***No***
8	Pine Avenue / Broadway	0.437	A	0.726	C	0.443	A	0.732	C	0.006	0.006	***No***
9	Pine Avenue / Seaside Way	0.287	A	0.286	A	0.329	A	0.346	A	0.042	0.060	***No***
10	Pine Avenue / Shoreline Drive	0.342	A	0.477	A	0.358	A	0.477	A	0.016	0.000	***No***
11	Chestnut Place / Shoreline Drive	0.407	A	0.565	A	0.407	A	0.572	A	0.000	0.007	***No***
Project Access Driveways												
12	Existing Driveway / Ocean Boulevard	9.7	A	11.8	B	0.0	A	0.0	A	-100%	-100%	***No***
13	Project Exit / Seaside Way	N/A	N/A	N/A	N/A	11.1	B	12.5	B	N/A	N/A	***N/A***
14	Project Entrance / Seaside Way	N/A	N/A	N/A	N/A	0.0	A	0.0	A	N/A	N/A	***N/A***

Notes: V/C = volume to capacity ratio.
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

Table 4.16-7 indicates that the project will not contribute to a significant project impact at the study intersections for "Existing Plus Project" conditions based on the City's threshold criteria. No off-site roadway improvements are needed for the project. The following improvements are incorporated into the project description to accommodate access to the project site:

- Project Exit at Seaside Way – New southbound stop sign
- Project Entrance at Seaside Way – Eastbound left turn lane

Forecast Year 2017 No Project Conditions Intersection Analysis

Table 4.16-8, *2017 Cumulative Plus Project Conditions Intersection Analysis*, summarizes the AM and PM peak hour intersection operations analysis results for "2017 Cumulative No Project Conditions", based on existing and initial intersection geometry. As shown in Table 4.16-8, all existing and future study intersections are projected to operate at an acceptable LOS (LOS D or better), except for the following intersection:

- Alamitos Avenue – Shoreline Drive at Ocean Boulevard – LOS F (AM); LOS E (PM)

Forecast Year 2017 Plus Project Conditions Intersection Analysis

Table 4.16-8 also summarizes the AM and PM peak hour intersection operations analysis results for "2017 Cumulative Plus Project Conditions", based on existing and initial intersection geometry. As shown in Table 4.16-8, all existing and future study intersections are projected to operate at an acceptable LOS (LOS D or better), except for the following intersection:

- Alamitos Avenue – Shoreline Drive at Ocean Boulevard – LOS F (AM); LOS E (PM)

Table 4.16-8, shows that the project will not contribute to a significant project impact at the study intersections for "2017 Cumulative Plus Project" conditions based on the City's threshold criteria. No additional off-site roadway improvements are needed for the project.

Based on the analysis provided above, the project would not result in significant impacts to local intersections in the project area. While the intersection of Alamitos Avenue-Shoreline Drive at Ocean Boulevard would operate at a deficient LOS (LOS E), this deficiency would occur with or without the project and the project's contribution to the impact does not exceed the City's identified significance threshold. Although no off-site mitigation would be required, on-site improvements have been incorporated into the project description to adequately provide access to the site from surrounding roadways. These improvements include two access driveways along on Seaside Way for the project site via an entrance and an exit to the parking garage. To ensure safe and adequate ingress and egress is provided at the project site, a southbound stop sign would be installed along Seaside Way for project egress, and an eastbound left turn lane would be provided along Seaside Way for project ingress. Traffic impacts in this regard would be less than significant with the incorporation of the on-site improvements.

Table 4.16-8
2017 Cumulative Plus Project Conditions Intersection Analysis

Study Intersection		2017 Cumulative No Project Conditions				2017 Cumulative Plus Project Conditions				Increase in V/C		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
	Segment	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS			
1	Golden Shore / Ocean Boulevard	0.542	A	0.668	B	0.545	A	0.670	B	0.003	0.002	***No***
2	Magnolia Avenue-Queens Way / Ocean Boulevard	0.688	B	0.670	B	0.692	B	0.672	B	0.004	0.002	***No***
3	Pacific Avenue / Ocean Boulevard	0.591	A	0.540	A	0.594	A	0.542	A	0.003	0.002	***No***
4	Pine Avenue / Ocean Boulevard	0.578	A	0.762	C	0.593	A	0.796	C	0.015	0.034	***No***
5	Locust Avenue / Ocean Boulevard	0.492	A	0.511	A	0.493	A	0.515	A	0.001	0.004	***No***
6	Long Beach Boulevard / Ocean Boulevard	0.551	A	0.511	A	0.558	A	0.517	A	0.007	0.006	***No***
7	Alamitos Avenue-Shoreline Drive / Ocean Boulevard	1.042	F	0.922	E	1.062	F	0.932	E	0.020	0.010	***No***
8	Pine Avenue / Broadway	0.455	A	0.765	C	0.461	A	0.771	C	0.006	0.006	***No***
9	Pine Avenue / Seaside Way	0.296	A	0.306	A	0.338	A	0.366	A	0.042	0.060	***No***
10	Pine Avenue / Shoreline Drive	0.404	A	0.534	A	0.419	A	0.541	A	0.015	0.007	***No***
11	Chestnut Place / Shoreline Drive	0.416	A	0.617	B	0.417	A	0.624	B	0.001	0.007	***No***
Project Access Driveways												
12	Existing Driveway / Ocean Boulevard	9.9	A	12.2	B	0.0	A	0.0	A	-100%	-100%	***No***
13	Project Exit / Seaside Way	N/A	N/A	N/A	N/A	11.2	B	12.7	B	N/A	N/A	***N/A***
14	Project Entrance / Seaside Way	N/A	N/A	N/A	N/A	0.0	A	0.0	A	N/A	N/A	***N/A***

Notes: V/C = volume to capacity ratio.
Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. The Los Angeles County Congestion Management Plan (CMP) is the applicable CMP for the project study area. Per the requirement of the CMP, the potential impact at the designated monitoring locations on the CMP highway system was assessed. The CMP requirements include the following:

- All CMP arterial monitoring intersections, including freeway on and off-ramp intersections, where the project will add 50 or more trips during either the AM or the PM weekday peak hours.

- Mainline freeway-monitoring station where the project will add 150 or more trips, either direction, during the AM or PM weekday peak hours.

CMP Intersection Impact

The following CMP intersection monitoring location in the project study are has been identified:

CMP Station	Location
No. 33	Alamitos Avenue at Ocean Boulevard

Based on the project's trip assignment, the project will add 35 net AM peak hour trips and 36 net PM peak hour trips to CMP Intersection No. 33. Since the project will not add 50 or more trips at the identified CMP intersection during weekday AM or PM peak hours, a CMP intersection traffic impact analysis is not required. Thus, a less than significant impact would occur in this regard.

CMP Freeway Impact

The following CMP freeway monitoring location in the project study are has been identified:

CMP Station	Location
No. 1078	I-710, north of Junction Route 1 (PCH), Willow Street

Based on the project's trip assignment, the project will add 35 net AM peak hour trips and 44 net PM peak hour trips to CMP Freeway Location No. 1078. Since the project will not add 50 or more trips at the identified CMP freeway location during weekday AM or PM peak hours, a CMP freeway traffic impact analysis is not required. Thus, a less than significant impact would occur in this regard.

CMP Transit Impact

Per the requirement of the CMP, the potential impact of the project on the transit service has been assessed. The project trip generation, as previously shown in Table 4.16-4, was adjusted

to determine the transit trips generated by the project. Per the CMP guidelines, a person trips equal 1.4 times vehicle trips and transit trips equal to 3.5 percent of the total person trips. The conversion equation is:

- Transit trips = 0.035 x (1.4 x vehicle trips); or Transit trips = 0.049 x Vehicle trips.

Table 4.16-9, *Project Transit Trip Calculation*, shows project transit trip calculations. As shown in Table 4.16-9, the project will generate 70 daily transit trips with five AM peak hour transit trips (one AM inbound and four AM outbound) and six PM peak hour transit trips (four PM inbound and two PM outbound).

Table 4.16-9
Project Transit Trip Calculations

Trip Type	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Net Vehicle Trips	1,436	22	89	111	86	48	134
Transit Trips	**70**	**1**	**4**	**5**	**4**	**2**	**6**

Source: RBF Consulting, *Oceanaire Apartments Traffic Impact Analysis*, February 24, 2015.

It is anticipated that the existing transit service in the project study area would be able to accommodate the project-generated transit trips. The project study area is currently being served by the following transit service:

- Long Beach Transit (LBT) Routes 51, 61, 71, 72, 111, 112, 181 and 182.
- Metro Blue Line
- LADOT Commuter Express 142

With a low number of transit trips generated by the project and available transit opportunities available in the study area, it is concluded that the existing public transit system would not be significantly impacted by the proposed project. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

c) ***Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

No Impact. The nearest airport to the project site is the Long Beach Airport, located approximately 3.75 miles to the northeast of the project site at 4100 Donald Douglas Drive. Due to distance and nature of the proposed project, implementation of the proposed project would not result in any change in air traffic patterns or traffic levels. Therefore, no impact would occur.

Mitigation Measures: No mitigation measures are required.

d) ***Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

Less Than Significant Impact. The proposed project is not anticipated to result in significant impacts related to hazardous design features. The proposed driveway for project entrance and exit would be designed and constructed in accordance with City standards to minimize the potential for safety risks. In addition, as discussed above in Response 4.16(a), the project would include on-site improvements to ensure that safe and adequate ingress and egress to the project site is provided. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

e) ***Result in inadequate emergency access?***

Less Than Significant Impact. Refer to Response 4.8(g), above.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. Refer to Response 4.16(b). The proposed project would not conflict with any policies related to alternative forms of transportation. The project site is located within the Downtown Shoreline Planned Development District which is comprised of high intensity mixed-use development, with multi-family residential uses located in close proximity to commercial/retail uses (thus resulting in reduced vehicle trips). Moreover, the proposed project would include sidewalks along the entire site perimeter, which would facilitate additional pedestrian use within the vicinity.

The project site is served by Long Beach Transit (LBT) bus service, with multiple stops throughout the Downtown Shoreline area, including 27 bus stops within a 0.25-mile radius of the project site. The project would also include bicycle racks. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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4.17 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			✓	
e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			✓	

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Less Than Significant Impact. Sewer services for the project site are provided by Long Beach Water Department (LBWD). The LBWD operates and maintains nearly 765 miles of sanitary sewer lines, safely and expeditiously delivering over 40 million gallons per day to Los Angeles County Sanitation Districts (LACSD) facilities located on the north and south sides of the City. From these facilities, treated sewage will be used in one of three ways: 1) it will be used to irrigate parks, golf courses, cemeteries, and athletic fields, 2) it will be used to recharge the City's groundwater basin, or 3) it will be pumped into the Pacific Ocean.

Currently, a majority of the City's wastewater is delivered to the Joint Water Pollution Control Plant (JWPCP) of the LACSD. The remaining portion of the City's wastewater is delivered to the Long Beach Water Reclamation Plant of the LACSD. JWPCP is located approximately 5.5 miles northwest of the project site at 24501 South Figueroa Street in the City of Carson. The plant occupies approximately 350 acres to the east of the Harbor (110) Freeway. The JWPCP is the largest of the LACSDs' wastewater treatment plants. It provides advanced primary and partial secondary treatment for 350 million gallons of wastewater per day. The plant serves a population of approximately 3.5 million people, including most of the 460,000 residents of the City. At JWPCP, the treated wastewater is disinfected with chlorine and sent to the Pacific Ocean through networks of outfalls that extend two miles off the Palos Verdes Peninsula to a

depth of 200 feet. The Long Beach Water Reclamation Plant is located in the City approximately 6.5 miles to the northeast of the project site at 7400 East Willow Street. The plant occupies 17 acres west of the San Gabriel River (605) Freeway. The plant provides primary, secondary, and tertiary treatment for 25 million gallons of wastewater per day. The plant serves a population of approximately 250,000 people, including a portion of the 460,000 residents of the City. Almost five million gallons per day of the purified water is reused at over 40 reuse sites.

The proposed project would result in the construction of a 216-unit multi-family/mixed-use apartment complex on the project site. While the project would result in an increase in population at the site, it is not expected that the project would exceed wastewater treatment requirements of the LARWQCB. The LACSD is responsible for meeting all State and Federal wastewater treatment requirements. As part of any new development project, the LACSD would charge a standard sewer connection fee that would assist LACSD in ensuring that sufficient capacity is available and that the wastewater treatment requirements of the LARWQCB are met. Thus, upon payment of standard sewer connection fees, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. The LBWD maintains and operates its own municipal water system, and would provide water service to the project site. Water demand is met through a combination of local groundwater and purchased water from the Metropolitan Water District (MWD). Existing 12-inch water mains are located within Ocean Boulevard to the north, Pine Avenue to the east, and Seaside Way to the south of the project site. Only a minor lateral connection would be required to provide service to the project site. Impacts regarding wastewater treatment facilities are described in Response 4.17(a), above. As such, it is not anticipated that any water or wastewater facilities would be required to serve the project that would result in a significant environmental effect. Refer to Response 4.17(d), below, for a discussion of water supply impacts. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. The City operates and maintains its storm drain facilities in the project area through implementation of the Long Beach Stormwater Management Program (LBSWMP). The City operates existing storm drain facilities to the east of the project site, within Pine Avenue, and to the south of the project site within Seaside Way. The proposed project would include on-site facilities that direct flows to two 18-inch storm drains that connect to a larger 72-inch storm drain within Seaside Way. Aside from minor ancillary connections to existing City facilities, no other storm drain facilities would need to be constructed. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The City receives its potable water supply from two main sources: groundwater and imported water. Ownership of pumping rights allows over half of the City's water supply needs to be produced from groundwater wells located within the City. The other portion of the City's potable water supply is treated surface water purchased from the Metropolitan Water District of Southern California (MWD). This water originates from two sources: the Colorado River, via the 242-mile Colorado River Aqueduct and Northern California Bay-Delta region, via the 441-mile California Aqueduct. The City satisfies non-potable water demand through reclaimed water supplies. Reclaimed water originates from the Long Beach Reclamation Plant, located on the east side of the City at 7400 East Willow Street. The water produced at the Long Beach Reclamation Plant comes from sewage water that is treated to a quality standard that is suitable for irrigating parks, golf courses, and other outdoor landscapes.

According to the City's 2010 Urban Water Management Plan (UWMP), the City's projected water demand is 67,620 acre-feet per year (AFY) consisting of 24,520 AFY from MWD wholesale purchases, 33,000 AFY from groundwater, and 10,100 AFY from recycled water.[27] The UWMP projects that water demand in 2035 will increase to 70,929 AFY. The UWMP includes an analysis of water supply reliability projected through 2035. Based on the analysis, the City would be capable of providing adequate water supply to its service area under a normal supply and demand scenario, single dry-year supply and demand scenario, and multiple dry-year supply and demand scenario through 2035. Furthermore, the MWD 2010 UWMP states that the MWD "has supply capabilities that would be sufficient to meet expected demands from 2015 through 2035 under the sing dry-year and multiple dry-year conditions."[28] Thus, the City and MWD UWMPs account for increased demand as growth within the City occurs.

Although the project would result in an increase in water demand due to the introduction of new residents, the City and MWD UWMPs demonstrate that adequate supply is available to serve the City through the long-range year of 2035. The UWMP projections are based upon growth and buildout as provided within the City's General Plan, and the proposed project is consistent with the site's land use designation as a Mixed Use District (LUD No. 7). As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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?***

Less Than Significant Impact. Refer to Response 4.17(a), above.

Mitigation Measures: No mitigation measures are required.

[27] Long Beach Water Department. *2010 Urban Water Management Plan*. September 2011.
[28] Metropolitan Water District of Southern California. *Regional Urban Water Management Plan*. November 2010.

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

Less Than Significant Impact. The proposed project would result in the generation of solid waste during the short-term construction processes and long-term operations. Residents and businesses in the City generate about 368,000 tons of residential, commercial, and industrial waste each year.[29] The City's solid waste is sent to the Southeast Resource Recovery Facility (SERRF) located approximately 2.75 miles to the west of the project site at 120 Pier South Avenue, where it is processed through one of three boilers. The ash residue is then treated and sent to local landfills as road base material. The SERRF processes an average of 1,290 tons of municipal solid waste each day, and produces enough electricity to furnish more than 35,000 homes with electrical power. The SERRF also performs "front-end" and "back-end" recycling by recovering such items as white goods prior to incineration and collecting metals that are removed from the boilers after incineration. Each month, an average 825 tons of metal are recycled rather than sent to a landfill. Due to the fact that the City is serviced by the SERFF, and will not rely on the capacity of landfills to accommodate the project's solid waste disposal needs, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. As stated above, the proposed project would result in the generation of solid waste during the short-term construction processes and long-term operations. The proposed project would comply with all applicable Federal, State, and local statutes and regulations related to solid waste. These regulations include the U.S. Environmental Protection Agency's Resource Conservation and Recovery Act (RCRA), which provides the federal government with "cradle to grave" authority over the disposal of solid waste and hazardous materials. The project would also be required to comply with Assembly Bills 939 and 1327, which require measures to enhance recycling and source reduction. And lastly, the project would be required to comply with the LBMC Chapter 18.67, *Construction and Demolition Recycling Program*, which requires covered projects to divert at least 60 percent of all project-related construction and materials. Chapter 18.67 of the LBMC also requires preparation of a Waste Management Plan (WMP) for the project. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

[29] City of Long Beach Website. *SERRF*. Available at: http://www.longbeach.gov/lbgo/serrf/. Accessed October 10, 2014.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		✓		
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

a) ***Does the project have the potential to 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?***

Less Than Significant Impact With Mitigation Incorporated. The project site is within a developed urban area, and there are no rare, endangered, threatened plants or animal species within the project site. No impacts to biological resources would occur.

As noted above within Section 4.5, *Cultural Resources*, the site exists within a highly developed area and the project site has been completely disturbed and graded. No known cultural resources exist within the boundaries of the site. Although it is not expected that cultural resources would be encountered during construction, the project would require grading and excavation that may encounter unknown buried resources. As such, Mitigation Measures CUL-1 and CUL-2 have been provided in the unlikely event such resources are discovered during the grading and excavation process. Upon implementation of the recommended mitigation measures, impacts would be less than significant.

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)?***

Less Than Significant Impact with Mitigation Incorporated. As noted within Section 4.0, *Environmental Analysis*, impacts related to the proposed project would be less than significant with implementation of recommended mitigation measures. No impacts related to the project have been identified that would be individually limited, but cumulatively considerable for the issue areas analyzed within this Initial Study. The proposed project would be consistent with the City's long-range development plans for the project site as it would represent a use consistent with the surrounding land uses and developments. Thus, impacts in this regard would be less than significant.

c) ***Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?***

Less Than Significant Impact with Mitigation Incorporated. Previous sections of this Initial Study reviewed the proposed project's potential impacts related to aesthetics, air pollution, noise, public health and safety, traffic and other issues. Mitigation measures have been incorporated into the project that would reduce the potential adverse impacts on human beings to a less than significant level. Therefore, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.

5.0 MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring plan. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring plan must be designed to ensure compliance during project implementation (*Public Resources Code* Section 21081.6).

In compliance with *Public Resources Code* Section 21081.6, the attached *Mitigation Monitoring and Reporting Program* has been prepared for the proposed Oceanaire Apartment Project. This *Mitigation Monitoring and Reporting Program* is intended to provide verification that all mitigation measures identified in the Initial Study prepared for the project are monitored and reported. Monitoring will include 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation; and 3) retention of records in the project file.

This *Mitigation Monitoring and Reporting Program* delineates responsibilities for monitoring the project, but also allows the City of Long Beach flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- The City distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Initial Study, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to the City as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- The City prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.
- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the *Mitigation Monitoring and Reporting Program*, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the City. Such changes could include reassignment of monitoring and reporting responsibilities, plan redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in *CEQA Guidelines* Section 15162. No change will be permitted unless the *Mitigation Monitoring and Reporting Program* continues to satisfy the requirements of *Public Resources Code* Section 21081.6.

MITIGATION MONITORING AND REPORTING CHECKLIST

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
AESTHETICS							
AES-1	Construction equipment staging areas shall be located, to the greatest extent feasible, away from nearby existing residential uses, and shall utilize appropriate screening (i.e., temporary fencing with opaque material) to shield public views of construction equipment and material. Prior to issuance of a grading permit, the City Engineer shall verify that staging locations are identified on final grading/ development plans and that appropriate perimeter screening is included as a construction specification.	Review of Project Plans and Specifications; Construction Inspections	Prior to Issuance of Grading Permit; During Construction	City of Long Beach City Engineer; Construction Contractor			
AES-2	The project applicant shall ensure that any exterior lighting does not spill over onto the adjacent uses. Prior to issuance of any building permit, the project applicant shall prepare and submit an Outdoor Lighting Plan to the City of Long Beach Development Services Department, for review and approval, that includes a footcandle map illustrating the amount of light from the proposed project at adjacent light sensitive receptors. All exterior light fixtures (including street lighting) shall be shielded or directed away from adjoining uses. Landscape lighting levels shall respond to the type, intensity, and location of use. Safety and security for pedestrians and vehicular movements shall be anticipated.	Review of Project Plans	Prior to Issuance of a Building Permit	City of Long Beach Development Services Department			
AIR QUALITY							
AQ-1	Prior to issuance of any Grading Permit, the City Engineer shall confirm that the Grading Plan and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or	Review of Project Plans; Construction Inspections	Prior to Issuance of a Grading Permit; During Construction	City of Long Beach City Engineer; Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors: • All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust; • Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance; • Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied; • All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour; • Disturbed areas shall be replaced with ground cover or paved immediately after						

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	construction is completed in the affected area; • Track-out devices such as gravel bed track-out aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes. Alternatively a wheel washer shall be used at truck exit routes; • On-site vehicle speed shall be limited to 15 miles per hour; • All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; and • Trucks associated with soil-hauling activities shall avoid residential streets and utilize City-designated truck routes to the extent feasible.						
AQ-2	Before issuance of each Grading Permit, the construction contractor shall provide evidence to the City Engineer that the following measures would be implemented during construction: • Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NOX emissions requirements.	Review of Project Plans; Construction Inspections	Prior to Issuance of a Grading Permit; During Construction	City of Long Beach City Engineer; Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	• During Project construction, all internal combustion engines/construction, equipment operating on the project site shall meet EPA-Certified Tier 3 emissions standards, or higher according to the following: - All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road 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. - 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.						
CULTURAL RESOURCES							
CUL-1	If evidence of subsurface archaeological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Long Beach Development Services Department. With direction from the Development Services Department, an archaeologist certified by the	During Construction	During Construction	City of Long Beach Development Services Department; Certified Archaeologist (if required)			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	County of Los Angeles shall be retained to evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted, the archaeologist shall collect the resource and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition and extent of the resources), final mitigation recommendations, and cost estimates.						
CUL-2	If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Long Beach Development Services Department. With direction from the Development Services Department, a paleontologist certified by the County of Los Angeles shall evaluate the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.	During Construction	During Construction	City of Long Beach Development Services Department; Certified Paleontologist (if required)			
GEOLOGY AND SOILS							
GEO-1	Prior to Grading or Building Permit issuance, the Grading and Building Plan, construction contracts, and specifications shall demonstrate compliance with the recommendations set forth in the Report of Geotechnical Exploration (Leighton and Associates, April 2014) prepared for the project that pertain to geological hazards. These recommendations pertain to site earthwork and preparation, grading, foundation design, and the establishment of adequate seismic design parameters under the 2013 California Building Code (CBC). The Report of Geotechnical Exploration is included in Appendix C of this	Preparation of a Site-Specific Geotechnical/ Soils Report; Review of Project Plans	Prior to Issuance of Grading or Building Permits; During Construction	City of Long Beach City Engineer; Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	document and is incorporated by reference into this mitigation measure.						
NOISE							
NOI-1	Prior to Grading Permit issuance, the project applicant shall demonstrate, to the satisfaction of the City of Long Beach City Engineer that the project complies with the following: • Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices. • Property owners and occupants located within 200 feet of the project boundary shall be sent a notice, at least 15 days prior to commencement of construction of each phase, regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the project construction site. All notices and signs shall be reviewed and approved by the City of Long Beach Development Services Department, prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints. • Prior to issuance of any Grading or Building Permit, the Contractor shall provide evidence that a construction staff	Review of Project Plans; Construction Inspections	Prior to Issuance of Grading Permit; During Construction	City of Long Beach City Engineer; Construction Contractor			

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	member will be designated as a Noise Disturbance Coordinator and will be present on-site during construction activities. The Noise Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the Public Works Department. All notices that are sent to residential units immediately surrounding the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator. • Prior to issuance of any Grading or Building Permit, the Project Applicant shall demonstrate to the satisfaction of the City Engineer that construction noise reduction methods shall be used where feasible. These reduction methods include shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and electric air compressors and similar power tools.						

Mitigation Number	Mitigation Measure	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	• Construction haul routes shall be designed to avoid noise sensitive uses (e.g., residences, convalescent homes, etc.), to the extent feasible. • During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers. • Construction activities shall not take place outside of the allowable hours specified by the City's Municipal Code Section 8.80.202, Construction Activity (7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 6:00 p.m. on Saturdays; construction activities are not permitted on Sundays or legal holidays).						

6.0 REFERENCES

The following references were utilized during preparation of this Initial Study. These documents are available for review at the City of Long Beach Development Services Department, located at 333 West Ocean Boulevard, 3rd Floor, Long Beach, California 90802.

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