County of Los Angeles

Parcel 44 Project, Marina del Rey
Draft Environmental Impact Report
Project # R2013-01647-(4)
SCH #2013081040

Volume I

Prepared For:

County of Los Angeles
Department of Regional Planning
320 Temple Street
Los Angeles, CA 90012

February 2015

Parcel 44 Project, Marina del Rey

Draft Environmental Impact Report

Project # R2013-01647-(4)

SCH #2013081040

Volume I

Prepared for:

County of Los Angeles
Department of Regional Planning
320 Temple Street
Los Angeles, CA 90012

Prepared by:

Impact Sciences, Inc.
803 Camarillo Springs Road, Suite A
Camarillo, California 93012

February 2015

TABLE OF CONTENTS

Volume 1

Appendices

Volume 2

Volume 3

LIST OF FIGURES

LIST OF FIGURES (continued)

LIST OF TABLES

LIST OF TABLES (continued)

1.0 EXECUTIVE SUMMARY

1.0.1 INTRODUCTION

The purpose of the executive summary is to provide a clear and simple description of the project and its potential environmental impacts. Section 15123 of the *California Environmental Quality Act (CEQA) Guidelines*[1] requires the executive summary to identify each significant effect with proposed mitigation measure(s) and alternatives that would minimize or avoid that effect. The summary is also required to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

1.0.2 PROJECT LOCATION AND SETTING

Marina del Rey is an unincorporated seaside community located in Los Angeles County (**Figure 3.0-1 Vicinity Map**). Regional access to the area is provided by State Route 90 (SR-90) and Interstate 405 (I-405). The community of Venice is located northwest of Marina del Rey, and Playa Vista is located to the southeast. Los Angeles International Airport is approximately 4 miles southeast of Marina del Rey. Marina del Rey is generally characterized by relatively flat and low-lying topographic features. The marina is now highly urbanized and is home to approximately 5,000 pleasure boats and a variety of land uses, including hotels, restaurants, office, and commercial centers, residential uses and public parks, beaches, and bike paths.

The project site is situated in the southeastern portion of Marina del Rey. Elevations on the project site and surrounding area range from 10 to 15 feet above mean sea level. Parcel 44, the project site, is a U-shaped parcel makes up a portion of Basin G between Bali Way and Mindanao Way. Landside access to the project site is now provided via Bali and Mindanao Ways. Maps illustrating the site location from a regional and local perspective are shown in **Figure 3.0-1, Vicinity Map**, and **Figure 3.0-2, Project Location Map,** respectively.

The project site is currently developed with eight existing structures in use, totaling approximately 14,724 square feet. The remainder of the site consists of paved parking. The subject Parcel 44 consists of a total of 8.39 landside acres and 7.18 waterside or submerged acres. The proposed project only includes improvements to the landside portion of the Parcel 44. Approval for demolition of the existing Pier 44 anchorage and the subsequent construction of a new private boat anchorage on the waterside portion of the Parcel 44 was previously granted by the California Coastal Commission pursuant to Coastal

1 California Environmental Quality Act, *State CEQA Guidelines*, Section 15123.

Development Permit (CDP) No. 5-11-131. Final issuance of this CDP was given by the Coastal Commission staff on June 26, 2012. Given this, the waterside component of Parcel 44 is not assessed further in this project Draft EIR; however, it is included in the Draft EIR's cumulative impact analyses.

1.0.3 PROJECT CHARACTERISTICS

The proposed project consists of the removal of all existing development on Parcel 44, including the parking lots. The project would construct eight new buildings containing a total of approximately 83,253 square feet of floor area. The following is a description of the proposed new structures on Parcel 44.

- Building I (as denoted on the site plan) will serve as boaters' bathrooms with an area of 386 square feet.
- Building II will serve a "Trader Joe's" (or similar) grocery market of approximately 13,625 square feet.
- Building III (386 square feet) is similar to Building I and will serve as boaters' bathrooms.
- Building IV is a two-story structure. The ground floor of this building will be occupied entirely by a "West Marine" (or similar) retail store (approximately 25,000 square feet). The second floor of this building will contain marine administrative offices (approximately 2,285 square feet), boat broker offices (approximately 3,911 square feet) boaters' bathroom and laundry (approximately 542 square feet), office space[2] (approximately 4,554 square feet), two additional office spaces (approximately 1,444 and 3,172 square feet) and a community room/boaters' lounge (approximately 840 square feet).
- Building V will accommodate a retail space (approximately 3,795 square feet) and a restaurant (approximately 2,355 square feet) with an associated market (approximately 500 square feet).
- Building VI will contain a two-story, waterfront-oriented restaurant (approximately 7,500 square feet) with a prominent "tower" feature to serve as an entry foyer to the restaurant, which will be accessible from Admiralty Way and Bali Way. The first floor of this building will also accommodate commercial retail space (approximately 9,500 square feet).
- Building VII will serve as boaters' bathrooms with an area of 386 square feet.
- Building VIII will serve as a yacht club/boat repair shop (approximately 1,850 square feet).

In addition, an open-air boat stacking/rack system is included, allowing outdoor storage of up to approximately 56 boats (stacked three-boats-high).

Based on the traffic analysis, the project is expected to generate a net increase in net increase in Parcel 44 site traffic of approximately 3,753 net new daily trips, including about 79 net new trips (53 inbound,

2 The office space in Building IV is a replacement for the existing office space that will be demolished as part of the proposed project.

26 outbound) during the AM peak hour, and about 387 net new trips (206 inbound, 181 outbound trips) during the PM peak hour.[3]

1.0.4 PROJECT OBJECTIVES

Consistent with the certified Local Coastal Program (LCP) and the County's broader public policy goals and objectives, the applicant proposes to redevelop uses on the project site in order to meet the following project objectives.

- To create a vibrant, marine-oriented retail experience for the visiting public, as well as provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way;
- To provide high quality, visitor-serving restaurants, retail and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP;
- To improve the coastal recreational opportunities for the visiting public by greatly enhancing the public's access to and passive recreational use of the landside portions of the site;
- To provide marine-related retail space and accommodate the boating supply needs of boaters throughout the marina;
- To provide retail space for a "Trader Joe's" (or similar) specialty market and allow for the convenient sale of food and beverage for visitors, Burton Chase Park users, and boaters as well as the greater Marina del Rey community;
- To improve boater amenities on the project site by providing boater related uses such as a yacht club, boat repair shop, boat storage, boater bathrooms and transient docks;
- To design buildings which are attractive on all sides and from every vista;
- To provide safe, convenient pedestrian access from Admiralty Way, Mindanao Way and Bali Way;
- To increase and improve the parcel's view corridors to the Marina waters;
- To provide an improved and safer bicycle travel through the site via realignment of the existing bike path on the site;
- To provide bicycle racks convenient to visitors using the bike path;
- To provide improved fire department access to the site and marina;

---

3 These numbers account for the removal of the existing site related trips and the trip reductions to account for pass-by traffic.

- To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan) of the certified Marina del Rey Land Use Plan.

1.0.5 ALTERNATIVES TO THE PROJECT

CEQA requires that an environmental impact report (EIR) describe a range of reasonable alternatives to a proposed project that could feasibly avoid or lessen any significant environmental impacts, while attaining the basic objectives of the project. Comparative analysis of the impacts of these alternatives is required. In response to the significant impacts associated with the proposed project, the County of Los Angeles developed and considered several alternatives to the project. These alternatives include:

1.0.5.1 Alternative 1 – No Project/No Development

The No Project Alternative assumes that the demolition of the existing structures and reuse of the project site would not occur. The existing buildings would remain in use.

1.0.5.2 Alternative 2 – Reduced Density Alternative

The Reduced Density Alternative would include a total of 59,603 square feet of new development and would eliminate the retail/restaurant uses in buildings V and VI, which represents a 30 percent reduction compared to the proposed project. Proposed building heights in this Alternative would be the same as those included in the proposed project. The intent of this Alternative is to avoid or reduce the severity of project-related significant impacts resulting from construction and operation by reducing the amount of development on the project site.

1.0.5.3 Alternative 3 – Mixed Use (Retail/Residential) Alternative

The Mixed Use (Retail/Residential) Alternative would develop the site with a combination of retail and residential uses. The height of four of the buildings would be increased from two to three stories to allow two floors of residential uses above the ground floor retail. Specifically, buildings II, IV, V, and VI would be increased to three stories (compared to two stories with the proposed project) with retail on the ground floor and 24 residential units above. Dedicated residential parking would also be necessary to accommodate the residential uses; overall approximately the same surface area would be dedicated to parking as with the proposed project this would be because although a minimum of 24 spaces would be necessary for residential parking, the reduction in commercial square footage would reduce the amount of parking necessary for commercial uses.

1.0.6 AREAS OF KNOWN CONTROVERSY

The *State CEQA Guidelines* require a Draft EIR to identify areas of controversy known to the lead agency, including issues raised by other agencies and the public. No areas of public controversy were raised by agencies or members of the public during the scoping meeting and the Initial Study (IS)/Notice of Preparation (NOP) review periods.

Comments were received from public agencies and interested parties (see **Section 2.0, Table 2.0-1**) in response to the circulated NOP. In compliance with *State CEQA Guidelines*, the County held one scoping meeting on September 10, 2013 at Burton Chase Park, Community Room, located at 13650 Mindanao Way in Marina del Rey, to solicit comments and to inform the public of the proposed EIR. Comments received in response to the published NOP are provided in **Appendix 1.0**.

1.0.7 ISSUES TO BE RESOLVED

The *State CEQA Guidelines* require an EIR to present issues to be resolved by the lead agency. These issues include the choice between alternatives and whether or how to mitigate potentially significant impacts. The major issues to be resolved by the County of Los Angeles, as the Lead Agency for the project include the following:

- Whether the recommended mitigation measures should be adopted or modified;
- Whether additional mitigation measures need to be applied to the project; and
- Whether the project or an alternative should be approved.

1.0.8 SUMMARY OF PROJECT IMPACTS

A summary of the environmental impacts associated with implementation of the proposed project, mitigation measures included to avoid or lessen the severity of potentially significant impacts, and residual impacts, is provided in **Table 1.0-1, Summary of Project Impacts, Mitigation Measures, and Residual Impacts**, below.

Table 1.0-1
Summary of Project Impacts, Mitigation Measures, and Residual Impacts

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Aesthetics		
Impact 4.1-1: The project would change the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features	No mitigation is required	Less than significant
Impact 4.1-2: The project would create a new source of shadows, light, or glare which could adversely affect day or nighttime views in the area	No mitigation is required	Less than significant
Air Quality		
Impact 4.2-1: The project would not conflict with or obstruct implementation of the applicable air quality plan	No mitigation is required	Less than significant
Impact 4.2-2: The project would generate total criteria pollutant emissions during construction or operation (direct and indirect) in excess of the thresholds given in Table 4.2-4, South Coast Air Quality Management District Regional Emission Thresholds	No mitigation is required	Less than significant
Impact 4.2-3: The project would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard	No mitigation is required	Less than significant
Impact 4.2-4: The project would not expose sensitive receptors to substantial pollutant concentrations	No mitigation is required	Less than significant
Biological Resources		
Impact 4.3-1: Could the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)	**4.3-1:** Prior to and during all project-related construction activities, applicant shall strictly comply with all applicable policies contained in Policy Nos. 23 (Marina del Rey Tree Pruning and Tree Removal Policy), 34 (Marina del Rey Leasehold Tree Pruning and Tree Removal Policy), and 37 (Biological Report & Construction Monitoring Requirements) of the certified LCP.	With implementation of **Mitigation Measure 4.3-1,** impacts would be less than significant

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Biological Resources (continued)		
Impact 4.3-2: Could the proposed project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations, or by the CDFW or USFWS	Implementation of **Mitigation Measure 4.3-1**, above	With implementation of **Mitigation Measure 4.3-1,** impacts would be less than significant
Impact 4.3-3: Could the proposed project have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by § 404 of the federal Clean Water Act or California Fish & Game Code § 1600, et seq. through direct removal, filling, hydrological interruption, or other means	No mitigation is required	Less than significant
Impact 4.3-4: Could the proposed project result in substantial interference 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	Implementation of **Mitigation Measure 4.3-1**, above	With implementation of **Mitigation Measure 4.3-1,** impacts would be less than significant
Impact 4.3-5: Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10 percent canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshuas, Southern California black walnut, etc.)	No mitigation is required	Less than significant
Impact 4.3-6: Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, § 22.56.215), and Sensitive Environmental Resource Areas (SERAs) (L.A. County Code, Title 22, Ch. 22.44, Part 6)	Implementation of **Mitigation Measure 4.3-1**, above	With implementation of **Mitigation Measure 4.3-1,** impacts would be less than significant
Impact 4.3-7: Would the project conflict with the provisions of an adopted state, regional, or local habitat conservation plan	Implementation of **Mitigation Measure 4.3-1**, above	With implementation of **Mitigation Measure 4.3-1,** impacts would be less than significant

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Geology and Soils		
Impact 4.4-1: The project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction	Adherence to the design recommendations provided in the Geotechnical study will ensure impacts will remain less than significant.	Impacts would be less than significant
Impact 4.4-2: The project would 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	Adherence to the design recommendations provided in the Geotechnical study will ensure impacts will remain less than significant.	Impacts would be less than significant
Impact 4.4-3: The project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property	Adherence to the design recommendations provided in the Geotechnical study will ensure impacts will remain less than significant.	Impacts would be less than significant
Greenhouse Gases		
Impact 4.5-1: The project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment	No mitigation is required	Less than significant
Impact 4.5-2: The project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	No mitigation is required	Less than significant
Hydrology/Water Quality		
Impact 4.6-1: Violate water quality standards or waste discharge requirements 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 Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality Otherwise substantially degrade water quality	No mitigation is required	Less than significant

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Hydrology/Water Quality (continued)		
Impact 4.6-2: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site 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	No mitigation is required	Less than significant
Impact 4.6-3: Place structures in areas subject to inundation by seiche, tsunami, or mudflow	No mitigation is required	Less than significant
Noise		
Impact 4.7-1: The project would not result in exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08)	No mitigation is required	Less than significant
Impact 4.7-2: Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	No mitigation is required	Less than significant
Impact 4.7-3: A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems	**4.7-1:** All construction equipment, fixed or mobile, that is utilized on the site for more than two working days shall be in proper operating condition and fitted with standard factory silencing features. In areas where construction equipment (such as generators and air compressors) is left stationary and operating for more than one day within 100 feet of residential land uses, temporary portable noise structures shall be built. These barriers shall be located between the piece of equipment and sensitive land uses. As the project is constructed, the use of building structures as noise barrier would be sufficient. The applicant's representative shall spot check to ensure compliance. **4.7-2** The project applicant shall post a notice at the construction site and along the proposed truck haul route. The notice shall contain information on the type of project and anticipated duration of construction activity, and shall provide a phone number where people can register questions and complaints. The applicant shall keep a record of all complaints and take appropriate action to minimize noise generated by the offending activity where feasible. A monthly log of noise complaints shall be maintained by the applicant and submitted to the County of Los Angeles Department of Public Health.	With implementation of **mitigation measures 4.7-1** and **4.7-2** impacts will be less than significant.

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Traffic/Access		
Impact 4.8-1: The proposed project would 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	Project Design Features provided in Section 4.8 Traffic and Access. **Project Specific Measures – Los Angeles County Intersections:** **4.8-1** **Admiralty Way and Mindanao Way** – Although as shown earlier in **Table 4.8-8**, the project could result in a significant impact at this intersection during the PM peak hour under the "Existing With Project" scenario, this location was assumed only to be improved with the project-required improvements to the eastbound approach of Mindanao Way for the analysis of potential project-related impacts for that scenario. However, as described earlier in this report, the County is currently underway with, and is nearing completion on, improvements to Admiralty Way that will install new southbound dual left-turn lanes at this intersection. As a result, as further shown in **Table 4.8-9**, once the ongoing installation of the new dual southbound left-turn lanes is completed, the project's impacts will become less than significant (during both peak hours). Therefore, no improvements to this intersection (beyond the project-required improvement to eastbound Mindanao Way and the ongoing improvements being installed by the County) are necessary. **Shared Los Angeles County/Los Angeles City Intersections** **4.8-2a:** **Lincoln Boulevard and Mindanao Way** – This intersection is under the shared jurisdiction of the County and City of Los Angeles and the State of California. The "Revised Set of Intersection Improvements" contained in the updated LCP does not identify any roadway improvements for this location, although the (now-superseded) Transportation Improvement Program (TIP) of the prior LCP included an improvement to install a new northbound right-turn only lane on Lincoln Boulevard at Mindanao Way. However, as described earlier in this report, this measure has already been installed, and a review of this intersection indicates that it currently provides exclusive left-turn and right-turn lanes, along with three through lanes, on the northbound approach, a left-turn lane, and three through lanes (including a shared through/right-turn lane) on the southbound approach, dual left-turn lanes along with two through lanes (including a shared through/right-turn lane) for the westbound approach, and two through lanes (including a shared through/right-turn lane) on the eastbound approach (eastbound left turns are prohibited at this intersection). There are no additional rights-of-way available to widen any of the intersection approaches, and as such, no feasible improvements are available at this location.	With implementation of project design features construction impacts would be less than significant. Operational impacts would remain significant and unavoidable.

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Traffic/Access (continued)		
	4.8-2b: Lincoln Boulevard and Fiji Way – This intersection is also under the shared jurisdiction of the County and City of Los Angeles and the State, and as a result, the updated LCP does not identify any roadway improvements for this location, although the previous TIP included a measure to install a second eastbound left-turn lane on Fiji Way at Lincoln Boulevard (this recommendation has since been abandoned). This intersection currently provides dual left-turn lanes plus three through lanes (including a shared through/right-turn lane) on the northbound approach, a left-turn lane and three through lanes (including a shared through/right-turn lane) on the southbound approach, a left-turn lane, a through lane, and a right-turn only (free right) lane on the eastbound approach, and a single lane (shared left-turn/through/right-turn lane) on the westbound approach. No additional rights-of-way are currently available, and no further improvements are feasible. **City of Los Angeles Intersections** **4.8-3: Lincoln Boulevard and Venice Boulevard** – This intersection is already improved with dual left-turn lanes on each approach, in addition to exclusive right-turn only lanes on both the eastbound and westbound approaches (each with right-turn overlap phases concurrent with the northbound and southbound left-turn phases). **Lincoln Boulevard and Washington Boulevard** – Similar to Lincoln Boulevard and Venice Boulevard, this intersection is also currently improved with dual left-turn lanes on each approach, plus exclusive right-turn only lanes (including right-turn overlap phases concurrent with the northbound and southbound left-turn phases) on both the eastbound and westbound approaches. **Lincoln Boulevard and Marina Expressway** – This location is currently improved to provide both dual left-turn and dual right-turn lanes on the westbound approach of the Marina Expressway, as well as dual left-turns for southbound Lincoln Boulevard (left-turns for northbound travel are not permitted at this location). **Mindanao Way and Eastbound Marina Expressway** – Improvements were recently completed at this intersection to install dual left-turn lanes on the southbound approach of Mindanao Way (onto the eastbound Marina Expressway), while the eastbound approach of the Marina Expressway is flared at the intersection in order to provide an exclusive left-turn lane (in addition to its typical two through lanes). **Lincoln Boulevard and Jefferson Boulevard** – This intersection has recently been reconstructed to substantially enhance its capacity and operations (as mitigation for the adjacent Playa Vista development project), particularly in the northbound and southbound directions, and currently provides an exclusive right-turn only lane on the northbound approach, plus dual left-turn lanes on the southbound approach, and dual left-turn and dual right-turn lanes on the westbound approach.	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Traffic/Access (continued)		
Impact 4.8-2: The proposed project could conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways.	No mitigation is required	Less than significant
Impact 4.8-3: The proposed project could increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	No mitigation is required	Less than significant
Impact 4.8-4: Would the project result in adequate emergency access	No mitigation is required	Less than significant
Cumulative Traffic Impacts	**4.8-4a:** **Admiralty Way and Via Marina** – Two potential roadway improvement alternatives are identified in the certified LCP to address cumulative traffic impacts at this intersection: 1. The first roadway improvement alternative (LCP A) includes the installation of a third left-turn lane (in addition to the two existing right-turn only lanes) on the westbound approach of Admiralty Way at Via Marina, and would also convert one of the three existing southbound through lanes to a new left-turn lane (resulting in a final southbound configuration of two left-turn lanes and two through lanes). The northbound approach of this intersection would remain unchanged, and continue to provide two through lanes and one right-turn only lane. The certified LCP does not identify whether roadway widenings are necessary to implement this improvement. 2. The second alternative (LCP B) would reconstruct this intersection to realign Admiralty Way and the south leg of Via Marina to operate as a "through roadway," with the north leg of Via Marina intersecting the realigned Admiralty Way/Via Marina roadway in a "T" configuration. The resulting intersection would include two through lanes in each direction along realigned Admiralty Way/Via Marina, with one westbound right-turn lane and dual eastbound left-turn lanes from this roadway onto the north leg of Via Marina, while the southbound approach of Via Marina at the intersection would provide two left-turn lanes and a single right-turn lane.	With implementation of **Mitigation Measure 4.8-4a** through **4.8-4d** cumulative impacts would remain significant and unavoidable

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Traffic/Access (continued)		
	4.8-4b: **Admiralty Way and Palawan Way** – There are also two potential roadway improvements identified in the certified LCP to address the cumulative impact at this intersection: 1. In addition to the current County improvements to restripe northbound Palawan Way to convert the existing left-turn lane to a shared left-turn/through lane (with the existing shared through/right-turn lane remaining unchanged), and to add a new exclusive westbound right-turn only lane on Admiralty Way, the first improvement alternative (LCP A) would restripe the southbound approach of Palawan Way to convert the existing through lane to a shared left-turn/through lane (but leave the existing left-turn and right-turn lanes unchanged), and would further improve the westbound approach of Admiralty Way to provide an additional through lane (west of the intersection with Palawan Way). This alternative improvement would also convert the new westbound right-turn only lane to a shared through/right-turn lane, to provide a future lane configuration of one left-turn lane, two through lanes, and one shared through/right-turn lane. The eastbound approach would continue to exhibit its current configuration of one left-turn lane, one through lane, and one shared through/right-turn lane. As with the ongoing improvement at this location, due to the proposed "shared through/left-turn lane" configuration for southbound Palawan Way, this alternative will require modification of the existing traffic signal to provide north/south opposed phasing operation. 2. The second certified LCP roadway improvement alternative (LCP B) is similar to the LCP A alternative described above, and would again modify westbound Admiralty Way to provide a third westbound lane west of the intersection, and convert the new westbound right-turn only lane to a shared through/right-turn lane (again with no changes to the eastbound approach lane configuration). However, this alternative would also restripe northbound Palawan Way to convert the existing shared through/right-turn lane to an exclusive right-turn only lane, while keeping the new shared left-turn/through lane currently being constructed. Additionally, this alternative would modify the southbound approach of Palawan Way to add a second left-turn lane (resulting in a final southbound lane configuration of two left-turn lanes, one through lane, and one right-turn only lane). As with the LCP A alternative, the traffic signal would be modified to operate with opposed north/south phasing. **4.8-4c:** **Admiralty Way and Bali Way** – The LCP improvement to add a second left-turn lane on southbound Admiralty Way at Bali Way, resulting in a final lane configuration for this approach of two left-turn lanes, one through lane, and one shared through/right-turn lane is currently under construction, and no further improvements are proposed.	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Traffic/Access (continued)		
	4.8-4d: Admiralty Way and Mindanao Way – In addition to the ongoing improvements to this intersection being installed by the County to provide a second southbound left-turn lane on Admiralty Way at Mindanao Way, and the project-required improvement to widen the south side of Mindanao Way to install a new shared through/right-turn lane on the eastbound approach of this street (and convert the current shared through/right-turn lane to a shared left-turn/through lane) described earlier (which is also part of the overall LCP improvement at this location), the remaining LCP improvements at this intersection would restripe the westbound approach of Mindanao Way to convert the existing shared left-turn/through lane to a shared left-turn/through/right-turn lane. The traffic signal phasing at this location will continue to exhibit the current east-west "split" phase operations, due to the proposed new eastbound/westbound lane configurations	
Police Protection		
Impact 4.9.1-1: Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for Sheriff's protection	No mitigation is required	Less than significant
Fire Protection		
Impact 4.9.2-1: Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection	Implementation of project design features**.**	Less than significant
Wastewater		
Impact 4.10.1-1: Exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Board	No mitigation is required	Less than significant
Impact 4.10.1-2: Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects	No mitigation is required	Less than significant

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Water		
Impact 4.10.2-1: The proposed project would have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses	None required.	Impacts would be less than significant.
Solid Waste		
Impact 4.10.3-1: The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	**4.10.3-1:** The project proponent shall also provide a Construction and Demolition Debris Recycling and Reuse Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. **4.10.3-2:** To reduce the volume of solid and hazardous waste generated by the operation of the project, a solid waste management plan shall be developed by the project applicant. This plan shall be reviewed and approved by the County of Los Angeles Health Department. The plan shall identify methods to promote recycling and re-use of materials, as well as safe disposal consistent with the policies and programs contained within the County of Los Angeles Source Reduction and Recycling Element. Methods shall include locating recycling bins in proximity to dumpsters used by future on-site customers and business operators.	With implementation of **Mitigation Measure 4.10.3-1** and **4.10.3-2** impacts would be less than significant

2.0 INTRODUCTION

Pursuant to California Public Resources Code Section 21082.1, the County of Los Angeles Department of Regional Planning (County) has independently reviewed and analyzed information contained in this Environmental Impact Report (EIR) prior to its distribution as a Draft EIR. Conclusions and discussions contained herein reflect the independent judgment of the County as to those issues known at the time of publication.

2.0.1 PURPOSE OF THE EIR

This EIR has been prepared on behalf of the County of Los Angeles to evaluate the environmental consequences, the mitigation measures, and the project alternatives associated with the proposed Parcel 44 project. The proposed project requires the following discretionary actions:

- Certification of an Environmental Impact Report
- Coastal Development Permit required to authorize the demolition of all existing facilities located on the site and the development/construction of new proposed structures and appurtenant facilities on the parcel.
- Parking Permit required to authorize commercial tandem parking and a minor reduction in Code-required parking for the project. The commercial tandem spaces will be serviced by valet.
- Conditional Use Permit required to ensure consistency with subject parcel's "Waterfront Overlay Zone" development criteria.
- Variance required to authorize a reduction in the required side yard for installation of the proposed open boat storage racks.

It is intended that this EIR be considered in the decision-making process for this project, along with other information presented on the project such as public proceedings. Pursuant to *California Environmental Quality Act (CEQA) Guidelines* Section 15200, this EIR will serve the following purposes of review:

1. Sharing expertise
2. Disclosing agency analyses
3. Checking for accuracy
4. Detecting omissions
5. Discovering public concerns
6. Soliciting counter proposals

2.0.2 STATUTORY AUTHORITY

This EIR has been prepared in accordance with the CEQA statutes, as amended (Public Resources Code Section 21000, et seq.). In accordance with the *State CEQA Guidelines* Section 15146, the degree of specificity required in an EIR must correspond to the actions sought to be covered by the EIR. In accordance with *State CEQA Guidelines* Section 15050, the County of Los Angeles Department of Regional Planning is the Lead Agency for the EIR. The County and the applicant have entered into a third-party agreement that allows the applicant to select the subconsultant to prepare an EIR. The subconsultant is responsible solely to the County for such EIR preparation.

This EIR identifies and discusses every significant impact, mitigation measure, and project alternative with relationship to this project, using its best efforts to forecast, while incorporating requests by the public and responsible agencies for consideration of specific mitigation measures and/or alternatives.

The mitigation measures included in this EIR are designed to avoid or reduce the environmental impacts described herein. Mitigation measures are structured in accordance with Section 15370 of the *State CEQA Guidelines*. This section refers to effects on the physical environment, as opposed to other types of effects (e.g., economic and social effects) that may arise as a result of this project or that may be of interest to the public and decision makers generally. Accordingly, the mitigation measures have been structured to meet the following criteria:

- Avoiding the impact altogether by not taking a certain action or parts of an action
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments

2.0.3 ENVIRONMENTAL REVIEW PROCESS

CEQA requires that an environmental review be conducted for activities and approvals that involve discretionary actions. CEQA applies to all California government agencies at all levels, including local agencies; regional agencies; and state agencies, boards, and commissions. An environmental impact report (EIR) is an informational document required by CEQA when substantial evidence exists that a project may have a significant physical environmental effect. The EIR is intended to provide information to decision makers, agency staff and the public about (1) the potential environmental impacts of a project,

(2) ways in which the significant effects of a project might be minimized or avoided, and (3) alternatives to the project that could reduce or avoid the significant impacts associated with the project.

CEQA applies to projects for which a governmental agency can use its judgment or discretion in deciding whether to carry out or approve the project. The public agency that has the principal responsibility for carrying out or approving the project is termed the Lead Agency. For the purpose of this EIR, the County of Los Angeles Department of Regional Planning is the Lead Agency. This EIR will also be used by other agencies in their decision-making processes. Responsible Agencies include any public agencies other than the Lead Agency that have discretionary approval power over the project. Trustee Agencies are those state agencies that have jurisdiction by law over natural resources held in trust for the people of the State of California. Additionally, Reviewing Agencies include those agencies that do not have discretionary power over the project but that are expected to review the EIR for adequacy and accuracy.

The first step in the CEQA process is the preparation of an Initial Study (IS). This document, along with a Notice of Preparation (NOP), was prepared and distributed for review and comment on August 19, 2013, and is provided as **Appendix 1.0**. Time limits mandated by state law required a 30-day review period, which ended on September 19, 2013. The purpose of the NOP was for public information and to elicit responses on matters to be studied in the EIR. **Table 2.0-1** (beginning on page 2.0-7 below) contains a summary of all agencies and persons who provided comments on the IS/NOP and indicates where the comment is addressed in the EIR. The comment letters are included in this Draft EIR in **Appendix 1.0**. The NOP was filed with the Los Angeles County Clerk, posted on the project site, published in The Argonaut, a local newspaper, and sent via US mail to approximately 30 public agencies and interested parties.

In addition, a Public Scoping Meeting was held on September 10, 2013, in Marina del Rey to allow local residents and interested persons an opportunity to review the proposed project and provide input on issues to be addressed in the Draft EIR. The process for commenting on the Draft EIR was described and attendees were notified that a public hearing would be held by the Los Angeles County Regional Planning Commission to consider the Draft EIR.

The Scoping Meeting was attended by approximately two individuals from the public. Comments were solicited from the meeting attendees. A summary of the comments provided during the scoping meeting is included in **Table 2.0-2**, at the end of this section, along with a notation of where the issue is addressed in the EIR. The transcript from the Scoping Meeting is included in **Appendix 1.0**.

This Draft EIR will be distributed to affected agencies, surrounding cities, and interested parties for a 45-day review and comment period in accordance with *State CEQA Guidelines* Section 15087. Upon completion of the 45-day public review period (during which period a Department of Regional Planning

Hearing Examiner will conduct a duly noticed public meeting in Marina del Rey to solicit public comments regarding the Draft EIR), written responses will be prepared to all comments received on the Draft EIR. These comments and responses, along with the Mitigation Monitoring Program for the project, will constitute the Final EIR for the project. The Final EIR will be considered for certification by the Regional Planning Commission of Los Angeles County. In accordance with *State CEQA Guidelines*, written responses to comments from state agencies will be made available to those agencies at least 10 days prior to the public hearing with the Regional Planning Commission, at which time certification of the Final EIR will be considered by the Commission.

It should be noted that the environmental impacts of a project may not always be mitigated to a less than significant level. When this occurs, impacts are considered unavoidable significant impacts. If a public agency approves a project that has significant unavoidable impacts, the Lead Agency shall state in writing the specific reasons for approving the project based on the Final EIR and any other information in the public record for the project. This is termed a "Statement of Overriding Considerations" in accordance with *State CEQA Guidelines* Section 15093, and is used to explain the specific reasons the benefits of the proposed project make its unavoidable environmental impacts acceptable. The Statement of Overriding Considerations is prepared after the Final EIR has been completed, but before action to approve the project has been taken.

2.0.4 DOCUMENT ORGANIZATION

This Draft EIR is organized into the following sections.

1.0, Executive Summary, presents an overview of the significant effects of the project, proposed mitigation, and alternatives.

2.0, Introduction, provides an overview of the public review process and contents of the EIR.

3.0, Project Description, presents a description of the project, including the objectives, location, and characteristics of the project as well as a description of existing conditions at the project site.

4.0, Environmental Impact Analysis, contains analysis of each of the environmental topics addressed in this EIR. Each topic is addressed in separate subsections. The environmental topics addressed in this EIR include the following:

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Geology and Soils
4.5 Greenhouse Gases

4.6 Hydrology and Water Quality
4.7 Noise and Vibration
4.8 Traffic and Access
4.9 Public Services
4.9.1 Police Protection
4.9.2 Fire Protection
4.10 Utilities and Service Systems
4.10.1 Wastewater
4.10.2 Water
4.10.3 Solid Waste

5.0, Alternatives, provides analysis of alternatives to the project. As required by the *State CEQA Guidelines*, a discussion of the reasons for selection of the alternatives analyzed is provided with a comparative analysis of each alternative with the project.

6.0, Other CEQA Considerations, provides discussion of the ways in which the project could foster economic or population growth, or the construction of additional housing.

7.0, Significant Irreversible Environmental Changes provides a discussion of changes associated with the project that would be significant and irreversible.

8.0, Effects Found Not to be Significant, provides a discussion of those topics that do not require detailed analysis in the EIR because impacts would be less than significant.

9.0, List of EIR Preparers, and Organizations and Persons Consulted, provides a list of all persons and organizations contributing to the preparation of the EIR.

10.0, References, lists persons contacted and documents used as a basis of information for the EIR.

Appendices to this EIR include the NOP, comments on the NOP, and various supporting technical studies and data summarized in this Draft EIR.

2.0.5 PROJECT ALTERNATIVES

Chapter 5, Alternatives Analysis presents alternatives that have been designed to alleviate identified environmental problems. These alternatives consist of the No Project Alternative, the Reduced Building Height/Same Building Footprint Alternative, and the Alternate Land Use/Public Facility Alternative. Each of the alternatives has been measured against the stated objectives of the proposed project and in accordance with *State CEQA Guidelines* Section 15126.6, the alternatives must be able to attain most of the basic objectives of the project.

These alternatives focus on approaches capable of eliminating significant environmental impacts associated with the proposed project including, but not limited to, air quality, noise, traffic, and aesthetics, or reducing them to a level of insignificance. Consistent with *State CEQA Guidelines* Section 15126.6, an EIR need only address those alternatives that are actually capable of reducing or eliminating one or more significant physical environmental effects brought on by the project, as proposed. A comprehensive analysis of project alternatives, including the identification of the environmentally superior alternative, is provided in **Section 5.0, Alternatives**.

2.0.6 THRESHOLDS OF SIGNIFICANCE

The state does not require that local agencies adopt their own thresholds of significance. In this regard, the County of Los Angeles generally relies on the state's CEQA Environmental Checklist and has thresholds within its Initial Study Checklist. In addition, in some areas, the County relies on its General Plan, codes and ordinances as thresholds of significance.

2.0.7 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

State CEQA Guidelines Section 15123(b)(2) and (3) require that the EIR summary identify areas of controversy known to the lead agency, issues raised by agencies and the public and issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts.

No areas of public controversy were raised by agencies or members of the public during the scoping meeting and the IS/NOP review periods.

2.0.8 DISAGREEMENT AMONG EXPERTS

This Draft EIR contains substantial evidence to support all of the conclusions presented herein. That is not to say that there will not be disagreements with these conclusions. The *State CEQA Guidelines* and, more particularly, case law, clearly provide the standards for treating disagreement among experts. Where evidence and opinions of experts conflict on an issue concerning the environment, and the agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts and include sufficient information to allow the public and decision makers to take intelligent account of the environmental consequences of their action.

It is also possible that evidence will be presented during the Draft EIR review that might create disagreement. This evidence is considered by the decision makers during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, the decision makers are not obligated to select the most conservative or environmentally protective option. They may give more

weight to one expert than another, and resolve a dispute among experts through the exercise of their collective good faith judgment. In their proceedings, they must consider the comments received and address objections, but need not follow said comments or objections so long as they state the basis for their decision and that decision is supported by substantial evidence.

2.0.9 AVAILABILITY OF THE DRAFT EIR

The Draft EIR, the Technical Appendices, and the Administrative Record for the proposed project are available at the County of Los Angeles, 320 W. Temple Street, Los Angeles, California, and the County Department of Beaches & Harbors, 13837 Fiji Way, Marina del Rey, California.

The Draft EIR may be viewed on the County's website at

http://planning.lacounty.gov/case.

Reference copies are available for review at the Lloyd Taber-Marina del Rey Library at 4533 Admiralty Way, Marina del Rey.

Table 2.0-1
NOP Comment Letter Summary

Commenter	Comment	Where Comment Addressed in EIR
Air Quality Management District	Identify any potential adverse air quality impacts that could occur from the project	**Section 4.2, Air Quality**
	Quantify criteria pollutant emissions	
	Provides suggested mitigation measures	
Metro	Comments on maintaining bus stops during construction and final project design	**Section 4.8, Traffic**
	Provides comments on the realignment of the bike path	
	Comments to include CMP analysis	
County of Los Angeles Fire Department	Development must comply with applicable codes and ordinances	**Section 4.9-2, Fire and Emergency Services**
	Provides development specifications to meet the fire code	
Department of Conservation	Provides guidance on development in areas with previously abandoned/plugged oil wells	Comment is not applicable, as no wells exist on-site. See the Initial Study in **Appendix 1.0**
City of Los Angeles Bureau of Sanitation	Provides wastewater generation factors and sewer availability	**Section 4.10, Utilities**
	Includes post construction mitigation requirements	

Table 2.0-2
Scoping Meeting Comments

Comment	Where Comment Addressed in EIR
Construction activities could disturb birds on the project site.	**Section 4.3, Biological Resources**

3.0 PROJECT DESCRIPTION

3.0.1 INTRODUCTION

The Project Description is the starting point for all environmental documents required by the California Environmental Quality Act (CEQA). The purpose of the project description is to describe the project in a way that will be meaningful to the public, reviewing agencies and decision makers. The *State CEQA Guidelines* state that the project description need not be exhaustive but should supply the detail needed for the evaluation and review of potential environmental impacts. The *State CEQA Guidelines* require a project description to address the following items: (1) the precise location and boundaries of the project; (2) a statement of project objectives; (3) a general description of project characteristics; and (4) a listing of required project approvals and decision-making agencies.

This section includes a description of the proposed Marina del Rey Parcel 44 Project. The project site occurs on Marina del Rey Lease Parcel 44. The proposed project would replace 14,724 square feet of existing development consisting of office space, boat repair facility, and yacht club with new structures containing approximately 83,253 square feet of floor area including visitor and marine/boater-serving retail, two restaurants, a grocery store, marine and conventional office space, a community room, and boater serving uses including a new yacht club, boat repair shop, and landside boat storage facilities. The project site is subject to the Marina del Rey Land Use Plan (LUP) and is located in the Plan's Development Zone 3.[1] Development potential within Zone 3 allows for 178,741 square feet of visitor serving commercial, 32,000 square feet of office, 573 restaurant seats, and 345 boat stack spaces. The proposed project includes 56,310 square feet of visitor serving commercial, 13,366 square feet of office, 382 restaurant seats, and 56 dry stack spaces.[2] The existing uses on the site include 3,164 square feet of visitor serving commercial and 12,060 square feet of office with no restaurant seats or boat stacks.[3]

---

1 The LUP's Development Zones lists the amount of potential development allocated to each zone.

2 Proposed visitor serving commercial includes: boater's bathroom: (1,158 square feet total), Trader Joes: (13,625 square feet), West Marine store (25,000 square feet), boater's bathroom/laundry (542 square feet), community room/boater's lounge (840 square feet), retail space (13,295 square feet total), yacht club/boat repair (1,850 square feet) and market attached to restaurant (500 square feet). Proposed office includes: marine administrative offices (2,285 square feet), boat broker's office (3,911 square feet), office space (9,170 square feet)

3 Existing visitor serving commercial includes: boat repair (1,000 square feet), bathrooms (584 square feet), and yacht club (1,080 square feet). Existing office includes: boat brokers (2,560 square feet) boat brokers/offices (5,284 square feet), office building (4,216 square feet)

3.0.2 LEAD AGENCY

Los Angeles County
320 West Temple Street
Los Angeles, California 91020
Attention: Anita Gutierrez, Special Projects Section

3.0.3 OVERVIEW

As part of the County of Los Angeles' original construction of Marina del Rey, the County divided Marina del Rey's land and water areas into a number of parcels with a specific number and lettering scheme. The project site occurs on one parcel of land designated as Marina del Rey Parcel 44. The proposed project is subject to the Marina del Rey Specific Plan, which is a component of the certified Marina del Rey Local Coastal Program (LCP). The LCP consists of the Marina del Rey Land Use Plan, Local Implementation Plan (LIP), and Design Guidelines that are an appendix to the LUP. The Marina del Rey LCP and this Draft EIR also use the parcel numbering system described above.

The LCP was originally certified by the California Coastal Commission (CCC) on October 11, 1984. The CCC reviewed the LIP for Marina del Rey and effectively certified the Marina del Rey LCP on September 12, 1990. On February 8, 1996, the CCC effectively certified a comprehensively revised and updated LCP for the area of the publicly owned, and existing developed, 804-acre Marina del Rey. Then in February 2012, the CCC certified an additional comprehensive/"major" amendment to the LCP.

Section 15265 of the *State CEQA Guidelines* exempts activities and approvals pursuant to the California Coastal Act. This exemption is provided because responsibility for environmental analysis is shifted to the CCC's certified regulatory plan for its local coastal program certification program, which allows written environmental information to serve as the functional equivalent of an environmental impact report under the provisions of the Public Resources Code Section 21080.5. The CCC must find that the LUP conforms to the Coastal Act, contains public access components, and is consistent with past actions.

The County of Los Angeles and the CCC both held extensive public hearings regarding the major amendments to the LCP preceding the CCC's ultimate certification of the major LCP amendments in 1996 and 2012. These public hearings included discussion of the environmental effects the land use changes contained within the amended LCP would cause.

3.0.4 PROJECT LOCATION AND SITE CHARACTERISTICS

Marina del Rey is generally characterized by relatively flat and low-lying topographic features. Elevations on the subject Parcel 44 and surrounding area range from 10 to 15 feet above mean sea level. The marina is now highly urbanized and is home to approximately 5,000 pleasure boats and a variety of land uses, including hotels, restaurants, office, and commercial centers, residential uses and public parks, beaches, and bike paths. The community of Venice is located northwest of Marina del Rey, and Playa Vista is located to the southeast. Los Angeles International Airport is approximately 4 miles southeast of Marina del Rey.

The project site is situated in the southeastern portion of Marina del Rey. The U-shaped parcel makes up a portion of Basin G between Bali Way and Mindanao Way. Landside access to the project site is now provided via Bali and Mindanao Ways. Maps illustrating the site location from a regional and local perspective are shown in **Figure 3.0-1, Vicinity Map**, and **Figure 3.0-2, Project Location Map,** respectively.

The proposed project, to be developed by Pacific Marina Ventures, LLC, is situated on Parcel 44, as depicted in the certified LCP. The relationship of the project parcel to the LCP is shown in **Figure 3.0-3, Local Coastal Program Layout**.

Parcel 44 is a U-shaped parcel that wraps partially around Basin G and is currently developed with eight existing structures totaling approximately 14,724 square feet. The remainder of the site consists of paved parking. The subject Parcel 44 consists of a total of 8.39 landside acres and 7.18 waterside or submerged acres. The proposed project only includes improvements to the landside portion of the Parcel 44. Approval for demolition of the existing Pier 44 anchorage and the subsequent construction of a new private boat anchorage on the waterside portion of the Parcel 44 was previously granted by the California Coastal Commission pursuant to Coastal Development Permit (CDP) No. 5-11-131. Final issuance of this CDP was given by the Coastal Commission staff on June 26, 2012. Given this, the waterside component of Parcel 44 is not assessed further in this project Draft EIR; however, it is included in the Draft EIR's cumulative impact analyses.

The project site is developed with eight structures in use as office space for boat brokers, a boat repair shop, a kayak rental facility, and a yacht club. The site currently provides only a single bathroom facility for the boaters. The Marvin Braude Bike Path, which traverses the east side of Marina del Rey and connects the bicycle lanes on Washington Boulevard with the bike facilities along Fiji Way, traverses the site in a north-south direction along the eastern perimeter of Basin G.

Admiralty Way bounds the site to the east. Two mid- to high-rise (approximately 10-story) office buildings are located on Admiralty Way between Mindanao Way and Bali Way. A two-story office building is located between the two high-rise buildings. Immediately north of the project site across Bali Way is a paved public parking lot and a boat sales facility, south of the project site across Mindanao is a Los Angeles County Beaches and Harbors visitor center, surface parking lots and the Marina's public boat launching ramp.

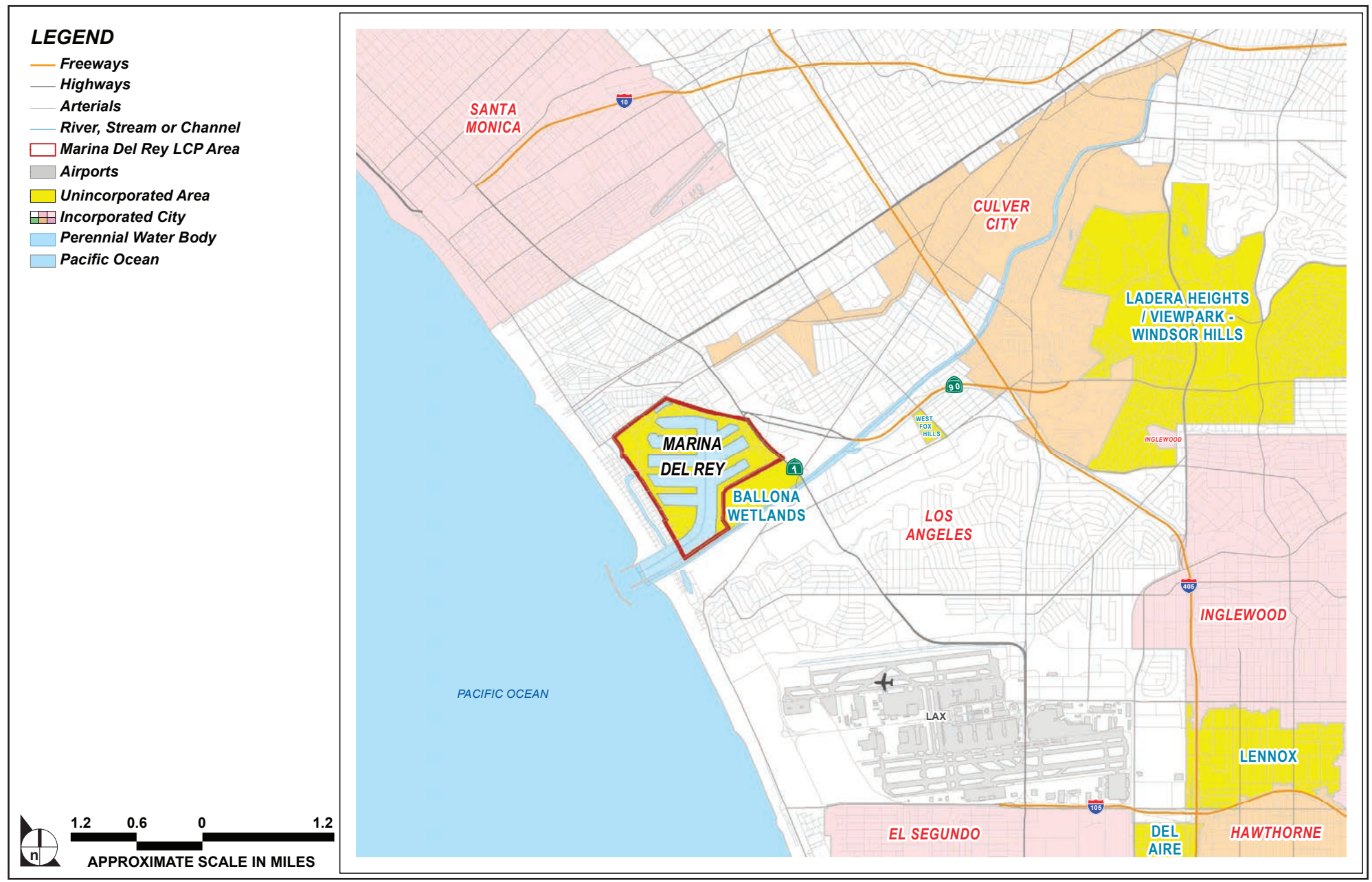
Additional land uses proximal to the project site include additional boater facilities including a number of wet boat slips immediately north and south of the project site in Basins F and H, respectively. South of Basin H across Fiji Way is Area A of the Ballona Wetlands Ecological Reserve.

Fisherman's Village and the Breakwater apartment complex are located to the south and southwest of the project site along Fiji Way. Government facilities including the Coast Guard, the County Sheriff, and the County Department of Beaches & Harbors offices are also located southwest of the project site along Fiji Way.

Burton Chace Park is located at the terminus of the Mindanao Way mole road and is situated between Basins G and H southwest of the project site. The park contains picnic areas, paved walkways, a banquet/meeting facility, a snack bar, and public restrooms. Dry boat storage in the marina is now provided on Parcels 49 and 77, Parcel 49 is located adjacent to the project site, across Mindanao Way, and Parcel 77 is located between Parcel 49 and Burton Chace Park.

Due to the visual importance of the marina's scenic elements (particularly the small craft harbor water areas) the LCP requires that all development, redevelopment or intensification on waterfront parcels shall provide an unobstructed view corridor of no less than 20 percent of the parcel's water front that provide public views of the marina boat basins and/or channels.[4] The proposed project is subject to this requirement. As proposed, the project provides 822 linear feet of view corridor, or approximately 53 percent of the parcel's water frontage, well in excess of the view corridors required for the Project per the LCP.

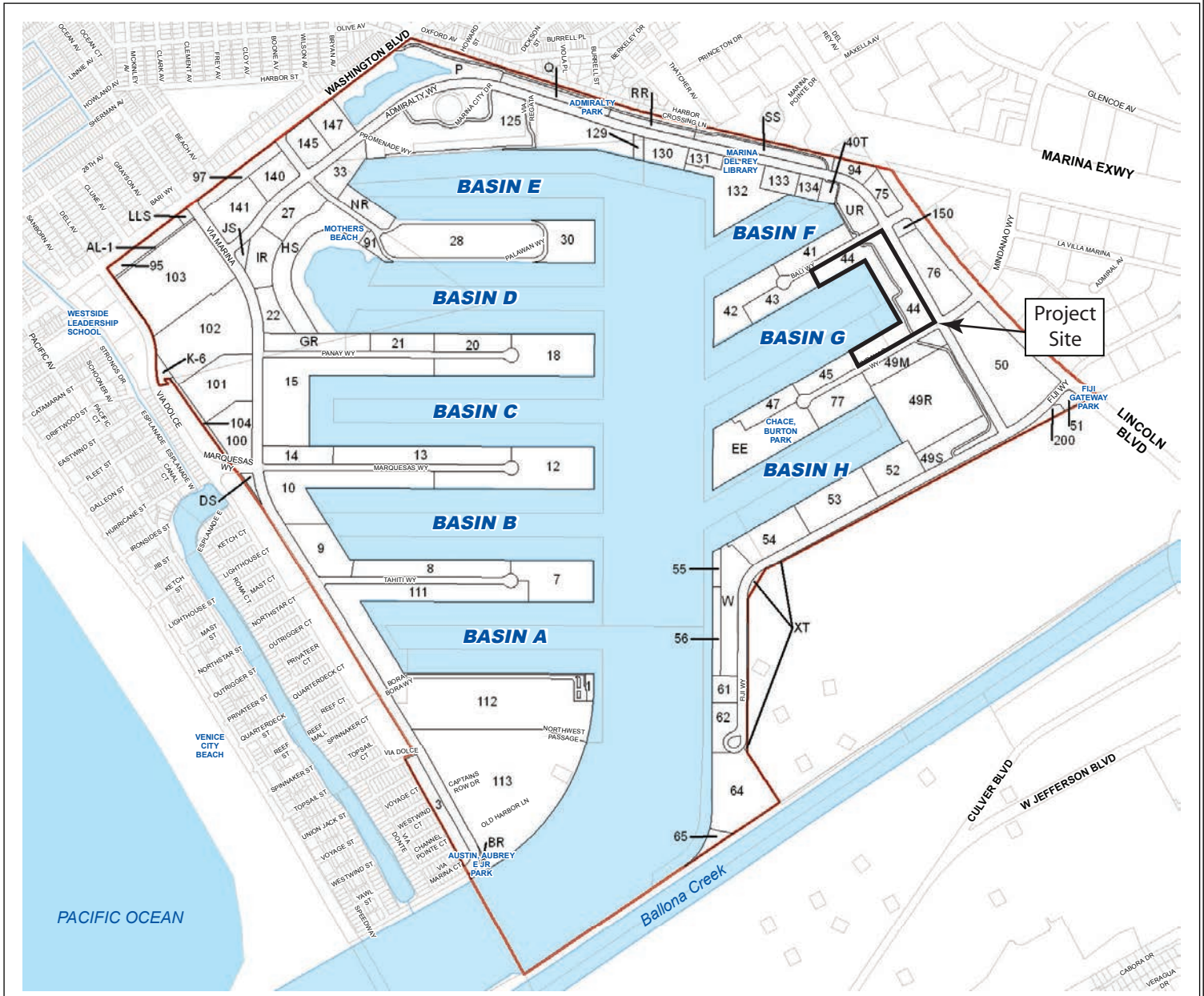
4 County of Los Angeles, Department of Regional Planning, Marina del Rey LUP, 2012.



SOURCE: Marina del Rey Land Use Plan, February 2012

FIGURE **3.0-1**

Vicinity Map



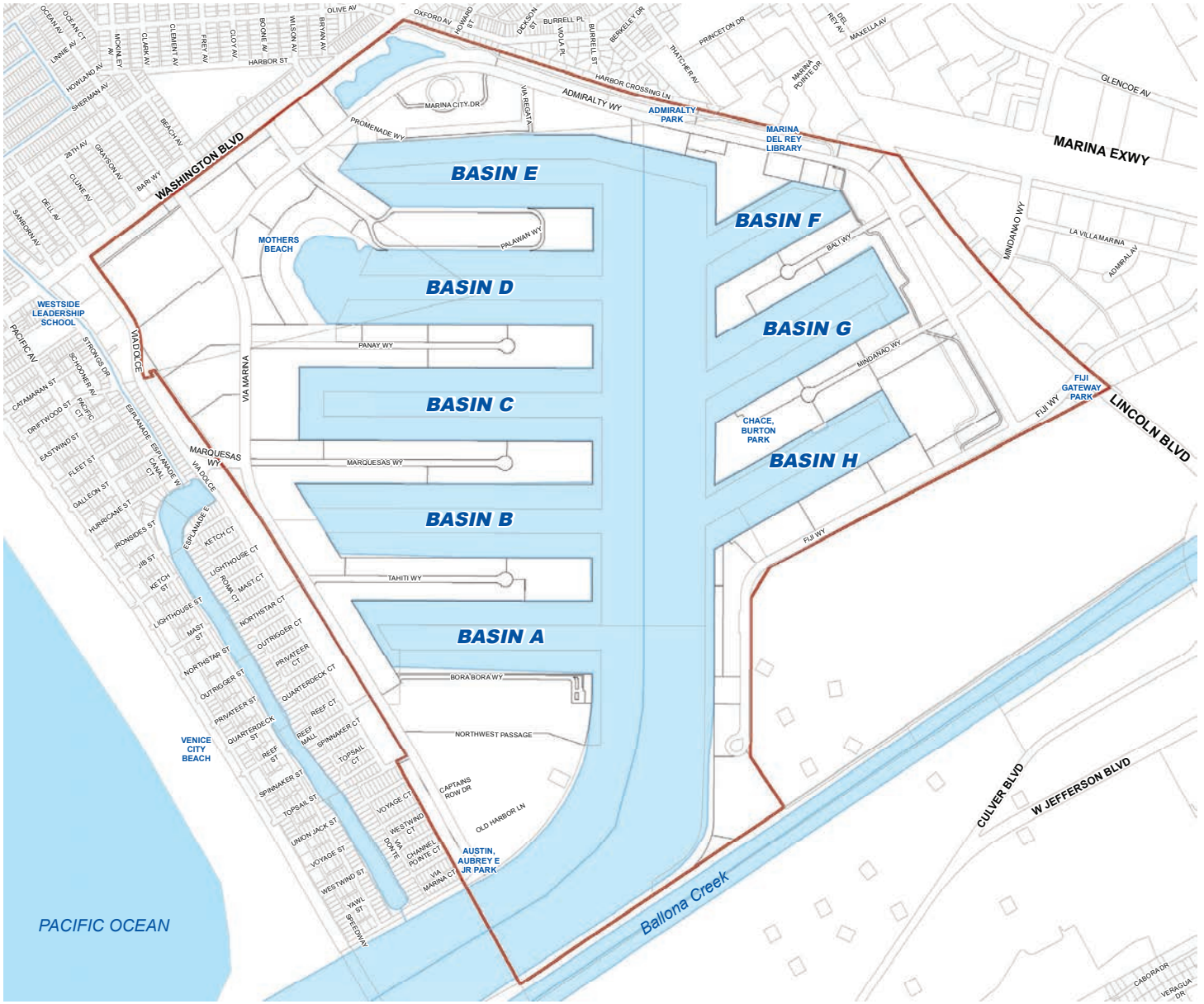
SOURCE: Marina del Rey Land Use Plan, February 2012

FIGURE **3.0-2**

Project Location Map

LEGEND

- River, Stream or Channel
- Lease Parcels LCP
- Marina Del Rey LCP Area
- Perennial Water Body
- Pacific Ocean



1,296 648 0 1,296

APPROXIMATE SCALE IN FEET

SOURCE: Marina del Rey Land Use Plan, February 2012

FIGURE **3.0-3**

Local Coastal Program Layout

3.0.5 STATEMENT OF PROJECT OBJECTIVES

Existing uses in Marina del Rey were developed in the early to mid-1960s around the time the small-craft harbor was initially dedicated. This early construction is considered "Phase I" marina development as identified in the certified LCP. The original development projects are aging and are in need of replacement with new visitor- and boater-serving uses. Similarly, the existing anchorage docks, originally constructed to accommodate the boating community of the 1960s, are dilapidated, are not compliant with the Americans with Disability Act (ADA), do not contain sanitary sewage pump-out stations, and cannot accommodate wider slip berths necessary to serve the contemporary commercial boating community.

As certified in 2012, the LCP specifically encourages the recycling and intensification (within defined density limits) of the existing Phase I Marina del Rey development. Consistent with the certified LCP and the County's broader public policy goals and objectives, the applicant proposes to redevelop uses on the project site in order to meet the following project objectives. The objectives have been grouped according to the primary and secondary project objectives:

3.0.5.1 Project Objectives

- To create a vibrant, marine-oriented retail experience for the visiting public, as well as provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way;
- To provide high quality, visitor-serving restaurants, retail and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP;
- To improve the coastal recreational opportunities for the visiting public by greatly enhancing the public's access to and passive recreational use of the landside portions of the site;
- To provide marine-related retail space and accommodate the boating supply needs of boaters throughout the marina;
- To provide retail space for a "Trader Joe's" (or similar) specialty market and allow for the convenient sale of food and beverage for visitors, Burton Chase Park users, and boaters as well as the greater Marina del Rey community;
- To improve boater amenities on the project site by providing boater related uses such as a yacht club, boat repair shop, boat storage, boater bathrooms, and transient docks;
- To design buildings which are attractive on all sides and from every vista;
- To provide safe, convenient pedestrian access from Admiralty Way, Mindanao Way and Bali Way;
- To increase and improve the parcel's view corridors to the Marina waters;

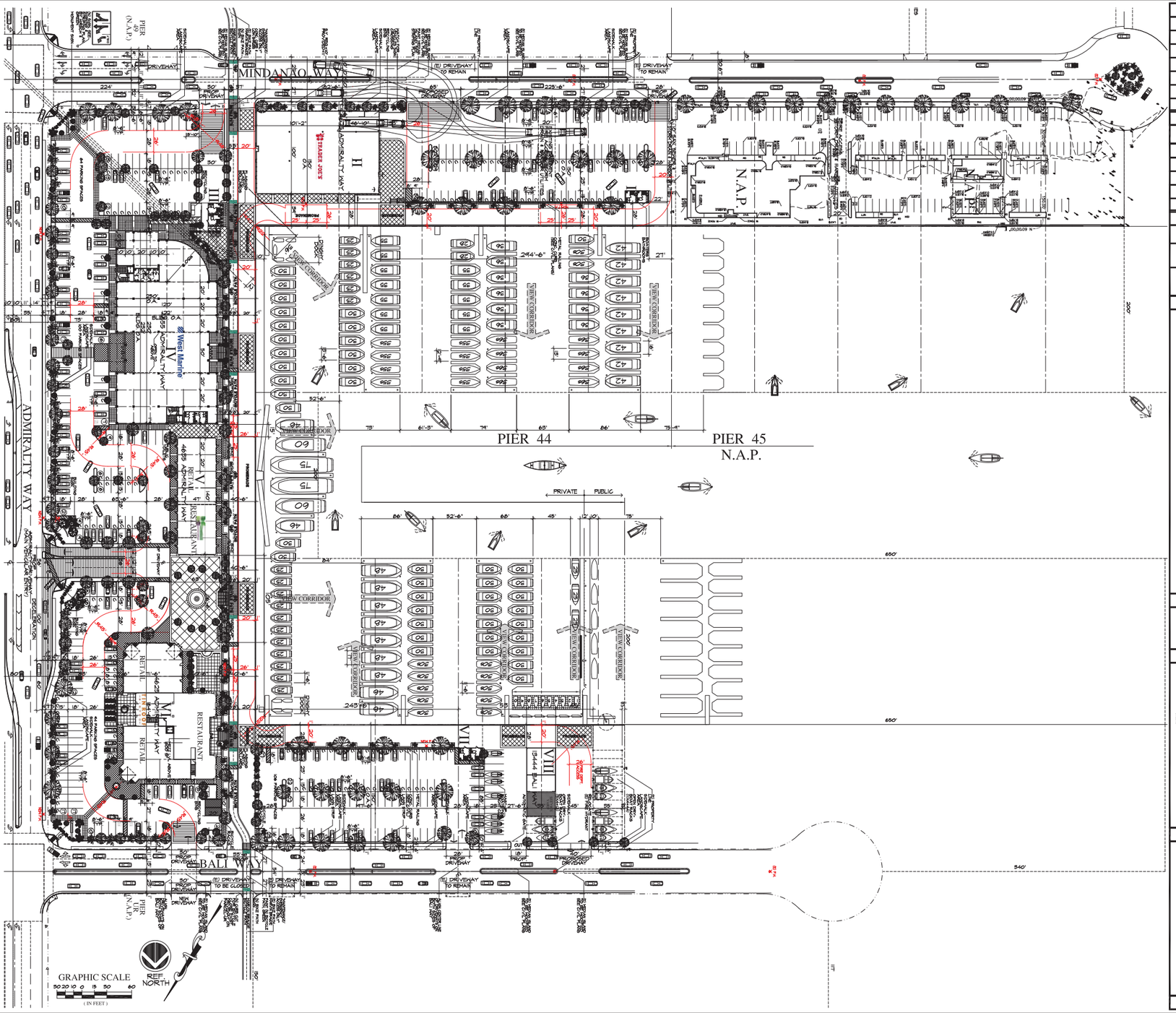
- To provide an improved and safer bicycle travel through the site via realignment of the existing bike path on the site;
- To provide bicycle racks convenient to visitors using the bike path;
- To provide improved fire department access to the site and marina;
- To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan) of the certified Marina del Rey Land Use Plan.

3.0.6 DESCRIPTION OF PROJECT CHARACTERISTICS

Figure 3.0-4, Site Plan and **Figure 3.0-5 First Floor Site Plan**, illustrate the conceptual site plan for the proposed Marina del Rey Parcel 44 Project. The proposed project would consist of the removal of all existing development on Parcel 44, including the parking lots. The project would construct eight new buildings containing a total of approximately 83,253 square feet of floor area. The following is a description of the proposed new structures on Parcel 44. Building square footages are summarized below and in **Table 3.0-1 Proposed Project Summary**.

- Building I (as denoted on the site plan) will serve as boaters' bathrooms with an area of 386 square feet.
- Building II will serve a "Trader Joe's" (or similar) grocery market of approximately 13,625 square feet.
- Building III (386 square feet) is similar to Building I and will serve as boaters' bathrooms.
- Building IV is a two-story structure. The ground floor of this building will be occupied entirely by a "West Marine" (or similar) retail store (approximately 25,000 square feet). The second floor of this building will contain marine administrative offices (approximately 2,285 square feet), boat broker offices (approximately 3,911 square feet) boaters' bathroom and laundry (approximately 542 square feet), office space[5] (approximately 4,554 square feet), two additional office spaces (approximately 1,444 and 3,172 square feet) and a community room/boaters' lounge (approximately 840 square feet).
- Building V will accommodate a retail space (approximately 3,795 square feet) and a restaurant (approximately 2,355 square feet) with an associated market (approximately 500 square feet)
- Building VI will contain a two-story, waterfront-oriented restaurant (approximately 7,500 square feet) with a prominent "tower" feature to serve as an entry foyer to the restaurant, which will be accessible from Admiralty Way and Bali Way. The first floor of this building will also accommodate commercial retail space (approximately 9,500 square feet).

5 The office space in Building IV is a replacement for the existing office space that will be demolished as part of the proposed project.



EXISTING BUILDING STRUCTURES ANALYSIS	AREA
BLDG. A - BOAT BROKERS	1,120 S.F.
BLDG. B - BOAT BROKERS/OFFICES	5,284 S.F.
BLDG. C - BOAT REPAIR (SEAMARK)	1,000 S.F.
BLDG. D - BOAT BROKERS (VACANT)	1,440 S.F.
BLDG. E - YACHT CLUB	1,080 S.F.
BLDG. H - OFFICE BUILDING	4,216 S.F.
BLDG. I - BATHROOMS	584 S.F.
TOTAL:	14,724 S.F.

ALL EXISTING BUILDING STRUCTURES ON PARCEL 44 TO BE DEMOLISHED (INCLUDING BUILDINGS A, B, C, D, E, H & I)

VIEW CORRIDOR STUDY

PROPERTY FACING WATER

A. MINDANAO WAY	=	495	LIN. FT.
B. ADMIRALTY WAY	=	600	LIN. FT.
C. BALI WAY	=	433.66	LIN. FT.
TOTAL		1,528.66	LIN. FT.

VIEW CORRIDOR ANALYSIS

VIEW CORRIDOR REQUIRED
1,528.66' X 20% = 305.7 LIN. FT.

TOTAL VIEW CORRIDOR PROVIDED
27 + 282.5 + 36 + 12 + 15 + 105 + 243.5 + 53 + 45 + 3 = 822 LIN. FT.

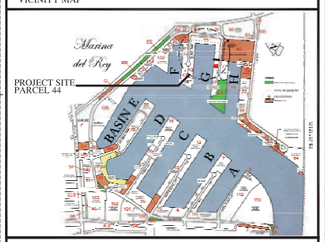
ADDITIONAL NOTES

* FOR ADDITIONAL INFO REGARDING STREET IMPROVEMENTS SEE SIGNING AND STRIPING PLAN BY "HIRSCHGREEN TRANSPORTATION CONSULTING, INC."
* FOR ADDITIONAL INFO REGARDING SITE IMPROVEMENTS SEE CIVIL PLANS BY "BREEN ENGINEERING INC." AND SEE LANDSCAPE PLANS BY "PETER D. BRANDOW & ASSOCIATES"
* CLOSE ANY UNUSED DRIVEWAYS WITH STANDARD CURB, GUTTER, AND SIDEWALK ALONG THE PROPERTY FRONTAGE ADMIRALTY WAY, BALI WAY AND MINDANAO WAY TO THE SATISFACTION OF PUBLIC WORKS. (SEE CIVIL PLANS)
* RECONSTRUCT ANY NON-ADA CONFORMING PARKWAY IMPROVEMENTS (SIDEWALK, DRIVEWAYS, CURB RAMPS, LANDINGS, ETC.) THAT EITHER SERVE OR FORM A PART OF A PEDESTRIAN ACCESS ROUTE TO MEET CURRENT ADA GUIDELINES TO THE SATISFACTION OF PUBLIC WORKS.
* RECONSTRUCT THE PAVEMENT ON ADMIRALTY WAY, BALI WAY AND MINDANAO WAY FROM THE CENTERLINE TO THE EDGE OF GUTTER ALONG THE PROPERTY FRONTAGE TO THE SATISFACTION OF PUBLIC WORKS.
* REPAIR ANY CURB, GUTTER, DRIVEWAYS, PAVEMENT AND SIDEWALK DAMAGED DURING CONSTRUCTION.

FIRE DEPARTMENT NOTES

* ALL BUILDINGS SHALL BE FULLY SPRINKLERED. SPRINKLER SYSTEM SHALL BENFPA 13R OR GREATER.

VICINITY MAP



PROJECT INFORMATION

PROJECT : BUILDING II (TRADER JOE'S) : 4675 ADMIRALTY WAY
ADDRESS BUILDING IV (WEST MARINE): 4655 ADMIRALTY WAY
BUILDING V (RETAIL/REST.) : 4635 ADMIRALTY WAY
BUILDING VI (RETAIL/REST.) : 4625 ADMIRALTY WAY
BUILDING VIII (YACHT CLUB) : 13444 BALI WAY
MARINA DEL REY, CA 90292

APN: ASSESSOR'S MAP BOOK NO. 4224, PAGE 8, PARCEL NO. 901 LOTS 722 THROUGH 728, 744 THROUGH 758, AND 730 THROUGH 742 UNINCORPORATED COUNTY AREA OF MARINA DEL REY

APPLICANT: PACIFIC MARINA VENTURE, LLC
13737 FIJI WAY
MARINA DEL REY, CA 90292
PH: 310-822-6866

ARCHITECT: JACK HOLLANDER & ASSOCIATES, INC.
616 WALDEN DRIVE
BEVERLY HILLS, CA 90212
PH: 310-205-0440
EMAIL: JACKHOLLANDER@ROADRUNNER.COM
WEB: WWW.JACKHOLLANDER.COM

PARCEL-44 SIZE : 8.39 ACRES

PROPOSED NEW BUILDINGS AREA		CONSTRUCTION TYPE	AREA
BLDG. I	BOATERS BATHROOMS	TYPE V-N	386 S.F.
BLDG. II	SPECIALTY MARKET	TYPE V-A	13,625 S.F.
BLDG. III	BOATERS BATHROOMS	TYPE V-N	386 S.F.
BLDG. IV	WEST MARINE, (2 STORY BLDG.) MARINE OFFICES & BOAT BROKERS	TYPE V-A	42,970 S.F.
BLDG. V	RETAIL/RESTAURANT	TYPE V-A	6,650 S.F.
BLDG. VI	RETAIL/RESTAURANT	TYPE V-A	17,000 S.F.
BLDG. VII	BOATERS BATHROOMS	TYPE V-N	386 S.F.
BLDG. VIII	YACHT CLUB/BOAT REPAIR SHOP	TYPE V-N	1,850 S.F.
	TOTAL:		83,253 S.F.

PROPOSED NEW SPACES & USES		AREA
SPACE J	SPECIALTY MARKET	13,625 S.F.
SPACE K	RETAIL	9,500 S.F.
SPACE K-1	RESTAURANT (TIN ROOF)	7,500 S.F.
SPACE L	BOAT BROKERS/OFFICE	1,222 S.F.
SPACE N-1	REPLACE EXIST. BLDG.H - OFFICE BLDG.	4,554 S.F.
SPACE N-2	MARINE ADMIN. OFFICES	2,285 S.F.
SPACE N-3	BOAT BROKERS OFFICES	3,911 S.F.
SPACE N-4	OFFICES	1,444 S.F.
SPACE N-5	OFFICES	3,172 S.F.
SPACE P	WEST MARINE	25,000 S.F.
SPACE W/T	COMMUNITY ROOM/BOATERS LOUNGE	840 S.F.
	BOATERS BATHRMS. & BOATERS LAUNDRY - BLDG. IV	542 S.F.
SPACE Q	RETAIL	3,795 S.F.
SPACE Q-1	RESTAURANT (GREENLEAF)	2,355 S.F.
SPACE Q-2	MARKET (GREENLEAF)	500 S.F.
SPACE Z	BOAT REPAIR SHOP	700 S.F.
SPACE Z-1	BOATERS BATHROOMS	386 S.F.
SPACE Z-2	BOATERS BATHROOMS	386 S.F.
SPACE Z-3	BOATERS BATHROOMS	386 S.F.
SPACE Z-4	YACHT CLUB	1,150 S.F.
	TOTAL	83,253 S.F.

PARKING ANALYSIS		PARKING SPACES REQUIRED
DRY BOAT STORAGE (56)	56 X 0.3	16.8
MAST-UP BOATS	13 X 0.3	3.9
SPACE J - SPECIALTY MARKET	13,625/250	54.5
SPACE K - RETAIL	9,500/250	38.0
SPACE K-1 - RESTAURANT-DINING & BAR	3,000/45	66.66
- OUTDOOR DINING	1,500/45	33.33
- KITCHEN & SERVICE, ETC.	4,500/200/3	7.5
SPACE L - BOAT BROKERS/OFFICE	1,222/400	3.06
SPACE N-1 - REPLACE EXIST.BLDG, H - OFFICE BLDG.	4,554/400	11.38
SPACE N-2 - MARINE ADMIN. OFFICES	2,285/400	5.71
SPACE N-3 - BOAT BROKERS OFFICES	3,911/400	9.78
SPACE N-4 - OFFICES	1,444/400	3.60
SPACE N-5 - OFFICES	3,172/400	7.93
SPACE P - WEST MARINE	25,000/250	100
SPACEW/T - COMMUNITY ROOM/LOUNGE	840/250	3.36
SPACE Q - RETAIL	3,795/250	15.04
SPACE Q-1 - RESTAURANT (GREENLEAF) (DINING)	1,000/45	22.22
KITCHEN & SERVICE FOR RESTAURANT	1,355/200/3	2.25
- OUTDOOR DINING	15 SEATS/3	5
SPACE Q-2 - "GREENLEAF" MARKET	500/250	2.00
SPACE Z - BOAT REPAIR SHOP	700/250	2.80
SPACE Z-4 - YACHT CLUB	1,150/250	4.60
- BOAT SLIPS	148 X 0.6	88.8
SUB. TOTAL		508.25
MAX REDUCTION ALLOWABLE PER BICYCLE PROVIDED		- 25
TOTAL PARKING REQUIRED		483.25

PARKING PROVIDED

REGULAR	HANDICAPPED	COMPACTS	TOTAL
282	11	184	477

REDUCTION OF PARKING SPACES BASED ON BICYCLES PARKING SPACES PROVIDED

REQUIRED BICYCLE PARKING

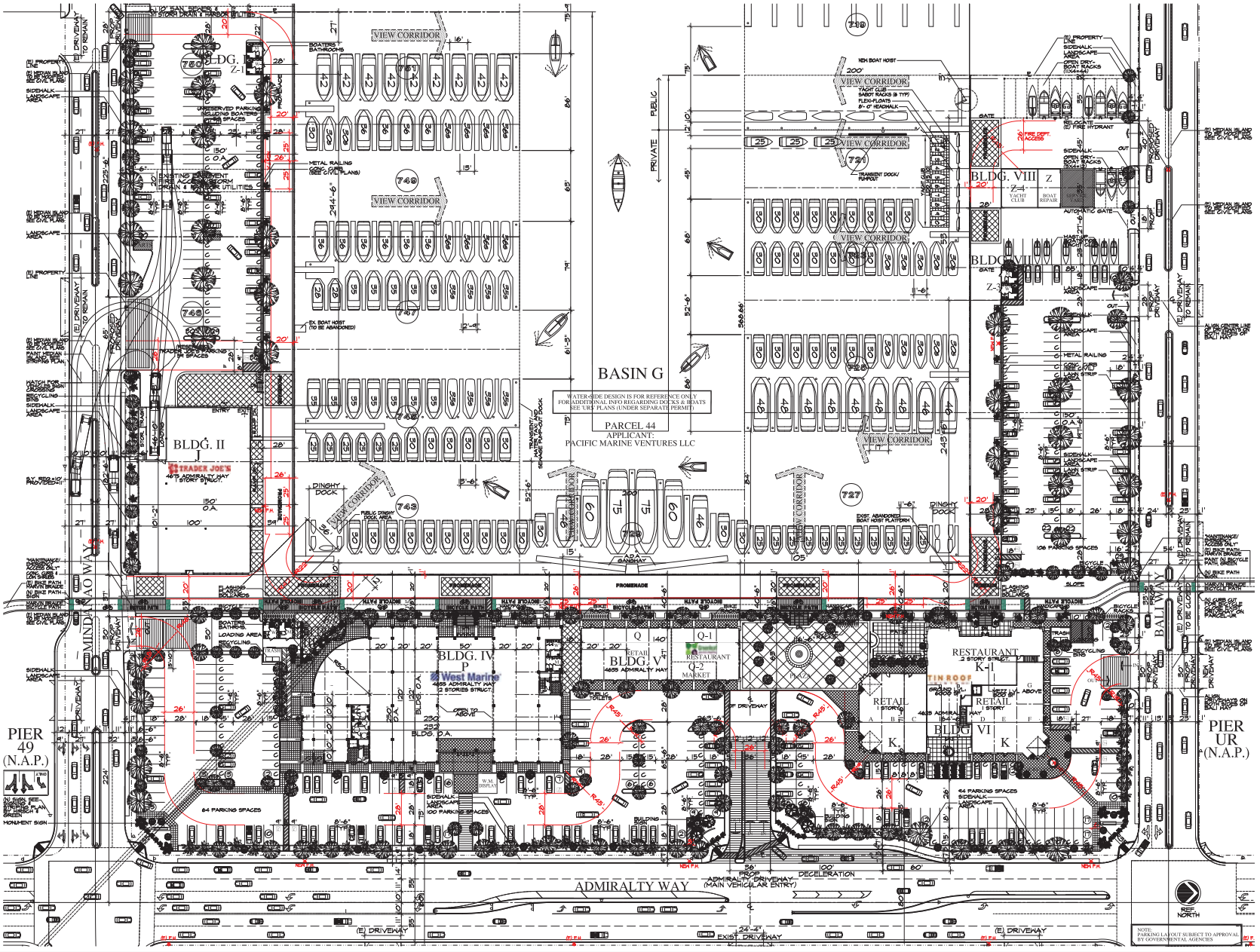
A. RETAIL / RESTAURANT			
SHORT TERM 1 SPACE/5,000	63,775/5,000	=	12.75
LONG TERM 1 SPACE/5,000	63,775/12,000	=	5.31
B. YACHT CLUB			
SHORT TERM 2 SPACES MIN.		=	2
LONG TERM 2 SPACES MIN.		=	2
C. OFFICE			
SHORT TERM 1 SPACE/20000	16,588/20,000 OR 2 MIN.	=	2
LONG TERM 1 SPACE/10000	16,588/10,000 OR 2 MIN.	=	2
	TOTAL	=	26.06
BICYCLES SPACE PARKING REQUIRED		=	26

ALLOWABLE BICYCLE SPACES TO REPLACE PARKING SPACES :
FOR EVERY 2 BICYCLE PARKING SPACES PROVIDED ABOVE MIN. REQUIRED, VEHICLES MAY BE REPLACED BY ONE MAXIMUM 5% REDUCTION ALLOWED.
MAX. REDUCTION ALLOWED: 508.25 X 5% = 25.41 SAY 25 CAR SPACES
FOR TOTAL REDUCTION OF 25 CAR SPACES, WE NEED TO PROVIDE ADDITIONAL 50 BICYCLES SPACES.
26 (MIN. REQUIRED) + 50 ADD'L BICYCLE SPACES = 76 SPACES

SOURCE: Jack Hollander & Associates, Inc., December 2013

FIGURE **3.0-4**

Site Plan



SOURCE: Jack Hollander & Associates, Inc., 2014

FIGURE **3.0-5**

First Floor Site Plan

- Building VII will serve as boaters' bathrooms with an area of 386 square feet.
- Building VIII will serve as a yacht club/boat repair shop (approximately 1,850 square feet).

Table 3.0-1
Proposed Project Summary

Building	Space	Square Footage
I	Boater Bathroom	386
II	Specialty Market	13,625
III	Boater Bathroom	386
IV	West Marine, Marine Offices and Boat Repair	42,970
V	Retail/Restaurant	6,650
VI	Retail/Restaurant	17,000
VII	Boater Bathroom	386
VIII	Yacht Club, Boat Repair Shop	1,850
Total		**83,253**

In addition, an open-air boat stacking/rack system is included, allowing outdoor storage of up to approximately 56 boats (stacked three-boats-high).

3.0.6.1 Parking and Access

The project proposes 477 on-grade parking spaces on the parcel, of which 282 are standard-dimensioned spaces, 11 are handicap accessible spaces and 184 are compact parking spaces. The project also proposes 76 bicycle parking spaces, nine long-term parking spaces, and 67 short-term parking spaces. Bicycle racks would be provided at four locations along the western boundary of the project site. With the maximum vehicle parking reduction allowed under County Code for the bicycle parking spaces being provided on-site,[6] the project's proposed uses require 482 spaces per Code. Therefore, in order to provide some flexibility regarding parking configuration and numbers to account for installation of site infrastructure improvements (i.e., transformers, etc.) during construction, the Applicant will be filing for a Parking Permit to authorize commercial tandem parking and a modest parking reduction for the project.

A detailed "shared parking" analysis prepared for the proposed project (further discussed in **Section 4.8, Traffic and Access**) indicates that, once consideration is given to the hourly variability of the parking demands for the various uses proposed, the actual maximum parking demand is expected to be approximately 457 spaces on typical weekdays, and approximately 398 spaces on weekends. Based on the

6 County code allows for a maximum reduction in vehicle parking spaces of 5 percent of the total number of required parking spaces, which would equate to 25 vehicle parking spaces for this project,

County's parking ratios and the proposed project, the amount of vehicular and bicycle parking required for each of the project's individual component uses, as well as for the entire development itself, is provided in **Table 3.0-2, Los Angeles County Zoning Code Vehicular Parking Calculations** and **Table 3.0-3, Los Angeles County Zoning Code Bicycle Parking Calculations.** Therefore, the project's proposed vehicular parking supply is adequate to accommodate the anticipated peak demands of the site at all times, and no on-site project-related parking shortages are anticipated.

Table 3.0-2
Los Angeles County Zoning Code Vehicular Parking Calculations

Land Use	Project Component Size	County Vehicular Parking Requirement (# of parking spaces/sf/3 of seats/boat slips)	Spaces Required
Retail Uses (total)	53,960 sf	4.0/1,000 sf	216
Restaurant Uses			
Indoor Dining Area (total)	267 seats	1.0/3 seats	89
Outdoor Dining Area (total)	115 seats	1.0/3 seats	38
Kitchen/Back of House (total)	30 persons	1.0/3 persons	10
Total Restaurant Parking:			137
Office and Other Commercial Uses	16,588 sf	2.5/1,000 sf	41
Yacht Club	1,150 sf	4.0/1,000 sf	5
Boaters Bathroom/Laundry	1,700 sf	N/A (ancillary)	0
Boat Slips	148	0.6/boat slip	89
Boat Dry/Mast-up Storage	69	0.3/space	21
Total Project Vehicular Parking Required:			509
Reduction in Required Vehicular Parking: (5% for provision of County Code Bicycle Parking)			25
Adjusted Total Project Vehicular Parking Required:			484

Source: Parcel 44 Traffic Impact Analysis Report, prepared by Hirsh/Green Transportation Consulting, Inc.
Notes: sf = square feet
Total retail uses includes; 13,795 sf visitor serving retail: 25,000 sf West Marine (retail): 13,625 sf Trader Joes (specialty market): 700 sf boat repair: and 840 sf community room/boater's lounge.
Office and other commercial uses includes; 5,133 sf Boat Broker's Office: 2,285 sf Marine Administrative Office: and 9,170 sf general office space.

Table 3.0-3
Los Angeles County Zoning Code Bicycle Parking Calculations

Proposed Use/Size	Bicycle Parking Requirement (Spaces/sf)		Bicycle Parking Required	
	Long Term	Short Term	Long Term	Short Term
Total Retail and Restaurant Uses/63,815 sf	1.00/12,000 sf	1.00/5,000 sf	5 spaces	13 spaces
Total Office and Commercial Uses/16,588 sf	1.00/10,000 sf	1.00/20,000 sf	2 spaces	2 spaces
Yacht Club/1,150 sf	1.00/12,000 sf	1.00/5,000 sf	2 spaces	2 spaces
Total Boater Bathrooms and Laundry/1,700 sf	N/A (ancillary)	N/A (ancillary)	0 spaces	0 spaces
Boat Slips/148 slips	N/A	N/A	0 spaces	0 spaces
Dry/Mast-up Boat Storage/69 boat	N/A	N/A	0 spaces	0 spaces
Subtotal Bicycle Parking Required:			**9 spaces**	**17 spaces**
Additional Bicycle Parking Provided:			**0 spaces**	**50 spaces**
Total Project Bicycle Parking Required:			**9 spaces**	**67 spaces**
Total Short and Long Term Bicycle Parking:			**76 spaces**	

Source: Source: Parcel 44 Traffic Impact Analysis Report, prepared by Hirsh/Green Transportation Consulting, Inc.
Notes: sf = square feet
Notes: Minimum 2 long-term and 2 short-term bicycle parking spaces required per use.

Vehicular access to the site and the parking facilities would be provided by a total of 10 driveways, including five driveways along the Bali Way project frontage, four along the Mindanao Way project frontage, and a single driveway along the site's Admiralty Way frontage. Raised and landscaped median islands are present along Admiralty, Mindanao, and Bali Ways adjacent to the project frontages. Both Bali Way and Mindanao Way currently provide openings in the median islands to permit left turns into and out of the Parcel 44 site, it is anticipated that modification to the locations and/or sizes of these existing median openings may be necessary to align openings in the raised medians with the proposed new project driveways. See **Section 4.8, Traffic and Access,** for a discussion of the proposed modifications.

Admiralty Way also provides an opening in the raised median island adjacent to the project's proposed driveway location. However, no northbound left-turn lane is currently provided at this location (there is no existing driveway on the west side of Admiralty Way opposite this median opening). Therefore, the project proposes to construct a new northbound left-turn lane at this existing median opening to allow vehicles to enter the site from Admiralty Way in either direction. However, it is anticipated that this driveway be restricted to right-turn-only exits to minimize potential access conflicts and reduce the potential for vehicular queues along Admiralty Way.

The following discussion describes the eight new structures proposed on the Marina del Rey Parcel 44 project site.

3.0.6.2 Building I, III, VII

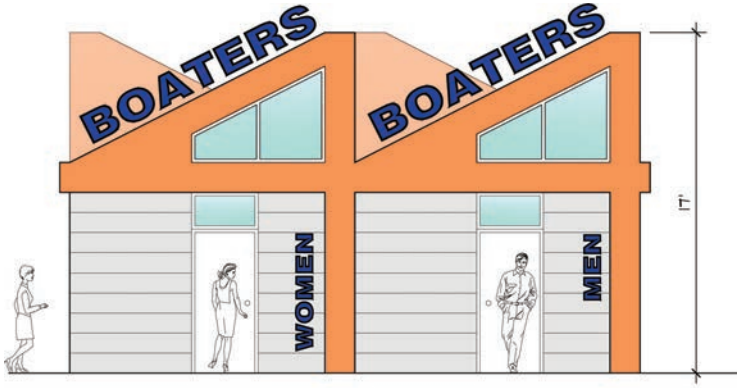
Building I, III, and VII would have the same design. These buildings would include boater bathrooms. Building I would be located in the western portion of the project site, adjacent to the Basin G bulkhead and near the adjacent parcel (Parcel 45). Building III would be located in the western portion of the project site adjacent to the southwest corner of Basin G and east of the bicycle path. Building VII would be located on the northwest portion of the project site along Bali Way. Boater bathrooms in would total 386 square feet and have a maximum height of 17 feet. The bathrooms would primarily be used by boaters who would access the bathrooms from the boat slips or the surface parking lot. Elevations for the boater restrooms are provided in **Figure 3.0-6, Building I, III, VII Elevations**.

3.0.6.3 Building II

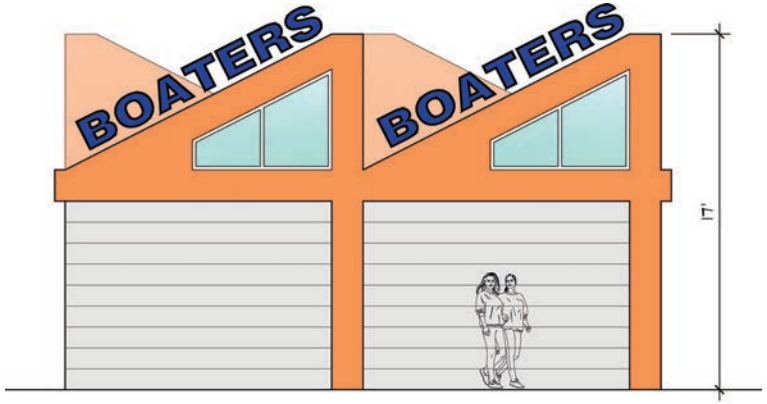
Building II would be the Trader Joe's (or similar) grocery market. The building would be one-story and would total approximately 13,625 square feet. The building would be oriented to face north, toward Basin G, with the patron entrance located at the northwest corner of the building. A 28-foot public promenade would be located between the Trader Joe's and the Basin G bulkhead. The promenade would include tables and seating areas, as well as landscaping. The primary roof structure associated with Building II would be 22 feet in height, with the entrance having an extended roof structure of 36 feet in height. **Figure 3.0-7, Trader Joe's Architectural Rendering**, provides a conceptual view of the proposed Trader Joe's grocery store.

Parking for the Trader Joe's would be located west of the building with 59 reserved spaces. Bicycle racks would also be provided near the entrance. Loading area and trash bins would be located to the rear of the building facing Mindanao Way. The primary ingress/egress point to the Trader Joe's would be from a 65-foot driveway on Mindanao Way. The driveway would accommodate delivery trucks associated with the grocery store. At this access location trucks would have sufficient room to pull into the parking lot and then back into the loading area. The size of the driveway would also be sufficient to accommodate left turns by trucks onto Mindanao Way.

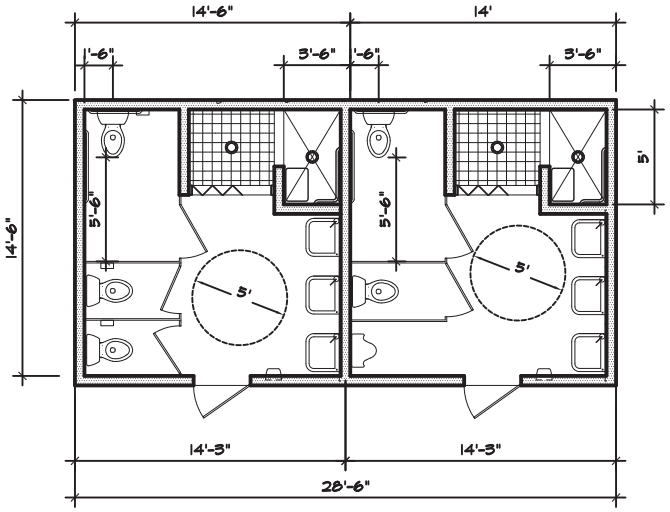
The building would be designed with modern materials such as glass with engineered wood accents. A small patio would be provided facing the marina off the promenade.



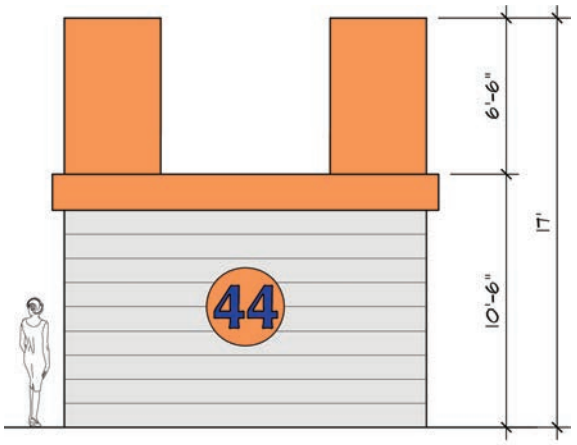
EAST ELEVATION



WEST ELEVATION



FLOOR PLAN



SOUTH & NORTH ELEVATION

SOURCE: Jack Hollander & Associates, Inc., 2013

FIGURE **3.0-6**

Building I, III, VII Elevations

SOURCE: Jack Hollander & Associates, Inc., 2013

FIGURE **3.0-7**

Trader Joe's Architectural Rendering

0889.005•04/14

3.0.6.4 Building IV

Building IV would be the approximately 42,970-square-foot West Marine Building. The building would be set back approximately 100 feet from the curb along Admiralty Way. The West Marine Building would consist of two stories and would be 40 feet in height to the main roof, with an additional 4 feet in height to the tower parapet. The highest roof point would be 65 feet at the architectural feature at the center of the building. **Figure 3.0-8, West Marine Elevations**, shows an elevation of Building IV.

In addition to the 25,000-square-foot West Marine retail space, Building IV would contain a variety of uses including approximately 4,554 square feet of offices to replace the existing offices, approximately 2,285 square feet of marine administration offices, an approximately 3,911-square-foot boat broker's office, additional office spaces of approximately 1,444 square feet and 3,172 square feet, an approximately 840-square-foot community room/boater lounge, and a 542-square-foot boater bathroom and boater laundry facility. The 25,000-square-foot West Marine would be located on the ground floor; all other uses would be located on the second floor.

Building IV would be constructed of glass and stone. The exterior glass would complement the nearby glass towers to the north on Admiralty Way. **Figure 3.0-9, West Marine Architectural Rendering** shows the proposed design of the building. The center of the building would be open air and would open to a promenade on the marina (west) side of the building. Unreserved parking spaces would be located between the east face of the building and Admiralty Way. Additional unreserved parking spaces would be located north of the West Marine Building between the West Marine Building (Building IV) and Building V. The West Marine building would open both to the east and the west with a pedestrian connection to Admiralty Way on the east face and a promenade on the west face of the building. The second level of the building would include outdoor tables and seating areas.

3.0.6.5 Building V

Building V is a single-story structure that includes general retail and restaurant space that totals approximately 6,650 square feet (3,795 square feet of retail, 2,355 square feet of restaurant, and a 500-square-foot market). Building V would be located on the southern portion of the site immediately south the driveway at Admiralty Way. Building V would provide pedestrian connections to Buildings IV and VI (via a plaza). The promenade and the bike path would continue along the west side of the building adjacent to Basin G. The building would also be assessable via a pedestrian connection that connects this building with the bike path and pedestrian walkways. Bicycle racks would be provided near the west entrance of the building (i.e., from the promenade).

3.0.6.6 Building VI

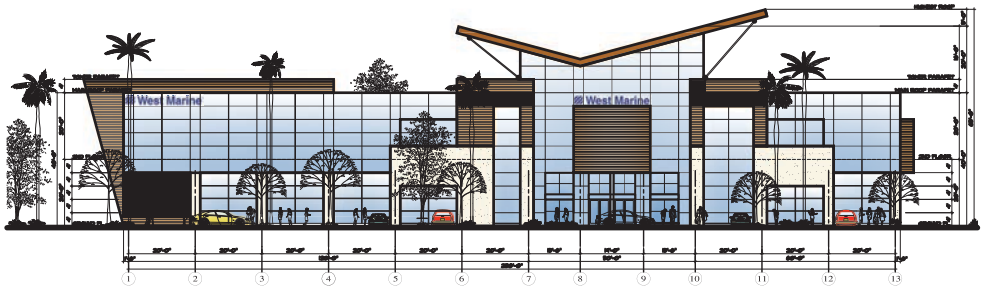
Building VI is a two-story structure situated at the northeastern portion of the project site. This structure would include approximately 9,500 square feet of retail space and approximately 7,500 square feet of restaurant space on the ground floor. The restaurant space would be oriented toward the waterfront with access to the pedestrian promenade through the building. A patio area would be provided on the southwest portion of the building. A pedestrian connection would be provided to Building V and additional bicycle racks would be provided between the two structures. Building VI would be designed in a California design with light earth tones. The east façade would be the main entrance as it would face the primary entrance from Admiralty Way. The building would be anchored by a north and a south tower at the ends of the building, both with clay hipped roofs. The center of the building would include prominent central tower with a large arched entrance and pitched roof. The retail spaces would be accented with engineered wood veneer over large window. The height to the main roofline would be approximately 32 feet. The tower features would have a maximum height of 45 feet. Elevations for Building VI are provided in **Figure 3.0-10**

3.0.6.7 Building VIII

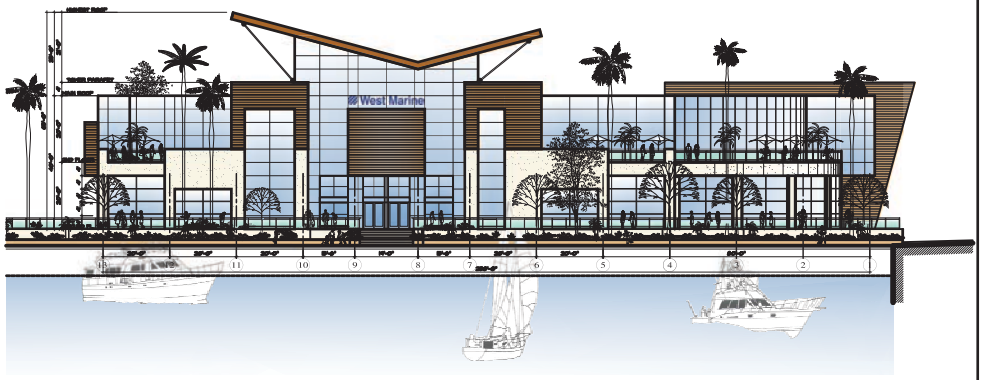
Building VIII would include a new yacht club and adjacent boat repair shop totaling approximately 1,850 square feet, located immediately adjacent to Building VII. A small service yard would be located immediately adjacent to Building VII to the west.

3.0.6.8 Boat Storage

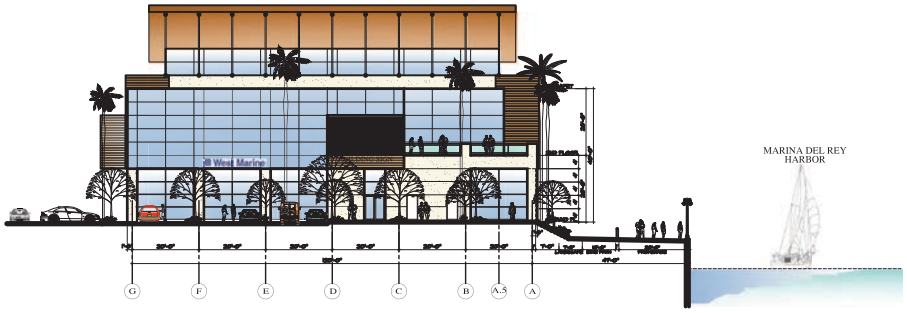
Open-air dry boat storage for up to approximately 56 boats would be provided at the northwest portion of the project site (along Bali Way). Boats could be stacked up to four boats high to a maximum of 45 feet using the proposed boat storage system. The boat storage would be provided in two rows of stalls; the first row would accommodate 12 boats and a second row would accommodate up to 44 boats 30 to 35 feet in size.



EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION

SOUTH ELEVATION

SOURCE: Jack Hollander & Associates, Inc., 2013

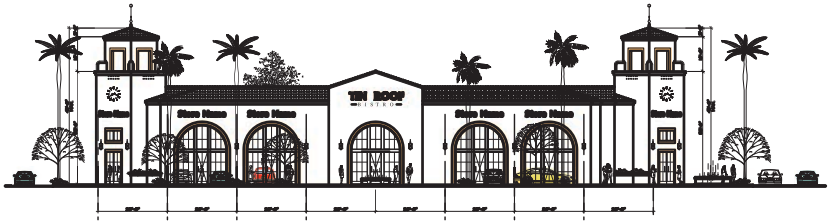
FIGURE **3.0-8**

West Marine Elevations

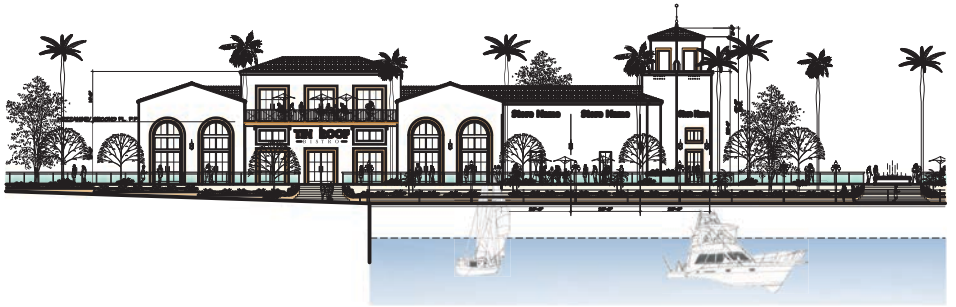
SOURCE: Jack Hollander & Associates, Inc., 2013

FIGURE **3.0-9**

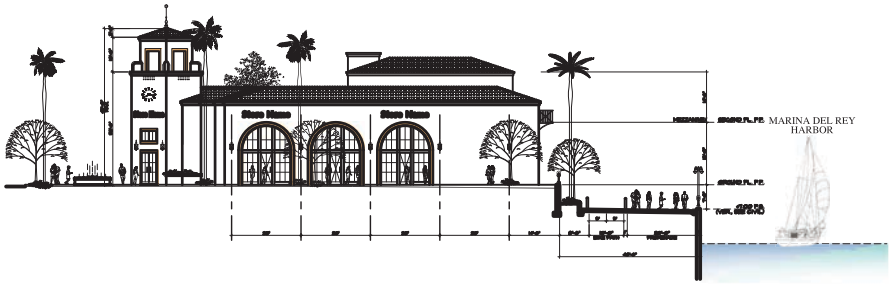
West Marine Architectural Rendering



EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION

SOUTH ELEVATION

SOURCE: Jack Hollander & Associates, Inc., 2013

FIGURE **3.0-10**

Building VI Elevation

3.0.6.9 Project Amenities

Public Promenade and Bike Path

Public access will be provided via a waterfront pedestrian promenade and bike path depicted on **Figure 3.0-11, Promenade and Bike Path Section** and **Figure 3.0-12 Site Plan with Bike Access and Promenade.** The project includes development of an expansive waterfront pedestrian promenade along the parcel's bulkhead and realignment of the Marvin Braude Bike Path to run parallel to the waterfront pedestrian promenade along the parcel's Admiralty Way bulkhead. The promenade and bike path provides access from Bali Way to Mindanao Way. The promenade is comprised of 8 feet of landscaping, a 10-foot-wide bike path, and a 20-foot pedestrian promenade.

The County has recommended the project upgrade the existing Marvin Braude Bike Path crossings along both Bali Way and Mindanao Way. These upgrades could consist of elevating the bicycle crossing slightly above the grade of the roadways (such as a speed table or other such device), the use of flashing lights and improved signage indicating a bicycle crossing, colored or textured pavement treatments for the crossings, or a combination of these or other measures.

The proposed project also includes upgrades to the existing sidewalks adjacent to the site, including a 7-foot-wide sidewalk along Admiralty Way with a 4- to 7-foot-wide sidewalk provided along the remainder of the project frontages on both streets.

Plaza

A large public plaza with a fountain would be provided between Buildings V and VI. The public plaza would provide a visual connection to the marina and also would provide a physical connection for pedestrians and bicyclists. The plaza will open the visual connection between Admiralty Way and the water. The plaza is shown in **Figure 3.0-5, First Floor Plan**.

3.0.6.10 Infrastructure Improvements

Stormwater Infrastructure

New catch basins and storm drains on-site will collect and convey stormwater away from structures. Two single connections to the existing 60-inch Los Angeles County storm drain are proposed. One of the connections will come from the north part of the site to accommodate the drainage from the north/northeast part of the site; the other connection is for the southern portion of the site.

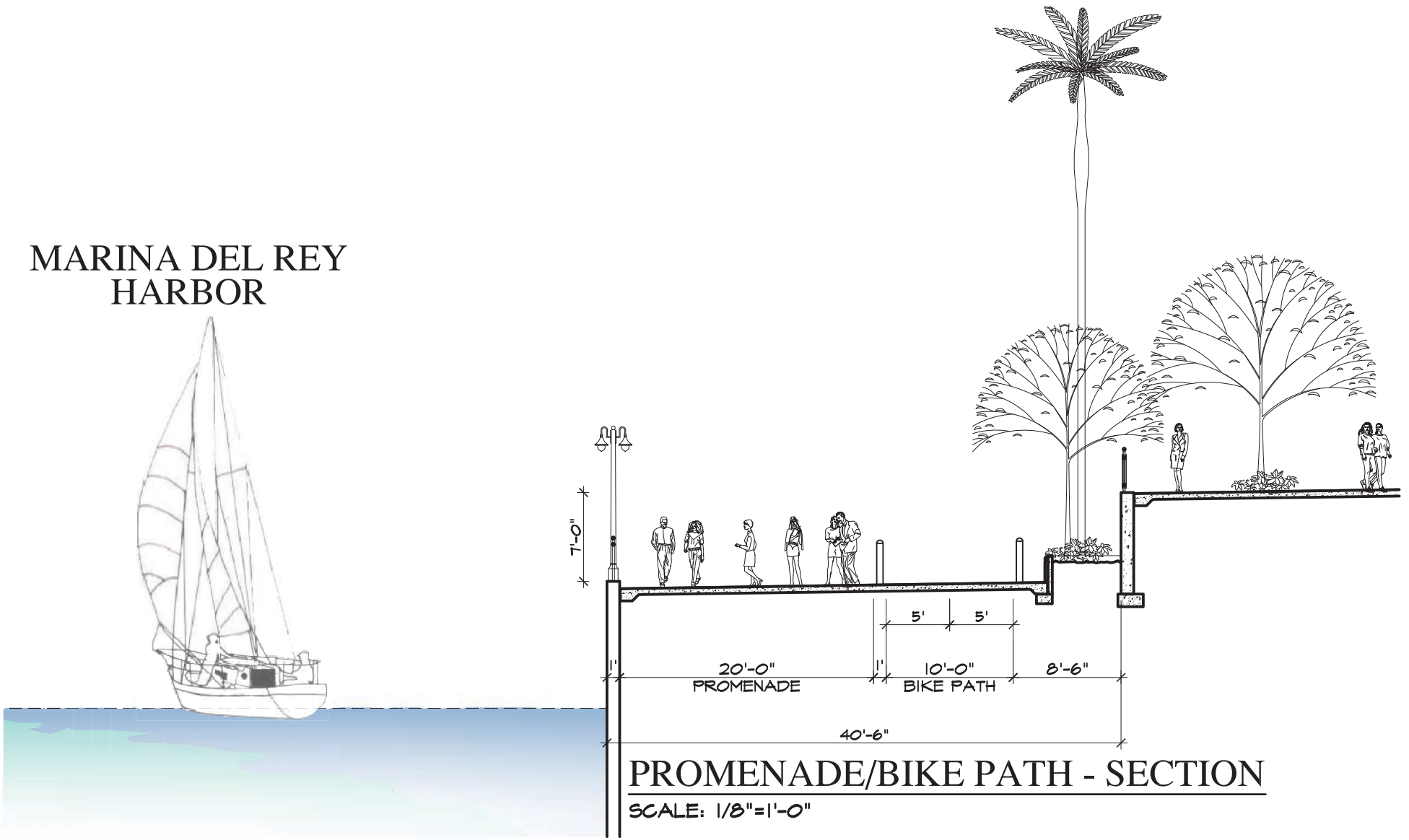
Groundwater in this location is tide dependent and during exploration it was observed to be between elevations of +2 to -3 Mean Sea Level (msl). Additionally, historical groundwater information indicates that the groundwater table has been as high as +5.0 msl, which is less than 3 feet below finished grade. According to the County of Los Angeles, Low Impact Development Standards Manual (LID), January 2009, the design requirements state "infiltration (on-site) may not be possible in all development scenarios. Exceptions may include, 'where seasonal high ground water is within 10 feet of surface'." Therefore, on-site infiltration is not a feasible option at this site.

As required by the LID design requirements, the next stormwater management option is storage and reuse. The proposed new development will not have an adequate amount of landscaping to support a storage and reuse system, therefore making this option infeasible. The last method of LID design requires the site to manage stormwater through water conservation use. LID Best Management Practices (BMPs) that percolate runoff through engineered soil and allow it to discharge downstream slowly shall be implemented. Two forms of BMPs will be implemented to meet this requirement: The first is a planted paving surface with stormwater subbase and flow through planters. The site is graded to sheet flow runoff to the planted pavement, where it will be treated through biofiltration, then infiltrate to the stormwater sub-base, lined with an impermeable liner. The remaining site will divert runoff to catch basins and roof drains throughout the site, where it will be collected and diverted to the flow through planters, lined with an impermeable liner, to be treated through biofiltration. This will allow for stormwater detention and an achievable discharge rate. A cross section of the proposed improvements is provided in **Figure 3.0-13, Bio-Planter Combination Section**.

Treated runoff will slowly be released to the existing 60-inch reinforced concrete pipe (RCP) storm drain that runs through the site and is maintained by the Los Angeles County Flood Control District. This is the only feasible option for stormwater management.

Sewer Infrastructure

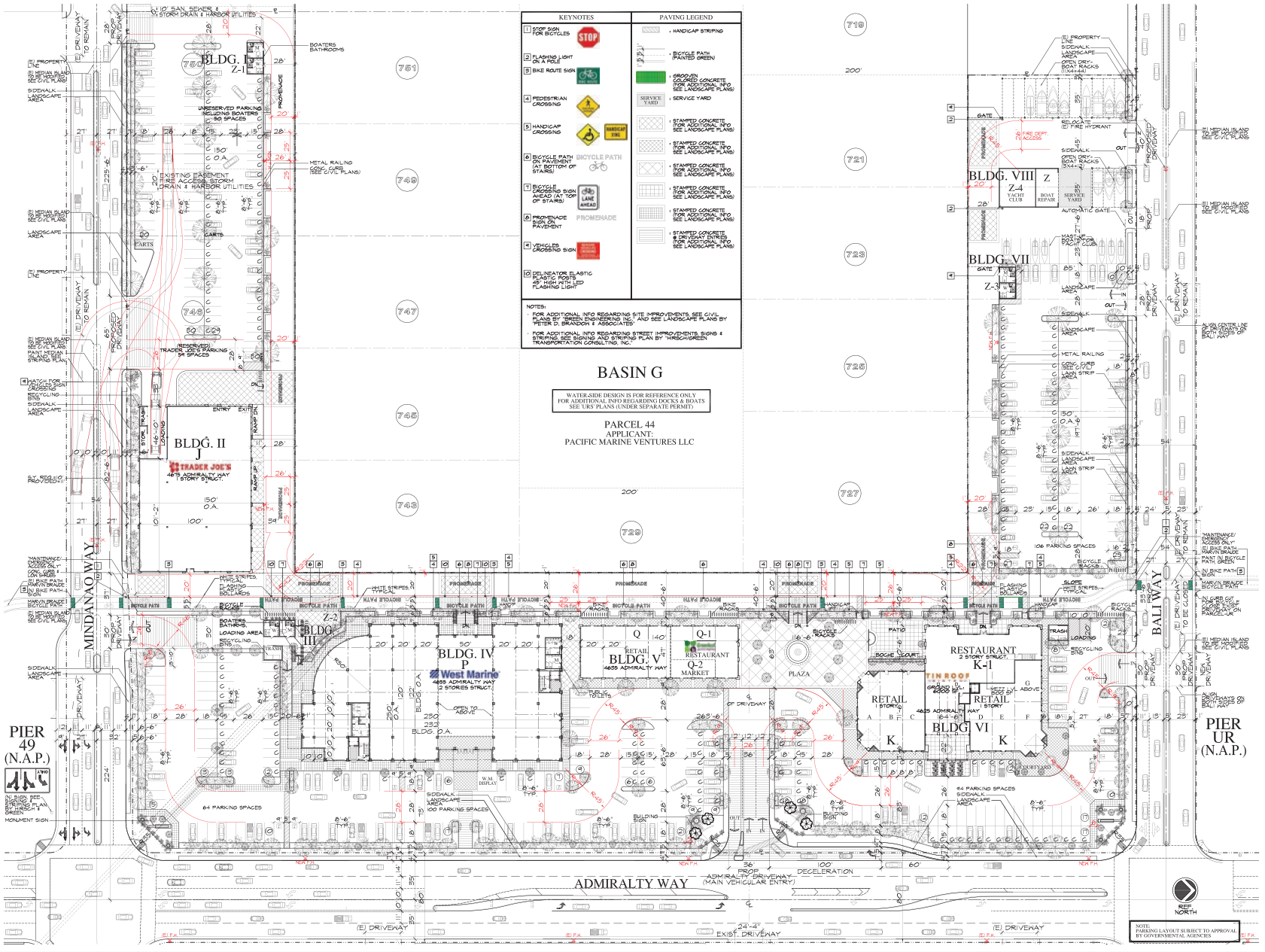
There is an existing 15-inch sewer main that runs through the northeastern edge of the property along Bali Way. The existing 15-inch main drains by gravity through the eastern portion of the Marina del Rey sewer system until it enters the Marina pump station near Bali Way. That effluent is pumped via a 10-inch force main to Admiralty Way and Via Regatta where it becomes gravity flow. This sewer joins the City of Los Angeles sewer approximately 400 feet north of Basin E in Washington Street via a metering structure. The Sewer Area Study prepared by Breen Engineering, Inc., for the proposed project includes calculations to determine the capacity for the existing sewers to accommodate the proposed project and determined that the sewer system in the area has sufficient capacity available to serve the project. The Los Angeles County Department of Public Works concurred with the Sewer Area Study.



SOURCE: Jack Hollander & Associates, Inc., 2014

FIGURE **3.0-11**

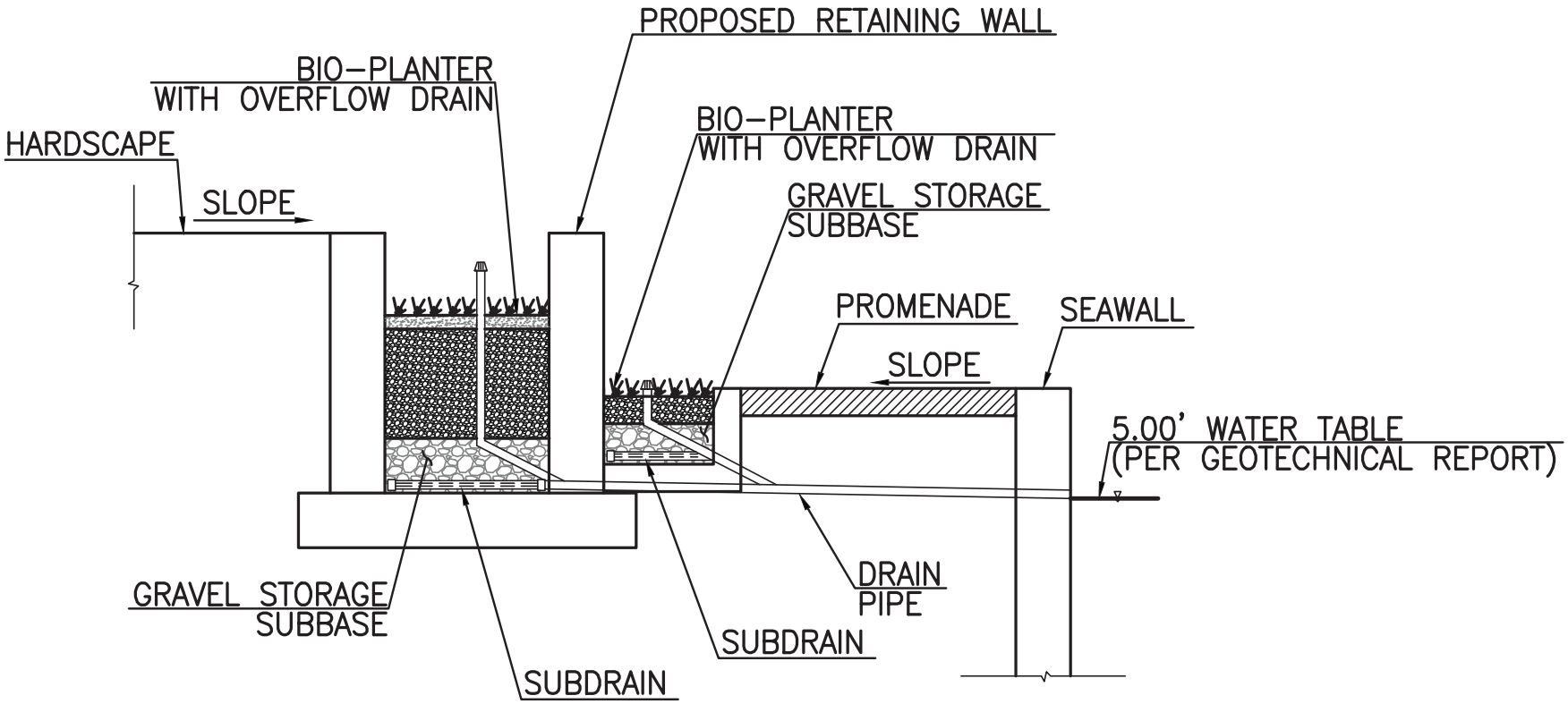
Promenade and Bike Path Section



SOURCE: Jack Hollander & Associates, Inc., 2014

FIGURE **3.0-12**

Site Plan With Bike Access and Promenade



SOURCE: Breen Engineering, Inc., April 2014

FIGURE **3.0-13**

Bio-Planter Combination Section

3.0.6.11 Project Construction Program and Phasing

The project would be constructed in one phase beginning approximately January 2015 and ending approximately the end of April 2016. Construction would include a demolition, grading, trenching, building construction, and architectural coating sub-phase. The demolition debris amount was conservatively estimated based on the footprint measurements from the existing buildings, totaling approximately 14,724 square feet.

Demolition of Existing Uses

The site is currently developed with a number of small one and two-story structures containing a total of approximately 14,724 square feet of commercial, retail, and marine-related uses, including an approximately 7,844-square-foot boat sales facility (Boat Brokers), a total of approximately 4,216 square feet of office space, a 1,000-square-foot boat repair operation (Seamark), an approximately 1,080-square-foot yacht club, an approximately 111-space dry boat-storage facility, and a 584-square-foot boater bathroom facility, as well as surface parking lots surrounding and serving each of these uses. However, the majority of the site is currently utilized as boat parking/storage for the boat sales and/or boat repair businesses.

Prior to commencement of demolition, abatement of identified asbestos sources would occur, as necessary. A variety of equipment would be used during the demolition phase and may include cranes, tractors, pneumatic hammers, drills, and similar types of equipment. A staging area would be identified within the project site for the storage of equipment and material. Debris would be trucked from the site for disposal at unclassified landfills that accept these waste materials and may include, but are not limited to, Sunshine Canyon, Long Beach Southeast Resource Recovery Facility (the nearest landfill by distance), Peck Road, or Reliance Pit No. 2 Landfills, or other appropriate landfills, which may be located outside Los Angeles County. Building materials containing asbestos, if any, would be handled, transported, and disposed of in accordance with applicable laws and regulations prior to building removal.[7]

Grading of the Project Site after Demolition

Remedial grading will take place after demolition to ensure that grade elevations are contoured for development of the proposed project. The project is expected to require 11,075 cubic yards (cy) of cut and 32,880 cy of fill. Approximately 700 cy of material would be imported to the project site.

---

7 South Coast Air Quality Management District Rule 1403 [Asbestos Emissions from Demolition/Renovation Activities].

3.0.6.12 Project Applications

The County's approval of the following discretionary land use permits will be necessary to facilitate development of the proposed project:

- **Coastal Development Permit** (to authorize the proposed demolition of existing facilities located on the site and the development/construction of new proposed structures and appurtenant facilities on the parcel) Coastal Development Permit No. 201300003
- **Parking Permit** (to authorize commercial tandem parking and a minor reduction in Code-required parking for the project) Parking Permit No. 201300012
- **Conditional Use Permit** (to ensure consistency with subject parcel's "Waterfront Overlay Zone" development criteria) Conditional Use Permit No. 201300166
- **Variance** (to authorize a reduction in required yards for installation of the proposed open boat storage racks) Variance No. 201300004

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0.1 INTRODUCTION

The purpose of this section is to inform decision makers and the public about the type and magnitude of the change to the existing environment that would result from the project, plus proposed and approved cumulative development in Marina del Rey. Environmental topics addressed in this Draft Environmental Impact Report (Draft EIR) have been identified in the Notice of Preparation prepared by the County of Los Angeles for the proposed project. The environmental impact analysis sections of this Draft EIR provide a comprehensive discussion of the existing local and regional environmental conditions, evaluate expected project and cumulative impacts that would result from the project, and determine the level of significance of reasonably foreseeable impacts. The environmental impact analysis sections identify mitigation measures intended to reduce potential environmental impacts.

4.0.2 CUMULATIVE IMPACT ANALYSIS

The technical analysis contained in **Section 4.0, Environmental Impact Analysis,** examines both project-specific impacts and the potential environmental effects associated with cumulative development. The California Environmental Quality Act (CEQA) requires that EIRs discuss cumulative impacts, in addition to project-specific impacts. In accordance with CEQA, the discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. According to Section 15355 of the *State CEQA Guidelines*:

> *"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*
>
> *(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
>
> *(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

Section 15130(a)(l) of the *State CEQA Guidelines* further states that "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."

Section 15130(a) of the *State CEQA Guidelines* also requires that EIRs discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable."[1] Where a Lead Agency is examining a project with an incremental effect that is not cumulatively considerable, it need not consider the effect significant but must briefly describe the basis for its conclusion. If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, Section 15130(a)(2) of the *State CEQA Guidelines* requires a brief discussion in the EIR of why the cumulative impact is not significant and why it is not discussed in further detail. Section 15130(a)(3) of the *State CEQA Guidelines* requires supporting analysis in the EIR if a determination is made that a project's contribution to a significant cumulative impact is rendered less than cumulatively considerable and, therefore, is not significant. CEQA recognizes that the analysis of cumulative impacts need not be as detailed as the analysis of project-related impacts, but instead should "be guided by the standards of practicality and reasonableness" (*State CEQA Guidelines* Section 15130(b)). The discussion of cumulative impacts in this draft EIR focuses on whether the impacts of the proposed project are cumulatively considerable.

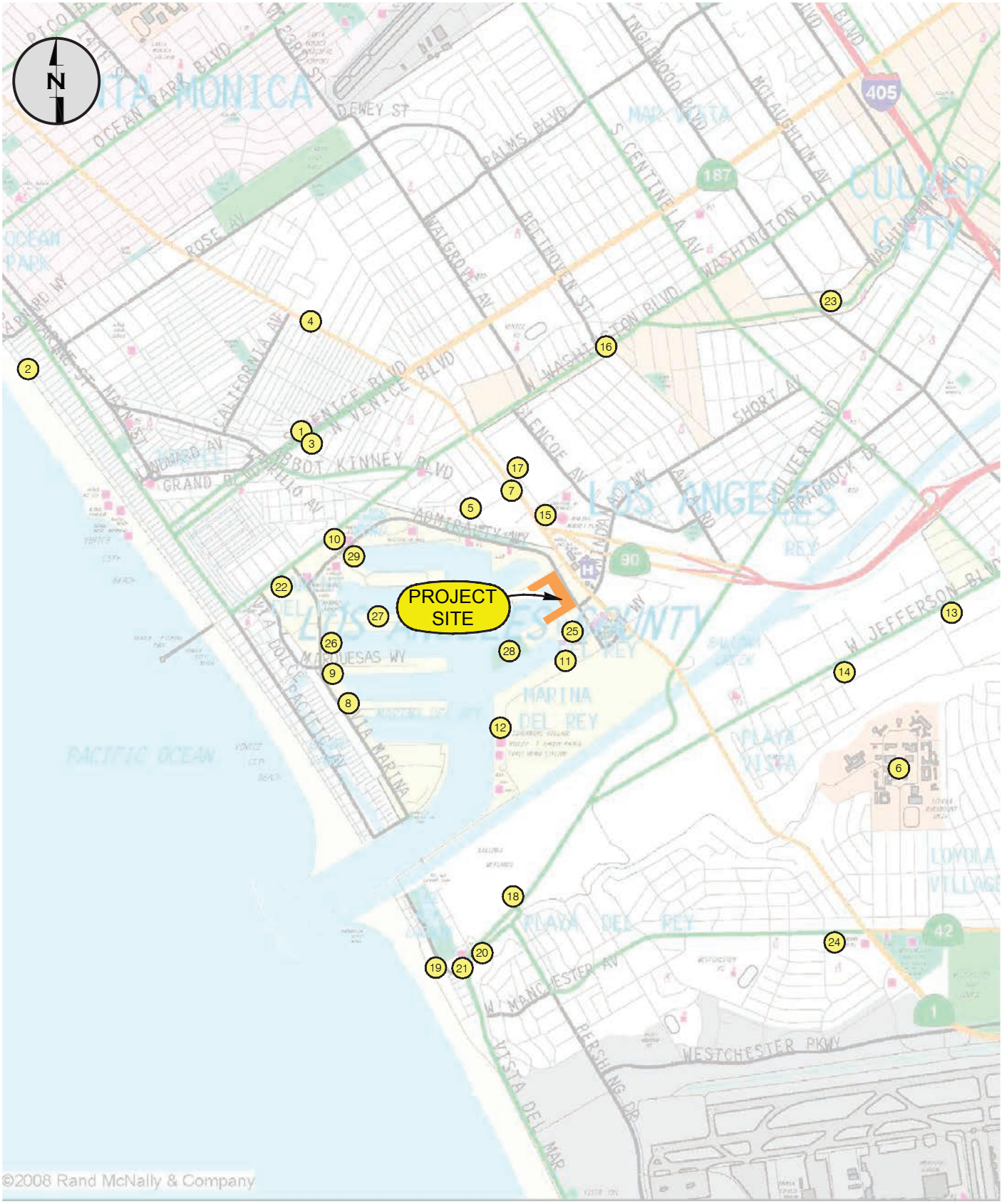
The fact that a cumulative impact is significant on the whole does not necessarily mean that the project-related contribution to that impact analysis is significant as well. Instead, under CEQA, a project-related contribution to a significant cumulative impact is only significant if the contribution is "cumulatively considerable." To support each significance conclusion, the draft EIR provides a cumulative impact analysis; and where project-specific impacts have been identified that, together with the effects of other related projects, could result in cumulatively significant impacts, these potential impacts are documented.

Section 15130(b) of the *State CEQA Guidelines* defines consideration of the following two elements as necessary to provide an adequate discussion of cumulative impacts: "(A) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the Agency, or (B) a summary of projections contained in an adopted general plan or related planning document which is designed to evaluate regional or area wide conditions." In this draft EIR, a combination of these two methods is used, depending upon the specific environmental issue area being analyzed.

Related projects within the vicinity of the project are presented in **Table 4.0-1, List of Related Projects,** and the locations of these projects are shown in **Figure 4.0-1, Location of Related Projects**. **Table 4.0-1** includes those projects that are (1) completed but not fully occupied; (2) currently under construction or beginning construction; (3) proposed with applications on file at the County of Los Angeles or City of Los Angeles; or (4) reasonably foreseeable.

---

1 Under Section 15065(a)(3) of the *State CEQA Guidelines*, "cumulatively considerable" means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.0-1**

Location of Related Projects

Table 4.0-1
List of Related Projects

Map No.	Land Use/Description	Size[1]	Address
1	Specialty Retail	10,000 sf	585 Venice Boulevard
	Warehouse	*10,000 sf*	
2	Mixed Use		305 Ocean Front Walk
	Hotel	30 room	
	Restaurant (high-turnover)	2,000 sf	
3	Mixed Use		580 Venice Boulevard
	Residential	5 unit	
	Retail	5,700 sf	
4	Supermarket	36,800 sf	1600 Lincoln Boulevard
5	LADPW Maintenance Yard Expansion	n/a	3233 Thatcher Avenue
6	Loyola Marymount University (student increase)	2,540 student	1 LMU Drive
7	Retail	8,000 sf	4160 Lincoln Boulevard
8	Marina del Rey Parcel 9		NEC Tahiti Way/Via Marina
	Hotel	288 Room	
	Public Wetland Park	1.46 acre	
9	Marina del Rey Parcels 14 and 10 R		E/s Via Marina near Marquesas Way
	Apartment	526 unit	
	Boat dock	168 slip	
	Apartment	*136 unit*	
	Boat dock	*184 slip*	
10	Marina del Rey Parcel 147		E/o Palawan Way between Washington Boulevard and Admiralty Way
	Senior care	114 unit	
	Specialty retail	3,000 sf	
11	Marina del Rey Parcel 52		Fiji Way, W/o Admiralty Way
	Storage	375 boat	
	County Office	*2,000 sf*	
	Public Parking Lot	*236 Space*	
12	Fisherman's Village (Parcels 55, 56, W)		Near southern terminus of Fiji Way
	Retail	29,150 sf	
	Restaurants and Food Court	37,100 sf	
	Ferry Terminal and Office	6,500 sf	
	Hotel	132 room	
	Boat Slips	26 slip	
	Retail	*2,580 sf*	
	Office	*10,404 sf*	
	Restaurants	*16,149 sf*	
	Boat Slips	*17 slip*	

Map No.	Land Use/Description	Size[1]	Address
13	The Village at Playa Vista		S/o Jefferson Boulevard and Westlawn Avenue
	Office	175,000 sf	
	Apartment	2,600 unit	
	Retail	150,000 sf	
	Community Serving Uses	40,000 sf	
14	Playa Vista – Phase 1		S/o Jefferson Boulevard and E/o Lincoln Boulevard
	Office	1,922,050 sf	
	Condominium	3,246 sf	
	Retail	25,000 sf	
	Production and Stage Support	1,129,900 sf	
	Community Service Uses	65,000 sf	
15	Villa Marina		E/o Lincoln Boulevard between SR-90 and Maxella Avenue
	Condominium	244 unit	
	Shopping Center	9,000 sf	
	Shopping Center	*21,038 sf*	
16	Mixed Use		12803 Washington Boulevard
	Office	31,150 sf	
	Retail	6,260 sf	
17	Apartment	77 unit	4100 Del Rey Avenue
18	Office	7,994 sf	309-315 E. Culver Boulevard
19	Mixed Use		6819 Pacific Avenue
	Single-family residential	29 unit	
	Retail	4,000 sf	
20	Mixed Use		220 Culver Boulevard
	Apartments	63 unit	
	Pharmacy/drugstore	11,000 sf	
	Restaurant	*4,000 sf*	
21	Mixed Use		138 Culver Boulevard
	Apartments	72 unit	
	Retail	7,000 sf	
	Restaurant	3,000 sf	
	Supermarket	6,000 sf	
22	Marina del Rey Parcel 95		Washington Boulevard between Via Dolce and Via Marina
	Retail	14,922 sf	
	Café/Coffee Shop	1,797 sf	
	Islands Restaurant	165 seats	
	Office	9,180 sf	
	Furniture Sales/Showroom	*7,500 sf*	
23	Office	41,000 sf	11955 W. Washington Boulevard
	Retail	9,500 sf	

Map No.	Land Use/Description	Size[1]	Address
24	Apartment	126 unit	7280 W. Manchester Avenue
25	Marina del Rey Parcels 49, 77		W/o Admiralty Way between Mindanao Way and Fiji Way
	Retail	135,000 sf	
	Office	26,000 sf	
26	Esprit Phase 2 (Parcel 15)		E/o Via Marina between Mindanao Way and Marquesas Way
	Apartments	585 unit[2]	
	Retail	8,000 sf	
	Boat Slips	41 slip	
	Restaurant	4,400 sf	
27	Marina del Rey (Parcel 21)		13953 Panay Way
	Health Club	10,000 sf	
	Retail	2,916 sf	
	Maine Commercial Offices	11,432 sf	
	Yacht Club	92 slip	
	Health Club	*16,000 sf*	
	Retail	*2,916 sf*	
	Marine Commercial Offices	*5,432 sf*	
	Yacht Club	*64 slip*	
28	Burton Chace Park Expansion	6.64 acres	Western terminus of Mindanao Way
29	Marina del Rey Parcel 30/NR		Western terminus of Mindanao Way SEC Admiralty Way and Palawan Way
	Apartment	292 unit	
	Supermarket	14,700 sf	
	Pharmacy/Drugstore	11,000 sf	
	Retail	2,300 sf	
	Restaurants	16,670 sf	
	Restaurant/Entertainment	*17,000 sf*	
30	Marin del Rey Parcels 100, 101		SWC Via Marina/Panay Way
	Apartment	544 unit	
	Apartment	202 unit	
31	Parcel 44		
	Boat slips	205 slip	W/o Admiralty Way, between Mindanao Way and Bali Way

Note: uses identified in italics are existing uses removed in order to develop proposed project
Source: Hirsch Green, 2013.
sf = square feet;

2 The total units proposed are 585; the traffic study assumes an increase of 297, as 288 units currently exist on the site.

Based on the list of related projects provided in **Table 4.0-1**, a summary of the projected cumulative development is provided in **Table 4.0-2, Cumulative Development Summary**.

Table 4.0-2
Cumulative Development Summary

Land Use	Size/Units
Residential	8,235 du
Restaurant	66,280 sf
Hotel	450 rooms
Commercial/Office	3,351,026 sf
Commercial/Retail	519,248 sf
Institutional/Community Services	105,000 sf
Boat Dock/Storage	661 boats
Park	7,64 acres

Source: Hirsch/Green Transportation Consulting, Inc. *Traffic Impact Analysis Report, (2013).*

Specific past, present, and reasonably anticipated future projects listed above, as well as applicable land use planning documents, are considered when evaluating cumulative impacts in **Sections 4.1** through **4.10**, as appropriate for each environmental topic addressed in this Draft EIR.

4.1 AESTHETICS

4.1.1 INTRODUCTION

This section of the EIR evaluates potential project-related changes in the visual character of the project site and surrounding environment. Methods of analysis include: (1) identification of "viewsheds" through which the project can be observed; (2) identification of "prominent visual features" within those viewsheds; and (3) simulation of post-development changes in the viewsheds through the preparation of renderings of post-development conditions.

Viewsheds are defined herein as views available from a particular viewing point. The viewsheds selected for this analysis are ones that are visible to:

- a relatively large mobile viewing audience; and/or
- a permanent-resident population (from existing residential uses); and/or
- a location designated as scenic by either the Los Angeles General Plan or Marina del Rey Land Use Plan (LUP).

"Prominent visual features" are defined as visual elements that stand out in relation to their surroundings.

If portions of the proposed development area cannot be observed, or if views of the development area are so far away as to make them visually obscure, those views are not considered visually prominent and are not emphasized as part of this analysis. It is not the intent of this analysis to suggest that the project site is visible from only the viewing locations discussed in this section. Rather, an attempt was made to identify viewsheds that are representative of the most prominent views available in the project area.

4.1.2 ENVIRONMENTAL SETTING

The project site (Marina del Rey Parcel 44) is presently developed with a total of seven one- and two-story structures, paved parking, and minimal landscaping. Existing structures were constructed in the early 1960s as part of Phase I Marina del Rey development and, while older, the structures are generally well maintained. The building footprints comprise a small portion of the project site with large areas of the project site consisting of surface parking between and surrounding the structures. The parking is a mixture of boat and car parking; boats and boat masts dominate much of the existing views.

The perimeter of the site is landscaped with a combination of low shrubs interspersed with medium (6- to 8-foot) landscape trees and tall (12-foot and up) palm trees. Due to the limited amount of development on the project site, intermittent views of the water, the boats moored in Basin G and the associated masts are available along Admiralty Way, Mindanao Way, and Bali Way.

4.1.2.1 Visual Character

Marina del Rey is part of the Los Angeles coastal plain and is generally characterized by relatively flat and low-lying topographic features. Elevations on the site and surrounding area range from 10 to 15 feet above mean sea level.

The visual character of the project site and region is dominated by urban development within Marina del Rey and the surrounding cities of Los Angeles, Santa Monica, and Culver City. Views of open space, although uncommon, include the distant Santa Monica Mountains and the more proximal Westchester Bluffs and Ballona Wetlands. Views of the Pacific Ocean and marine uses within the small-craft harbor from surrounding roadways are largely obscured by intervening structures and landscape vegetation. The LUP indicates that marine related elements of the harbor (e.g., masts, sails, moles, slips, etc.) represent the primary visual resource of Marina del Rey.[1]

Other positive scenic elements in the Marina include Burton Chace Park, Fisherman's Village, Yvonne B. Burke Park, Marina/"Mother's" beach, the jetties, and the breakwater. Although the Marina is characterized mainly by low-rise buildings, there is sufficient height diversity to allow for visual interest and variety. At the northern end of the main channel, the high-rise Marina City Club complex and Promenade Apartments provide an example of height and architectural diversity.

With respect to public viewing locations, all moles within the Marina allow opportunities for public viewing while the seaward ends allow vistas of greater than 180 degrees. Landscaping is provided along many of these walkways which softens the profile of the bulkheads.

4.1.2.2 Scenic Resources

As discussed above, the LUP identifies several locations as significant vantage points within the Marina. These locations are:

- Burton Chace Park
- Bike path along the northern boundary of the flood control channel

---

1 County of Los Angeles, Department of Regional Planning *LUP*, 2012 p. 9-2.

- Parking lot just northwest of the County Fire Station (view of the main channel)
- North jetty viewing area (good views of bluffs)
- Major streets (Via Marina, Admiralty Way and Fiji Way)
- Fisherman's Village
- End of moles, and lands adjacent to the Main Channel

In the vicinity of the project site, Via Marina to Admiralty Way to Fiji Way (west, then east) is defined as a scenic highway in the Marina del Rey LUP.

4.1.2.3 Viewshed Descriptions

In consultation with County staff, the following five viewing locations, or vantage points, located in proximity to the project site were selected to illustrate and evaluate the project's potential impacts on views:

- The intersection of Bali Way and Admiralty Way,
- The waterside portion of the project site (the eastern portion of Marina del Rey Basin G),
- The Mindanao Way median proximate to the entrance to Burton Chace Park,
- The intersection of Mindanao Way and Admiralty Way, and
- Across Admiralty Way.

Views from each viewing location are described below. **Figure 4.1-1, Viewing Locations**, provides a map depicting the viewing locations.

To provide a standard frame of reference for the reader, the visual character of each viewing location is described in terms of foreground, middle ground, and background views. Each view represents a portion of the total viewshed based on distance from the viewer. Foreground views represent the closest views available, middle ground views represent the next distinguishable range of view, while background views represent distant landscape elements and typically form backdrops for the mid- and foreground scenes. Delineation of the viewing ranges is largely subjective and is based on landscape transitions.

Viewing Location A, View from Admiralty Way/Bali Way Intersection: As illustrated in **Figure 4.1-2, Existing View of Project Site, View A**, a view of the existing buildings, landscaping and surface parking is available from this location. Foreground views are dominated by Admiralty Way, including the landscaped median and streetlamps. Middle ground views include surface parking (both cars and boats),

signage associated with the existing boat rental facilities, and two small one story buildings on the near corner of the project site. An existing two-story building on the project site is also visible further south. Views of the buildings are partially obstructed by landscaping, including trees and hedges located throughout the parking lot. Background views consist of the boats in Basin G (although these views are limited due to the topography from this angle), and to a greater extent the upper portions of boat masts. Due to the limited amount of development on the site, views of the Main Channel are provided intermittently from Admiralty Way; however, from this particular vantage point, views of the water are predominantly blocked by the existing structures, trees and large boats parked on-site.

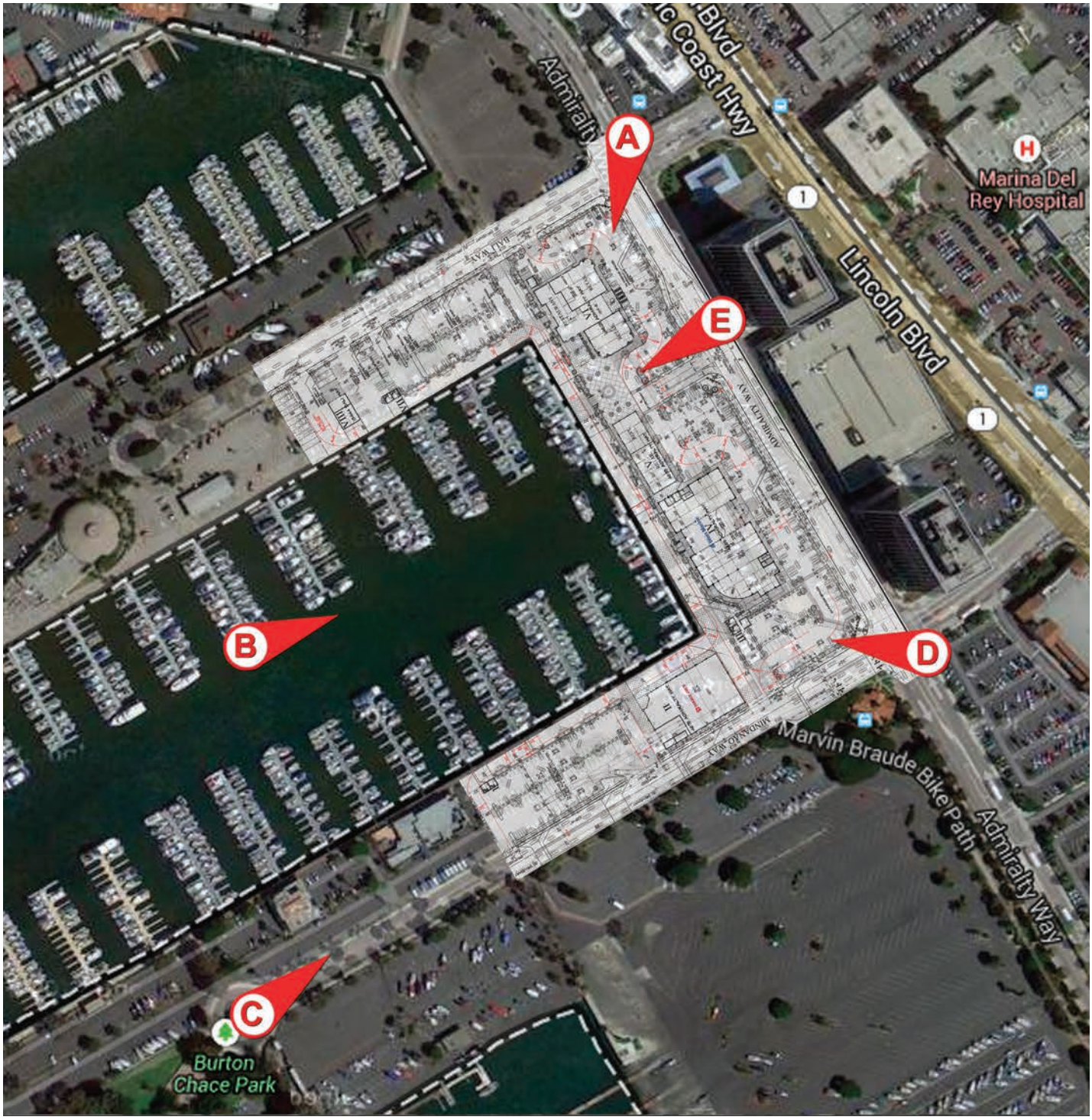
Prominent Visual Features: existing on-site structures, boat masts, Basin G (limited visibility)

Viewing Location B, View from the Waterside (from Basin G looking back towards Admiralty Way): As illustrated in **Figure 4.1-3, Existing View of Project Site, View B**, foreground views from this location are dominated by the existing boats in the boat slips. Water, boats, boat masts, and the existing slips dominate the foreground view. In the middle ground view the roof of two existing structures on the site is just visible between the various boat masts, while the background views are dominated by a large office building east side of Admiralty Way.

Prominent Visual Features: water, boats, office building on Admiralty Way.

Viewing Location C, View from the Mindanao Way median proximate to the entrance to Burton Chace Park: As illustrated in **Figure 4.1-4, Existing View of the Project Site, View C**, views of the project site are largely obscured by the existing office building on the adjacent Parcel 45 and mature landscaping along Mindanao Way. Foreground views include the landscaped median and sidewalk on Mindanao Way as well as an existing two-story office building. In the middle ground, the existing surface parking lot can be seen beyond the trees along Mindanao Way. Background views are dominated by two tall office buildings located on the east of Admiralty Way across the project site. Views of water or other important marine related uses are not available from this vantage point.

Prominent Visual Features: an existing office building, ornamental landscaping, off-site existing buildings.



NOT TO SCALE

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-1**

Viewing Locations

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-2**

Existing View of the Project Site, View A

0889.005•01/14

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-3**

Existing View of the Project Site, View B

0889.005•01/14

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-4**

Existing View of the Project Site, View C

0889.005•01/14

Viewing Location D, View from Admiralty Way/Mindanao Way Intersection: As illustrated in **Figure 4.1-5, Existing View of the Project Site, View D**, much of the project site is visible from this vantage point. The foreground view includes the median on Admiralty Way and a small one-story building near the intersection of Mindanao Way and Admiralty Way. The middle ground view includes mature landscaping and the existing surface parking on the project site. From this vantage point, views of the water are not available due to the structures on the site and the boats parked near the eastern perimeter of the site. Chain link fencing that surrounds much of the parking area is also visible from this vantage point. The background view from this vantage point includes the Marina City Club complex located north of the project site and the Promenade Apartments located to the northeast of the project site, within the City of Los Angeles.

Prominent Visual Features: mature landscaping, Admiralty Way corridor, Marina City Club complex and the Promenade Apartments complex.

Viewing Location E, View from Admiralty Way: As illustrated in **Figure 4.1-6, Existing View of the Project Site, View E**, much of the project site is visible from this vantage point. The foreground view includes the median on Admiralty Way, surface parking, and the existing two-story existing building on the project site. The middle ground view includes mature landscaping and the existing surface parking on the project site. From this vantage point, views of the water are not available due to the structures on the site. Background views include additional structures on the Mindanao Way portion of the site.

Prominent Visual Features: mature landscaping, Admiralty Way, existing two-story building, and surface parking.

4.1.2.4 Light and Glare

For purposes of this analysis, "light" refers to light emissions, or the degree of brightness, generated by a given source. Artificial lighting may be generated from point sources (i.e., focused points of origin representing unshielded light sources) or from indirectly illuminated sources of reflected light. Light may be directed downward to illuminate an area or surface, cast upward into the sky and refracted by atmospheric conditions (skyglow), or cast sideways and outwards onto off-site properties (overspill). Skyglow and light overspill are considered forms of light pollution.

The effects of nighttime lighting are contextual and depend upon the light source's intensity, its proximity to light-sensitive land uses (sensitive receptors such as residential units and schools), and the existing lighting environment in the vicinity of a project site. Adverse lighting impacts may occur when project-related lighting is visually prominent and decreases available views, alters the nature of

community or neighborhood character, or illuminates a sensitive land use. Nighttime illumination of sensitive receptors may adversely affect certain land use functions, such as those of a residential or institutional nature, since such uses are typically occupied during evening hours and can be disturbed by bright lights.

Glare, or "unwanted source luminance," is defined as focused, intense light directly emanated by a source or indirectly reflected by a surface from a source. There is no absolute threshold for glare, since it is subjective and may not be considered problematic unless it is directed at a sensitive receptor and/or interferes with a specific activity. Glare can be categorized as discomforting (annoying without interfering with activities), disabling (reducing contrast and therefore impairing visual performance), and blinding (of sufficient intensity to cause residual loss of visual distinction of objects, colors or brightness).

Daytime glare is typically caused by the reflection of sunlight from highly reflective surfaces at or above eye level. Reflective surfaces are generally associated with buildings clad with broad expanses of highly polished surfaces or with broad, light-colored areas of paving. Daytime glare is generally most pronounced during early morning and late afternoon hours when the sun is at a low angle and the potential exists for intense reflected light to interfere with vision and driving conditions. Daytime glare may also hinder outdoor activities conducted in surrounding land uses, such as sports.

Nighttime glare refers to direct, intense, focused light, as well as reflected light, which hampers visibility. Glare caused by direct sources of light typically originates from mobile sources, such as automobiles. Glare may also originate from particularly intense stationary sources, such as floodlights. As with daytime sun glare, such intense light may cause undesirable interference with driving or other activities.

The project site is presently developed with existing boater-serving uses and an existing surface parking lot. Both of these existing developed land uses contain a variety of exterior night lighting. Principal light sources include street lighting, lighting associated with the existing uses, parking lot lighting, and vehicle headlights. None of these light sources is considered exceptionally bright or unique. All are considered typical in most urban settings.

Uses on the project site currently do not generate significant daytime or nighttime glare. The buildings are set back behind a large surface parking area and do not contain large expanses of light or polished surfaces that directly or indirectly generate daytime glare. Since nighttime lighting on the project site is minimal, the site does not constitute a source of nighttime glare.

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-5**

Existing View of the Project Site, View D

0889.005•01/14

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-6**

Existing View of the Project Site, View E

4.1.2.5 Shade and Shadow

The analysis of project-related shadow effects evaluates the potential for project development to cast shadows on adjacent land uses. Consequences of shadows on land uses may be positive, including cooling effects during warm weather, or negative, such as the loss of natural light necessary for solar energy purposes. Shading effects are dependent upon several factors, including the local topography, the height, and bulk of a project's structural elements, the shade sensitivity of adjacent land uses, the season, and consequent length of shadows, and the duration of shadows at a given location. Land uses considered sensitive to the effects of shadows include residential recreational uses; institutional uses (e.g., schools and nursing homes); certain commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; plant nurseries; and solar collectors, or other uses for which sunlight is important to function, physical comfort, or commerce.

A project's potential for shading adjacent land uses is determined by identifying the height and bulk of proposed project components, such as buildings and trees, and by calculating the shadows that would be cast by those components during the most extreme shading conditions: Winter Solstice (December 21), when the sun is at its lowest point in the sky and shadows are the longest, and Summer Solstice (June 21), when the sun is at its highest point and shadows are the shortest. Shadow length and bearing (the direction in which the shadow is cast) are dependent upon the location (latitude and longitude) of the project site, which dictates the angle of the sun relative to the project site. In the Los Angeles area, the maximum shadow a building can cast is equivalent to three times its height, during the Winter Solstice.

4.1.3 REGULATORY FRAMEWORK

4.1.3.1 State

California Environmental Quality Act (CEQA)

CEQA affords protection for the environment, including aesthetic resources. The *State CEQA Guidelines* provide four criteria that may be used to evaluate the significance of visual quality impacts: negative effects on a scenic vista, damage to scenic resources within a state scenic highway, degradation of the visual character or quality of a site and its surroundings, and creation of a new source of substantial light or glare affecting views.

4.1.3.2 Local

Chapter 9 of the LUP (Coastal Visual Resources) provides the policy framework for visual resource protection within Marina Del Rey. In general, the LUP encourages flexibility in design to afford greater

waterfront views, particularly in the moles (both Bali Way and Mindanao Way are mole roads). The LUP includes the following policies that are applicable to the proposed project:

Policy 9E.1 Views of the Harbor a Priority. Maintaining and enhancing views of the Marina shall be a priority goal of this Plan. Enhancing the ability of the public to experience and view the Marina waters shall be a prime consideration in the design of all new, modified, or expanded development. This goal shall be achieved by placing conditions on permits for new development to enhance public viewing, to allow for greater public access, and to create new view corridors of the waterfront.

Policy 9E.4 Design Control Board Scope of Review. Architectural design (i.e., building and façade design, materials, colors) landscaping, signs and site planning in the existing Marina shall continue to be reviewed by the Design Control Board in accordance with the revised Statement of Aims and Policies, the Permanent Sign Controls and Regulations and the Specifications and Minimum Standards of Architectural Treatment and Construction of this certified LCP. (Note: The relevant parts of these documents are found on pages 1 through 15 and 27 through 70 of Appendix C of the LIP. It should be noted that pages 16 through 26 of Appendix C, referring to land use and height standards, shall not govern redevelopment in Marina del Rey.) The Design Control Board will have final review of architectural design (i.e., building and façade design, materials, colors), landscaping, and signs based on the site plan approved by the Regional Planning Commission or Hearing Officer.

Policy 9E.5 The following existing views within the existing Marina shall not be significantly disturbed.

- All views from north jetty and south jetty (on the jetty at points west of UCLA boathouse);
- Harbor views from Burton Chace Park and Fisherman's Village
- Cross-beach view from Panay Way parking lot (parcel GR) unless a
- parking structure increasing public parking is provided; and
- Main Channel view from Yvonne B. Burke Park.

Policy 9E.6 All development shall incorporate harbor views from streets and pedestrian access ways consistent with security and safety considerations. All development, redevelopment, or intensification on waterfront parcels shall provide an unobstructed view corridor of no less than 20 percent of the parcel's waterfront providing public views of the Marina boat basins and/or channels.

4.1.4 IMPACT ANALYSIS

4.1.4.1 Thresholds of Significance

The County of Los Angeles includes thresholds of significance in its Initial Study checklist. In general, these thresholds are similar to the applicable thresholds listed in Appendix G of the *State CEQA Guidelines*. Where the thresholds differ it is noted below. Therefore, the proposed project would have a potentially significant impact with respect to aesthetics and views if it would:

- Have a substantial effect on a scenic vista
- Be visible from or obscure views from a regional riding or hiking trail
- Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features
- Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area

The following significance thresholds were determined to be less than significant in the Initial Study prepared for the proposed project and are therefore not included in this section. The project's Initial Study prepared by the Department of Regional Planning is provided in **Appendix 1.0** of this document.

- Have a substantial effect on a scenic vista
- Be visible from or obscure views from a regional riding or hiking trail
- Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

4.1.4.2 Methodology

For each of the viewsheds used in this analysis, view orientations were selected which would display the maximum amount of the proposed development area possible within that range of view. Existing

condition elements were constructed in 3D from existing plans and aerial photographs. Using project information, the size and mass of post-project elements visible within each viewshed were then rendered to scale and added into their correct positions in the 3D environment. The project architect was consulted during the preparation of these renderings to ensure their accuracy.

Upon completion of the simulations, developed post-project conditions for each viewshed were evaluated using adopted Los Angeles County threshold criteria for significant visual impacts. Exceedance of these criteria would result in a significant visual impact. As part of this analysis, shade and shadow impacts and light and glare impacts associated with Parcel 44 project was included.

4.1.4.3 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.1-1 **The project would change the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features.**

Demolition and Construction: Development of the project would require the removal of all existing structures, the surface parking lots, and interior and perimeter landscaping. Minor excavation and earth movement would be required to develop new drainage patterns, facilitate construction of the proposed parking lots and landscaped areas, and the minor excavations necessary to install the sub-grade infrastructure. The proposed project would be constructed over a period of approximately 18 months. During this time, construction workers and equipment will be visible throughout the project site. Chain link fencing would likely be installed that would surround the perimeter of the project site. During construction, frames of the structures would be raised and finished, and hardscape and landscaping would be completed. As the structures are constructed and finished, the scale of the project and changes in the visual character of the site would become evident. The duration of these construction activities would be short term. Although the visual character of the project site will be altered from its current condition, this impact is not considered significant due to its short-term nature and given the urbanized visual character of the surroundings.

Operation: Project improvements would contribute to the changing character of Marina del Rey. New (Phase II) development in the marina is more intensive than the existing Phase I marina development. Phase II marina development allows for a greater development intensity that is generally achieved through an increase in site development intensity and available building height limits. The Marina del Rey Specific Plan defines the project site as a combination of "Marine Commercial, Boat Storage, and Visitor Serving/Convenience Commercial" land use designations; per the Specific Plan, the subject parcel is identified as "Height Category 3": Building height not to exceed 45 feet, unless an

expanded view corridor is provided in accordance with Section 22.46.1060, in which case the height shall not exceed a maximum of 75 feet. As proposed, no structures would be built within the Boat Storage-designated portion of the subject parcel (located on the site adjacent to the Admiralty Way/Mindanao Way intersection); the West Marine and Trader Joe's buildings would be constructed within the Marine Commercial- and Visitor Serving Commercial/Convenience Commercial-designated portions of the parcel, respectively. Building heights would not exceed 45 feet in height, except for a small portion of the West Marine structure, which would extend to approximately 65 feet in height to accommodate the proposed architecture of the pitched roof feature; however, additional view corridor has been provided on the site (beyond the 20 percent minimum threshold) to accommodate the additional West Marine building height beyond 45 feet. Therefore, proposed building heights and associated view corridors on the project site would be compliant with the regulations pertaining to same per the certified Local Coastal Program (LCP).

As stated above, five locations, or vantage points in close proximity to the project site, were selected to evaluate potential project impacts on views. The selected vantage points represent publicly accessible locations, including Admiralty Way, within the sailing basin (Basin C) and in close proximity to the entrance to Burton Chace Park. Views from each viewing location with implementation of the proposed developed are described below, beginning with the five locations in close proximity to the project site. **Figure 4.1-1, Viewing Locations**, provides and map depicting the five viewing locations.

Analysis Viewing Location A: As shown in **Figure 4.1-7, Post Development, Viewing Location A**, views of the project site change with implementation of the proposed project. A large part of the foreground view continues to be the roadway and associated infrastructure such as streetlights, median islands, and their associated landscaping.

Middle ground views would changes considerably. Parking and landscaping would continue to be visible along the Admiralty Way frontage; however, the two-story restaurant/retail building (Building 6), the single -story retail building (Building 5), and, to a lesser degree, the two-story West Marine building would also be visible. Where the previous buildings encompassed a minimal amount of the project site (with the majority of the site being comprised of surface parking lots) in the post-development condition, structural development would comprise a considerably greater portion of the project site. The two small buildings would be replaced by Building 6, Building 5 and the West Marine building. The tower element of Building 6, located at the northeast corner of the project site, as well as the arched windows and stucco exteriors of these structures would be featured prominently from this vantage point. The engineered wood and glass of the West Marine building would be visible as well as Building 6's central tower. However, a visual break in the massing is provided between Building 5 and Building 6 located west along Bali Way, creating a substantial view corridor to the adjacent Marina basin that is presently largely

obscured. This feature minimizes the massing of the buildings and creates visual interest by "opening" views to the water that are presently obscured.

With the existing development, the background view includes a partial view of boats parked in the marina. From this vantage point, the boats in the marina would be visible through the proposed landscaping as much of the project site's Bali Way frontage would be in use as surface parking.

As illustrated, the proposed project would be perceived as a project with greater mass and on-site building intensity than the existing uses on-site. This increased height and mass would make on-site uses appear more observable and visually prominent than in the viewshed presently experienced.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the landscaping and the existing buildings on-site. Distant views of the boats in the marina, although limited, are also available. As part of site construction, existing landscape vegetation would be removed and replaced. As discussed above, the height, massing, and orientation of the buildings on the site would obscure views of the marina currently available in the background view from Admiralty Way but not from Bali Way. Once complete, the most dominant visual feature would be the new commercial buildings.

Level of Impact: Site development would alter the visual character of the project site to a more intensive developed use consistent with Phase II development in Marina del Rey and requirements of the certified LCP. The height and mass of the proposed buildings would represent a more observable component of the background when compared to the existing condition. However, as proposed, maximum building heights are within allowable height limits and the project would exceed the requirement of providing 20 percent view corridors, consistent with LCP requirements. Further, proposed structures would be similar in scale to new structures constructed or new structures that are proposed, in construction, or that are recently completed in the marina, given the Phase II standards defined in the Marina del Rey LUP. For these reasons, impacts to the visual resources environment when viewed from this location are impacted, but such impacts are not considered significant.

Analysis Viewing Location B: As shown in **Figure 4.1-8, Post Development, Viewing Location B**, the foreground of the view would continue to be dominated by the boats, masts, boat slips, and water. The middle ground of the view would change in that the proposed two-story West Marine building, one-story retail/restaurant building, and Trader Joe's building would be visible. The glass and engineered wood exterior of these buildings would be clearly visible beyond the boat slips. These buildings also include articulation and other features to reduce the overall impact of the massing of the structures and create visual interest.

Existing View

Post Development View

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-7**

Post Development, Viewing Location A

Existing View

Post Development View

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-8**

Post Development, Viewing Location B

0889.005•01/14

The Trader Joe's building would be visible to the south and a small portion of Building 5 would be visible to the north. The waterfront promenade would also be visible. Even with the proposed West Marine building visible in the middle ground, the office building located east of Admiralty Way would continue to dominate the background view.

Prominent Visual Features: Currently, the most noticeable features from this location are the boats and boat slips in the foreground and the office building in the background. Once complete, the boats and the office building would continue to be the most prominent features; the proposed project—specifically, the West Marine building, the Trader Joe's building, the new one-story retail/restaurant building and the waterfront promenade—would also be visible.

Level of Impact: Project implementation would not significantly alter any visual features from this viewpoint. No prominent features were located in the middle ground view previously. Further, visibility of the proposed project would be somewhat limited due to the distance from the viewing location and the addition of site landscaping. Therefore, impacts with respect to the proposed project from this viewing location are not considered significant.

Analysis Viewing Location C: This viewing location simulates the expected view of the project from the Mindanao Way median proximate to the entry to Burton Chace Park. As shown in **Figure 4.1-9, Post Development, Viewing Location C**, project implementation would not substantially alter the current view offered from this vantage point. Visual access to the project site remains obstructed by landscaping along Mindanao Way and an existing office building located on the parcel adjacent to the subject parcel. Middle ground views include the mature landscaping along Mindanao Way. Visibility of the project site is limited to a small portion of the Trader Joe's building, which is largely hidden by the vegetation and the distance of the proposed structures. Background views continue to be dominated by the large office towers situated east of Admiralty Way.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint are the vegetation along Mindanao Way, an office building on the adjacent parcel, and office towers in the background. As part of the construction and operation of the project, this feature would not change.

Level of Impact: Project implementation would not alter any defined significant visual feature from this viewpoint. Since visibility of the proposed project is limited due to the distance from the viewing location and the prominence of the vegetation and an existing office building in this view-shed, aesthetic/visual impacts with respect to the proposed project from this viewing location are considered less than significant.

Analysis Viewing Location D: As shown in **Figure 4.1-10, Post Development, Viewing Location D**, views from this vantage point would change considerably. This would be the view experienced by those traveling north on Admiralty Way at the street's intersection with Mindanao Way. Much of the foreground view would continue to be dominated by the roadway and associated infrastructure, the street median, etc. The middle ground view would change such that the existing one-story boat rental facility on the site would be replaced by the two-story West Marine commercial building. Exterior features associated with the West Marine Building (i.e., engineered wood, glass) would become the prominent features in the middle ground view. From this key vantage point, a portion of Building 6 would also be visible on the northern portion of the site. Placement of the West Marine will allow views of the marina that previously were not available from this vantage point. As is shown in **Figure 4.1-8**, the marina, including boats and masts, are visible in the middle ground view between the West Marine building and the small boater bathroom building to the southwest. The background view would be unchanged and would include residences north of the project site.

Prominent Visual Features: Currently, the most noticeable features are the existing one-story building and the multi-family residential tower in the background view. Visibility of the marina would be increased, however modestly, from this vantage point.

Level of Impact: While views of the project site would change, project implementation would not alter any defined significant visual feature from this viewpoint. With the proposed view corridors, views of the marina would be enhanced from this viewpoint (inasmuch as water views are not presently available from this vantage point). Moreover, proposed structures that are visible from this vantage point are consistent with certified LCP's height requirements for the subject parcel, and are compatible, in terms of height and mass, with other existing structures in the vicinity of the parcel. Further, the Marina del Rey Design Control Board has reviewed and conceptually approved the proposed building architecture, height and massing scheme, consistent with requirements of the certified LCP. Therefore, visual impacts with respect to the proposed project from this viewing location are considered less than significant.

Analysis of Viewing Location E: As shown in **Figure 4.1-11, Post Development, Viewing Location E**, views from this vantage point would change considerably. While foreground views would continue to include Admiralty Way, middle ground views would change. The current middle ground view consists of surface parking and the two-story building on the project site as well as landscaping scattered throughout; water views are not currently provided from this vantage point. In the proposed view, the middle ground view would be dominated by the retail/restaurant building (Building 5) to the south of the viewscape and Building 6 on the north end of the project site. Features of these buildings, including the arched windows and two towers of Building 6 and the glass and engineered wood of Building 5 would be clearly visible.

Existing View

Post Development View

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-9**

Post Development, Viewing Location C

0889.005•01/14

Existing View

Post Development View

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-10**

Post Development, Viewing Location D

0889.005•01/14

Existing View

Post Development View

SOURCE: VisionScape Imagery, 2014

FIGURE **4.1-11**

Post Development, Viewing Location E

The spacing between Buildings 5 and 6 allow for the creation of a substantial new view corridor to the marina basin at this location. The marina, including existing boats, masts and other features, would be clearly visible. From this location, the waterfront promenade and plaza would also be visible.

Prominent Visual Features: Currently, the most noticeable feature is the existing two-story building on the project site; water views are currently not available from this vantage point. From this vantage point, a substantial new view corridor to the marina basin would be created with implementation of the project.

Level of Impact: While views of the project site would change, project implementation would not alter any defined significant visual feature from this viewpoint. With the proposed view corridors, views of the marina would be significantly enhanced from this viewpoint (inasmuch as water views currently do not exist from this vantage point). Therefore, visual impacts with respect to the proposed project from this viewing location are considered less than significant.

Consistency with Visual Resources Policies: As shown in **Figure 3.0-4, Proposed Marina del Rey Parcel 44 Site Plan**, of **Section 3.0, Project Description**, a number of view corridors are incorporated into the project site. These view corridors provide unobstructed view of greater than 48 percent of the project's waterfront, providing public views of the Marina boating basins and main channel. Proposed project view corridors exceed the view corridor requirements for the subject parcel outlined in the certified LCP.

To further ensure visual resource protection, the certified LCP requires that the proposed project site plans and architectural design be reviewed and approved by the Marina Del Rey Design Control Board (DCB) and incorporate view corridors that do not presently exist on the project site. The DCB also has the authority to regulate signage, building architectural design, site planning, and facade design for all new development proposals. Design requirements are contained in the Specifications and Minimum Standards of Architectural Treatment and Construction. Consistent with certified LCP requirements, the project site plan and architectural plans have been reviewed and conceptually approved by the DCB. In rendering its conceptual approval for the project, the DCB found the proposed project to be in conformity with the various public access, height, circulation, building massing, visual impact, and view requirements of the Marina del Rey LCP. Further, consistent with certified LCP requirements, the Project would be conditioned to undergo a "final" DCB review concerning the architectural design, landscaping and signs, prior to issuance of building permits.

Therefore, impacts of the proposed project in regards to visual effects as defined in the Marina del Rey LUP would not be considered significant.

Mitigation Measures

Impacts related to visual resources would be less than significant; no mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact 4.1-2: The project would create a new source of shadows, light, or glare which could adversely affect day or nighttime views in the area.

Shade and Shadow Analysis: The shade and shadow created by an object blocking sunlight varies based on the time of year and time of day. This variation is a result of the sun's azimuth (the position of the earth in its annual orbit relative to the sun due to the tilted axis of the earth) and altitude (the position of the earth in its daily rotation relative to the sun). Because the sun is lowest in the southern sky during the winter, the longest shadows are cast during this condition. During the summer months, the sun is more directly overhead, and shadow length is more limited. Therefore, for eight months out of the year the project would only cast minimal shade or shadow onto adjacent land area.

Shade-sensitive land uses include residences, school open space areas, public parks and playgrounds, or outdoor sports facilities. Currently, there are no shade sensitive land uses existing in the project site area. Therefore, although project implementation would increase the maximum building height on the site, the proposed structures would not cast shadows that would impact any off-site shade sensitive uses. The two-story structures associated with the proposed project would not generate shadows of a sufficient length to be cast off-site. During the winter months, the Trader Joe's building and the West Marine building could cast shadows on a small portion of the realigned bike path. However, shadows would be cast for a limited period of time (less than three consecutive hours). Given that no single use would be exposed to shadows cast by the project for more than 3 hours, and the small number of uses affected and the nature of those land uses, this is considered a less than significant impact.

Light and Glare Analysis: Area lighting would be provided on the dock utilizing pole-mounted fixtures providing safety lighting to the docks. Special attention would be given to the type of fixture and light source to assure that light does not reflect into places of business, or impact a boater's ability to navigate into the marina.

Structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues,

this project will be reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues. Project-related light impacts would be less than significant.

The building materials proposed for the commercial buildings on the project site, including building cladding and windows, would be low reflectivity and are intended to minimize glare. Building siting location on the project site and setbacks from surrounding roadways would also reduce the potential for glare affecting off-site land uses or activities. Project-related glare impacts would be less than significant.

Mitigation Measures

Since shade/shadow and light and glare impacts would be less than significant, no mitigation measures are required.

Residual Impact

Impact would be less than significant.

4.1.4.4 Cumulative Impacts

The majority of cumulative projects currently proposed are outside of the viewshed affected by this project. Development proposed within the marina would have to be consistent with the heights standards defined in the Marina del Rey LUP and would thus be generally consistent with existing or approved structures near the project site. Finally, the analysis and conclusions provided in **Subsection 4.1.4.3**, above, regarding coastal visual resource policies would apply equally to proposed new development. For these reasons, cumulative impacts with respect to these projects were not considered significant.

The proposed project was determined to result in less than significant shadow effects on off-land uses as well as less than significant light and glare effects. Moreover, as previously stated, most of the cumulative projects are not in proximity to the project sites. With respect to shadow effects, cumulative projects that are in proximity to the project site would not be expected to affect the same land uses affected by the proposed project. For these reasons, shadow, light and glare effects would be less than cumulatively considerable and therefore less than significant.

Mitigation Measures

Impacts to visual qualities are largely created on the sites of the individual related projects. As Phase II Marina del Rey development becomes more prominent, the existing visual character of the marina will be altered. In the future, larger structures will become more commonplace within Marina del Rey, which

will increase the development intensity. Further, all proposed development within the marina is subject to review and approval by the DCB, which is responsible for the enforcement of development standards within Marina del Rey.

Residual Impact

Impact would be less than significant.

4.2 AIR QUALITY

4.2.1 INTRODUCTION

This section provides an assessment of the potential for air quality impacts from the proposed Marina del Rey Parcel 44 project. Ambient air quality of the local and regional area is discussed including a comparison of existing air quality with applicable federal, state, and local air pollutant standards. Criteria air pollutant levels in the vicinity of the proposed project site are identified and discussed. This section also identifies plans and policies developed in efforts to improve air quality. The evaluation of potential air quality impacts associated with the proposed project is assessed based on emissions calculations using methodologies recommended by the local air quality agency, the South Coast Air Quality Management District (SCAQMD). The assessment indicates that the proposed Marina del Rey Parcel 44 project would not generate emissions that are greater than the SCAQMD daily thresholds of significance. In addition, the project would neither exceed the localized significance thresholds at nearby sensitive receptors, conflict with implementation of the applicable air quality management plan, nor expose sensitive receptors to carbon monoxide hotspots, substantial odors, or toxic air contaminants. The project would not have a significant impact on regional emissions. Emission calculations and air quality modeling conducted for the proposed project are provided in **Appendix 4.2**.

The analysis of air quality impacts is based on air quality regulations administered by the US Environmental Protection Agency (US EPA), the California Air Resources Board (CARB), and the SCAQMD, with each agency responsible for different aspects of the proposed project's activities. The roles of these agencies are discussed in detail under **Subsection 4.2.4, Regulatory Considerations**.

4.2.2 ENVIRONMENTAL SETTING

4.2.2.1 Regional Climate

The project site is located west of Interstate 405 and south of State Route 10 in the County of Los Angeles unincorporated community of Marina Del Rey. The project site is bounded on the north by Bali Way, on the northeast by Admiralty Way, on the south by Mindanao Way, and on the west by the existing boat docks. The project is located in the South Coast Air Basin (Basin). The Basin consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside Counties. Meteorological conditions such as wind speed, wind direction, solar radiation, atmospheric stability, along with local topography heavily influence air quality by affecting the movement and dispersal of pollutants. Predominant meteorological conditions in the Basin are light winds and shallow vertical mixing due to low-altitude temperature inversions. These conditions, when

coupled with the surrounding mountain ranges, hinder the regional dispersion of air pollutants. These meteorological conditions, in combination with regional topography, are conducive to the formation and retention of ozone (O_3) and urban smog.

The atmospheric pollution potential of an area is largely dependent on winds, atmospheric stability, solar radiation, and topography. The combination of low wind speeds and low inversions produce the greatest concentration of air pollutants. Smog potential is greatly reduced on days without inversions or on days with winds averaging over 15 miles per hour (mph).[1]

Regional climate significantly influences air quality in the Basin. Temperature, wind, humidity, precipitation, and the amount of sunshine are several factors that influence the quality of the air. In addition, the Basin is frequently subjected to an inversion layer that traps air pollutants. Temperature has an important influence on Basin wind flow, pollutant dispersion, vertical mixing, and photochemistry.

Annual average temperatures throughout the Basin vary from the low to middle 60s Fahrenheit (°F). However, due to decreased marine influence, the eastern portion of the Basin shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the Basin, and annual average minimum temperatures are 56 °F in downtown Los Angeles, 49 °F in San Bernardino, and 55 °F in Long Beach. July and August are the warmest months in the Basin, and annual average maximum temperatures are 83 °F in downtown Los Angeles, 95 °F in San Bernardino, and 85 °F in Long Beach. All portions of the Basin have recorded maximum temperatures above 100 °F.

Although climate of the Basin can be characterized as semi-arid, air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of Basin climate. Humidity restricts visibility in the Basin, and the conversion of sulfur dioxide (SO_2) to sulfates is heightened in air with high relative humidity. The marine layer is an excellent environment for this conversion process, especially during the spring and summer months. The annual average relative humidity is 71 percent along the coast and 59 percent inland. Because the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the Basin's rainfall occurs from November through April. Annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered

1 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, (1993) A8-1.

thundershowers near the coast and slightly heavier shower activity in the eastern portion of the region near the mountains.

The determination of whether a region's air quality is healthful or unhealthful is made by comparing contaminant levels in ambient air samples to national and state standards. California and the US EPA have established health-based air quality standards for the following criteria air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM10), fine particulate matter (PM2.5), and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. California standards are more stringent than the federal standards, and in the case of PM10 and SO_2, much more stringent. California has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. The state and national ambient air quality standards for each of the monitored pollutants and their effects on health are summarized in **Table 4.2-1, Ambient Air Quality Standards**.

Table 4.2-1
Ambient Air Quality Standards

Air Pollutant	Concentration/Averaging Time		Most Relevant Health Effects
	State Standard (CAAQS)	Federal Primary Standard (NAAQS)	
Ozone	0.09 ppm, 1-hr avg. 0.070 ppm, 8-hr avg.	0.075 ppm, 8-hr avg. (three-year average of annual 4th-highest daily maximum)	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage
Nitrogen Dioxide[1]	0.18 ppm, 1-hr avg. 0.030 ppm, annual arithmetic mean	0.100 ppm, 1-hr avg. (three-year avg. of the 98th percentile of the daily maximum 1-hour avg.) 0.053 ppm, annual arithmetic mean	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extrapulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration
Carbon Monoxide	20 ppm, 1-hr avg. 9.0 ppm, 8-hr avg.	35 ppm, 1-hr avg. (not to be exceeded more than once per year) 9 ppm, 8-hr avg. (not to be exceeded more than once per year)	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses
Sulfur Dioxide[2]	0.25 ppm, 1-hr. avg. 0.04 ppm, 24-hr avg.	0.075 ppm, 1-hr avg. (three-year avg. of the 99th percentile)	Bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in person with asthma

Air Pollutant	Concentration/Averaging Time: State Standard (CAAQS)	Concentration/Averaging Time: Federal Primary Standard (NAAQS)	Most Relevant Health Effects
Respirable Particulate Matter (PM10)	50 µg/m³, 24-hr avg. 20 µg/m³, annual arithmetic mean	150 µg/m³, 24-hr avg. (not to be exceeded more than once per year on average over three years)	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly
Fine Particulate Matter (PM2.5)	12 µg/m³, annual arithmetic mean	35 µg/m³, 24-hr avg. (three-year average of 98th percentile) 15 µg/m³, annual arithmetic mean (three-year average)	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly
Lead[3]	1.5 µg/m³, 30-day avg.	1.5 µg/m³, calendar quarter 0.15 µg/m³, three-month rolling average	(a) Increased body burden, and (b) Impairment of blood formation and nerve conduction
Visibility-Reducing Particles	Reduction of visual range to less than 10 miles at relative humidity less than 70%, 8-hour avg. (10:00 AM–6:00 PM)	None	Visibility impairment on days when relative humidity is less than 70 percent.
Sulfates	25 µg/m³, 24-hr avg.	None	(a) Decrease in ventilatory function, (b) Aggravation of asthmatic symptoms, (c) Aggravation of cardio-pulmonary disease, (d) Vegetation damage, (e) Degradation of visibility, and (f) Property damage
Hydrogen Sulfide	0.03 ppm, 1-hr avg.	None	Odor annoyance
Vinyl Chloride[3]	0.01 ppm, 24-hr avg.	None	Known carcinogen

µg/m³ = microgram per cubic meter; ppm = parts per million by volume;
NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards.

[1] *On January 25, 2010, the US EPA promulgated a new 1-hour NO_2 standard. The new 1-hour standard is 0.100 parts per million (188 micrograms per cubic meter [µg/m³]) and became effective on April 12, 2010.*

[2] *On June 3, 2010, the US EPA issued a new 1-hour SO_2 standard. The new 1-hour standard is 0.075 parts per million (196 µg/m³). The US EPA also revoked the existing 24-hour and annual standards citing a lack of evidence of specific health impacts from long-term exposures. The new 1-hour standard becomes effective 60 days after publication in the Federal Register.*

[3] *CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.*

Source: South Coast Air Quality Management District, Final Program Environmental Impact Report for the 2007 Air Quality Management Plan*, (2007) Table 3.1-1, p. 3.1-3.*

Generally, the sources for hydrogen sulfide emissions include decomposition of human and animal wastes and industrial activities, such as food processing, coke ovens, kraft paper mills, tanneries, and petroleum refineries. The sources for vinyl chloride emissions include manufacturing of plastic products, hazardous waste sites, and landfills. In addition, according to the SCAQMD's *2007 Air Quality Management Plan*,[2] the sulfate and visibility-reducing particle standards have not been exceeded

2 South Coast Air Quality Management District, *2007 Air Quality Management Plan*, (2007).

anywhere in the Basin. As a result, there is no need for any further evaluation of the hydrogen sulfide, vinyl chloride, sulfate, or visibility-reducing particle emissions for the project. Although the Los Angeles County portion of the Basin is designated as nonattainment for lead, the exceedance is the result of lead emissions from an industrial lead-acid battery recycling facility in the City of Commerce.

The SCAQMD issued violation notices to the recycling facility for exceeding the limit of 1.5 micrograms per cubic meter over a 30-day averaging period during five consecutive months (December 2007 through April 2008).[3] Concentrations during this period also exceeded the federal lead standard. Since this time, the SCAQMD monitors show concentrations of lead that are much lower, although they still exceed the revised federal lead standard of 0.15 microgram per cubic meter ($\mu g/m^3$) calculated as a rolling three-month average. No other monitors in the Basin indicate lead exceedances. The project is not located in the same source receptor area as the lead exceedances in the City of Commerce and the project does not include any uses that would emit lead. Motor vehicles and paints used to be a source of lead; however, unleaded fuel and unleaded paints have virtually eliminated lead emissions from most land use projects. Lead based paint has been identified on the site; however, this issue is discussed in **Section 4.10.4 Solid Waste**. As a result, there is no need for any further evaluation of lead emissions in this section. Accordingly, this air quality analysis will focus primarily on the criteria air pollutants summarized below.

- **Ozone (O_3).** Ozone is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X) undergo photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

- **Volatile Organic Compounds (VOCs).** VOCs are compounds comprised primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. VOCs themselves are not criteria pollutants; however, they contribute to O_3 formation.

- **Nitrogen Dioxide (NO_2).** NO_2 is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO) and is also a byproduct of fuel combustion. NO_X is primarily emitted in the form of NO, but quickly reacts to form NO_2. NO_X is primarily a mixture of NO and NO_2. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO.

- **Carbon Monoxide (CO).** CO is a colorless, odorless gas produced by the incomplete combustion of fuels. Motor vehicles operating at slow speeds are the primary source of CO. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- **Sulfur dioxide (SO_2).** SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical

[3] South Coast Air Quality Management District, "Facility Information Detail (FIND)," http://www.aqmd.gov/webappl/fim/prog/novnc.aspx?fac_id=124838. 2010.

processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4).

- **Respirable Particulate Matter (PM10).** PM10 consists of small, suspended particles or droplets 10 microns or smaller in diameter. Some sources of PM10, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM10 is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.

- **Fine Particulate Matter (PM2.5).** PM2.5 refers to particulate matter that is 2.5 microns or smaller in size. The sources of PM2.5 include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles.

4.2.2.2 Local Air Quality

The SCAQMD has divided the Basin into Source Receptor Areas (SRAs) in which air quality monitoring stations are operated. The project site is located in the Northwest Coastal Los Angeles County SRA (SRA 2). The monitoring station for this area is located at the Veterans Administration Hospital in West Los Angeles. This station monitors emission levels of O_3, CO, NO_2, and sulfate. The nearest station that monitors SO_2 and PM10 is the Hawthorne station in the Southwest Coastal Los Angeles County SRA (SRA 3). The nearest station monitoring PM2.5 is the North Main Street station in the Central Los Angeles County SRA (SRA 1).

Table 4.2-2, Ambient Pollutant Concentrations, lists the ambient pollutant concentrations registered and the exceedances of state and federal standards that have occurred at the abovementioned monitoring stations from 2010 through 2012, the most recent years in which data is available from the SCAQMD. As shown, the monitoring stations have registered values above state and federal standards for O_3 and state standards for PM10.

4.2.2.3 Surrounding Land Uses

The project site is located west of Interstate 405 and south of State Route 10 in the Marina Del Rey. The project site is adjacent to office buildings to the northeast, parking lots and small offices to the north and south, and a marina to the west.

4.2.3 REGULATORY FRAMEWORK

Air quality within the Basin is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policymaking, education, and other programs. Agencies primarily responsible for improving the air quality within the Basin (Los Angeles County Area) include the US

EPA, CARB, Southern California Association of Governments (SCAG), SCAQMD, and the County of Los Angeles.

Table 4.2-2
Ambient Air Pollutant Concentrations

Pollutant	Standards[1]	Year 2010	2011	2012
OZONE (O_3)				
Maximum 1-hour concentration (ppm)		0.101	0.098	0.093
Maximum 8-hour concentration (ppm)		0.081	0.068	0.073
Number of days exceeding state 1-hour standard	0.09 ppm	1	2	0
Number of days exceeding state 8-hour standard	0.070 ppm	6	0	1
Number of days exceeding federal 8-hour standard	0.075 ppm	3	0	0
NITROGEN DIOXIDE (NO_2)				
Maximum 1-hour concentration (ppm)		0.0710	0.0813	0.0613
Annual average concentration (ppm)		0.0196	0.0139	0.0137
Number of days exceeding state 1-hour standard	0.18 ppm	0	0	0
CARBON MONOXIDE (CO)				
Maximum 1-hour concentration (ppm)		3	--	--
Maximum 8-hour concentration (ppm)		2.0	1.3	1.4
Number of days exceeding 1-hour standard	20 ppm	0	--	--
Number of days exceeding 8-hour standard	9.0 ppm	0	0	0
SULFUR DIOXIDE (SO_2)				
Maximum 1-hour concentration (ppm)		0.0149	0.0115	0.0049
Maximum 24-hour concentration (ppm)		0.0041	--	--
Number of days exceeding state 1-hour standard	0.25 ppm	0	0	0
Number of days exceeding state 24-hour standard	0.04 ppm	0	--	--
RESPIRABLE PARTICULATE MATTER (PM10)				
Maximum 24-hour concentration ($\mu g/m^3$)		70	41	31
Annual average concentration ($\mu g/m^3$)		29.8	21.7	19.8
Number of samples exceeding state standard	50 $\mu g/m^3$	5	0	0
Number of samples exceeding federal standard	150 $\mu g/m^3$	0	0	0
FINE PARTICULATE MATTER (PM2.5)				
Maximum 24-hour concentration ($\mu g/m^3$)		35.2	--	--
Annual average concentration ($\mu g/m^3$)		10.2	--	--
Number of samples exceeding federal 24-hour standard	35 $\mu g/m^3$	0	--	--

Source: South Coast Air Quality Management District, "Historical Data by Year," http://www.aqmd.gov/smog/historicaldata.htm. 2013.
[1] Parts by volume per million of air (ppm), micrograms per cubic meter of air ($\mu g/m^3$), or annual arithmetic mean (aam).

4.2.3.1 Federal

US Environmental Protection Agency

The US EPA is responsible for enforcing the federal Clean Air Act and the NAAQS. The US EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The US EPA also maintains jurisdiction over emissions sources outside state waters (outer continental shelf), and establishes national emissions standards for vehicles. As part of its enforcement responsibilities, the US EPA requires each state with areas that do not meet the NAAQS to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the period identified in the SIP. The US EPA formally classifies air basins as attainment or nonattainment based on whether the region meets or exceeds the NAAQS. The US EPA makes area designations for seven criteria pollutants: O_3, CO, NO_2, SO_2, PM10, PM2.5, and lead. The status of the Basin with respect to attainment with the NAAQS is summarized in **Table 4.2-3, Attainment Status – South Coast Air Basin (Los Angeles County).**

Table 4.2-3
Attainment Status – South Coast Air Basin (Los Angeles County)

Pollutant	Federal	State
Ozone (O_3)	Nonattainment (Extreme)	Nonattainment (Severe [1 hour])
Nitrogen Dioxide (NO_2)	Attainment/Unclassified	Nonattainment
Carbon Monoxide (CO)	Attainment (Maintenance)	Attainment
Sulfur Dioxide (SO_2)	Attainment/Unclassified	Attainment
Respirable Particulates (PM10)	Nonattainment (Serious)	Nonattainment
Fine Particulates (PM2.5)	Nonattainment	Nonattainment
Lead (Pb)	Unclassified	Attainment
Sulfates (SO_4)	—	Attainment
Hydrogen Sulfide (H_2S)	—	Unclassified
Vinyl Chloride	—	Unclassified
Visibility-Reducing Particles	—	Unclassified

Sources:
California Air Resources Board, "Area Designations Maps/State and National," http://www.arb.ca.gov/desig/adm/adm.htm. 2011.
US Environmental Protection Agency, "Air Quality Maps," http://www.epa.gov/region9/air/maps/index.html. 2011.

In response to rapid population growth and the associated rise in motor vehicle operations, the 1990 Clean Air Act Amendments addressed tailpipe emissions from automobiles, heavy-duty engines,

and diesel fuel engines. The amendments established more stringent standards for hydrocarbons, nitrogen oxides (NO_X), and CO emissions in order to reduce the levels of these pollutants in heavily populated areas. Under the 1990 Clean Air Act Amendments, new fuels were required to be less volatile, contain less sulfur (regarding diesel fuel), and have higher levels of oxygenates (oxygen-containing substances to improve fuel combustion). The US EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. Due to the lack of a substantial reduction in hazardous emissions under the 1977 Clean Air Act, the 1990 Clean Air Act Amendments include regulations for reducing impacts from 189 listed hazardous air pollutants (HAPs) that are carcinogenic, mutagenic, and/or reproductive toxicants. The 1990 Clean Air Act Amendments also affects major stationary sources and area emissions sources requiring use of Maximum Achievable Control Technology (MACT) to reduce HAP emissions and their associated health impacts.

4.2.3.2 State

California Air Resources Board

CARB is a branch of the California Environmental Protection Agency (Cal/EPA) that oversees air quality planning and control throughout California. It is primarily responsible for ensuring the implementation of the California Clean Air Act (CCAA), responding to Federal Clean Air Act requirements, and regulating emissions from motor vehicles and consumer products within the state. In addition, CARB also sets health-based air quality standards and control measures for toxic air contaminants (TACs). However, the focus of most of the board's research goes toward automobile emissions, as they are the largest contributor to air pollution in California. CARB establishes new standards for vehicles sold in California and for various types of equipment available commercially. CARB also sets vehicle fuel specifications to reduce vehicular emissions.

The CCAA established a legal mandate for air basins to achieve the CAAQS by the earliest practical date. Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. These designation criteria provide the basis for CARB to designate areas of the state as attainment, nonattainment, or unclassified according to state standards. CARB makes area designations for 10 criteria pollutants: O_3, CO, NO_2, SO_2, PM10, PM2.5, sulfates, lead, hydrogen sulfide,

and visibility-reducing particles.[4] The status of the Basin with respect to attainment with the CAAQS is summarized in **Table 4.2-3.**

4.2.3.3 Local

South Coast Air Quality Management District

Air Quality Management Plan

The SCAQMD is required to produce air quality management plans (AQMPs) directing how the Air Basin's air quality will be brought into attainment with federal and state standards. The US EPA requires that transportation conformity budgets be established based on the most recent planning assumptions (i.e., within the last five years). Plan updates are necessary to ensure continued progress toward attainment and to avoid a transportation conformity lapse and associated federal funding losses. A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implement the programs contained in these plans. Agencies involved include the US EPA, CARB, the Southern California Association of Governments (SCAG), local governments, and the SCAQMD.

Since 1979, the SCAQMD has prepared a number of AQMPs. The SCAQMD adopted the currently applicable 2007 Air Quality Management Plan (2007 AQMP) on June 1, 2007. CARB approved the 2007 AQMP as the comprehensive SIP component for the Basin on September 27, 2007. The 2007 AQMP for the Air Basin (and those portions of the Salton Sea Air Basin under the SCAQMD's jurisdiction) sets forth a comprehensive program that will lead these areas into compliance with federal and state air quality planning requirements for ozone, PM10, and PM2.5. In addition, as part of the 2007 AQMP, the SCAQMD requested US EPA's approval of a "bump-up" to the "extreme" nonattainment classification of ozone. The US EPA approved the extreme nonattainment request on April 15, 2010. The extreme nonattainment classification extends the ozone attainment date from 2021 to 2024 and allows for the attainment demonstration to rely on emission reductions from measures that anticipate the development of new technologies or improvement of existing control technologies.

---

4 California Air Resources Board, "Area Designations (Activities and Maps)," http://www.arb.ca.gov/desig/desig.htm. 2010. According to California Health and Safety Code, Section 39608, "state board, in consultation with the districts, shall identify, pursuant to subdivision (e) of Section 39607, and classify each air basin which is in attainment and each air basin which is in nonattainment for any state ambient air quality standard." Section 39607(e) states that the State shall "establish and periodically review criteria for designating an air basin attainment or nonattainment for any state ambient air quality standard set forth in Section 70200 of Title 17 of the California Code of Regulations. California Code of Regulations, Title 17, Section 70200 does not include vinyl chloride; therefore, CARB does not make area designations for vinyl chloride.

The 2007 AQMP focuses on attainment strategies for the ozone and PM2.5 standards through stricter control of sulfur oxides and directly emitted PM2.5, NO_x, and VOCs. Although PM2.5 plans for nonattainment areas were due in April 2008, the SCAQMD has integrated PM2.5 and ozone reduction control measures and strategies in the 2007 AQMP. The need to commence PM2.5 control strategies before April 2008 was due to the attainment date for PM2.5 (2015) being much earlier than that for ozone (2024 for the extreme designation). Control measures and strategies for PM2.5 will also help control ozone generation in the region because PM2.5 and ozone share similar precursors (e.g., NO_x). In addition, the 2007 AQMP focuses on reducing VOC emissions, which have not been reduced at the same rate as NO_x emissions in the past. Hence, the Basin has not achieved the reductions in ozone as were expected in previous plans.

California Environmental Quality Act Air Quality Handbook

In 1993, the SCAQMD prepared its *California Environmental Quality Act (CEQA) Air Quality Handbook* (CEQA Handbook) to assist local government agencies and consultants in preparing environmental documents for projects subject to CEQA.[5] The SCAQMD is in the process of developing its *Air Quality Analysis Guidance Handbook* (Guidance Handbook) to replace the CEQA Handbook. The CEQA Handbook and the Guidance Handbook describe the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental documents. The Guidance Handbook provides the most up-to-date recommended thresholds of significance in order to determine if a project will have a significant adverse environmental impact. Other important subjects covered in the CEQA Handbook and the Guidance Handbook include methodologies for estimating project emissions and mitigation measures that can be implemented to avoid or reduce air quality impacts. Although the Governing Board of the SCAQMD has adopted the CEQA Handbook, and is in the process of developing the Guidance Handbook, the SCAQMD does not, nor intends to, supersede a local jurisdiction's CEQA procedures.[6]

While the Guidance Handbook is being developed, supplemental information has been adopted by the SCAQMD. These include revisions to the air quality significance thresholds and a procedure referred to as "localized significance thresholds," which has been added as a significance threshold under the *Final Localized Significance Threshold Methodology* (LST Methodology).[7] The LST Methodology provides thresholds of significance for NO_x, CO, PM10, and PM2.5 to evaluate localized air quality impacts at sensitive receptors in the vicinity of a project. In addition, the SCAQMD has recommended that lead

---

5 South Coast Air Quality Management District, "Air Quality Analysis Guidance Handbook," http://www.aqmd.gov/CEQA/hdbk.html. 2010.

6 South Coast Air Quality Management District, "Frequently Asked CEQA Questions," http://www.aqmd.gov/ceqa/faq.html. 2010.

7 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, (2008).

agencies not use the screening tables in the CEQA Handbook*'s* Chapter 6 because the tables were derived using an obsolete version of CARB's mobile source emission factor inventory and are also based on outdated trip generation rates from a prior edition of the Institute of Transportation Engineer's Trip Generation Handbook.[8] The SCAQMD has also recommended that lead agencies not use the on-road mobile source emission factors in Table A9-5-J1 through A9-5-L as they are obsolete, and instead recommends using on-road mobile source emission factors approved by CARB.[9] The outdated and obsolete information were not used in this analysis. The applicable portions of the CEQA Handbook, the Guidance Handbook, and other revised methodologies were used in preparing the air quality analysis in this section, as discussed and referenced later in this section.

Multiple Air Toxics Exposure Study III

According to the SCAQMD's Multiple Air Toxics Exposure Study III (MATES III), the incidence of cancer over a lifetime in the US population is about 1 in 4, to 1 in 3, which translates into a risk of about 300,000 in 1 million.[10] One study, the *Harvard Report on Cancer Prevention*, estimated that, of cancers associated with known risk factors, about 30 percent were related to tobacco, about 30 percent were related to diet and obesity, and about 2 percent were associated with environmental pollution related exposures.[11] The potential cancer risk for a given substance is expressed as the incremental number of potential excess cancer cases per million people over a 70-year lifetime exposure at a constant annual average pollutant concentration. The risks are usually presented in chances per million. For example, if the cancer risks were estimated to be 100 per million, this would predict an additional 100 excess cases of cancer in a population of 1 million people over a 70-year lifetime.[12]

As part of the SCAQMD's environmental justice initiatives adopted in late 1997, the SCAQMD conducted the MATES III study between April 2004 and March 2006, which was a follow-up to the previous MATES I and II air toxics studies conducted in the Basin. The MATES III Final Report was issued in September 2008. The MATES III study was based on actual monitored data throughout the Basin and consisted of several elements. These included a monitoring program, an updated emissions inventory of

---

8 South Coast Air Quality Management District, "CEQA Air Quality Handbook," http://www.aqmd.gov/ceqa/oldhdbk.html. 2010.

9 South Coast Air Quality Management District, "EMFAC 2007 (v2.3) Emission Factors (On-Road)," http://www.aqmd.gov/CEQA/handbook/onroad/onroad.html. 2010.

10 South Coast Air Quality Management District, *Final Report: Multiple Air Toxics Exposure Study in the South Coast Air Basin*, (2008) 1-3, 1-4.

11 Harvard Report on Cancer Prevention, Vol. 1, Causes of Human Cancer, *Cancer Causes and Control*, (1996) 7 (Suppl. 1): 53–59.

12 South Coast Air Quality Management District, *Final Report: Multiple Air Toxics Exposure Study in the South Coast Air Basin*, (2008) 1-3, 1-4.

TACs, and a modeling effort to characterize carcinogenic risk across the Basin from exposure to TACs. The MATES III study applied a 2-kilometer (1.24-mile) grid over the Basin and reported carcinogenic risk within each grid space (each covering an area of 4 square kilometers or 1.54 square miles). The study concluded that the average of the modeled air toxics concentrations measured at each of the monitoring stations in the Basin equates to a background cancer risk of approximately 1,200 in 1 million primarily due to diesel exhaust particulate matter (DPM).[13] Using the MATES III methodology, about 94 percent of the cancer risk is attributed to emissions associated with mobile sources, and about 6 percent of the risk is attributed to toxics emitted from stationary sources, which include industries, and businesses such as dry cleaners and chrome plating operations.[14] The MATES III study found lower ambient concentrations of most of the measured air toxics, as compared to the levels measured in the previous MATES II study conducted during 1998 and 1999. Specifically, benzene and 1,3-butadiene, pollutants generated mainly from vehicles, were down 50 percent and 73 percent, respectively.[15] The reductions were attributed to air quality control regulations and improved emission control technologies.

Rules and Regulations

The SCAQMD primarily regulates emissions from stationary sources such as manufacturing and power generation. Mobile sources such as buses, automotive vehicles, trains, and airplanes are largely out of the SCAQMD's jurisdiction and within the regulatory jurisdiction of CARB and the US EPA. In order to achieve air quality standards, the SCAQMD adopts an AQMP that serves as a guideline to bring pollutant concentrations into attainment with federal and state standards. The SCAQMD determines if certain rules and control measures are appropriate for their specific region according to technical feasibility, cost effectiveness, and the severity of nonattainment. Once the SCAQMD has adopted the proper rules, control measures, and permit programs, it is responsible to implement and enforce compliance with those rules, control measures, and programs. These rules not only regulate the emissions of the federal and state criteria pollutants but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD. Stationary emissions sources are regulated through SCAQMD's permitting process. Through this permitting process, SCAQMD monitors the amount of stationary emissions being generated and uses this information in developing AQMPs.

---

13 South Coast Air Quality Management District, *Final Report: Multiple Air Toxics Exposure Study in the South Coast Air Basin*, (2008) ES-2.

14 South Coast Air Quality Management District, *Final Report: Multiple Air Toxics Exposure Study in the South Coast Air Basin*, (2008) ES-2.

15 South Coast Air Quality Management District, *Final Report: Multiple Air Toxics Exposure Study in the South Coast Air Basin*, (2008) 2–7.

Marina del Rey Land Use Plan

The Marina del Rey Land Use Plan identifies goals and policies relating to improving the safety and health of the community. The specific goals, objectives, and policies related to air quality that are applicable to the project are listed below.

> *30253. New Development shall:*
>
> *(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.*
>
> *(4) Minimize energy consumption and vehicle miles traveled.*

4.2.4 IMPACT ANALYSIS

4.2.4.1 Methodology

The SCAQMD provides methodologies for evaluating the significance of operational emissions from projects. The methodologies are described in the SCAQMD CEQA Handbook and *Guidance Handbook*. The SCAQMD thresholds of significance apply to all sources of air pollutants, including equipment and businesses not directly regulated by the SCAQMD and motor vehicles. The SCAQMD has produced substantial data to demonstrate the appropriateness of these thresholds in the south coast air basin. Emissions modeling were conducted using the California Emissions Estimator Model (CalEEMod) and information provided in the CalEEMod *User's Guide*.[16] CalEEMod is a program that calculates air pollutant emissions from land use sources and incorporates the CARB on-road and off-road vehicle emissions models. The model also incorporates factors specific to air basins in California, such as vehicle fleet mixes. Air quality impacts are also estimated based on information and estimated activity levels of project operation. The potential for the project to cause health impacts is assessed in accordance with land use planning recommendations described in CARB's *Air Quality and Land Use Handbook*.[17] The purpose of the *Air Quality and Land Use Handbook* is to provide information that will help keep vulnerable populations out of harm's way with respect to nearby sources of air pollution. Other sources of information relied upon are provided as footnote citations where applicable.

---

16 South Coast Air Quality Management District, *California Emissions Estimator Model User's Guide*, (2011). The model and User's Guide may be downloaded from the following website: http://www.caleemod.com.

17 California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, (2005). The document may be downloaded from the following website: http://www.arb.ca.gov/ch/landuse.htm.

4.2.4.2 Thresholds of Significance

New and modified projects will often affect regional air quality, both directly and indirectly. When determining the extent of a project's environmental impact and the significance of such impact, the project should be compared with established thresholds of significance. The following discusses the thresholds set forth by the SCAQMD for both construction and operational emissions that would be generated by the project. In accordance with Appendix G of the *State CEQA Guidelines*, the proposed project would have a significant impact on air quality if it would:

- conflict with or obstruct implementation of the applicable air quality plan;
- 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);
- expose sensitive receptors to substantial pollutant concentrations; or
- create objectionable odors affecting a substantial number of people.

The Initial Study (**Appendix 1.0**) prepared for the project concluded the proposed project would not violate any air quality standard or create objectionable odors. Therefore, those topics are not included in this analysis.

The *State CEQA Guidelines* Section 15064.7 provides the significance criteria established by the applicable air quality management district or air pollution control district, when available, may be relied upon to make determinations of significance. The potential air quality impacts of the project are, therefore, evaluated according to thresholds developed by the SCAQMD in their *CEQA Air Quality Handbook*, *Air Quality Analysis Guidance Handbook*, and subsequent guidance, which are listed below.

While the SCAQMD has established significance thresholds for lead, construction and operation of the project would not exceed the established thresholds for lead as previously discussed above. Furthermore, as discussed near the beginning of this section, the region is below the state and federal ambient air quality standards for lead. Therefore, lead emissions from the project would not cause an air quality violation and will not be analyzed further.

4.2.4.3 Regional Thresholds of Significance

The SCAQMD CEQA Handbook provides significance thresholds for both construction and operation of projects within SCAQMD jurisdictional boundaries. Exceedance of the SCAQMD thresholds could result in a potentially significant impact. Ultimately, the lead agency determines the thresholds of significance

for impacts. If the project proposes development that would generate emissions in excess of the established thresholds, as illustrated in **Table 4.2-4, South Coast Air Quality Management District Regional Emission Thresholds**, a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts.

Table 4.2-4
South Coast Air Quality Management District Regional Emission Thresholds

Phase	Pollutant (pounds per day)					
	VOC	NO_x	CO	SO_x	PM10	PM2.5
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55

Source: South Coast Air Quality Management District, Air Quality Significance Thresholds, (2012).

4.2.4.4 Localized Significance Thresholds

In addition to the above-listed emission-based thresholds, the SCAQMD also recommends that potential impacts on localized ambient air concentrations due to construction emissions be evaluated. This LST evaluation requires that anticipated ambient air concentrations, determined using a computer-based air quality dispersion model, be compared to localized significance thresholds for PM10, PM2.5, NO_2, and CO.[18] The significance threshold for PM10, which is 10.4 micrograms per cubic meter ($\mu g/m^3$), represents compliance with Rule 403 (Fugitive Dust), while the thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of the project that would not cause or contribute to an exceedance of the relevant ambient air quality standards. The significance threshold for PM2.5, which is also 10.4 $\mu g/m^3$, is intended to constrain emissions to aid in progress toward attainment of the ambient air quality standards. The SCAQMD's LST Methodology includes lookup tables that can be used for projects less than 5 acres in size to determine the maximum allowable daily emissions that would satisfy the LSTs (i.e., not cause an exceedance of the applicable concentration limits). The allowable emission rates depend on (1) the Source Receptor Area (SRA) in which the project is located, (2) the size of the project site, and (3) the distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals). The project site is located in Marina del Rey, which is in SCAQMD SRA 2 (Northwest Coastal Los Angeles County). The parcel consists of a total of 8.39 landside acres. The closest sensitive receptors are located at the Marina del Rey Hospital which is approximately 170 meters to the east. The thresholds are based on a 170-meter distance, interpolated from the thresholds

18 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, (2008).

given. Based on these factors, the LST for each pollutant is shown in **Table 4.2-5, Localized Significance Thresholds for SRA 2**.

4.2.4.5 Operational CO "Hotpots" Thresholds of Significance

The significance of project impacts depends on whether existing ambient CO levels in the vicinity of the project are above or below state and federal CO standards. If the ambient CO levels are less than these standards and operation of the proposed project causes an exceedance of either the state 1-hour or 8-hour CO concentrations, the project would be considered to have a significant local impact. If ambient levels already exceed a state or federal standard, then project emissions would be considered significant if they cause an increase in the 1-hour CO concentrations by 1.0 parts per million (ppm) or more or 8-hour CO concentrations by 0.45 ppm or more.

Table 4.2-5
Localized Significance Thresholds for SRA 2[1]

Pollutant	Threshold Pounds per Day
Nitrogen Dioxide (NO_x) [2]	242.8
Carbon Monoxide (CO)	4,091.9
Respirable Particulate Matter (PM10)	Construction 75.3
	Operational 18.6
Fine Particulate Matter (PM2.5)	Construction 24.5
	Operational 6.1

Source: SCAQMD, Final Localized Significance Threshold Methodology, (2008). Appendix C.

[1] *LST thresholds are interpolated from the values in this document based on the project, location, project size, and the distance to the nearest sensitive receptor.*

[2] *The NO_x LST thresholds contained in the SCAQMD lookup tables are based on emissions of NO_x from construction of the project and assume gradual conversion to NO_2 based on the distance from the project site boundary.*

4.2.4.6 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.2-1: The project would not conflict with or obstruct implementation of the applicable air quality plan

The 2007 AQMP, discussed previously, was prepared to accommodate growth, to reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses, and activities that are consistent with the applicable

assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

Consistency with the assumptions in the AQMP is established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. The 2007 AQMP based its assumptions on growth forecasts contained in the SCAG *2004 Regional Transportation Plan* (2004 RTP).[19] The 2004 RTP is based on growth assumptions through 2030 developed by each of the cities and counties in the SCAG region and was updated in 2012. According to the SCAG 2004 RTP growth projection data, Los Angeles County is projected to have an employment population of 4,558,000 in 2020.[20] Existing employment data from the California Employment Development Department indicates that Marina del Rey has an employment population of approximately 6,600 and Los Angeles County has an employment population of approximately 4,519,900 as of October 2013.[21] The project would not increase the employment population over those that have been projected for the City in 2020 and would not exceed the growth assumptions in the AQMP. Thus, the project would be considered consistent with the air quality-related regional plans, and should not jeopardize attainment of state and federal ambient air quality standards. The project would have a less than significant impact.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

---

19 South Coast Air Quality Management District, *Final 2007 Air Quality Management Plan*, (2007) 3-1.

20 Los Angeles County. "Adopted 2012 RTP Growth Forecasts." http://www.scag.ca.gov/forecast/index.htm

21 California Employment Development Department, November 22. "Monthly Labor Force Data for Cities and Census Designated Places (CDP)," http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=133. 2013.

Impact 4.2-2: **The project would generate total criteria pollutant emissions during construction or operation (direct and indirect) in excess of the thresholds given in Table 4.2-4, South Coast Air Quality Management District Regional Emission Thresholds**

Construction Emissions

Construction emissions are generated from projects as a result of operation of mobile equipment and motor vehicles, disturbance of soil, and application of architectural coatings and asphalt paving. As indicated in **Table 4.2-4**, the SCAQMD has established construction thresholds of significance for VOC, NO_X, CO, SO_X, PM10, and PM2.5. The project site is approximately 8.39 land acres, and is currently developed with approximately 14,724 square feet of uses such as boat brokers, offices, boat repair, and a yacht club. It is anticipated project construction would commence approximately during the last week of January 2015 and would end approximately the last week of August 2016. Construction activities would include demolition, grading, paving, building construction, and architectural coating sub-phases. The demolition debris amount was conservatively estimated based on the footprint measurements from the existing buildings, totaling 14,724 square feet (sf). A total of 83,253 square feet of new retail, commercial, restaurant, boat repair, yacht club, and office space would be built. This includes a 13,625 sf Trader Joes grocery store, 25,000 sf West Marine boat retail store, 9,890 sf of restaurant space, 13,760 sf of additional visitor-serving retail space, 16,588 sf of marine-related and conventional office space, as well as a yacht club (1,150 sf), lounge for boaters, and boat repair (700 sf) and storage facilities.

Based on the above information, **Table 4.2-6, Unmitigated Construction Emissions**, presents the estimated maximum daily emissions associated with the proposed project. Construction emissions include all emissions associated with the construction equipment, grading and demolition activities, worker trips, and on-road diesel trucks. The emissions are considered to be conservative; that is, the emissions presented below in **Table 4.2-6** likely over-predict the actual emissions that would occur during project construction. This is due to the model's worst-case assumption that all construction equipment is operating simultaneously for the entire day during each day of the construction period. In reality construction equipment often operates only for a portion of the workday, and is not necessarily used every day so that at any given time only some pieces of the total fleet are operating. As indicated below, emissions would not exceed the SCAQMD's significance thresholds during any year of construction.

Table 4.2-6
Unmitigated Construction Emissions

Construction Year	Maximum Emissions in Pounds per Day					
	VOC	NOx	CO	SOx	PM10	PM2.5
2015	5.31	37.66	28.45	0.04	3.06	2.42
2016	56.43	24.21	19.97	0.03	2.02	1.65
Maximum pounds per day:	**56.43**	**37.66**	**28.45**	**0.04**	**3.06**	**2.42**
SCAQMD Threshold:	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc., (2013). Emissions calculations are provided in ***Appendix 4.2****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Operational Emissions

Operational emissions would be generated by both stationary and mobile sources as a result of normal day-to-day activities on the project site after occupation. Stationary emissions would be generated by the consumption of natural gas for space and water heating devices (including residential and commercial use water heater and boilers). Mobile emissions would be generated by the motor vehicles traveling to, from, and within the project site.

The proposed project would result in an increase in project related traffic. Therefore, the proposed project would result in an increase in existing operational emissions. The average daily trips associated with the project would be greater than the existing average daily trips. Therefore, the proposed project would result in an increase in mobile source emissions. The existing operational emissions would be considered the baseline emissions. Emissions from the existing uses are therefore subtracted from the emissions from the proposed project to provide an overall net emissions rate. Based on the net operational emissions associated with complete buildout and operation of the project, the project would not exceed SCAQMD significance thresholds during operation. Therefore, operational emissions are considered less than significant.

Table 4.2-7
Unmitigated Operational Emissions

Emissions Source	Emissions in Pounds per Day					
	VOC	NOx	CO	SOx	PM10	PM2.5
Proposed						
Area/Stationary Sources	2.21	0.78	0.66	0.00	0.06	0.06
Operational (Mobile) Sources	13.59	27.88	119.56	0.26	17.59	4.95
Total pounds per day:	**15.81**	**28.67**	**120.23**	**0.27**	**17.65**	**5.01**
Existing						
Area/Stationary Sources	0.39	0.03	0.02	0.00	0.00	0.00
Operational (Mobile) Sources	2.46	5.42	23.71	0.04	2.67	0.78
Total pounds per day:	**2.85**	**5.45**	**23.72**	**0.02**	**2.67**	**0.78**
Net Total:	**12.96**	**23.22**	**143.96**	**0.23**	**14.98**	**4.23**
SCAQMD Threshold:	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc., (2013). Emissions calculations are provided in ***Appendix 4.2****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact 4.2-3: **The project would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.**

According to the SCAQMD CEQA Handbook, projects that do not exceed the project-specific SCAQMD thresholds of significance should be considered less than significant on a cumulative basis unless there is other pertinent information to the contrary.[22]

As shown previously in **Tables 4.2-6** and **4.2-7**, operational and construction emissions are below the thresholds of significance. Therefore, the proposed project's contribution of these emissions to the air quality within the Basin would not be cumulatively considerable.

22 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 9–12.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact 4.2-4: The project would not expose sensitive receptors to substantial pollutant concentrations.

Localized Significance Thresholds

As indicated in **Subsection 4.2.4.2**, above, the SCAQMD recommends that the potential localized impacts be evaluated on the ambient air concentrations due to on-site construction emissions of NOx, CO, PM10, and PM2.5. The SCAQMD LST Methodology includes screening tables that can be used to determine the maximum allowable daily emissions that would satisfy the LSTs (i.e., not cause an exceedance of the applicable concentration limits). The allowable emission rates depend on (1) the Source Receptor Area (SRA) in which the project is located, (2) the size of the project site, and (3) the distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals).

The project-specific localized significance thresholds for SRA 2 (Northwest Coastal Los Angeles County) are shown in **Table 4.2-8, Localized Significance Thresholds Analysis during Construction**, and are compared with the maximum daily on-site construction emissions. The limits are based on the proximity of the nearest sensitive receptor to the project site, which is approximately 170 meters. The LSTs for construction and operation were linearly interpolated using the 100-meter and 200-meter screening columns under the 5 acre screening table.

Table 4.2-8
Localized Significance Thresholds Analysis during Construction

Pollutant	Maximum On-Site Emissions (Pounds per day)	LST Thresholds[1] (Pounds per day)	Exceeds LST?
Nitrogen Oxides (NOx)	29.68	242.8	NO
Carbon Monoxide (CO)	22.06	4,091.9	NO
Respirable Particulate Matter (PM10)	2.97	75.3	NO
Fine Particulate Matter (PM2.5)	2.07	24.5	NO

The LSTs for the proposed project are shown in **Table 4.2-9, Localized Significance Thresholds Analysis during Operation**, and are compared with the maximum daily on-site operational emissions.

Table 4.2-9
Localized Significance Thresholds Analysis during Operation

Pollutant	Total On-Site Emissions (Pounds per day)	LST Thresholds[1] (Pounds per day)	Exceeds LST?
Nitrogen Oxides (NO_x)	0.78	242.8	NO
Carbon Monoxide (CO)	0.66	4,091.9	NO
Respirable Particulate Matter (PM10)	0.06	18.6	NO
Fine Particulate Matter (PM2.5)	0.06	6.1	NO

Source: Impact Sciences, Inc., (2012). Emissions calculations are provided in ***Appendix 4.2****.*
[1] *South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, (2008).*

As indicated in **Table 4.2-8**, and **Table 4.2-9** on-site construction and operational emissions of NO_x, CO, PM10, and PM2.5 would not exceed the SCAQMD LST thresholds for nearby sensitive receptors. The project would have a less than significant impact with respect to this criterion.

CO Hotspots

Motor vehicles are a primary source of pollutants within the project vicinity. Traffic congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed state and/or federal standards are termed CO "hotspots." Such hotspots are defined as locations where the ambient CO concentrations exceed the state or federal ambient air quality standards. CO is produced in greatest quantities from vehicle combustion and is usually concentrated at or near ground level because it does not readily disperse into the atmosphere. As a result, potential air quality impacts to sensitive receptors are assessed through an analysis of localized CO concentrations. Areas of vehicle congestion have the potential to create CO hotspots that exceed the state ambient air quality 1-hour standard of 20 ppm or the 8-hour standard of 9.0 ppm. The federal levels are less stringent than the state standards and are based on 1- and 8-hour standards of 35 and 9 ppm, respectively. Thus, an exceedance condition would occur based on the state standards prior to exceedance of the federal standard.

The project was evaluated to determine if it would cause a CO hotspot utilizing a simplified CALINE4 screening model developed by the Bay Area Air Quality Management District (BAAQMD). The simplified model is intended as a screening analysis that identifies a potential CO hotspot. If a hotspot is

identified, the complete CALINE4 model is then utilized to determine precisely the CO concentrations predicted at the intersections in question. This methodology assumes worst-case conditions (i.e., wind direction is parallel to the primary roadway and 90 degrees to the secondary road, wind speed of less than 1 meter per second and extreme atmospheric stability) and provides a screening of maximum, worst-case, CO concentrations. This method is acceptable to the SCAQMD as long as it is used consistently with the *BAAQMD Guidelines*. This model is utilized to predict future CO concentrations 0 and 25 feet from the intersections in the study area based on projected traffic volumes from the intersections contained in the project traffic study.[23] Intersections operating at level of service (LOS) between A through D are determined to not have the potential to create a CO Hotspot and are therefore not included in the analysis. Intersections operating at an LOS of E or F are considered have to have the potential to create a CO hotspot. Post-project maximum future CO concentrations were calculated for peak-hour traffic volumes for both weekday and weekend events. The results of these CO concentration calculations for weekday and weekend events are presented in **Table 4.2-10, Carbon Monoxide Concentrations – With Cumulative and Project Traffic**, to present the worst-case scenario the determination of significance is based on representative receptors located 0 feet from the intersection. Receptors 25 feet from an intersection would experience lower concentrations and therefore were not calculated.

As shown, the CALINE4 screening procedure predicts that, under worst-case conditions, future CO concentrations at each intersection would not exceed the state 1-hour and 8-hour standards with the operation of the proposed project. No significant CO hotspot impacts would occur to sensitive receptors in the vicinity of these intersections. As a result, no significant project-related impacts would occur relative to future carbon monoxide concentrations.

---

23 Hirsch/Green Transportation Consulting, Inc. *Traffic Impact Analysis Report Proposed Commercial Redevelopment of Parcel 44 on Admiralty Way between Bali Way and Mindanao Way in Marina del Rey, California*. October 2013.

Table 4.2-10
Carbon Monoxide Concentrations – With Cumulative and Project Traffic

Intersection[3]	AM 1-Hour[1]	PM 1-Hour[1]	8-Hour[2]
1. Venice Boulevard and Lincoln Boulevard	4.0	3.9	2.8
5. Washington Boulevard and Palawan Way	3.2	3.3	2.3
7. Washington Boulevard and Lincoln Boulevard	4.3	4.6	3.2
8. Washington Boulevard and Glencoe Avenue	3.5	4.3	3.0
9. Admiralty Way and Via Marina	3.6	4.1	2.9
13. Lincoln Boulevard and Marina Expressway	4.4	4.6	3.2
17. Lincoln Boulevard and Mindanao Way	4.4	4.5	3.1
18. Mindanao Way and EB Marina Expressway	3.5	3.8	2.6
20. Mindanao Way and Glencoe Avenue	3.0	3.6	2.5
22. Lincoln Boulevard and Fiji Way	4.9	4.8	3.4
25. Lincoln Boulevard and Jefferson Boulevard	5.1	5.1	3.6
Exceeds state 1-hour standard of 20 ppm?	NO	NO	—
Exceeds federal 1-hour standard of 35 ppm?	NO	NO	—
Exceeds state 8-hour standard of 9.0 ppm?	—	—	NO
Exceeds federal 8-hour standard of 9 ppm?	—	—	NO

[1] *State standard is 20 parts per million. Federal standard is 35 parts per million.*
[2] *State standard is 9.0 parts per million. Federal standard is 9 parts per million.*
[3] *The four intersections were chosen based on the intersections in Table 12(c) from the Traffic study.*
EB = eastbound; WB = westbound
Source: Impact Sciences, Inc. Emissions calculations are provided in ***Appendix 4.2****.*

Toxic Air Contaminants

The proposed project would result in some minor emissions of toxic air contaminants (TACs), primarily from diesel-fueled trucks. The SCAQMD recommends a detailed health risk assessment be performed for diesel particulate matter (DPM) for facilities that are substantial sources of DPM. Such sources are considered to be land uses such as truck stops and warehouses. As the total number of additional truck trips is very few in comparison to a facility such as a warehouse, for which CARB assumes a minimum of 100 truck trips per day, the proposed project would not be considered a substantial source of DPM. There are no other substantial sources of other TACs associated with the proposed project. Therefore there would be a less than significant impact due to TACs attributed to the proposed project.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

4.2.5 CUMULATIVE IMPACTS

SCAQMD staff has suggested that the emissions-based thresholds be used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable.[24] Individual projects that exceed the SCAQMD-recommended daily thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the basin is in nonattainment. As presented previously in **Table 4.2-6**, construction of the project would not result in daily construction emissions that exceed the thresholds of significance recommended by the SCAQMD. Operation of the proposed project would not exceed the established thresholds of significance as presented in **Table 4.2-7**. Therefore, the project would not generate a cumulatively considerable contribution to air pollutant emissions during project construction or operation.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

4.2.5.1 Wind Conditions Impacts

A wind study was also prepared for the proposed project by RWDI, Inc., a leading wind impact engineering firm.[25] The study addressed the wind study requirements of the Los Angeles County Zoning Code regarding assessment of the effects of building placement on wind patterns in the marina, loss of surface winds used by sailboats and birds and general air circulation. The analysis was accomplished by placing three-dimensional scale models of the existing and proposed site and surroundings in a wind tunnel. All predominant wind directions were studied, with west, west-southwest, southwest and east winds occurring for the majority of the time. The analysis considered if the proposed development would result in changes to the local wind direction or mean speed between adjacent sensors that are greater than the difference currently experienced between any two adjacent sensors.

---

24 Personal communication with Steve Smith, Program Supervisor, South Coast Air Quality Management District, April 19, 2006.

25 RWDI, Wind Conditions Consultation Marina del Rey Parcel 44, November 14, 2013

Information on the changes in wind speed and direction can be found in **Appendix 4.2**. The result is that the largest changes would occur near the proposed development, as well as the west end of Basin F. However, these changes are not considered significant. The study also included an analysis of the potential impact on bird behavior. This analysis found that the minimal changes in the overall wind field would not have a significant impact on the birds' use of the area. Overall, RWDI's wind study for the proposed project concludes the project would have a less than significant impact on wind conditions.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

4.3 BIOLOGICAL RESOURCES

4.3.1 INTRODUCTION

This section describes effects on biological resources that would result from implementation of Parcel 44 project in Marina del Rey. The following discussion addresses existing environmental conditions in the affected area, identifies and analyzes environmental impacts to the proposed project, and recommends measures to reduce or avoid significant impacts anticipated from project construction and operation, where applicable. In addition, existing laws and regulations relevant to biological resources are described. In some cases, compliance with these existing laws and regulations would serve to reduce or avoid certain impacts that might otherwise occur with the implementation of the project. The information and analysis that is presented in this section has been derived from the following sources:

- California Natural Diversity Database. 2012. Biogeographic Data Branch. Department of Fish and Wildlife. Commercial Version. August 2012.
- California Department of Fish and Wildlife (CDFW) (January 2011). Special Animals (898 taxa). Habitat Conservation Division, Wildlife and Habitat Data Analysis Branch.
- California Department of Fish and Wildlife (January 2010). Special Vascular Plants, Bryophytes, and Lichens List. Natural Heritage Division, Natural Diversity Data Base.
- California Department of Fish and Wildlife (September 2010). Natural Communities List. Available at: http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf
- California Department of Fish and Wildlife, Vegetation Classification and Mapping Program, List of Vegetation Alliances and Associations. September 2010. http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database, August, 2013.
- Environmental & GIS Services, LLC. 2012. Avian Resources Assessment; Proposed Parcel 44 Redevelopment, Marina del Rey, Los Angeles County, California. Prepared for Pacific Marina Venture, LLC. July 31, 2012.
- Hamilton, Robert A. and Daniel S. Cooper. 2010. "Conservation & Management Plan for Marina del Rey, Los Angeles County, California." Prepared for County of Los Angeles, Department of Beaches and Harbors and Department of Regional Planning. March 23, 2010.
- US Fish and Wildlife Service (USFWS). 2012. Federally Listed Threatened and Endangered Species that May Occur in Los Angeles County, California. http://www.fws.gov/carlsbad/SpeciesStatusList/CFWO_Species_Status_List%20.htm

- USFWS. 2012. Critical Habitat Mapper: http://crithab.fws.gov. Accessed November 2012.
- USFWS. 2012. Pacific Southwest Region. Website search of species' details. Found at: http://www.fws.gov/arcata/es/birds/brnPelican/b_pelican.html. Accessed November 2012.

4.3.2 METHODS

An Avian Resources Assessment was conducted on the project site by Environmental & GIS Services, LLC (eGIS) in July, 2012.[1] The purpose of the study was to evaluate the site's use by avian species and to determine if any special-status birds reside on or significantly utilize the project site. The assessment included a background literature search including avian history of the site from the County of Los Angeles Department of Beaches and Harbors. eGIS also conducted a desktop review of other applicable documents and data sources, such as the California Natural Diversity Database (CNDDB),[2] the Habitat and Conservation Plan (HCP) for Marina del Rey,[3] and applicable local maps of environmentally sensitive habitat areas (ESHAs) to determine whether endangered species or sensitive environments are known to be on or within close proximity to the site.

Additional resources reviewed included the US Fish and Wildlife Service (FWS) list of threatened and endangered species potentially occurring in Los Angeles County,[4] the FWS Critical Habitat Mapper,[5] aerial photographs, an informal consultation with Mr. Ismael Lopez, planner at the Los Angeles County Department of Beaches and Harbors regarding Marina del Rey rookery locations, and an informal consultation with Kathy Keane of Keane Biological Consulting, who has managed California least tern (*Sterna antillarum browni*) foraging and breeding areas in Southern California, has also managed the ongoing tern monitoring study for the US Army Corps of Engineers dredging project at the mouth of Marina del Rey and has worked extensively at the nearby Venice Beach tern nesting colony.

---

1 Environmental & GIS Services, LLC. 2012. Avian Resources Assessment; Proposed Parcel 44 Redevelopment, Marina del Rey, Los Angeles County, California. Prepared for Pacific Marina Venture, LLC. July 31, 2012.

2 California Natural Diversity Database. 2012. Biogeographic Data Branch. Department of Fish and Wildlife. Commercial Version. August 2012.

3 Hamilton, Robert A. and Daniel S. Cooper. 2010. "Conservation & Management Plan for Marina del Rey, Los Angeles County, California." Prepared for County of Los Angeles, Department of Beaches and Harbors and Department of Regional Planning. March 23, 2010.

4 US Fish and Wildlife Service (USFWS). 2012. Federally Listed Threatened and Endangered Species that May Occur in Los Angeles County, California. Available at http://www.fws.gov/ENDANGERED/species/ http://www.fws.gov/carlsbad/SpeciesStatusList/CFWO_Species_Status_List%20.htm

5 US Fish and Wildlife Service (USFWS). 2012. Critical Habitat Mapper. http://crithab.fws.gov

4.3.3 ENVIRONMENTAL SETTING

4.3.3.1 General

The project site totals 8.39 landside acres and is situated immediately east of Marina del Rey Harbor. Admiralty Way forms the eastern site boundary, Bali Way is situated immediately north of the site and Mindanao Way occurs to the South. Marina del Rey Basin G occurs immediately west, north and south of the project site. The project site currently supports commercial buildings and large surface parking lots. The existing development includes dock master administration buildings, a yacht club, yacht and sailboat sales, and vehicle parking. The surrounding area also supports similar boating facilities as well as office buildings, a parking structure, the Marina del Rey Hotel and Burton Chace Park.

4.3.3.2 Vegetation

Existing vegetation on-site is limited to landscaping, primarily non-native trees. Species present include melaleuca (*Melaleuca* sp.), Mexican fan palm (*Washingtonia robusta*), eucalyptus (*Eucalyptus* sp.), coral trees (*Erythrina* sp.), and ficus trees (*Ficus* sp.). Scattered non-native ornamental shrubs are also present adjacent to parking spaces and buildings. The trees and shrubs appeared to be regularly pruned and, as such, provide very limited nesting opportunities. The larger ficus and coral trees contained no nest structures and exhibited only light guano staining underneath, suggesting that this area is not used for nesting or significant roosting.

4.3.3.3 Wildlife

The only wildlife observed during the site evaluation were American crow (*Corvus brachyrhynchos*), house finch (*Carpodacus mexicanus*), northern rough-winged swallow (*Stelgidopteryx serripennis*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), rock pigeon (*Columba livia*), and black phoebe (*Saynoris nigricans*). All of these species are common and highly tolerant of human disturbance. The crows and hummingbirds were the most abundant species on-site and have a high potential to nest here.

No active bird nests were observed during the surveys. However, two stick nests, apparently constructed by American crows, were observed in fan palms in the southern portion of the site along Mindanao Way. The presence of several juvenile crows in the vicinity was noted.

The adjacent waters of Marina del Rey and the associated slip area provides perching, resting, and foraging opportunities for shore and sea birds. Though the dock area was inaccessible at the time of the survey, pelicans, gulls, herons, egrets, and cormorants are locally abundant and are expected to occur in the adjacent waters.

Several additional species are anticipated to utilize the site periodically for roosting, including some of the shore birds and sea birds that frequent the area.

4.3.3.4 Special-Status Species

Based on a query of California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) Inventory and general knowledge of the project region, 35 special-status plant and 43 special-status animal species are reported within the project region, as defined by the US Geological Survey (USGS) quadrangle containing the project sites and the surrounding five quadrangles. A summary of these species' potential to utilize the site is provided in **Table 4.3-1, Special-Status Plant Species Reported from the Project Area** and **Table 4.3-2, Special-Status Wildlife Species Recorded from the Project Area**.

Due to the lack of suitable habitat, no plant species listed in **Table 4.3-1** were observed or are expected to occur on-site. None of the special-status wildlife species listed in **Table 4.3-2** is expected to reside or nest on-site, but a few, such as the brown pelican, egrets, and herons may periodically roost there.

Table 4.3-1
Special-Status Plant Species Recorded from the Project Vicinity

Common Name *Scientific Name*	Status Federal	State	CNPS	Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
Aphanisma *Aphanisma blitoides*	--	--	1B.2	Coastal bluff scrub; coastal dunes; coastal scrub	1-305 m AH March-June	Not expected. No suitable habitat on-site.
Marsh sandwort *Arenaria paludicola*	FE	CE	1B.1	Freshwater marsh; marsh and swamp; wetlands	3-170 m PH May-August	Not expected. No suitable habitat on-site.
Braunton's milk-vetch *Astragalus brauntonii*	FE	--	1B.1	Chaparral; closed-cone coniferous forest; coastal scrub; valley and foothill grassland	4-640 m PH January-August	Not expected. No suitable habitat on-site.
Ventura marsh milk-vetch *Astraglus pycnostachyus* var. *lanosissimus*	FE	CE	1B.1	Marshes and swamps; salt marsh; wetlands	1-35 m PH June-October	Not expected. No suitable habitat on-site.
Coastal dunes milk-vetch *Astragalus tener* var. *titi*	FE	CE	1B.1	Coastal bluff scrub; coastal dunes	1-50 m AH March-May	Not expected. No suitable habitat on-site.
South coast saltscale *Atriplex pacifica*	--	--	1B.2	Coastal dunes; coastal bluff scrub; coastal scrub; playas	0-140 m AH March-October	Not expected. No suitable habitat on-site.
Parish's brittlescale *Atriplex parishii*	--	--	1B.1	Chenopod scrub; playas; vernal pools	25-1900 m AH June-October	Not expected. No suitable habitat on-site.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	--	--	1B.2	Coastal bluff scrub; coastal scrub	10-200 m AH April-October	Not expected. No suitable habitat on-site.

Common Name *Scientific Name*	Status Federal	State	CNPS	Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	--	--	1B.2	Chaparral; coastal scrub; valley and foothill grassland	320-1000 m PH(b) March-June	Not Expected. No suitable habitat on-site.
Santa Barbara morning-glory *Calystegia sepium* ssp. *binghamiae*	--	--	1B.1	Marshes and swamps; riparian scrub	0-22 m PH(r) April-May	Not Expected. No suitable habitat on-site.
Southern tarplant *Centromadia parryi* ssp. *australis*	--	--	1B.1	Marsh and swamp; saltmarsh; valley and foothill grassland; wetlands	0-425 m AH May-November	Not Expected. No suitable habitat on-site.
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	--	--	1B.1	Coastal bluff scrub; coastal dunes	0-100 m AH January-August	Not Expected. No suitable habitat on-site.
Coastal goosefoot *Chenopodium littoreum*	--	--	1B.2	Coastal dunes	10-30 m AH April-August	Not Expected. No suitable habitat on-site.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE	CE	1B.2	Coastal dunes; marsh and swamp; salt marsh; wetlands	0-30 m AH(hp) May-October	Not Expected. No suitable habitat on-site.
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	FC	CE	1B.1	Coastal scrub; valley and foothill grassland	150-1220 m AH April-May	Not Expected. No suitable habitat on-site.
Beach spectaclepod *Dithyrea maritima*	--	ST	1B.1	Coastal dunes; coastal scrub	3-50 m PH(r) March-May	Not Expected. No suitable habitat on-site.
Santa Monica dudleya *Dudleya cymosa* ssp. *ovatifolia*	FT	--	1B.2	Chaparral; coastal scrub; volcanic or sedimentary, rocky	150-1675 m PH March-June	Not Expected. No suitable habitat on-site.

Common Name *Scientific Name*	Status Federal	State	CNPS	Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
Many-stemmed dudleya *Dudleya multicaulis*	--	--	1B.2	Chaparral; coastal scrub; valley and foothill grassland	15-790 m PH April-July	Not Expected. No suitable habitat on-site.
Island green dudleya *Dudleya virens* ssp. *insularis*	--	--	1B.2	Coastal bluff scrub; coastal scrub	5-300 m PH April-June	Not Expected. No suitable habitat on-site.
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	--	--	1A	Marshes and swamps (coastal salt and freshwater)	10-1675 m PH(r) August-October	Not Expected. No suitable habitat on-site.
Mesa horkelia *Horkelia cuneata* var. *puberula*	--	--	1B.1	Chaparral; cismontane woodland; coastal scrub	70-810 m PH February-Sept	Not Expected. No suitable habitat on-site.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	--	--	1B.1	Marshes and swamps (coastal salt); playas; vernal pools	1-1220 m AH February-June	Not Expected. No suitable habitat on-site.
Mud nama *Nama stenocarpum*	--	--	2B.2	Marshes and swamps (lake margins, riverbanks)	5-500 m AH/PH January-July	Not Expected. No suitable habitat on-site.
Gambel's water cress *Nasturtium gambelii*	FE	CT	1B.1	Marshes and swamps (freshwater or brackish)	3-330 m PH(r) April-October	Not Expected. No suitable habitat on-site.
Spreading navarretia *Navarretia fossalis*	FT	--	1B.1	Chenopod scrub; marshes and swamps (assorted shallow freshwater); playas, vernal pools	30-655 m AH April-June	Not Expected. No suitable habitat on-site.
Prostrate vernal pool navarretia *Navarretia prostrata*	--	--	1B.1	Coastal scrub; valley and foothill grassland; vernal pool; wetlands	15-1210 m AH April-July	Not Expected. No suitable habitat on-site.

Common Name *Scientific Name*	Status Federal	State	CNPS	Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
California orcutt grass *Orcuttia californica*	FE	CE	1B.1	Vernal pools	15-660 m AH April-August	Not Expected. Suitable habitat absent.
Lyon's pentachaeta *Pentachaeta lyonii*	FE	CE	1B.1	Chaparral; coastal scrub; valley and foothill grassland	30-630 m AH March-August	Not Expected. Suitable habitat absent.
Brand's star phacelia *Phacelia stellaris*	FC	--	1B.1	Coastal dunes; coastal scrub	1-400 m AH March-June	Not Expected. Suitable habitat absent.
Ballona cinquefoil *Potentilla multijuga*	--	--	1A	Meadows and seeps (brackish)	0-2 m PH June-August	Not Expected. No suitable habitat on-site.
White rabbit-tobacco *Pseudognaphalium leucocephalum*	--	--	2B.2	Chaparral; cismontane woodland; coastal scrub; riparian woodland	0-2100 m PH July-December	Not Expected. Suitable habitat absent.
Salt Spring checkerbloom *Sidalcea neomexicana*	--	--	2B.2	Chaparral; coastal scrub; lower montane coniferous forest; Mojavean desert scrub; playas	15-1530 m PH March-June	Not Expected. Suitable habitat absent.
Estuary seablite *Suaeda esteroa*	--	--	1B.2	Marshes and swamps (coastal salt)	0-5 m PH May-January	Not Expected. Suitable habitat absent.
San Bernardino aster *Symphyotrichum defoliatum*	--	--	1B.2	Cismontane woodland; coastal scrub; lower montane coniferous forest; marshes and swamps; meadows and seeps; valley and foothill grassland	2-2040 m PH(r) July-November	Not Expected. Suitable habitat absent.

Common Name *Scientific Name*	**Status** **Federal**	**State**	**CNPS**	**Habitat Requirements**	**Elevation Range, Life Form, and Flowering Period**	**Potential Occurrence**
Greata's aster *Symphyotrichum greatae*	--	--	1B.3	Broadleaf upland forest; chaparral; cismontane woodland; lower montane coniferous forest; riparian woodland	300-2010 m PH(r) June-October	Not Expected. Suitable habitat absent.

STATUS KEY:

Federal

FE: Federally listed Endangered
FT: Federally listed Threatened
FC: Federal Candidate for listing

State

CE: State-listed Endangered
CT: State-listed Threatened

CNPS

List 1A: Plants presumed extirpated in California and either Rare or Extinct elsewhere
List 1B: Plants rare, threatened or endangered in California and elsewhere
List 2B: Plants rare, threatened or endangered in California but more common elsewhere
.1: Seriously threatened in California
.2: Moderately threatened in California

LIFE FORM KEY:

AH: Annual Herb
PH: Perennial Herb
S: Shrub
(b): bulb
(d): deciduous
(e): evergreen
(hp): hemiparasitic
(r): rhizomatous

Table 4.3-2
Special-Status Wildlife Species Recorded from the Project Vicinity

Common Name *Scientific Name*	Status Federal	 State	Habitat Requirements	Potential Occurrence on the Project Site
Invertebrates				
Belkin's dune tabanid fly *Brennania belkini*	--	sa	Coastal dunes	Not expected. No suitable habitat on site.
Busck's gall moth *Carolella busckana*	--	sa	Coastal dunes; coastal scrub	Not expected. No suitable habitat on site.
Western tidal-flat tiger beetle *Cicindela gabbii*	--	sa	Estuary; mud shore/flats	Not expected. No suitable habitat on site.
Sandy beach tiger beetle *Cicindela hirticollis gravida*	--	sa	Coastal dunes	Not expected. No suitable habitat on site.
Senile tiger beetle *Cicindela senilis frosti*	--	sa	Mud shore/flats; wetlands	Not expected. No suitable habitat on site.
Globose dune beetle *Coelus globosus*	--	sa	Coastal sand dune habitat; foredunes and hummocks, usually beneath surface	Not expected. No suitable dune habitat on site.
Monarch butterfly(wintering sites) *Danaus plexippus*	--	sa	Winter roost sites located in wind-protected tree groves (gum trees, Monterey pine, and cypress trees), with water sources nearby.	Not expected. Individual monarchs may occur, but suitable wintering roost sites are not present on or adjacent to the site.
Henne's eucosman moth *Eucosma hennei*	--	sa	Coastal dunes	Not expected. No suitable habitat on site.
El Segundo blue butterfly *Euphilotes battoides allyni*	FE	--	Coastal dunes	Not expected. No suitable habitat on site.
Palos Verdes blue butterfly *Glaucopsyche lygdamus palosverdesensis*	FE	--	Coastal scrub	Not expected. No suitable habitat on site.
Wandering (saltmarsh) skipper *Panoquina errans*	--	sa	Marshes and swamps (coastal salt)	Not expected. No suitable habitat on site.
El Segundo flower-loving fly *Rhaphiomidas terminates terminatus*	--	sa	Coastal scrub	Not expected. No suitable habitat on site.
Gertsch's socalchemmis spider *Socalchemmis gertschi*	--	sa	Coastal scrub	Not expected. No suitable habitat on site.
Dorothy's El Segundo Dune weevil *Trigonoscuta dorothea dorothea*	--	sa	Coastal dunes	Not expected. No suitable habitat on site.
Mimic tryonia (CA brackishwater snail) *Tryonia imitator*	--	sa	Aquatic; brackish marsh; estuary; lagoon; marsh and swamp; salt marsh; wetland	Not expected. No suitable habitat on site.

Common Name *Scientific Name*	Status Federal	 State	Habitat Requirements	Potential Occurrence on the Project Site
Fishes				
Southern Steelhead (So. CA DPS) *Oncorhynchus mykiss*	FE	SSC	Seasonal to perennial coastal streams with suitable gravel substrate for spawning.	Not expected. No aquatic habitat on site.
Mohave tui chub *Siphateles bicolor mohavensis*	FE	CE, CFP	Aquatic; artificial flowing waters; artificial standing waters	Not expected. No suitable habitat on site.
Amphibians & Reptiles				
Western pond turtle *Emys marmorata*	--	SSC	Streams, rivers, ponds, freshwater marshes, and lakes with growth of aquatic vegetation.	Not expected. No suitable habitat on or near the site.
Silvery legless lizard *Anniella pulchra pulchra*	--	SSC	Chaparral; coastal dunes; coastal scrub. Loose moist soils	Not expected. No suitable habitat on or near the site.
Coast horned lizard *Phrynosoma blainvillii*	--	SSC	Relatively open grasslands, scrublands, and woodlands with fine, loose soil.	Not expected. No suitable habitat on or near the site.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	--	sa	Open areas in semiarid grasslands, scrublands, and woodlands.	Not expected. No suitable habitat on or near the site.
San Bernardino ringneck snake *Diadophis punctatus modestus*	--	sa	Woodlands, grassland, chaparral, and scrub habitats; often found in mesic areas under rocks, logs, and debris.	Not expected. No suitable habitat on or near the site.
Two-striped garter snake *Thamnophis hammondii*	--	SSC	Perennial and intermittent streams and man-made lakes and stock ponds; requires dense riparian vegetation.	Not expected. No suitable habitat on or near the site.
Birds				
Tri-colored blackbird (nesting colony) *Agelaius tricolor*	--	SSC	Colonial nesters near open water	Not expected. No suitable habitat on site.
Great egret (nesting colony) *Ardea alba*	--	sa	Fresh and saltwater wetlands; also forage in grasslands and agricultural fields	Not expected. May infrequently roost on-site, but no suitable burrows for breeding or refuge
Great blue heron (nesting colony) *Ardea herodias*	--	sa	Fresh and saltwater wetlands; also forage in grasslands and agricultural fields	Not expected. May infrequently roost on-site, but no suitable burrows for breeding or refuge
Burrowing owl (burrow sites and some wintering sites) *Athene cunicularia*	--	SSC	Open, dry annual or perennial grasslands, deserts and scrublands	Not expected. May infrequently roost on-site, but no suitable burrows for breeding or refuge
Western snowy plover (nesting) *Charadrius alexandrines nivosus*	FT	SSC	Great Basin standing waters; sand shore; wetland	Not expected. No suitable habitat on site.
Snowy egret (nesting colony) *Egretta thula*	--	sa	Aquatic habitats from coastal shore to small ponds and rivers	Not expected. No suitable habitat on site.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	FE	CE	Riparian woodlands	Not expected. No suitable habitat on site.

Common Name *Scientific Name*	Status Federal	 State	Habitat Requirements	Potential Occurrence on the Project Site
California black rail *Laterallus jamaicensis coturniculus*	--	CT	Brackish/freshwater marsh; salt marsh; wetlands	Not expected. No suitable habitat on site.
Black-crowned night heron (nesting colony) *Nycticorax nycticorax*	--	sa	Aquatic habitats from coastal shore to small ponds and rivers	Not expected. No suitable habitat on site.
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	--	CE	Marshes and swamps; coastal salt flats with pickleweed	Not expected. No suitable habitat on site.
California brown pelican (nesting colony and Communal roosts) *Pelecanus occidentalis californicus*	Delisted	Delisted CFP	Coastal areas	Not expected. May periodically roost on-site, but no suitable nesting on site.
Double-crested cormorant (nesting colony) *Phalacrocorax auritus*	--	WL	Coastal sage scrub	Not expected. No suitable habitat on site.
California gnatcatcher *Polioptila californica*	FT	SSC	Coastal sage scrub	Not expected. No suitable habitat on site.
Bank swallow (nesting) *Riparia riparia*	--	ST	Colonial nester; primarily in riparian and lowland habitats west of desert.	Not expected. No suitable habitat on site.
California least tern (nesting colony) *Sternula antillarum browni*	FE	CE	Alkali playa; coastal wetlands	Not expected. May periodically roost on-site, but no suitable nesting on site.
Least Bell's vireo (nesting) *Vireo bellii pusillus*	FE	CE	Low riparian scrub in vicinity of water or in dry riverbeds.	Not expected. No suitable habitat on site.
Mammals				
Pallid bat *Antrozous pallidus*	--	SSC	Deserts, grasslands, woodlands and forests; open dry habitats with rocky areas for roosting	Not expected. No suitable habitat on site.
Western mastiff bat *Eumops perotis californicus*	--	SSC	Many arid-semi arid habitats including conifer and deciduous woodlands, coastal scrub, chaparral, grasslands; roost sin crevices in cliff faces, high buildings, trees and tunnels	Not expected. No suitable habitat on site.
Silver-haired bat *Lasionycteris noctivagans*	--	sa	Lower montane coniferous forest; old growth forest; riparian forest	Not expected. No suitable habitat on site.
Hoary bat *Lasiurus cinereus*	--	sa	Dense trees for cover and open areas or habitat edges for feeding; requires water	Not expected. No suitable habitat on site.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	--	SSC	Joshua tree woodland; pinyon and juniper woodlands; riparian scrub; Sonoran desert scrub	Not expected. No suitable habitat on site.
Big free-tailed bat *Nyctinomops macrotis*	--	SSC	Rugged, rocky areas in and near desert scrub, woodlands, coniferous forests	Not expected. No suitable habitat on site.
South coast marsh vole *Microtus californicus stephensi*	--	SSC	Coastal marshes	Not expected. No suitable habitat on site.

Common Name *Scientific Name*	Status Federal	State	Habitat Requirements	Potential Occurrence on the Project Site
Pacific pocket mouse *Perognathus longimembris pacificus*	FE	SSC	Coastal scrub	Not expected. No suitable habitat on site.
American badger *Taxidea taxus*	--	SSC	Drier open stages of shrub, forest, and herbaceous habitats with friable soils.	Not expected. No suitable habitat on site.

(nesting) = For most taxa the CNDDB is interested in sightings for the presence of resident populations. For some species (primarily birds), the CNDDB is primarily interested in tracking certain parts of the species range or life history (e.g., nesting locations). The area or life stage of concern is indicated in parenthesis after the common name.

Status:

Federal – US Fish and Wildlife Service
FE: Federally Endangered
FT: Federally Threatened

State – California Department of Fish and Wildlife
CE: State-listed Endangered Species
CT: State-listed Threatened Species

CFP: California Fully Protected Species: The Fish and Game Code sections dealing with Fully Protected species state that these species "may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research. This language arguably makes the "Fully Protected" designation the strongest and most restrictive regarding the "take" of these species.
SSC: California Species of Special Concern: The goal of designating species as "Species of Special Concern" is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long term viability. Not all "Species of Special Concern" have declined equally; some species may be just starting to decline, while others may have already reached the point where they meet the criteria for listing as a "threatened" or "endangered" species under the state and/or federal Endangered Species Acts.
WL: CDFW Watch List or "Taxa to Watch" Species on this list are (1) not on the current Special Concern list, but were on previous lists and they have not been state listed under CESA; (2) were previously state or federally listed and now are on neither list; or (3) are on the list of "fully protected" species.
sa : California Special Animal (species with no official federal or state status, but are included on CDFW's Special Animals list)

Special-status plant species

As stated, no special-status plant species are anticipated to occur on the subject property due to lack of suitable habitat and/or because the location of the site is beyond the distributional range for the species.

Special-status animal species

None of the special-status animal species listed in **Table 4.3-1** was observed on the project during the course of surveys conducted in July 2012 by eGIS. Focused surveys were not conducted for any special-status animal species that could potentially utilize the site as there is no suitable habitat present to support any of those species known to occur in the area. As previously mentioned, egrets and herons occur in the area and could occur on-site to roost or use the adjacent waters; however, there are no documented historical colonial water bird rookeries on-site and the eGIS evaluation of the site determined the existing trees on-site "are pruned or trimmed to a point that does not provide much if any potential for nesting."[6]

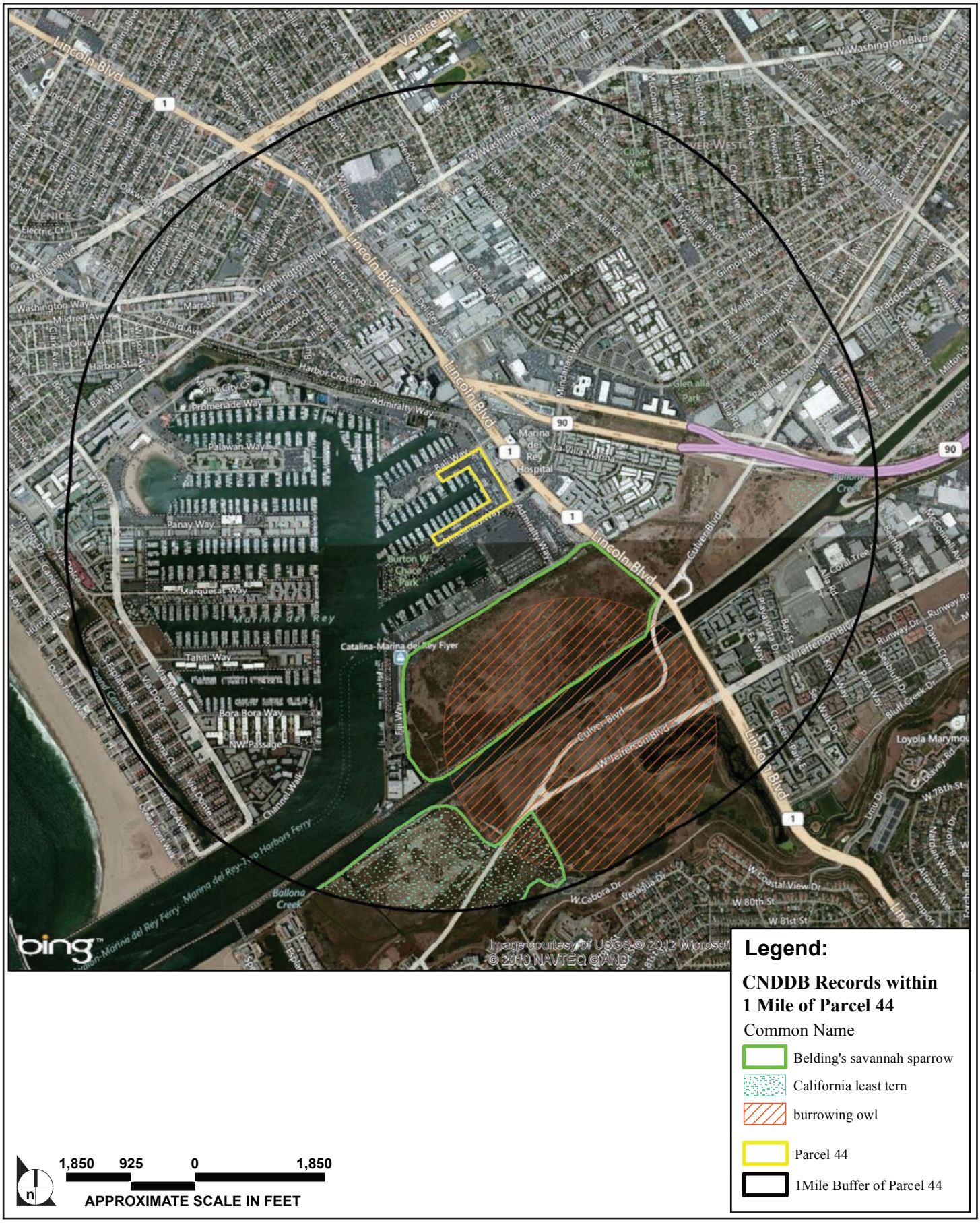
Three special-status avian species have been identified in the CNDDB within 1 mile of Parcel 44. These include Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), California least tern (*Sternula antillarum browni*), and burrowing owl (*Athene cunicularia*). Each of these three species has been identified within 0.25 mile of Parcel 44, on and adjacent to the Burton Chace Park to the south. **Figure 4.3-1** illustrates the locations of these species mapped in the CNDDB.

There is no suitable nesting habitat for burrowing owl or Belding's savannah sparrow on Parcel 44 and extremely limited foraging opportunities so they are not expected to occur. There is also no suitable nesting or foraging habitat for least tern on-site. However, terns may forage in the adjacent Marina del Rey Basin G. When consulted by eGIS, Ms. Kathy Keane stated foraging by least tern occurs mostly towards the mouth of Marina del Rey harbor and offshore, closer to the nesting colony and in better water quality.[7]

---

6 Environmental & GIS Services, LLC. 2012. Avian Resources Assessment; Proposed Parcel 44 Redevelopment, Marina del Rey, Los Angeles County, California. Prepared for Pacific marina Venture, LLC. July 31, 2012. Page 6.

7 Environmental & GIS Services, LLC. 2012. Avian Resources Assessment; Proposed Parcel 44 Redevelopment, Marina del Rey, Los Angeles County, California. Prepared for Pacific marina Venture, LLC. July 31, 2012.



SOURCE: Environmental & GIS Services, LLC, July 2012

FIGURE **4.3-1**

Special Status Avian Records Identified in the CNDDB

0889.005•11/12

The Conservation and Management Plan (Plan) for Marina del Rey indicates that the site does not include any of the five well-known historical colonial water bird rookeries in Marina del Rey. However, Burton Chace Park, approximately 100 feet southwest of the site, is a known rookery for black-crowned night herons, snowy egrets and other birds. Other heron and egret rookeries exist along Admiralty Way approximately 0.5 mile northwest of the site, and more natural habitats exist greater than 0.25 mile to the south in the Ballona Wetlands. The Plan recommends that no new non-native trees be planted in the area that could serve as nesting habitat such that existing conflicts between humans and nesting birds are not expanded. Notwithstanding, The Local Coastal Program (LCP) is the prevailing regulatory document for Marina del Rey and Sections 5.1.11, 5.2.8, and 5.37 of the Marina del Rey Land Use Plan states:

> *Removal of any tree shall require mitigation at a 1:1 ratio. Replacement trees shall consist of native or non-native, non-invasive tree species. The Department shall develop a tree replacement planting plan for all trees to be removed, which plan (sic) should include the location, tree type, tree size, and planting specifications and a monitoring program with specific performance standards. A tree replacement monitoring report shall be prepared and then updated annually for five years.*

California brown pelican, though de-listed from both the federal and state Endangered Species Acts is still considered a state fully protected species, which means the animal cannot be harassed or otherwise taken. However, this species rarely utilizes landside portions of Marina del Rey, but is likely to roost on the adjacent docks and forage in the waters of Marina del Rey. The nearest nesting colony in California is Anacapa Island in the Channel Islands.[8]

4.3.3.5 Habitat Connectivity

As used in this document, habitat connectivity is an umbrella term referring to all of the factors relating to integration of habitats within an ecosystem. Wildlife corridors and habitat linkages are features that promote habitat connectivity. Wildlife corridors are typically discrete linear features within a landscape that are constrained by development or other non-habitat areas. Habitat linkages are networks of corridors and larger natural open space areas that encompass an adequate diversity and acreage of useable habitats to provide long-term resilience of ecosystems against the detrimental effects of habitat fragmentation, which creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open-space areas, various studies have concluded that many wildlife and plant species would not likely persist over time in fragmented or isolated habitat areas because they prohibit the movement of new individuals and genetic information among areas where they may be

8 US Fish and Wildlife Service. 2012. Pacific Southwest Region. Website search of species' details. Found at: http://www.fws.gov/arcata/es/birds/brnPelican/b_pelican.html. Accessed November 2012.

periodically displaced by natural or human-caused disturbances such as disease, fire, flood, or other natural phenomena.

Habitat linkages mitigate the effects of this fragmentation by

- allowing plant and animal species to disperse between remaining habitat areas, thereby permitting at-risk populations to maintain sustainable levels of genetic variability;
- providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) causing population or local species extinction; and
- serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

As the subject property is currently developed and amid existing development, it does not provide any linkage opportunity for local or regional movement of wildlife.

4.3.4 REGULATORY FRAMEWORK

4.3.4.1 Federal

Federal Endangered Species Act of 1973 (16 USC 1531 through 1543)

The federal Endangered Species Act (ESA) and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. The ESA defines species as "threatened" or "endangered" and provides regulatory protection for listed species. The federal ESA provides a program for conservation and recovery of threatened and endangered species, and conservation of designated critical habitat that the USFWS has determined is required for the survival and recovery of these listed species.

Section 7, requires federal agencies, in consultation with, and with the assistance of the Secretary of the Interior or the Secretary of Commerce, as appropriate, to insure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. The USFWS and National Marine Fisheries Service (NMFS) share responsibilities for administering the ESA. Regulations governing interagency cooperation under Section 7 are found at 50 CFR Part 402. The opinion issued at the conclusion of consultation will include a statement authorizing a take that may occur incidental to an otherwise legal activity.

Section 9, lists those actions that are prohibited under the ESA. Take of a species listed in accordance with the ESA is prohibited. There are two processes whereby a take is allowed when it is incidental to an

otherwise legal activity. Section 9 of the ESA prohibits take (i.e., to harass, harm, pursue, hunt, wound, kill, etc.) of listed species of fish, wildlife, and plants without special exemption. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or shelter. "Harass" is further defined as actions that create the likelihood of injury to listed species to an extent which significantly disrupt normal behavior patterns which include, but not limited to, breeding, feeding, and shelter.

Section 10, provides a means whereby a non-federal action with a potential to result in the 'take' of a listed species could be allowed under an incidental take permit. Application procedures are found at 50 CFR Parts 13 and 17 for species under the jurisdiction of USFWS and 50 CFR Parts 217, 220, and 222 for species under the jurisdiction of NMFS.

Migratory Bird Treaty Act (16 USC 703 through 711)

The Migratory Bird Treaty Act (MBTA) is the domestic law that affirms, or implements, the United States' commitment to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding season. The MBTA makes it unlawful to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States.

4.3.4.2 State

California Environmental Quality Act (Pub. Resource Code sections 21000 et seq.)

The California Environmental Quality Act (CEQA) was adopted in 1970 and applies to actions directly undertaken, financed, or permitted by state lead agencies. CEQA requires that agencies inform themselves about the environmental effects of their proposed actions, consider all relevant information, provide the public an opportunity to comment on the environmental issues, and avoid or reduce potential environmental harm whenever feasible. CEQA establishes state policy to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures. Regulations for implementation are found in the *State CEQA Guidelines* published by the Resources Agency. These guidelines establish an overall process for the environmental evaluation of projects.

California Endangered Species Act (California State Fish and Game Code 2050 et seq.)

The California ESA (CESA) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that affect both a state and federal listed species, compliance with the federal ESA will satisfy the CESA if the CDFW determines that the federal incidental take authorization is "consistent" with the CESA under California State Fish and Game Code Section 2080.1. For projects that will result in a take of a state-only listed species, the project proponent must apply for a take permit under Section 2081(b).

California State Fish and Game Code Sections 1600 through 1616

Under these sections of the California State Fish and Game Code, the project proponent is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the California State Fish and Game Code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial drainages valuable to fish and wildlife are subject to CDFW jurisdiction. The CDFW also has jurisdiction over dry washes that carry water ephemerally during storm events. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a streambed alteration agreement (SAA) that becomes part of the plans, specifications, and bid documents for the project.

Sections 2080 and 2081. Section 2080 of the California State Fish and Game Code states, "No person shall import into this state [California], export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2081 of the California State Fish and Game Code, the CDFW may authorize individuals or public agencies to import, export, take, or possess, and state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or a memorandum of understanding (MOU) if: (1) the take is incidental to an otherwise lawful activity,

(2) impacts of the authorized take are minimized and fully mitigated, (3) the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and (4) the project proponent ensures adequate funding to implement the measures required by the CDFW. The CDFW makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Sections 3503 and 3503.5. Under these sections of the California State Fish and Game Code, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory non-game bird as designated in the MBTA or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant to California State Fish and Game Code Section 3800.

Native Plant Protection Act (California State Fish and Game Code 1900 through 1913)

California's Native Plant Protection Act (NPPA) requires all state agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of the CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The project proponent is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants. Since there are no suitable habitats present on the subject site that would support special-status plant species recorded from the region, inventory and CDFW consultation is not applicable.

4.3.4.3 Local

Los Angeles County General Plan

This section contains goals and policies from the general goals and policies of the County of Los Angeles General Plan. The general goal of the plan is to conserve resources and protect the environment. The plan policies include Resource Conservation and Protection of Environmental Quality; protecting areas that have significant natural resources and scenic values, including significant ecological areas, the coastal zone and prime agricultural lands.

Marina del Rey Land Use Plan

The Coastal Act applies to the entire coast of California. Most County and incorporated City governments have had their own Local Coastal Programs adopted by the Coastal Commission and review and issue

Coastal Development Permits (CDPs) directly. Due to the expanse of Los Angeles County that occurs within the Coastal Zone, the County has split it into separate Land Use Plan areas. The project lies within the jurisdiction of the Marina del Rey Land Use Plan (LUP).

As defined in the Coastal Act, an "environmentally sensitive area (ESHA)" is an area in which a plant or animal habitat is either rare or especially valuable because of its special nature or role in an ecosystem and could be easily disturbed or degraded by human activities and developments (Coastal Act, Section 30107.5). If an area is found to be an "environmentally sensitive area," the area is governed by Section 30240 of the Coastal Act and cannot be developed except in ways that are resource dependent. The Marina del Rey Local Coastal Program, as certified for amendment by the California Coastal Commission in 2012, does not contain any lands designated as ESHA. However, there are additional policies within the LUP that remain applicable.

Though Marina del Rey is an entirely urbanized environment, starting in the mid-1990s, colonial water birds began roosting and nesting in mature ornamental, non-native landscape trees. Marina del Rey now supports, according to the County's Conservation and Management Plan (CMP), a combined total of more than 100 breeding pairs of Double crested Cormorants, Black-crowned Night-Herons, Great Blue Herons, Great Egrets, and Snowy Egrets.[9] The large number of colonial water bird breeding pairs in Marina del Rey indicates that these birds are successfully adapting to the urban environment and are not easily disturbed or degraded by human activities and developments.

While no ESHA exist in Marina del Rey, and therefore no Coastal Act policies relating to ESHA directly apply, Important Biological Resources (IBR), including colonial water birds and their heronries, do exist within the bounds of Marina del Rey and require policy protection as coastal resources per Coastal Act sections 30230, 30231, 30233, and 30250 and LUP Chapter 5. This protection is consistent with the California Environmental Quality Act. These policies, in parallel with the CMP, provide the necessary protection and an adaptive management approach intended to ensure the persistence and health of all important biological resources in Marina del Rey.

4.3.5 IMPACT ANALYSIS

Impacts associated with implementation of the proposed Marina del Rey Parcel 44 Project are discussed for each of the threshold criteria identified below. Wherever a significance threshold criterion is exceeded

9 County of Los Angeles Department of Regional Planning, 2012. Marina del Rey Land Use Plan, certified by the California Coastal Commission February 8, 2012. Online at http://planning.lacounty.gov/view/marina_del_rey_land_use_plan/

or wherever there is the potential for a criterion to be exceeded, mitigation is identified where it is feasible.

4.3.5.1 Thresholds of Significance

The County of Los Angeles has not defined specific thresholds that can be used to define if a project-related biological impact is considered significant. The County of Los Angeles generally relies on significance thresholds as defined by the *State CEQA Guidelines*, Appendix G, but also requires adherence to LCP Policies and includes thresholds within its Initial Study checklist.

The definition of significant impact as defined by CEQA has been derived from several sources. Significance criteria are defined in the *State CEQA Guidelines*. According to Appendix G (Environmental Checklist) of the *State CEQA Guidelines*, a project may be deemed to have a significant impact on the environment if it would result in any of the following:

- 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 CDFW or USFWS;
- A substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- A substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by § 404 of the federal Clean Water Act or California Fish and Game Code § 1600, et seq. through direct removal, filling, hydrological interruption, or other means;
- Substantial interference 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;
- Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10 percent canopy cover with oaks at least 5 inches in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshuas, Southern California black walnut, etc.);
- Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (LA County Code, Title 22, § 22.56.215), and Sensitive Environmental Resource Areas (SERAs) (LA County Code, Title 22, Ch. 22.44, Part 6); or
- Conflict with the provisions of an adopted state, regional, or local habitat conservation plan.

Threshold 4.3-1: **Could the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?**

For the purposes of this impact analysis, a special-status plant species is any taxon that satisfies one or more of the criteria listed by CDFW as categories for inclusion on the Special Vascular Plants, Bryophytes, and Lichens List:

- Officially listed by California or the federal government as endangered, threatened, or rare;
- A candidate for state or federal listing as endangered, threatened, or rare;
- Taxa which meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the *State CEQA Guidelines*; these taxa may indicate "none" under listing status, but note that all California Rare Plant Rank 1 and 2 and some Rank 3 plants may fall under Section 15380 of CEQA.
- A Bureau of Land Management, US Fish and Wildlife Service, or US Forest Service Sensitive Species;
- Taxa listed in the California Native Plant Society's Inventory of Rare and Endangered Plants of California as Rare Plant Rank 1 or 2;
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range but not currently threatened with extirpation;
- Population(s) in California that may be peripheral to the major portion of a taxon's range but are threatened with extirpation in California; and
- Taxa closely associated with a habitat that is declining in California at a significant rate (e.g., wetlands, riparian, vernal pools, old growth forests, desert aquatic systems, native grasslands, valley shrubland habitats, etc.).

For the purposes of this impact analysis, a special-status animal species is any taxon that satisfies one or more of the criteria listed by CDFW as categories for inclusion on the Special Animals list:

- Officially listed or proposed for listing under the state and/or federal Endangered Species Acts;
- State or federal candidate for possible listing;
- Taxa which meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the California Environmental Quality Act Guidelines;
- Taxa considered by the Department to be a Species of Special Concern (SSC);

- Taxa that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring;
- Populations in California that may be on the periphery of a taxon's range, but are threatened with extirpation in California;
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, vernal pools, etc.); and
- Taxa designated as special status, sensitive, or declining species by other state or federal agencies, or non-governmental organization (NGO).[10]

Those special-status species that are known to be present or that may potentially be present on the project site are listed below, as well as a discussion of potential impacts (construction and operational) that may arise as a result of project implementation.

Plants

No special-status plant species are expected to occur on the project site. Therefore, no impacts to special-status plant species would occur with implementation of the proposed project.

Wildlife

Special-status wildlife species are not considered likely to nest or otherwise depend upon resources on the subject property for any stage of their life history. However, the proximity of the site to Burton Chase Park, where special-status bird species are known to nest and forage, means there is still a limited potential for nesting on-site. There is the further potential for construction noise and activities to impact nesting birds on the Park site.

Additionally trees, shrubs and other substrata on the parcel provide nesting opportunities for common bird species protected under the MBTA. Should implementation of the project occur during the active nesting season, both direct and indirect impacts to active nests of birds protected under the MBTA, both

[10] State, federal and NGO lists compiled in the CDFW Special Animals list include the American Bird Conservancy Green List, the American Fisheries Society categories of risk for marine, estuarine & diadromous fish stocks; the Audubon Watch List; the list of Bureau of Land Management Sensitive Species; the list of California Department of Forestry and Fire Protection Sensitive species; the CDFW list of Fully Protected species; the list of USDA Forest Service Sensitive species; the list of Fish and Wildlife Service Birds of Conservation Concern; the Marine Mammal Commission list of Marine Mammal Species of Special Concern; the United States Bird Conservation Watch List; the Western Bat Working Group High, Medium and Low Priority species categories; and the Xerces Society Red list of pollinators.

on- and off-site, would be considered significant. To insure against this potential impact, mitigation measure **Mitigation Measure 4.3-1** shall be implemented.

Mitigation Measures

4.3-1: Prior to and during all project-related construction activities, applicant shall strictly comply with all applicable policies contained in Policy Nos. 23 (Marina del Rey Tree Pruning and Tree Removal Policy), 34 (Marina del Rey Leasehold Tree Pruning and Tree Removal Policy), and 37 (Biological Report & Construction Monitoring Requirements) of the certified LCP.

Residual Impacts

With proper implementation of **Mitigation Measure 4.3-1**, impacts to active nesting birds would be less than significant.

Threshold 4.3-2: **Could the proposed project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?**

For the purposes of this impact analysis, a sensitive natural community is one regulated by Public Resources Code Section 21083.4 (Oak Woodlands Protection) or one which is identified as such in the North Area Plan or by CDFW and which meets one or more of the following criteria:

- Habitat of rare, threatened or endangered species
- Riparian areas and wetlands subject to state and federal regulations
- Riparian woodlands, sycamore-alder riparian woodlands, southern and valley oak woodlands, and California walnut woodlands
- A vegetation alliance or association that has been assigned a G1, G2, or G3 rarity code on the Department of Fish and Game Biogeographic Data Branch Vegetation Classification and Mapping Program List of California Vegetation Alliances, dated December 28, 2009

There are no riparian habitats or any other sensitive natural communities present on-site. However, the documented heronries on the adjacent Burton Chase Park would be considered habitat for sensitive species. As such, project impacts would be considered potentially significant without mitigation.

Mitigation Measures

Implementation of **Mitigation Measure 4.3-1** would reduce potential impacts to a less than significant level.

Residual Impacts

Impacts would be less than significant.

Threshold 4.3-3: **Could the proposed project have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by § 404 of the federal Clean Water Act or California Fish & Game Code § 1600, et seq. through direct removal, filling, hydrological interruption, or other means?**

The proposed project would not 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.*), as no such features exist on the project site. No jurisdictional waters or wetlands are located on the project site. The project would not result in an impact to these resources.

Mitigation Measures

No mitigation is required or recommended.

Residual Impacts

No impact would occur.

Threshold 4.3-4: **Could the proposed project result in substantial interference 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?**

The proposed project would not interfere with local or migratory fish or wildlife species or with native resident or migratory wildlife corridors. However the rookeries identified on the adjacent Burton Chase Park would be considered a native wildlife nursery sites. As such, project implementation during the nesting season would be considered potentially significant.

Mitigation Measures

Implementation of **Mitigation Measure 4.3-1** would reduce potential impacts to a less than significant level.

Residual Impacts

Impacts would be less than significant.

Threshold 4.3-5: **Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10 percent canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshuas, Southern California black walnut, etc.);**

The project site contains a variety of landscape trees, but does not contain any oak woodlands or other unique native trees. Therefore, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant, no mitigation is required.

Residual Impacts

Impacts would be less than significant.

Threshold 4.3-6 **Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (LA County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (LA County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (LA County Code, Title 22, § 22.56.215), and Sensitive Environmental Resource Areas (SERAs) (LA County Code, Title 22, Ch. 22.44, Part 6)?**

The project site is not located in a Wildflower Reserve Area, does not support any trees protected under the Los Angeles County Oak Tree Ordinance, does not occur within an SEA or and SERA. The Department of Beaches and Harbors utilizes the Conservation and Management Plan for Marina del

Rey.[11] LUP Chapter 5 includes policies protecting colonial nesting birds. As previously described, if nesting of colonial nesting birds is occurring on or adjacent to the site when construction begins, impacts would be potentially significant.

Mitigation Measures

Implementation of **Mitigation Measure 4.3-1** would reduce potential impacts to a less than significant level.

Residual Impacts

Impacts would be less than significant.

Threshold 4.3-7: Would the project conflict with the provisions of an adopted state, regional, or local habitat conservation plan?

The project site is not located in an area of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved regional or state habitat conservation plan. The Department of Beaches and Harbors does utilize the Conservation and Management Plan for Marina del Rey.[12] The project as proposed does not conflict with any of the recommended conservation or management actions identified in the plan. However, LUP Chapter 5 could be interpreted as a local conservation plan. As such, project related impacts could be considered potential significant.

Mitigation Measures

Implementation of **Mitigation Measure 4.3-1** would reduce potential impacts to a less than significant level.

Residual Impacts

Impacts would be less than significant.

---

11 Hamilton, Robert A. and Daniel S. Cooper. 2010. "Conservation & Management Plan for Marina del Rey, Los Angeles County, California." Prepared for County of Los Angeles, Department of Beaches and Harbors and Department of Regional Planning. March 23, 2010.

12 Hamilton, Robert A. and Daniel S. Cooper. 2010. "Conservation & Management Plan for Marina del Rey, Los Angeles County, California." Prepared for County of Los Angeles, Department of Beaches and Harbors and Department of Regional Planning. March 23, 2010.

4.3.6 CUMULATIVE IMPACTS

Cumulative biological impacts tend to center around habitat loss. Although the entire project site is already developed, a substantial issue in the Marina del Rey area is the loss of trees suitable for colonial nesting water birds. The cumulative tree removals throughout the area have resulted in significant changes to availability for nesting by water birds. This has resulted in birds moving toward sites with remaining mature trees creating intensive conflicts at those properties. The proposed project includes the removal of 91 trees. Such a loss of mature trees would be considered cumulatively significant. However, compliance with the LUP tree policies (i.e., replacing all removed trees at a 1:1 ratio) would ensure cumulative impacts to suitable nesting trees would be less than significant as the overall number of trees in the vicinity would remain consistent.

Mitigation Measures

The project is required to comply with LUP policies, which would reduce potentially significant impacts to a less than significant level. Therefore no additional mitigation is required

Residual Impacts

Cumulative impacts would be less than significant.

4.4 GEOLOGY AND SOILS

4.4.1 INTRODUCTION

This section analyzes the geology, soils, and seismicity of the project site, identifies on-site soil conditions that have the potential to impact the proposed project, and recommends mitigation measures to reduce the significance of such impacts to an acceptable level. This section utilizes information from the Marina del Rey Local Coastal Program (LCP) and the findings of the Geotechnical Engineering Report prepared for the project site by Group Delta Consultants, dated June 1, 2012, Addendum 1 – Geotechnical Engineering Report, dated March 11, 2014, Addendum 2 – dated May 15, 2014 and Addendum 3 – dated June 16, 2014. All reports are included in this EIR in **Appendix 4.4**.

The purpose of the geotechnical report was to define the geologic conditions present on the site, the presence of any geologic hazards, and to provide data for the design of foundations, walls below grade, slabs on grade, paving and grading. The existing soil and groundwater conditions at the site were also investigated, including the corrosion potential of the soils.

Due to the potential for methane gas to occur on the project site, a Site Methane Investigation Report was completed by Methane Specialists, dated September 19, 2012. This report has been included in the EIR in **Appendix 4.4**.

4.4.2 ENVIRONMENTAL SETTING

The site is located within the Los Angeles coastal plain, which is the westernmost portion of California's Los Angeles Basin Structural and Geomorphic province. The Los Angeles Basin is bounded to the north by the Santa Monica Mountains and Elysian Hills, to the east by the Puente Hills, to the west by the Palos Verdes Peninsula and Pacific Ocean, and to the south by the Santa Ana Mountains and San Joaquin Hills. The project site is gently sloped and is not in an area of high slope instability. The topography of the site ranges from a height of 18 feet above sea level at the northeastern portion of the site near Admiralty Way, sloping down to a height of 10 feet above sea level at the southwestern portion of the site, adjacent to the marina.

4.4.2.1 Geologic Conditions

Based on the Quaternary Geologic Map of the Venice Quadrangle, the site and surrounding area are underlain by some artificial fill and native young alluvial fan and floodplain deposits. The surface of the subject site (Approx. El. +10 to +18 feet above sea level) contains manmade improvements consisting of

six single-story buildings, asphalt concrete pavement, curbing, sidewalk, and buried utilities. Below the surface improvements, the site is underlain by artificial fill, and native deposits predominantly consisting of firm to stiff clays interbedded with thin layers of silty sands, underlain by very dense sand.

4.4.2.2 Faults and Seismicity

The proposed project is located in a seismically active area with known fault zones. Earthquakes occur frequently in Southern California. The project site is not located on or near a delineated Alquist-Priolo Earthquake Fault Zone. As detailed in the Seismic Hazards map in the Marina del Rey Land Use Plan, no active or potentially active faults run through the project site.[1] Furthermore, no active or potentially active faults with the potential for surface fault rupture are known to be located directly beneath the site. Therefore, the potential for surface rupture during the design life of the proposed project is considered low.

The closest active fault to the site is the Santa Monica fault. The Santa Monica fault has been mapped approximately 4.6 miles from the site. Other faults proximal to the project site are shown in **Table 4.4-1**. Nearby faults include the Newport-Inglewood Fault, the Hollywood fault, and the Puente Hills Blind Thrust, located 4.6 miles, 5.4 miles, and 9.7 miles from the site, respectively.

Table 4.4-1
Summary of Faults Close to the Project Site

Fault Name	Fault Type	Maximum Moment Magnitude	Distance to the Project Site (Miles)
Newport-Inglewood Fault	RLSS	7.5	4.6
Santa Monica Fault	R	6.6	4.4
Hollywood Fault	LLSS	6.6	5.4
Puente Hills Blind Thrust	R	7.3	9.7

RLSS – Right Lateral Strike Slip
R – Reverse
LLSS – Left Lateral Strike Slip
Source: Geotechnical Engineering Report Proposed Commercial and Retail Development, Marina del Rey – Parcel 44, Group Delta Consultants, Inc. June 1, 2012.

1 Marina del Rey LUP, Section 10, Map 23, page 10-7

The site is not exposed to a greater than normal seismic risk compared to other areas of Southern California. However, based on the active and potentially active faults occurring in the region, the site will likely be subjected to significant ground shaking in the event of an earthquake.

4.4.2.3 Slope Stability and Landslides

Topographically, the project site gently sloped toward the basin and is not located in an immediate area containing major landslides, per the County of Los Angeles General Plan Figure 9.1, "Seismic and Geotechnical Hazard Zones Policy Map."[2] Slope stability maps in the County's General plan indicate that the project site lies within a stable area. Elevations on the project site range from 10 to 18 feet above sea level.

4.4.2.4 Tsunamis

All low-lying areas along California's coast are potentially subject to tsunami inundation. Tsunamis are long-period waves generated primarily from distant and local offshore earthquakes, landslides, or volcanic eruptions. The magnitude of this potential hazard is a function of the coastline configuration, sea floor topography, individual wave characteristics, and distance and direction from the source.

Two tsunamis induced by the 1960 Chile Earthquake caused damage in the Los Angeles and Long Beach harbors. In 1960, waves up to 5 feet in height occurred in the Cerritos Channel, and currents up to 12 knots were reported.

While the majority of the Southern California coastal areas do not have a significant potential to be inundated as a result of tsunamis, according to the Los Angeles County Seismic Safety Element (1990), the site is located in a tsunamis hazard zone. According to recently prepared tsunami-related inundation maps by the State of California, the maximum potential run-up height for the Marina del Rey area could be 15 feet.[3] The County of Los Angeles has included the site within the limits of a Tsunami Inundation Zone, and the site could be subjected to the effects of a seismic sea wave. Please refer to **Section 4.8, Hydrology and Water Quality**, for a discussion of potential tsunami impacts.

---

2 http://planning.lacounty.gov/assets/upl/project/gp_2035_FIG_C-1_appendix2012.pdf, accessed November 20, 2012.

3 State of California, 2009, Tsunami Inundation Map for Emergency Planning, Venice Quadrangle, Los Angeles County; produced by California Emergency Management Agency, California Geological Survey, and University of Southern California – Tsunami Research Center; dated March 1, 2009, mapped at 1:24,000 scale.

4.4.2.5 Liquefaction and Lateral Spreading

As detailed in the California Geologic Survey (formerly the California Division of Mines and Geology) Seismic Hazard Zones Map California Dept. of Conservation 2001) for the Venice Quadrangle, the project site is located in an area prone to liquefaction. The site also lies within a potential liquefaction zone as detailed in the County of Los Angeles General Plan Seismic Zones Map. Liquefaction involves the sudden loss in strength of a saturated, cohesionless soil (predominantly sand) caused by the buildup of pore water pressure during cyclic loading, such as that produced by an earthquake. This increase in pore water pressure can temporarily transform the firm soil into a fluid mass, resulting in vertical settlement and can also cause lateral ground deformations. Typically, liquefaction occurs in areas where there are loose sands and the depth to groundwater is less than 50 feet from the surface. At the proposed project site, the depth to groundwater changes with the tidal movements. The historic high depth to groundwater is +5 mean sea level (MSL) or 5 to 13 feet below the surface. Seismic shaking can also cause soil compaction and ground settlement without liquefaction, such as the settlement of dry sands above the water table.

Under cyclic loading, lateral spreading can occur on gently sloping ground or on virtually flat ground adjacent to bodies of water. According to the Geotechnical report prepared for the site, the subject site is underlain by approximately 25 to 30 feet of firm to stiff clays interbedded with thin layers of silty sands, underlain by very dense sand. The interbedded thin layers of silty sands within the clay layer are susceptible to liquefaction. However, these interbedded thin sandy layers appear to be localized and do not form a continuous liquefiable layer. Therefore, even with a conservative assumption of continuity of these thin layers liquefaction induced subsidence does not appear to be an issue on the project site.

According to the Geotechnical Report prepared for the project site, the site is not located within an area of known subsidence associated with fluid withdrawal (groundwater or petroleum) or hydrocompaction. The site is located within the Playa Del Rey Oil Field. Subsidence associated with petroleum production has been identified in some oil fields in the Los Angeles Basin; however, subsidence has not been identified in the Playa Del Rey Oil Field. Consequently, the potential for future subsidence within the oil field is considered low.

As detailed on the State of California, Division of Oil and Gas (CDOG) Division of Oil, Gas and Geothermal Resources (DOGGR) Los Angeles County Map 120, Playa del Rey, no active or abandoned oil wells occur on the project site. In the event that old oil wells are encountered during construction, they would be reported to the CDOG and properly abandoned in accordance with the current CDOG requirements.

4.4.2.6 Methane Gas

The site is located within the limits of a known oil field. Although oil wells are not known to be located within the limits of the site, there is a possibility that methane gas at depth could migrate through the estuary deposits and fill to the surface. Peat deposits may also be located beneath the site and would be subject to oxidation and settlement. Methane gas from peat decomposition or subsurface petroleum deposits may be present at the site or could migrate to the surface in the future. A Methane Investigation Report for the proposed project site was completed by Methane Specialists, dated September 19, 2012 and is included in **Appendix 4.4**. Methane Specialists bored 43 shallow methane monitoring probe wells at 4 feet below surface grade (bsg) and 23 deeper wells at five to 7 feet bsg. Methane gas was detected at one probe location, but no significant methane gas pressures were detected at any of the probe locations. According to Section 110.4, Title 26, Volume 1, of the California Building Code, of the Los Angeles County Code, methane gas mitigation is required for new buildings or structures located within 25 feet of an active, abandoned, or idle oil or gas well or where significant methane gas pressures are detected. The proposed project site is at least 200 feet from all such wells and no significant methane gas pressure were detected on the project site.

4.4.3 REGULATORY FRAMEWORK

4.4.3.1 State

California Geological Survey

The California Geological Survey (CGS) is responsible for enforcing the Alquist-Priolo Earthquake Fault Zoning Act and enforcing the Seismic Hazards Mapping Act. Both are described below.

Alquist-Priolo Earthquake Fault Zoning Act

The purpose of Alquist-Priolo Earthquake Fault Zoning Act (formerly called the Alquist-Priolo Special Studies Zones Act)[4] is to prohibit the location of most structures for human occupancy across the traces of active surface faults, which are faults that have ruptured the ground surface in the past 11,000 years, and to mitigate the hazard of fault rupture. The act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. Under the act, the State Geologist (Chief of the CGS), is required to delineate "earthquake fault zones" (EFZs) along known active faults in California. The boundary of an EFZ is generally 500 feet from major active faults, and 200 to 300 feet from well-defined

4 California Public Resources Code, Sec. 2621 et seq. The Alquist-Priolo Special Studies Zones Act was signed into law in 1972. In 1994, it was renamed the Alquist-Priolo Earthquake Fault Zoning Act. The act has been amended 10 times.

minor faults. Cities and counties affected by the EFZs must withhold development permits for certain construction projects proposed within an EFZ until geologic investigations demonstrate that a site is not significantly threatened by surface displacement from future faulting. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet).

Seismic Hazards Mapping Act

Under the CGS's Seismic Hazards Mapping Act,[5] which was passed in 1990, seismic hazard zones are to be identified and mapped to assist local governments for planning and development purposes. The Seismic Hazards Mapping Act differs from the Alquist-Priolo Earthquake Fault Zoning Act in that it addresses non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, landslides, other types of ground failure, and other hazards caused by earthquakes. The CGS provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations.[6]

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC). The 2013 edition of the CBC is based on the 2013 International Building Code (IBC) as published by the International Code Council, together with other amendments provided in local/municipal codes, and is adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in the California Occupational Safety and Health Administration (Cal-OSHA) regulations[7] and in Section A33 of the CBC.

Standard residential, commercial, and light industrial construction is governed by the CBC, to which cities and counties add amendments. Due to the type, quality, and age of some of the buildings, the 2001 State Historical Building Code[8] (SHBC) applies to the strengthening of unreinforced historic structures, while the 1986 Unreinforced Masonry Law[9] applies to the identification, reporting, and retrofit of non-historic unreinforced masonry buildings. The 2013 California Building Code[10] includes additions to

---

5 California Public Resources Code, Sec. 2690 et seq.

6 California Geological Survey, "Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California," 1997.

7 California Code of Regulations, Title 24, Part 8, "California Historical Building Code."

8 California Code of Regulations, Title 24, Part 8, "California Historical Building Code."

9 California Government Code, Section 8875 et seq.

10 California Code of Regulations, Title 24, Part 2, "California Building Code."

the previous building code that make it more stringent, in particular with regard to seismic and earthquake conditions for critical structures such as essential facilities, public schools, and hospitals. The CBC, which is included in Title 24 of the California Administrative Code, is a compilation of three types of building standards from three different origins:

- Those adopted by state agencies without change from building standards contained in national model codes (e.g., the IBC).
- Those adopted and adapted from the national model code standards to meet California conditions (e.g., most of California is in Seismic Design Categories D and E).
- Those authorized by the California legislature that constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns (e.g., the specification of Certified Engineering Geologist rather than engineering geologist).

The seismic performance objectives for both buildings and non-building structures addressed in the previous (1997) Uniform Building Code (UBC), seismic zones 3 and 4 are now Seismic Design Category D, E, or F under the 2013 CBC. Most of the residential projects in California will fall into Seismic Design Category D or E. For the proposed planning area, the seismic objectives are to:[11]

- sustain minimal or no damage under minor earthquake ground motion,
- limit damage to non-structural features under moderate level earthquake ground motion, and
- limit damage to structural and non-structural features without collapse under major level earthquake ground motion.

In addition, the CBC regulates excavation, foundations, and retaining walls; contains specific requirements pertaining to site demolition, exaction, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials; and regulates grading activities, including drainage and erosion control. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in the Cal-OSHA regulations.

4.4.4 IMPACT ANALYSIS

4.4.4.1 Thresholds of Significance

The County of Los Angeles includes thresholds of significance in its Initial Study checklist. In general, these thresholds are similar to the applicable thresholds listed in Appendix G of the *California*

11 Sladden, 2006, 4.

Environmental Quality Act (CEQA) Guidelines. Where the thresholds differ it is noted below. Therefore, the proposed project would have a potentially significant impact with respect to geology and soils if it would:

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

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction and lateral spreading.

iv) Landslides.

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

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

e) Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater.

f) Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element

The Initial Study determined that the project would result in less than significant impacts in regard to the thresholds listed below. Therefore these thresholds will not be discussed further in this document. The Initial Study has been attached to this document as **Appendix 1.0**.

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

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking.

iv) Landslides.

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

e) Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater.

f) Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element.

4.4.4.2 Methodology

Potential impacts associated with the proposed project are evaluated on a qualitative and quantitative basis through a comparison of anticipated project effects on existing geologic resources. The change in the land use is significant if the effects described below occur. The evaluation of project impacts as based on professional judgment, analysis of the County's safety policies and the significant criteria established by Appendix G of the *State CEQA Guidelines*.

4.4.4.3 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.4-1: The project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

As detailed in the California Seismic Hazard Zones Map, the project site is within a liquefaction zone. If a severe earthquake were to occur, the soils at the site would be susceptible to liquefaction, which could result in several inches of settlement and lateral spreading. Liquefaction-induced lateral spreading of the soils occurring on the project location was evaluated in the Geotechnical Report, based on the methodology recommended by NCEER (Northwestern Center for Engineering Education Research). The liquefaction potential was also evaluated using standard penetration test (SPT) blow counts from the mud rotary borings. Liquefaction analysis was also performed using Cone Penetrometer Technology (CPT) data. CPT data were used because they provide a continuous measurement of soil resistance and accurate stratigraphy of the site.

The liquefaction analysis was performed using the design groundwater level of elevation plus 5 feet, the predominant moment magnitude of 6.8 and a peak ground acceleration (PGA)[12] of 0.62 g (gravity).

12 Peak ground acceleration is a measure of how hard the earth is shaken in a given geography.

The liquefaction analysis indicated that some of the interbedded thin layers of silty sand and sandy silt underlying the site are susceptible to liquefaction during the design earthquake event. The total dynamic settlement based on the updated PGA on average varies from about 0.5 to 0.75 inch, with maximums in the range of 1 to 2 inches. The liquefaction analysis is included in the Geotechnical Report and Addendum 1, which has been attached to this EIR in **Appendix 4.4**.

The upper 5 feet of the subgrade soils at this site consist predominantly of silty sand and sandy silt that have low expansion potential. However, there are areas within this site that medium expansive clays and clayey sand exists.

As defined in the Geotechnical Report prepared for the project site, consequences of liquefaction at the project site include ground subsidence/settlement and temporary loss of shear strength, which, in turn, may result in lateral spreading of the ground.

The potential for lateral spreading at the site was evaluated following the screening analysis outlined in SP 117A – Guidelines for Evaluating and Mitigating Seismic Hazards in California (2008). The analysis conservatively assumes continuity in the thin interbedded sand layers susceptible to liquefaction. The analysis indicates the potential for lateral displacement to between 1.0 and 1.3 inches, well with the acceptable range.[13] Therefore, liquefaction induced lateral spreading and seismic slope stability is not deemed to be an issue at this site.[14, 15, 16]

If the proposed buildings were to be supported on inadequately designed foundations, without ground improvement, seismic settlement under footings could potentially cause a significant impact. Implementation of the mitigation measures described below would reduce this potentially significant impact to a less than significant impact.

Due to the geologic nature of the area, the project site may contain methane gas deposits which could migrate to the surface. A Site Methane Investigation Report was prepared for the project site. Forty-three methane monitoring probe borings were placed at a range of 4 to 7 feet below ground surface. While

---

13 SP 117A – Guidelines for Evaluating and Mitigating Seismic Hazards in California (2008) defines "small" localized lateral displacement as 0.49 feet or less. Further, if it is determined that lateral displacement will be less than 1.64 feet (0.5 meter), foundations can be designed to withstand projected movement.

14 Group Delta Consultants. *Addendum 1 – Geotechnical Engineering Report Update to Seismic Design Parameters Proposed Commercial and Retail Development Marina del Rey – Parcel 44*, March 11, 2014

15 Group Delta Consultants. Addendum 2 –Response to County Comments, Supplemental Lateral Spreading Analysis Proposed Commercial and Retail Development Marina del Rey – Parcel 44, May 15, 2014

16 Group Delta Consultants, Addendum 3 - Response to County Comments Supplemental Lateral Spreading Analyses Proposed Commercial and Retail Development Marina Del Rey - Parcel 44, June 16, 2014.

methane gas was detected below ground surface, no significant methane pressure was detected. Based on the results of the site investigation, DOGGR map research and the Los Angeles County Methane requirements, methane mitigation is not required, but soil gas monitoring is recommended during excavation. The Geotechnical Report prepare for the proposed project includes specific recommendations related to project design. Adherence to the recommendations in the Geotechnical report will ensure impacts will remain less than significant.

Mitigation Measures

None required. Adherence to the recommendations in the Geotechnical report will ensure impacts will remain less than significant.

Residual Impacts

Impacts will be less than significant.

Impact 4.4-2: **The project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.**

The project site lies in an area as having a potential for soil liquefaction potential due to the silty fine sands and sandy silts soils underlying the area, the presence of shallow groundwater and the proximity of the site to the to the Santa Monica Fault (4.4 miles) and Newport-Inglewood Fault (4.6 miles). See the discussion under **Impact 4.4-1** for a full description of the liquefaction testing completed for the project site and discussion of potential impacts.

The main consequence of strong ground motion at the proposed project site is the potential for slope instability and lateral ground spreading toward the main channel (to the west and southwest of the project site) of Marina del Rey. Under cyclic loading, lateral spreading can occur on gently sloping ground or on virtually flat ground adjacent to bodies of water. The subject site is underlain by approximately 25 to 30 feet of firm to stiff clays interbedded with thin layers of silty sands, underlain by very dense sand. The interbedded thin layers of silty sands within the clay layer are susceptible to liquefaction. Although, these interbedded thin sandy layers appear to be localized and do not form a continuous liquefiable layer even with a conservative assumption of continuous liquefaction. Therefore, lateral spreading does not appear to be an issue at this site.

Mitigation Measures

Adherence to the recommendations in the Geotechnical report will ensure impacts will remain less than significant.

Residual Impacts

Impacts will be less than significant.

Impact 4.4-3: The project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

The project site is not located on expansive soils, as defined by Table 18-1-B of the Uniform Building Code (1994). The existing upper soil fills of the project site consist mostly on non-expansive sandy soils. However, any import material should be tested for expansion potential prior to importing. During construction any expansive clays will be mixed with on-site sandy soils to reduce expansive potential. The use of expansive soils on the site would be potentially significant. With implementation of the recommendations in the Geotechnical report, impacts would be less than significant.

Mitigation Measures

None required. Adherence to the recommendations in the Geotechnical report will ensure impacts will remain less than significant.

Residual Impacts

With mitigation, impacts will be less than significant.

4.4.5 CUMULATIVE IMPACTS

The geographic context of the analysis of rupture of a fault, strong seismic ground shaking, liquefaction, landslide, lateral spreading subsidence, collapse, and expansive soils are site specific, rather than cumulative in nature. This is because each development site has unique geologic considerations that would be subject to specific site development and construction standards. In this way, potential cumulative impacts resulting from geological, seismic and soil conditions would be reduced to less than significant on a site-by-site basis by modern construction methods and enforcement of code requirements. Thus, cumulative impacts associated with other related projects are considered to be less than significant and the project would not result in a cumulatively considerable contribution to a significant geologic

impact. In addition, development of the proposed project and other related projects would comply with the most stringent safety standards, consistent with all applicable local, state, and federal regulations, such as the California Building Code.

Mitigation Measures

No mitigation measures are proposed or required.

Residual Impacts

Cumulative impacts will be less than significant.

4.5 GREENHOUSE GASES

4.5.1 INTRODUCTION

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, which is a part of climate change, is the observed increase in average temperature of the Earth's surface and atmosphere. One identified cause of global warming is an increase of greenhouse gas (GHG) emissions in the atmosphere. GHGs are those compounds in the Earth's atmosphere that play a critical role in determining the Earth's surface temperature. Specifically, GHGs allow the sun's rays to enter the Earth's atmosphere, but trap the energy that radiates back from the Earth to space, resulting in a warming of the atmosphere. The increase in net earthward movement of this radiation is known as the "greenhouse effect."

This section describes the current state of the regulations and programs addressing GHG emissions and global climate change in California. This section identifies plans and policies developed by federal, state, and local authorities to reduce GHG emissions. This section identifies and discusses inventories of GHG emissions associated with implementation of the proposed project, evaluates the project's potential global climate change impacts, and identifies mitigation measures to reduce potential impacts. GHG emission calculations conducted for the proposed project are contained within **Appendix 4.2** of this EIR.

Implementation of the project would result in increased GHG emissions associated from the operations of the proposed project and car trips to and from the proposed project. The proposed project is estimated to emit maximum net emissions of approximately 2,988 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year without the implementation of GHG-reducing project design features and mitigation measures. The proposed project's GHG emissions would be below the draft South Coast Air Quality Management District (SCAQMD) GHG threshold of 3,000 $MTCO_2e$ per year. Therefore, the project would have a less than significant impact on global climate change.

4.5.2 ENVIRONMENTAL SETTING

4.5.2.1 Climate Change and Greenhouse Gas Background

Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer).[1] Climate change may result from

- natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;
- natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and
- human activities that change the atmosphere's composition (e.g., burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

The natural process through which heat is retained in the troposphere[2] is called the greenhouse effect. The greenhouse effect traps heat in the troposphere through a three-fold process as follows: (1) short-wave radiation in the form of visible light emitted by the Sun is absorbed by the Earth as heat; (2) long-wave radiation re-emitted by the Earth; and (3) GHGs in the atmosphere absorbing or trapping the long-wave radiation and re-emitting it back towards the Earth and into space. This third process is the focus of current climate change actions.

While water vapor and carbon dioxide (CO_2) are the most abundant GHG, other trace GHGs have a greater ability to absorb and re-radiate long-wave radiation. To gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-emit long-wave radiation over a specific period. The GWP of a gas is determined using CO_2 as the reference gas with a GWP of 1 over 100 years. For example, a gas with a GWP of 10 is 10 times more potent than CO_2 over 100 years. The use of GWP allows GHG emissions to be reported using CO_2 as a baseline. The sum of each GHG multiplied by its associated GWP is referred to as carbon dioxide equivalents (CO_2e). This essentially means that 1 metric ton of a GHG with a GWP of 10 has the same climate change impacts as 10 metric tons of CO_2.

---

1 US Environmental Protection Agency, "Glossary of Climate Change Terms," http://www.epa.gov /climatechange/glossary.html#Climate_change. 2008.

2 The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.

State law defines GHGs to include the following compounds:[3]

- **Carbon Dioxide (CO_2).** CO_2 is primarily generated from fossil fuel combustion from stationary and mobile sources. CO_2 is the most widely emitted GHG and is the reference gas (GWP of 1) for determining the GWPs of other GHGs.

- **Methane (CH_4).** Methane is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of methane is 21.

- **Nitrous Oxide (N_2O).** Is produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 310.

- **Hydrofluorocarbons (HFCs).** HFCs typically are used as refrigerants in both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is growing particularly as the continued phase-out of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) gains momentum. The GWPs of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23.

- **Perfluorocarbons (PFCs).** Perfluorocarbons are compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. Perfluorocarbons are potent GHGs with a Global Warming Potential several thousand times that of carbon dioxide, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years).[4] The GWPs of PFCs range from 5,700 to 11,900.

- **Sulfur Hexafluoride (SF_6).** Sulfur hexafluoride is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. Sulfur hexafluoride has a GWP of 23,900. However, it is not prevalent in the atmosphere (4 parts per trillion [ppt] in 1990 versus 365 parts per million [ppm] of CO_2).[5]

The primary GHGs of concern relative to the proposed project are CO_2, CH_4, and N_2O. These three GHGs are generally emitted from combustion activities. HFCs are associated with refrigeration and air conditioning and are accounted for in this analysis with respect to motor vehicle air conditioning system leakage. Refrigerants, such as those used by the proposed specialty market are only emitted through leaks and are therefore not included in the analysis. The other GHGs listed above are related to specific

---

3 All Global Warming Potentials are given as 100-year values. Unless noted otherwise, all Global Warming Potentials were obtained from the Intergovernmental Panel on Climate Change. *Climate Change 1995: The Science of Climate Change – Contribution of Working Group I to the Second Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK: Cambridge University Press, 1996.

4 Energy Information Administration, "Other Gases: Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride," http://www.eia.doe.gov/oiaf/1605/gg00rpt/other_gases.html. n.d.

5 US Environmental Protection Agency, "High GWP Gases and Climate Change," http://www epa gov /highgwp/scientific.html#sf6. n.d.

industrial uses and not anticipated to be emitted in measurable or substantial quantities by the proposed project.

4.5.2.2 State of California Greenhouse Gas Emissions Inventory

The California Air Resources Board (CARB) compiles GHG inventories for the State of California. Based on the 2008 GHG inventory data (the latest year for which data are available), California emitted 474 $MMTCO_2e$ (million $MTCO_2e$) including emissions resulting from imported electrical power in 2008.[6] Based on the CARB inventory data and GHG inventories compiled by the World Resources Institute, California's total statewide GHG emissions rank second in the United States (Texas is number one) with emissions of 417 $MMTCO_2e$ excluding emissions related to imported electrical power.[7]

The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources, industry, agriculture and forestry, and other sources, which include commercial and residential activities. **Table 4.5-1, GHG Emissions in California**, provides a summary of GHG emissions reported in California in 1990 and 2008 separated by categories defined by the United Nations Intergovernmental Panel on Climate Change (IPCC).

Between 1990 and 2008, the population of California grew by approximately 8.1 million (from 29.8 to 37.9 million).[8] This represents an increase of approximately 27.2 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from $788 billion in 1990 to $1.8 trillion in 2008 representing an increase of approximately 128 percent (over twice the 1990 gross state product).[9] Despite the population and economic growth, California's net GHG emissions grew by only approximately 11 percent. The California Energy Commission (CEC) attributes the slow rate of growth to the success of California's renewable energy programs and its commitment to clean air and clean energy.[10]

---

6 California Air Resources Board, "California Greenhouse Gas 2000-2008 Inventory by Scoping Plan Category - Summary," http://www.arb.ca.gov/cc/inventory/data/data.htm. 2010.

7 "California Greenhouse Gas 2000-2008 Inventory by Scoping Plan Category - Summary," 2010.

8 US Census Bureau, "Data Finders," http://www.census.gov/. 2009; California Department of Finance, "E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-1008, with 2000 Benchmark," http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2009/. 2010.

9 California Department of Finance, "Financial & Economic Data: Gross Domestic Product, California," http://www.dof.ca.gov/HTML/FS_DATA/LatestEconData/FS_Misc.htm. 2010. Amounts are based on current dollars as of the data of the report. June 2, 2009.

10 California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004*, 2006.

Table 4.5-1
GHG Emissions in California

Source Category	1990 ($MMTCO_2e$)	Percent of Total	2008 ($MMTCO_2e$)	Percent of Total
ENERGY	**386.41**	**89.2%**	**413.80**	**86.6%**
Energy Industries	157.33	36.3%	171.23	35.8%
Manufacturing Industries & Construction	24.24	5.6%	16.67	3.5%
Transport	150.02	34.6%	173.94	36.4%
Other (Residential/Commercial/Institutional)	48.19	11.1%	46.59	9.8%
Non-Specified	1.38	0.3%	0.00	0.0%
Fugitive Emissions from Oil & Natural Gas	2.94	0.7%	3.28	0.7%
Fugitive Emissions from Other Energy Production	2.31	0.5%	2.09	0.4%
INDUSTRIAL PROCESSES & PRODUCT USE	**18.34**	**4.2%**	**30.11**	**6.3%**
Mineral Industry	4.85	1.1%	5.35	1.1%
Chemical Industry	2.34	0.5%	0.06	0.0%
Non-Energy Products from Fuels & Solvent Use	2.29	0.5%	1.97	0.4%
Electronics Industry	0.59	0.1%	0.80	0.2%
Substitutes for Ozone Depleting Substances	0.04	0.0%	13.89	2.9%
Other Product Manufacture and Use	3.18	0.7%	1.66	0.3%
Other	5.05	1.2%	6.39	1.3%
AGRICULTURE, FORESTRY, & OTHER LAND USE	**19.11**	**4.4%**	**24.42**	**5.1%**
Livestock	11.67	2.7%	16.28	3.4%
Land	0.19	0.0%	0.19	0.0%
Aggregate Sources & Non-CO_2 Sources on Land	7.26	1.7%	7.95	1.7%
WASTE	**9.42**	**2.2%**	**9.41**	**2.0%**
Solid Waste Disposal	6.26	1.4%	6.71	1.4%
Wastewater Treatment & Discharge	3.17	0.7%	2.70	0.6%
EMISSIONS SUMMARY				
Gross California Emissions	433.29		477.74	
Sinks from Forests and Rangelands	-6.69		-3.98	
Net California Emissions	426.60		473.76	

Sources:
[1] *California Air Resources Board, "California Greenhouse Gas 1990–2004 Inventory by IPCC Category - Summary," http://www.arb.ca.gov/cc/inventory/archive/archive.htm. 2010.*
[2] *California Air Resources Board, "California Greenhouse Gas 2000–2008 Inventory by IPCC Category - Summary," http://www.arb.ca.gov/cc/inventory/data/data.htm. 2010.*

4.5.2.3 Global Ambient CO_2, CH_4, and N_2O Concentrations

Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of carbon dioxide, methane, and nitrous oxide from before the start of the industrialization, around 1750, to over 650,000 years ago. For that period, it was found that carbon dioxide concentrations ranged from 180 ppm to 300 ppm. For the period from around 1750 to the present, global carbon dioxide concentrations increased from a pre-industrialization period concentration of 280 ppm to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range.[11] Recent values continue this upward trend. Global methane and nitrous oxide concentrations show similar increases for the same period (see **Table 4.5-2, Comparison of Global Pre-Industrial and Current GHG Concentrations**).

Table 4.5-2
Comparison of Global Pre-Industrial and Current GHG Concentrations

Greenhouse Gas	Natural Range for Last 650,000 Years [1] (ppm)	Year 1750 Concentrations (Early Industrial Period) [1] (ppm)	Year 2005 Concentrations [1] (ppm)	Year 2010 Concentrations [2, 3] (ppm)
Carbon Dioxide (CO_2)	180 to 300	280	379	390
Methane (CH_4)	0.320 to 0.790	0.715	1.774	1.870/1.745
Nitrous Oxide (N_2O)	0.180 to 0.260	0.270	0.319	0.323/0.322

Sources:

[1] *Intergovernmental Panel on Climate Change, Climate Change 2007: The Physical Science Basis, (2007) 3, 100.*

[2] *Dr. Pieter Tans, National Oceanic and Atmospheric Administration (NOAA)/Earth System Research Laboratory (ESRL), "Trends in Atmospheric Carbon Dioxide," http://www.esrl.noaa.gov/gmd/ccgg/trends. 2011.*

[3] *Carbon Dioxide Information Analysis Center, "Recent Greenhouse Gas Concentrations," http://cdiac.ornl.gov/pns/current_ghg.html. 2011. The first value for CH_4 and N_2O represents Mace Head, Ireland, a mid-latitude Northern-Hemisphere site, and the second value represents Cape Grim, Tasmania, a mid-latitude Southern-Hemisphere site.*

4.5.2.4 Effects of Global Climate Change

The primary effect of global climate change has been a rise in the average global tropospheric temperature of 0.2° Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005.[12] Climate change modeling using 2000 emission rates shows that further

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

12 Intergovernmental Panel on Climate Change, "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf. 2007.

warming is likely to occur, which would induce further changes in the global climate system during the current century.[13] Changes to the global climate system, ecosystems, and to California could include:

- declining sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;[14]
- rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets;[15]
- changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;[16]
- declining Sierra snowpack levels, which account for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;[17]
- increasing the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas located in the Southern California area and the San Joaquin Valley by the end of the 21st century;[18]
- increasing the potential for erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Delta and associated levee systems due to the rise in sea level;[19]
- increasing pest infestation making California more susceptible to forest fires;[20] and
- increasing the demand for electricity by 1 to 3 percent by 2020 due to rising temperatures resulting in hundreds of millions of dollars in extra expenditures.[21]

In June 2010, CARB released a report, *Climate Change Impact on Air Quality in California*, which studied how climate change will influence air quality in California through changes to meteorology and

---

13 "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," 2007.

14 "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," 2007.

15 Intergovernmental Panel on Climate Change, "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf. 2007.

16 "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," 2007.

17 California Environmental Protection Agency, Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2006.

18 *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2006.

19 *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2006.

20 *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2006.

21 *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2006.

emissions.[22] The report analyzed the effect of temperature and other meteorological changes consistent with future predicted meteorological conditions from Global Climate Models (GCMs) on ozone and particulate matter concentrations with a focus on the South Coast Air Basin and the San Joaquin Valley Air Basin. According to the modeling results, by 2050, temperature and other meteorological changes predicted to occur due to a changing climate could increase the number of days with conditions likely to encourage ozone concentrations greater than 90 parts per billion (equal to the state 1-hour average ozone ambient air quality standard) anywhere from 6 to 30 days per year under various GCM scenarios.[23] This climate-change increase is referred to as a climate penalty. The results of the report indicate that warmer future temperatures would require air quality management districts and air pollution control districts to implement additional emissions control regulations in affected air basins in California to offset the climate penalty, particularly for ozone.

In 2009, the California Natural Resources Agency (CNRA) published the *California Climate Adaptation Strategy*[24] as a response to the Governor's Executive Order S-13-2008. The CNRA report lists specific recommendations for state and local agencies to best adapt to the anticipated risks posed by a changing climate. In accordance with the *California Climate Adaptation Strategy*, the CEC was directed to develop a web site on climate change scenarios and impacts that would be beneficial for local decision makers.[25] The website, known as Cal-Adapt, became operational in 2011.[26] According to the Cal-Adapt website, the project region could result in an average increase in temperature of approximately 6 to 10 percent (about 3.5 to 5.8° Fahrenheit) by 2070–2090, compared to the baseline 1961-1990 period. According to the Cal-Adapt website, this represents a projection of potential future climate scenarios. The data are comprised of the average values from a variety of scenarios and models and are meant to illustrate how the climate may change based on a variety of different potential social and economic factors.

---

22 Kleeman, M. J., Chen, S., and Harley, R.A., *Climate Change Impact on Air Quality in California: Report to the California Air Resources Board*, 2010.

23 Kleeman, M. J., Chen, S., and Harley, R.A., *Climate Change Impact on Air Quality in California: Report to the California Air Resources Board*, 2010. 95.

24 California Natural Resources Agency, Climate Action Team, *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*, 2009.

25 California Natural Resources Agency, Climate Action Team, *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*, 2009. 9.

26 The Cal-Adapt website address is: http://cal-adapt.org.

4.5.2.5 Regulatory Framework

Federal

On September 15, 2009, the US EPA and the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) issued a joint proposal to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. In 2012, passenger cars and light-duty trucks would have to meet an average emissions standard of 295 grams of CO_2 per mile and 30.1 miles per gallon.[27] By 2016, the vehicles would have to meet an average standard of 250 grams of CO_2 per mile and 35.5 miles per gallon.[28] The final standards were adopted by the US EPA and DOT on April 1, 2010.

On December 7, 2009, the US EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

While these findings do not impose additional requirements on industry or other entities, this action was a prerequisite to finalizing the US EPA's proposed GHG emissions standards for light-duty vehicles, as discussed above.

State

The State of California has enacted regulations that target reductions in GHG emissions. The major regulations, policies, and legislation are provided below in approximate chronological order.

---

27 US Environmental Protection Agency, "EPA and NHTSA Propose Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks," http://epa.gov/otaq/climate /regulations/420f09047a.htm. 2009.

28 US EPA, "EPA and NHTSA Propose Historic National Program," 2009.

Title 24 Building Standards Code

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

Part 11 of the Title 24 Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality."[29] The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Part 11 of the Title 24 Building Standards Code became effective on January 1, 2011. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject to the requirements of the CALGreen Code.

Renewables Portfolio Standard

In 2002, Senate Bill 1078 (SB 1078, Sher) established California's Renewables Portfolio Standard (RPS) which requires investor-owned utilities, such as Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric, to increase energy production from renewable sources by 1 percent per year, up to a minimum of 20 percent of total energy generation by 2017. SB 107 (Simitian), signed by the Governor on September 26, 2008, accelerated the Renewable Portfolio Standard by requiring investor-owned utilities to meet the 20 percent target by 2010.

On September 15, 2009, the Governor issued Executive Order S-21-0911 requiring CARB, under its AB 32 authority, to adopt regulations to meet a 33 percent RPS target by 2020. The CARB regulations would use a phased-in or tiered requirement to increase the amount of electricity from eligible renewable sources over an eight-year period beginning in 2012. CARB adopted the regulation in September 2010. In March

29 California Building Standards Commission, 2008 California Green Building Standards Code, 2009. 3.

2011, the Legislature passed SB X1-2, which was signed into law by the Governor. SB X1-2 requires utilities to procure renewable energy products equal to 33 percent of retail sales by December 31, 2020 and also established interim targets: 20 percent by December 31, 2013 and 25 percent by December 31, 2016. SB X1-2 also includes publicly owned utilities in California.

Assembly Bill 1493

Assembly Bill 1493 (AB 1493, Pavley) was enacted on July 22, 2002 to reduce CO_2 emissions from the transportation sector. Under AB 1493, CARB set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles whose primary use is noncommercial personal transportation. The standards were adopted in September 2004 and were to be phased in during the 2009 through 2016 model years. However, before the regulation could go into effect, the US EPA had to grant California a waiver under the federal Clean Air Act (CAA), which ordinarily preempts state regulation of motor vehicle emission standards. The US EPA did not issue the waiver until June 30, 2009.

On September 15, 2009, the US EPA and the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) issued a joint proposal to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles. The proposed standards would be phased in and would require passenger cars and light-duty trucks to comply with a declining CO_2 emissions standard. In 2012, passenger cars and light-duty trucks would have to meet an average emissions standard of 295 grams of CO_2 per mile and 30.1 miles per gallon.[30] By 2016, the vehicles would have to meet an average standard of 250 grams of CO_2 per mile and 35.5 miles per gallon.[31] These standards were formally adopted by the US EPA and DOT on April 1, 2010. In light of the US EPA and NHTSA standards, California—and states adopting California emissions standards—have agreed to defer to the proposed national standard through model year 2016. The 2016 endpoint of the federal and state standards is similar, although the federal standard ramps up slightly more slowly than required under the state standard. The state standards (called the Pavley standards) require additional reductions in CO_2 emissions beyond 2016 (referred to as Pavley Phase II standards), which have not yet been adopted.

Executive Order S-3-05 and the Climate Action Team

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals: GHG emissions should be

---

30 US Environmental Protection Agency, "EPA and NHTSA Propose Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks," http://epa.gov/otaq/climate /regulations/420f09047a.htm. 2009.

31 US EPA, "EPA and NHTSA Propose Historic Nation Program," 2009.

reduced to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. The Secretary of California Environmental Protection Agency (Cal EPA) is required to coordinate efforts of various agencies in order to collectively and efficiently reduce GHGs. Some of the agency representatives involved in the GHG reduction plan include the Secretary of the Business, Transportation, and Housing Agency, the Secretary of the Department of Food and Agriculture, the Secretary of the Resources Agency, the Chairperson of CARB, the Chairperson of the CEC, and the President of the Public Utilities Commission. Representatives from these agencies comprise the Climate Action Team.

Assembly Bill 32

To further the goals established in Executive Order S-3-05, the Legislature enacted Assembly Bill 32 (AB 32, Nuñez and Pavley), the California Global Warming Solutions Act of 2006, which was signed into law on September 27, 2006. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries with penalties for noncompliance. AB 32 requires the state to undertake several actions – the major requirements are discussed below.

CARB Early Action Measures

CARB is responsible for carrying out and developing the programs and requirements necessary to achieve the goals of AB 32—the reduction of California's GHG emissions to 1990 levels by 2020. The first action under AB 32 resulted in CARB's adoption of a report listing three specific early action greenhouse gas emission reduction measures on June 21, 2007. On October 25, 2007, CARB approved an additional six early action GHG reduction measures under AB 32. CARB has adopted regulations for all early action measures. The original three adopted early action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" include

- a low-carbon fuel standard to reduce the "carbon intensity" of California fuels;
- reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants; and
- increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early action regulations adopted on October 25, 2007, also meeting the narrow legal definition of "discrete early action GHG reduction measures," include

- reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology;

- reduction of auxiliary engine emissions of docked ships by requiring port electrification;
- reduction of perfluorocarbons from the semiconductor industry;
- reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products);
- require that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency; and
- restriction on the use of sulfur hexafluoride (SF_6) from non-electricity sectors if viable alternatives are available.

State of California 1990 Greenhouse Gas Inventory

As required under AB 32, on December 6, 2007, CARB approved the 1990 greenhouse gas emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 $MMTCO_2e$. The inventory revealed that in 1990 transportation, with 35 percent of the state's total emissions, was the largest single sector generating carbon dioxide, followed by industrial emissions, 24 percent; imported electricity, 14 percent; in-state electricity generation, 11 percent; residential use, 7 percent; agriculture, 5 percent; commercial uses, 3 percent; and forestry emissions (excluding sinks) less than 1 percent. These figures represent the 1990 values. AB 32 does not require individual sectors to meet their individual 1990 GHG emissions inventory; the total statewide emissions are required to meet the 1990 threshold by 2020.

Climate Change Scoping Plan

As indicated above, AB 32 requires CARB to adopt a scoping plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions. CARB released the *Climate Change Scoping Plan* in October 2008, which contained an outline of the proposed state strategies to achieve the 2020 GHG emission limits. The CARB Governing Board approved the *Climate Change Scoping Plan* on December 11, 2008. The *Climate Change Scoping Plan* indicates how emissions reductions will be achieved from significant sources of GHGs via regulations, market mechanism, and other actions. The *Climate Change Scoping Plan* identifies 18 recommended strategies the state should implement to achieve AB 32. CARB has identified ongoing programs and has adopted regulations for a number of individual measures to reduce GHG emissions in accordance with the *Climate Change Scoping Plan* strategies. CARB is currently in the process of updating the Scoping Plan, which will introduce new strategies and recommendations.

Key elements of the *Climate Change Scoping Plan* include the following recommendations:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewables energy mix of 33 percent
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the state's long-term commitment to AB 32 implementation

Under the *Climate Change Scoping Plan*, approximately 85 percent of the state's emissions are subject to a cap-and-trade program where covered sectors are placed under a declining emissions cap. The emissions cap incorporates a margin of safety whereby the 2020 emissions limit will still be achieved even in the event that uncapped sectors do not fully meet their anticipated emission reductions. Emissions reductions will be achieved through regulatory requirements and the option to reduce emissions further or purchase allowances to cover compliance obligations. It is expected that emission reductions from the cap-and-trade program will account for a significant portion of the reductions required by AB 32.

Executive Order S-1-07

On January 18, 2007, California set a new Low Carbon Fuel Standard (LCFS) for transportation fuels sold within the state. Executive Order S-1-07 sets a declining standard for GHG emissions measured in CO_2-equivalent grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The LCFS will apply to refiners, blenders, producers, and importers of transportation fuels and will use market-based mechanisms to allow these providers to choose how they reduce emissions during the fuel cycle using the most economically feasible methods. CARB identified the LCFS as an early action item under AB 32 and the final regulation was adopted on April 23, 2009.

Senate Bill 375

The California Legislature passed SB 375 (Steinberg) on September 1, 2008. SB 375 requires CARB, working in consultation with the metropolitan planning organizations (MPOs), to set regional greenhouse gas reduction targets for the automobile and light truck sector for 2020 and 2035. The target must then be incorporated within that region's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., General Plan) are not required to be consistent with either the RTP or SCS.

On August 9, 2010, CARB staff issued the *Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant To Senate Bill 375*.[32] CARB staff proposed draft per capita reduction targets for the four largest MPOs (Bay Area, Sacramento, Southern California, and San Diego) of 7 to 8 percent for 2020 and reduction targets between 13 to 16 percent for 2035. For the Southern California Association of Governments (SCAG), which is the MPO for the region in which the proposed project is located, CARB established a draft per capita reduction target of 8 percent for 2020 and 13 percent for 2035. Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the low carbon fuel standard regulations. CARB adopted the final targets (the same targets as the proposed draft targets) on September 23, 2010.

Local

South Coast Air Quality Management District

In April 2008, the South Coast Air Quality Management District (SCAQMD), in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in California Environmental Quality Act (CEQA) documents, convened a GHG CEQA Significance Threshold Working Group.[33] The goal of the working group is to develop and reach consensus on an acceptable CEQA significance thresholds for GHG emissions that may be utilized on an interim basis until CARB (or some other state agency) develops guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects – residential; non-residential; industrial; etc. However, the threshold is still

---

32 California Air Resources Board (CARB), *Staff Report: Proposed Regional Greenhouse Gas Emission Reduction Targets For Automobiles And Light Trucks Pursuant To Senate Bill 375*, 2010.

33 For more information see: http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html.

under development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for stationary source projects where it is the lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 $MTCO_2e$ as a screening numerical threshold.

At present time, the SCAQMD has not adopted thresholds for residential, commercial or projects such as the one analyzed in this study. The SCAQMD is considering a tiered approach to determine the significance of residential and commercial projects and the most recent draft approach that was published in September 2010 is as follows:

- **Tier 1:** Is the project exempt from further analysis under existing statutory or categorical exemptions? If yes, there is a presumption of less than significant impacts with respect to climate change.

- **Tier 2:** Is the project's GHG emissions within the GHG budgets in an approved regional plan? (The plan must be consistent with *State CEQA Guidelines* Sections 15064(h)(3), 15125(d), or 15152(s).) If yes, there is a presumption of less than significant impacts with respect to climate change.

- **Tier 3:** Is the project's incremental increase in GHG emissions below or mitigated to less than the significance screening level (10,000 $MTCO_2e$ per year for industrial projects; 3,500 $MTCO_2e$ for residential projects; 1,400 $MTCO_2e$ for commercial projects; 3,000 $MTCO_2e$ for mixed-use or all land use projects)? If yes, there is a presumption of less than significant impacts with respect to climate change.

- **Tier 4:** Does the project meet one of the following performance standards? If yes, there is a presumption of less than significant impacts with respect to climate change.

  - **Option #1:** Achieve some percentage reduction in GHG emissions from a base case scenario, including land use sector reductions from AB 32 (e.g., 29 percent reduction as recommended by the San Joaquin Valley Air Pollution Control District).

  - **Option #2:** For individual projects, achieve a project-level efficiency target of 4.8 $MTCO_2e$ per service population by 2020 or a target of 3.0 $MTCO_2e$ per service population by 2035. For plans, achieve a plan-level efficiency target of 6.6 MTCO2e per service population by 2020 or a target of 4.1 $MTCO_2e$ per service population by 2035.

- **Tier 5:** Projects should obtain GHG emission offsets to reduce significant impacts. Offsets in combination with any mitigation measures should achieve the target thresholds for any of the above Tiers. Otherwise, project impacts would remain significant.

The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the Governing Board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that establishes a GHG reduction program within the SCAQMD; however, GHG emission reduction protocols

pursuant to these rules have only been established for boilers and process heaters, forestry, and manure management reduction projects.

County of Los Angeles

In January 2007, the Los Angeles County Board of Supervisors adopted the Countywide Energy and Environmental Policy (Policy), which provides guidelines for sustainability and green building design within County departments. The Policy states that the County will join the California Climate Action Registry (CCAR) to establish goals for reducing GHG emissions. The Policy also incorporates a sustainable building program into County capital improvement projects and seeks to integrate energy efficient and sustainable designs into future County building plans.[34]

In addition, the court settlement in August 2007 regarding the lack of GHG mitigation strategies in the San Bernardino County General Plan prompted Los Angeles County to pursue more immediate and formal mitigation strategies. Accordingly, the County prepared its "Report on the Impact of the State Action Against San Bernardino County Regarding its General Plan Update," which contains numerous recommendations for future requirements to combat global warming.[35] The report has three main sections: (1) energy efficiency and climate change, (2) green buildings, and (3) low-impact development.

In order to secure implementation of green building practices, the Los Angeles County Board of Supervisors adopted three ordinances pursuant to the County's Green Building Program on October 7, 2008, relating to green building, low-impact development, and native, drought-tolerant landscaping. These ordinances became applicable in unincorporated portions of Los Angeles County as of January 1, 2009.

The green building standards ordinance applies to four categories of development, with corresponding requirements for each: (1) small residential and nonresidential projects; (2) medium-sized residential projects; (3) medium-sized (i.e., 10,000 to 25,000 square feet) nonresidential, commercial, mixed-use, or first-time tenant improvement projects; and (4) large nonresidential, commercial, mixed-use, or first-time tenant improvement projects greater than 25,000 square feet, and all new high-rise buildings greater than 75 feet in height. In addition, the adopted ordinance contains minimum standards for all applicable projects:

- **Energy**: 15 percent better than Title 24;

---

34 County of Los Angeles. 3.045 Energy and Environmental Policy. December 19, 2006. Available online. http://countypolicy.co.la.ca.us/BOSPolicyFrame.htm.

35 County of Los Angeles, "Report on the Impact of the State Action Against San Bernardino County Regarding its General Plan Update." October 15, 2007. Available online: http://file.lacounty.gov/bc/q4_2007/cms1_076485.pdf.

- **Water**: Smart controller in landscaped areas, 75 percent of the landscaped area to use drought-tolerant plants, turf restrictions, hydrozones;
- **Resources**: Minimum 50 percent waste diversion during construction;
- **Trees**: Two trees planted per single-family home, one tree planted per 5,000 square feet of lot area for multi-family projects, three trees planted per 10,000 square feet of lot area for nonresidential projects; and
- **Low Impact Development**: Single-family residences to use three of seven approved low-impact development best management practices.

Marina del Rey Land Use Plan

The Marina del Rey Land Use Plan[36] identifies goals and policies relating to the improving the safety and health of the community. The community supports the SCAQMD's mission to protect public health and welfare from the adverse effects of air pollution. The objectives and actions related to air emissions in general that are applicable to the project are listed below.

> *30253. New Development shall:*
>
> *(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.*
>
> *(4) Minimize energy consumption and vehicle miles traveled.*

4.5.3 METHODOLOGY

The proposed project is evaluated in this Draft EIR for potential impacts related to GHG emissions and climate change and utilized approved emissions models and guidelines as tools to create the analytical basis for the assessment. The Office of Planning and Research (OPR), in its Climate Change Technical Advisory, recommends that GHG emissions from project-related traffic, energy consumption, water usage, and construction activities, should be identified and estimated, to the extent that data is available to calculate such emissions. In addition, CARB believes that indirect energy usage provides a more complete picture of the emissions footprint of a facility. According to CARB, "As facilities consider changes that would affect their emissions – addition of a cogeneration unit to boost overall efficiency even as it increases direct emissions, for example – the relative impact on total (direct plus indirect) emissions by the facility should be monitored. Annually reported indirect energy usage also aids the conservation awareness of the facility." For these reasons, CARB has proposed requiring the calculation

36 County of Los Angeles Department of Regional Planning. Marina del Rey Land Use Plan. February 2012.

of direct and indirect GHG emissions as part of the AB 32 reporting requirements, and this analysis does so.

Emissions modeling was conducted for mobile sources using the California Emissions Estimator Model (CalEEMod) and information provided in the CalEEMod *User's Guide*.[37] CalEEMod is a program that calculates air pollutant emissions from land use sources and incorporates the CARB on-road and off-road vehicle emissions models. Site-specific or project-specific data were used in the CalEEMod model, where available. The project would not include substantial stationary sources of GHG emissions. Mobile source GHG emissions from vehicles traveling to and from the project would generate the bulk of the operational emissions. The mobile source emissions are based on the trip rates provided in the traffic report for the project. Additional sources were consulted for this analysis as referenced. Emission calculations conducted for the proposed project are contained in **Appendix 4.2**.

4.5.4 THRESHOLDS OF SIGNIFICANCE

In accordance with Senate Bill (SB) 97, the Natural Resources Agency adopted amendments to Appendix G of the *CEQA Guidelines* that include criteria for evaluating GHG emissions on December 30, 2009.[38] The Natural Resources Agency delivered its rulemaking package to the Office of Administrative Law for its review pursuant to the Administrative Procedure Act. The adopted amendments became effective on March 18, 2010. According to the adopted amendments, a project would have a significant effect on the environment if:

- The project generates greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- The project conflicts with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

CEQA Guidelines Section 15064.7 states the significance criteria established by the applicable air quality management district or air pollution control district, when available, may be relied upon to make determinations of significance. The first significance criteria may be evaluated by directly calculating GHG emissions from the proposed project. As previously discussed, the SCAQMD has published draft guidance documents that have not yet been formally adopted. The SCAQMD is currently developing thresholds for GHG emissions and currently recommends a tiered approach. A brief summary of the available draft guidance document from the SCAQMD is provided below.

---

37 South Coast Air Quality Management District, *California Emissions Estimator Model User's Guide*, The model and User's Guide may be downloaded from the following website: http://www.caleemod.com. 2011.

38 The adopted amendments are available at the following website: http://ceres.ca.gov/ceqa/guidelines/. 2009.

- The Tier 3 threshold, for a presumption of a less than significant impact, requires a project's incremental increase in GHG emissions to be below or mitigated to less than the significance screening level of 3,000 $MTCO_2e$ for mixed-use or all land use projects.

- The Tier 4 threshold, for a presumption of a less than significant impact, requires a project to achieve a 28 percent reduction from a base case scenario, including land use sector reductions from AB 32 (total emissions not to exceed 25,000 $MTCO_2e$) or achieve a project-level efficiency target of 4.6 $MTCO_2e$ per service population per year (total emissions not to exceed 25,000 $MTCO_2e$ per year). The recommended plan-level significance threshold is an efficiency target of 6.6 $MTCO_2e$ per service population per year.

The second significance criteria may be evaluated by demonstrating compliance with plans, policies, or regulations adopted by local governments to curb GHG emissions. According to the Natural Resources Agency:

> *Provided that such plans contain specific requirements with respect to resources that are within the agency's jurisdiction to avoid or substantially lessen the agency's contributions to GHG emissions, both from its own projects and from private projects it has approved or will approve, such plans may be appropriately relied on in a cumulative impacts analysis.*[39]

The State of California, through its Governor and Legislature, has established a comprehensive framework for the substantial reduction of GHG emissions. As previously discussed, this will occur primarily through the implementation of AB 32 and Executive Order S-3-05, which addresses the reduction of GHG emissions on a statewide cumulative basis.

4.5.5 IMPACT ANALYSIS

4.5.5.1 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.5-1: The project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

The construction activities required to facilitate buildout of the proposed project would include the use of heavy-duty construction equipment. The vast majority of construction equipment (e.g., backhoes, cranes, rubber-tired loaders, scrapers, and haul trucks) rely on fossil fuels, primarily diesel, as an energy source. The combustion of fossil fuels in construction equipment results in GHG emissions of CO_2 and much smaller amounts of CH_4 and N_2O. Emissions of GHG would also result from the combustion of fossil fuels from haul trucks and vendor trucks delivering materials, and construction worker vehicles commuting, to and from the project site. Typically, light-duty and medium-duty automobiles and trucks

---

39 Natural Resources Agency, *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*, 2009. 15.

would be used for worker trips and heavy-duty trucks would be used from vendor trips. The vast majority of motor vehicles used for worker trips rely on gasoline as an energy source while motor vehicles used for vendor trips rely on diesel as an energy source. The combustion of gasoline and diesel in motor vehicles results in GHG emissions of CO_2 and smaller amounts of CH_4 and N_2O.

The proposed project would result in short-term emissions of GHGs during construction—that is, the emissions would occur only during active construction and would cease after the proposed project was built. The other primary GHGs (hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) are typically associated with specific industrial sources and would not be emitted by the proposed project. The emissions of CO_2 were estimated using the CalEEMod model.

The project consists of the development of a Trader Joe's, West Marine, restaurants, office space, yacht club and lounge, and boat repair and storage facilities, for a total of 83,253 square feet. Construction activity was modeled based on the construction schedule provided by the project applicant, and equipment types and activity levels provided as default values in CalEEMod. **Table 4.5-3, Estimated Construction Greenhouse Gas Emissions**, lists the estimated GHG emissions associated with construction of the project. The SCAQMD recommends annualizing construction-related GHG emissions over a project's lifetime, defined as a 30-year period, in order to include these emissions as part of the annual total operational emissions. Therefore, construction-related GHG emissions have been annualized over this period and included in the annual operational emissions discussed in the next section.

Table 4.5-3
Estimated Construction Greenhouse Gas Emissions

GHG Emissions Source	Emissions (Metric Tons CO_2e/year)
One-Time Emissions:	
Construction Year 2015	292.50
Construction Year 2016	207.10
One-Time Total GHG Emissions	**499.60**
Annualized over Project Lifetime	**16.65**

*Source: Impact Sciences, Inc. (2013). Emission calculations are provided in **Appendix 4.2**.*
Totals in table may not appear to add exactly due to rounding.

It is anticipated the proposed project would be operational by 2017. Once operational, the proposed project would result in GHG emissions, primarily CO_2, CH_4, and N_2O, as a result of fuel combustion from building heating systems and motor vehicles. Building and motor vehicle air conditioning systems may

use HFCs (and HCFCs and CFCs to the extent that they have not been completely phased out at later dates); however, these emissions are not quantified since they would only occur through accidental leaks. It is not possible to estimate the frequency of accidental leaks without some level of speculation. It should be noted that CARB has drafted a proposed "Regulation for Management of High Global Warming Potential Refrigerants" that would reduce emissions of these refrigerants from stationary refrigeration and air conditioning systems by requiring persons subject to the rule to reclaim, recover, or recycle refrigerant and to properly repair or replace faulty refrigeration and air conditioning equipment.[40]

Direct emissions of CO_2 emitted from operation of the proposed project include area source emissions (from natural gas consumption) and mobile source emissions. Area source emissions were calculated using CalEEMod using default assumptions for various types of retail, commercial, recreational and office space. Mobile source emissions were calculated using CalEEMod, based on the traffic study prepared for the project and the Institute of Transportation and Engineering 8th Edition trip generation rates.[41]

The proposed project would also result in indirect GHG emissions due to the electricity demand. The emission factor for CO_2 due to electrical demand from Southern California Edison, the electrical utility serving the proposed project, was selected in the CalEEMod model. Emission factors for CO_2 are based on CARB's Local Government Operations Protocol.[42] Emission factors for CH_4 and N_2O are based on E-Grid values.[43] The cited factors in the CARB report are based on data collected by the California Climate Action Registry. The emission factors take into account the current mix of energy sources used to generate electricity and the relative carbon intensities of these sources, and includes natural gas, coal, nuclear, large hydroelectric, and other renewable sources of energy. Electricity consumption was based on default data found in CalEEMod.

In addition to electrical demand, the proposed project would also result in indirect GHG emissions due to water consumption, wastewater treatment, and solid waste generation. GHG emissions from water consumption are due to the electricity needed to convey, treat, and distribute water. The annual electrical

---

40 California Air Resources Board, "Stationary Equipment Refrigerant Management Program," http://www.arb.ca.gov/cc/reftrack/reftrack.htm. 2009. This regulation is an early action measure under AB 32.

41 Institute of Transportation and Engineering, *ITE Trip Generation Rates – 8th Edition*, 2008.

42 California Air Resources Board, *Local Government Operations Protocol for the Quantification and Reporting of Greenhouse Gas Emissions Inventories*, Version 1.1, 2010. 208.

43 US Environmental Protection Agency, "E-Grid," http://www.epa.gov/cleanenergy/energy-resources/egrid/index.html.

demand factors for potable water were obtained from the CEC.[44] The default CalEEMod assumptions were used for GHG emissions from water consumption, wastewater production, and solid waste generation.

A summary of the operational emissions of the proposed project is provided below in **Table 4.5-4, Estimated Operational GHG Emissions**. Detailed emission calculations are provided in **Appendix 4.2**. The estimates represent emissions under "business as usual" conditions – that is, GHG emissions that would occur as a result of development of the proposed project without the reductions from policies, strategies, and mitigation measures from AB 32 and other GHG reduction plans or regulations.

Table 4.5-4
Estimated Operational GHG Emissions

Source	GHG Emissions (Metric Tons CO_2e/year)
Energy	686
Mobile Sources	2,749
Waste	57
Water	55
Amortized Construction	17
Proposed Project GHG Emissions	3,564
Existing GHG Emission	576
Net GHG Emissions	**2,988**
SCAQMD Threshold	**3,000**
Exceeds Threshold?	**NO**

*Source: Impact Sciences, Inc. (2013). Emission calculations are provided in **Appendix 4.2**.*
Note: Totals in table may not appear to add exactly due to rounding.

As shown in **Table 4.5-4**, the estimated emissions from the proposed project would not exceed the applicable threshold. Therefore, the proposed project's impact would be considered less than significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

44 California Energy Commission, *Refining Estimates of Water-Related Energy Use in California, PIER Final Project Report*, CEC-500-2006-118, 2006 22. Prepared by Navigant Consulting, Inc.

Impact 4.5-2: The project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The primary plan for reducing GHG emissions in California is AB 32. The County of Los Angeles has not adopted plans, policies, or regulations that contain more specific requirements with respect to GHG emissions in the County. The draft significance thresholds proposed by the SCAQMD were specifically designed to allow attainment of AB 32 goals within the jurisdiction of the SCAQMD. Therefore if emissions from a proposed project are below these thresholds, the project would not conflict with the requirements of AB 32. As shown in **Table 4.5-4**, GHG emissions would be below the significance threshold for this type of land use. The project will also comply with the requirements of the Los Angeles County Green Building Program, which include energy efficiency above the requirements of Title 24, recycling or reuse of construction materials, drought tolerant landscaping, smart irrigation, and tree planting. Therefore the project would be less than significant with respect to this criteria.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

4.5.5.2 Cumulative Impacts

Global climate change is by definition a cumulative impact as GHG emissions do not have a localized impact; they impact the globe as a whole. Since GHGs typically remain in the atmosphere for an extended period they ultimately mix with emissions from other sources, both local and distant. The impacts of the emissions from any one proposed project cannot be distinguished from the impacts of any other project in the same air basin, state or anywhere on the globe. Therefore, GHG reductions measures in California aim to reduce emissions on a statewide basis, specifically through the requirements of AB 32. The significance threshold set forth above is calculated to allow a specific region to meet these overall statewide targets by requiring substantial projects to match the reductions from business as usual required for the state as a whole in AB 32. Consequently, while the thresholds are applied to individual proposed projects, they also serve as cumulative impact thresholds. Therefore, the analysis presented in the section above leads to a conclusion that the project's contribution to cumulative impacts is less than significant.

4.6 HYDROLOGY AND WATER QUALITY

4.6.1 INTRODUCTION

This section provides analysis of the potential effects of the Marina del Rey Parcel 44 Project on the hydrology and water quality environment. The following analysis is based on a Drainage Concept Report prepared for the project by Breen Engineering, Inc., June 2014. This report is provided as **Appendix 4.6** of this EIR.

4.6.2 ENVIRONMENTAL SETTING

4.6.2.1 Regional Hydrology

The project site is situated in Marina del Rey, the Los Angeles Coastal Plain and within the 83,200-acre Ballona Creek watershed. A variety of surface water bodies are located in the project vicinity and include Santa Monica Bay, Marina del Rey, the Ballona Channel, and the Ballona and Del Rey lagoon. The Marina del Rey small-craft harbor serves as the outlet for an improved drainage network which collects and conveys untreated storm water from surrounding urbanized areas.

No natural watercourses occur on or in the vicinity of the project site. The Ballona Watershed Channel is located south of the project site. This waterway is channelized and conveys urban runoff from metropolitan Los Angeles to an ocean discharge point just south of the entrance to the Marina del Rey small-craft harbor.

The site has little topographic relief with elevations ranging from 18 feet mean sea level (msl) near the intersection of Admiralty Way and Bali Way to approximately 10 feet msl near the sea wall in the west-central portion of the project site. The site is not located in a defined floodway and no significant flooding potential occurs on or near the project site. Given the lack of flooding potential on the project site, the impact on the flooding is not emphasized herein.

4.6.2.2 Climate

The dry season climate for the project area is dry and warm. Intermittent storms occur during the wet season climate between November and March. At Los Angeles International Airport (LAX) the 57-year average annual rainfall is approximately 12.4 inches. The average high temperature is about 80 °F, and the average winter low temperature is about 46 °F.

4.6.2.3 Drainage

The 8.39-acre project site is currently developed for boat and vehicle parking, and includes six small structures totaling approximately 14,724 square feet. Currently, 94 percent of the project site is covered with impervious surfaces. Pervious areas are limited to small planter boxes surrounding the perimeter of the site and planter boxes scattered throughout the parking lot areas. Existing drainage on the project site occurs by sheet flow toward the marina where surface flows are diverted to catch basins along the seawall. There is no form of pre-treatment or storage for existing site runoff. Grated catch basins along the seawall collect runoff water that is diverted to a 60-inch reinforced concrete pipe storm drain which traverses the east corner of the project site near the intersection of Admiralty Way and Mindanao Way. This concrete storm drain exits through the seawall in the western portion of the project site. This 60-inch pipe is owned and maintained by the Los Angeles County Flood Control District (LACFCD). Based on calculations consistent with the LACDPW *Hydrology Manual*, runoff during a 25-year storm event is estimated to be approximately 20.54 cubic feet per second (cfs) for the Marina del Rey Parcel 44 Project site (**Appendix 4.6**).

Urban Runoff

In an urban environment, such as the city, stormwater characteristics depend on site characteristics (e.g., land use, perviousness, pollution prevention, types and locations of Best Management Practices [BMPs]), rain events (duration, amount of rainfall, intensity, and time between events), operations and maintenance practices (e.g., street sweeping), soil type and particle sizes, multiple chemical conditions, the amount of vehicular traffic, and atmospheric deposition. In addition, the US Environmental Protection Agency (USEPA) estimates that short-term runoff from construction sites, without adequate erosion and runoff control measures, can contribute more sediment to receiving waters than that which is deposited by natural processes over a period of several decades.

There are two kinds of urban runoff: dry weather and wet weather. Dry-weather urban runoff occurs when there is no precipitation. Wet-weather urban runoff refers collective to non-point, or diffuse, source discharges that result from precipitation. Wet- and dry-weather runoff typically contains similar pollutants of concern. However, except for the initial stormwater runoff concentrations (first flush) following a long dry period between rainfall events, the concentrations of pollutants found in wet-weather flows are typically lower than those found in dry-weather flows because the larger wet-weather flows dilute the amount of pollutants in runoff waters. Storm events may dislodge or carry pollutants over different surfaces than the lower dry-weather flows.

In dry-weather runoff, typical sources of pollutants include landscape irrigation runoff; driveway and sidewalk washing; non-commercial vehicle washing; groundwater seepage; fire flow; potable water line operations and maintenance discharges; and permitted or illegal non-storm water discharges. Irrigation runoff and washing processes generally contribute to dry weather urban runoff only during the dry season (typically from April through September). It can be a significant source of bacteria and other constituents that can be introduced through day-to-day urban activities as well as illicit discharges, dumping, or spills.

In wet-weather runoff, stormwater generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events (e.g., such as might occur in mountainous regions of the watershed) often contains pollutants in quantities that could adversely affect water quality. Most urban stormwater discharges are considered diffuse sources and are regulated by the Stormwater National Pollution Discharge Elimination System (NPDES) Permit or Construction General Permit (see Regulatory Framework of this section).

Both ocean water and urban runoff influence water quality in the Marina del Rey small craft harbor. Due to the semi-enclosed nature of the harbor, water temperature, sediment content, and dissolved oxygen content vary seasonally. There are two Total Maximum Daily Loads (TMDLs)[1] in the Marina del Rey Watershed: the Marina del Rey Harbor Toxics TMDL and the Marina del Rey Back Basins Bacteria TMDL.

The most recent Basin Plan Amendment for the Marina del Rey Harbor Toxics TMDL was adopted in February 2014.[2] According to the amendment the Marina del Rey Harbor is included on the Clean Water Act Section 303(d) list of impaired water bodies for chlordane, copper, lead, zinc, PCBs, DDT, Dieldrin,[3] sediment toxicity, and a fish consumption advisor. Review of available data during the development of this TMDL indicated that Dieldrin is no longer a cause of impairment however a dissolved copper and sediment impairment was discovered in the water column. Thus, the following designated beneficial uses are impaired by chlordane, copper, lead, zinc, PCBs, DDT, and sediment toxicity: water contact recreation, marina habitat, wildlife habitat, commercial and sport fishing, and shellfish harvesting.

---

1 When receiving water monitoring data indicates that a water quality criterion for a pollutant is exceeded, the receiving water is classified as impaired and placed on the Clean Water Act Section 303(d) List of Water Quality Limited Segments Requiring TMDLs (303(d) List). In order to address the impairment, a TMDL is developed for the pollutant(s) causing the impairment. The purpose of each TMDL is to limit the amount of pollutant(s) that may be discharged to the receiving water from all sources (i.e., stormwater runoff, wastewater, agriculture).

2 California State Water Resources Control Board, Basin Plan Amendments-TDMLS, http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/tmdl/tmdl_list.shtml, Accessed August 13, 2014

3 Dieldrin is a toxic insecticide produced by the oxidation of aldrin and is now largely banned because of its persistence in the environment

A Basin Plan Amendment for the Marina del Rey Back Basins Bacteria TMDL was adopted in August 2003.[4] Testing in the Back Basin and Mothers' Beach confirmed that contact recreation activities such as swimming, can lead to adverse health effects due to elevated bacterial levels.

Further, based on the State Water Resource Control Board's (SWRCB) 1994 Water Body Fact Sheet, water in Marina del Rey has been assigned an "impaired" rating, which means the water precludes, compromises, or does not support its designated use. Water quality problems within the small-craft harbor include the contamination of sediments, water, and biota with metals, polychlorinated biphenyl (PCB),[5] dichlorodiphenyltrichloroethane (DDT),[6] chlordane,[7] copper, and lead.[8] Some of these problems are attributed to historic contamination, while current contamination occurs most often from the leaching of anti-fouling paint from watercraft that contributes additional metals and tributyltin (TBT) to the small-craft harbor. One additional contaminant of relatively recent concern is the gasoline additive methyl tertiary butyl ether (MTBE). MTBE has not been detected on-site, but has been detected in soil and groundwater within the City of Santa Monica (located approximately 4 miles north of the project site). MTBE is typically released through leaking underground storage tanks (usually a gasoline station) where it percolates through the soil and into the groundwater table.

Urban runoff and illegal dumping of trash and chemicals have also had a direct influence on local water quality. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, and zinc) are consistently associated with suspended solids. A sediment analysis performed in 1995 characterized the composition of accumulated sediment at the mouth of Ballona Channel and from a large shoal area at the south entrance of the Marina del Rey small-craft harbor. The analysis found that sediments contained elevated concentrations of lead, petroleum-based compounds and multiple pesticides. Because metals are typically associated with fine particles in stormwater runoff, they have the potential to accumulate in marine sediments where they may pose a risk of toxicity. Similar

---

4 California State Water Resources Control Board, Basin Plan Amendments-TDMLS, http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/tmdl/tmdl_list.shtml, Accessed August 13, 2014

5 PCB is used as an insulating fluid in electrical equipment; as a plasticizer; in surface coatings, inks, adhesives, pesticide extenders and in carbonless duplicating paper. It is toxic by inhalation, ingestion, and skin absorption, and is hazardous to the upper respiratory tract, the digestive system, liver, blood, eyes, and skin.

6 DDT is a pesticide that was banned in the US in the 1970s. It is toxic by inhalation, absorption, ingestion, and contact, and is hazardous to the central nervous system, kidneys, liver, skin, and peripheral nervous system.

7 Chlordane is used as an insecticide and was banned by the US EPA in 1976. It is toxic by inhalation, absorption, ingestion, and contact, and is hazardous to the central nervous system, eyes, lungs, liver, kidneys, and skin.

8 California State Water Resources Control Board, "2010 California 303(d) List of Water Quality Limited Segments," http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/category5_report.shtml.

to metals, the majority of organic constituents in storm water are associated with particulates. Once the particles accumulate in the sediments in the harbor, the sediments themselves can become a source through sediment re-suspension and are thus assigned load allocations.

Thus, the 2013 Los Angeles County Low Impact Development (LID) Ordinance and 2014 Los Angeles County LID Manual require all applicants whose proposed project stormwater runoff drains to a TMDL-listed or 303(d)-listed water body provide an explanation of what measures will be included as part of the project to address the pollutants of concern. This includes both structural stormwater quality control measures and non-structural BMPs (i.e., trash cans, signage).[9]

Stormwater Runoff Water Quality

The quality of urban runoff in Marina del Rey is typical of most urban areas and includes a variety of common contaminants. These pollutants consist primarily of suspended sediments, fertilizers and pesticides, animal waste, and contaminants that are commonly associated with automobiles (e.g., petroleum compounds such as oil, grease, and hydrocarbons). In addition, urban stormwater often contains high levels of soluble and particulate heavy metals generated from traffic, industrial facilities, and occasionally residential sources.

4.6.2.4 Flood Hazards

100-Year Flood

Figure 4.6-1 FEMA Flood Zones illustrates the locations near the project site designated by FEMA as being within the 100-year flood hazard zone. As shown, there is a FEMA-designated 100-year flood hazards zone, (Zone AE) just northeast of the project site along Admiralty Way. This area is subject to inundation by a 1-percent-annual chance flood. Structures located within the special flood hazard area (SFHA) have a 26-percent chance of flooding over the course of 30 years. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in this zone. Areas west and south, along the harbor, of the project site are designated by FEMA as a moderate risk area with a 0.2 percent annual chance floodplain. These areas are designated as Zone X in **Figure 4.6-1.**

---

9 County of Los Angeles Department of Public Works Low Impact Development Manual, http://dpw.lacounty.gov/ldd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards%20Manual.pdf, accessed August 13, 2014

Tsunami and Seiche

Seiches are changes or oscillations of water levels (i.e., standing waves) within a confined body of water due to fluctuations in the atmosphere, tidal currents, or earthquakes. Seiches may be expected in the Marina del Rey as a result of earthquakes. Any significant wave front could cause damage to seawalls and docks, and watercraft within the harbor. However, modern shoreline protection techniques are designed to resist seiche damage.

All low-lying areas along California's coast are potentially subject to tsunami inundation. Tsunamis are long-period waves generated primarily from distant and local offshore earthquakes, landslides, or volcanic eruptions. The magnitude of this potential hazard is a function of the coastline configuration, sea floor topography, individual wave characteristics, and distance and direction from the source.

Two tsunamis induced by the 1960 Chile Earthquake caused damage in the Los Angeles and Long Beach harbors. In 1960, waves up to 5 feet in height occurred in the Cerritos Channel, and currents up to 12 knots were reported.

While the majority of the Southern California coastal areas do not have a significant potential to be inundated as a result of tsunamis, according to the Los Angeles County Seismic Safety Element (1990), the site is located in a tsunamis hazard zone. According to recently prepared tsunami-related inundation maps by the State of California, the maximum potential run-up height for the Marina del Rey area could be 15 feet. The County of Los Angeles has included the site within the limits of a Tsunami Inundation Zone, and the site could be subjected to the effects of a seismic sea wave.

Sea Level Rise

Studies of the potential impacts of sea level rise on the California coast have been performed by the United States Geological Survey (USGS), the Pacific Institute, and the National Oceanic and Atmospheric Administration (NOAA). These studies have been converted into interactive online maps showing potential inundation associated with specific rates of sea level rise. These maps are available at the website for the Pacific Institute (http://www2.pacinst.org/reports/sea_level_rise/gmap.html), NOAA (http://csc.noaa.gov/slr/viewer/), and a site set up by the California Energy Commission called Cal-Adapt (http://cal-adapt.org/) which is intended to synthesize climate change scenarios in California and present the information to local decision-makers. The Cal-Adapt and Pacific Institute sites provide predicted inundation hazards based on a 55-inch (140-cm) sea level rise. The NOAA sea level rise tool provides a sliding scale from 0 to 6 feet of seal level rise. The Cal-Adapt and Pacific Institute sites show little or no impact due to sea level rise in Marina del Rey.

Zone AE: Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones

Zone X: Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee.

SOURCE: FEMA, September 2008

FIGURE **4.6-1**

FEMA Flood Zones

The only areas impacted by sea level rise are very narrow portions of the waterfront, and existing structures appear to be outside of the potential impact zones. According to the NOAA estimations, there is little or no impact due to sea level rise in Marina del Rey until sea level rise exceeds 5 feet. At 5 to 6 feet of sea level rise, the NOAA site shows large portions of the fingers projecting into the harbor as flooded. Further, recent case law has indicated that the impacts of sea level rise on a project are not required to be analyzed under the California Environmental Quality Act (CEQA) finding, "the purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project."[10] This EIR appropriately includes an analysis of the potential effects of the project related to hydrology and water quality and greenhouse gas emissions (see **Section 4.5**) both of which are required by CEQA, but does not discuss the potential effects of sea level rise on the project.

4.6.3 REGULATORY FRAMEWORK

4.6.3.1 Federal

Clean Water Act

Being adjacent to a small-craft harbor, the Marina del Rey Parcel 44 Project may be subject to federal permit requirements under Section 404 of the CWA.[11] Section 404 of the CWA regulates activities that result in the location of a structure, excavation, or discharge of dredged or fill material into "waters of the United States," which include wetlands along with non-wetland habitats, such as coastal waters, streams (including intermittent streams), rivers, lakes, ponds, etc.[12]

In 1987, the CWA was amended by adding Section 402(p), which established regulations for municipal and industrial storm water discharges under the National Pollutant Discharge Elimination System (NPDES) program. Section 402, as amended, requires NPDES permits for storm water discharges from

---

10 See City of Long Beach v. Los Angeles Unified School Dist. (2009) 176 Cal.App.4th 889, 905

11 Since surface water in the project area is not used as drinking water, it is not subject to the drinking water standards enforced by state and federal agencies.

12 By Army Corps of Engineers (USACE) definition, "waters of the US" include permanent and intermittent streams as defined by the "ordinary high water mark" which can be identified by physical characteristics, such as channel scouring, bank "shelving," areas cleared of terrestrial vegetation, litter and debris, or other indications that may be appropriate.

storm drain systems[13] to waters of the United States. Section 402(p)(3)(B) requires that permits for storm drain systems

> *(i) may be issued on a system- or jurisdiction-wide basis; (ii) shall include a requirement to effectively prohibit non-storm water discharges into the storm sewers; and (iii) shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods and other such provisions as the Administrator of the State determines appropriate for the control of such pollutants.*

While the US Environmental Protection Agency (US EPA) is responsible for implementing the NPDES program at the federal level,[14] the State Water Quality Control Board (SWQCB) is responsible for implementing the federal NPDES requirements within California.[15] The SWQCB elected to issue a statewide General Permit for storm water discharges associated with construction activities requiring a NPDES permit and, in 1992, the SWQCB issued two statewide NPDES General Permits: one for storm water from industrial sites (NPDES No. CAS000001) and the other for storm water from construction sites (CAS000002).

In 1990, the US EPA published final regulations that established storm water permit application requirements for specified categories of industries. Regulations require that discharges of storm water associated with construction activities (storm water discharges), from soil disturbance of 1 acre or more, are regulated as an industrial activity and are required to obtain individual NPDES permits for storm water discharges, or be covered by the statewide General Permits. Developers planning construction greater than 1 acre must file a Notice of Intent (NOI) to discharge under this permit. Once a NOI has been submitted, the discharger is obligated to comply with the specific provisions of the statewide General Permit. The major provisions of the statewide General Permit require construction storm water dischargers to eliminate non-storm discharges to the storm drainage system, develop, and implement a Storm Water Pollution Prevention Plan (SWPPP) and to perform monitoring of discharges to the storm

---

13 Storm drain systems are described as Municipal Separate Storm Sewer Systems (MS4s) and include streets, gutters, conduits, natural or artificial drains, channels and water courses or other facilities that are owned, operated, maintained or controlled by any permittee (cities and counties) and used for the purpose of collecting, storing, transporting or disposing of storm water.

14 On November 16, 1990, pursuant to Section 402(p) of the CWA, the US EPA promulgated federal regulations (40 Code of Federal Regulations (CFR) Part 122.26) establishing requirements for storm water discharges under the NPDES program. The regulations recognize that certain categories of non-storm water discharges may not need to be prohibited if they have been determined not to be significant sources of pollutants.

15 The federal regulations allow states which are authorized to implement the NPDES program and have general permit authority to issue general permits or individual permits in order to regulate storm water discharges associated with industrial activity within their jurisdiction. In California, the SWRCB has responsibility for implementing the NPDES program for storm water discharges.

water system from their project site. Each of these components must be completed in conformance with the specific conditions outlined in the statewide General Permit.

Landside demolition and construction activities, which would disturb more than 1 acre, would require a NPDES permit and the project applicant would need to identify and implement BMPs to control water quality impacts via a Standard Urban Storm Water Mitigation Plan (SUSWMP).

4.6.3.2 Regional Water Quality Control Board Basin Plan, Los Angeles Region

The Los Angeles Regional Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (1) designates beneficial uses for surface and ground waters, (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and (3) describes implementation programs to protect all waters in the region. In addition, the Basin Plan incorporates (by reference) all applicable state and Regional Board plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan.

The Basin Plan is a resource for the Regional Board and others who use water and/or discharge wastewater in the Los Angeles region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. Finally the Basin Plan provides valuable information to the public about local water quality issues.

The Basin Plan is reviewed and updated as necessary. Following adoption by the Regional Board, the Basin Plan and subsequent amendments are subject to approval by the State Board, the State Office of Administrative Law (OAL), and the United States Environmental Protection Agency (USEPA).

The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer (drain) systems (MS4s). Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The MS4 permits require the discharger to develop and implement a Storm Water Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Clean Water Act Section 402(p). The management programs specify what BMPs will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

In order to address the requirements of the Clean Water Act, the Los Angeles Regional Water Quality Control Board (LARWQCB) issued a NPDES Permit (Order No. R4-2012-0175, NPDES Permit No.

CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System [MS4] Discharges Within the Coastal Watersheds of Los Angeles County, Except Discharges Originating from the City of Long Beach [MS4]) to the Los Angeles County Flood Control District, the County of Los Angeles, and the 84 incorporated cities within the coastal watersheds of Los Angeles County. The new requirements of the Municipal NPDES permit require that proposed projects include a plan (i.e., Standard Urban Storm Water Mitigation Plan [SUSMP], or functional equivalent document) to address potential water quality impacts on-site using Low Impact Development (LID), and that its potential impact on downstream water bodies (i.e., hydromodification) is evaluated.

The MS4 Permit Order requires development and implementation of a Planning and Land Development Program for all "New Development" and "Redevelopment" projects subject to the Order. The Program is intended to accomplish the following objectives:

- Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas;

- Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under CEQA; Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment water balance hydrology through infiltration, evapotranspiration and rainfall harvest and use;

- Maintain existing riparian buffers and enhance riparian buffers when possible;

- Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs;

- Properly select, design and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to pre-development hydrology, assure long-term function, and avoid the breeding of vectors; and

- Prioritize the selection of BMPs to remove storm water pollutants, reduce storm water runoff volume, and beneficially use storm water to support an integrated approach to protecting water quality and managing water resources.

The MS4 Permit Order specifies the criteria or thresholds for determining "New Development" and "Redevelopment Projects." The Redevelopment Projects that are subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, before completion of a project, include the following, among others:

- Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site.

- Where Redevelopment results in an alteration to more than 50 percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, the entire project must be mitigated.

- Where Redevelopment results in an alteration of less than 50 percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.

The New Development/Redevelopment Project Performance Criteria for commercial and residential activities include:

Control pollutants, pollutant loads, and runoff volume from the project by minimizing the impervious surface area and controlling runoff from impervious surfaces through infiltration, bioretention, and/or rainfall harvest and use.

- Retain on-site the Stormwater Quality Design Volume (SWQDv) from the 0.75-inch, 24- hour rain event or the 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, whichever is greater.

Bioretention and biofiltration systems shall meet the design specifications provided in NPDES Permit Attachment H unless approved otherwise by the Regional Water Board Executive Officer.

- When evaluating the potential for on-site retention, the maximum potential for evapotranspiration from green roofs and rainfall harvest and use shall be considered.

- If on-site retention, bioretention, and biofiltration systems are infeasible, opportunities for regional ground water replenishment off site may be permissible.

- Implement hydrologic control measures to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems (Hydromodification), including one, or a combination of on-site, regional, or sub-regional hydromodification control BMPs, LID strategies, or stream and riparian buffer restoration measures.

- Meet the Hydromodification Control Criteria by:

  - Retaining on-site the runoff volume from the 95th percentile, 24-hour storm, or

  - Post-development conditions should not exceed the pre-development conditions for the 2-year, 24-hour rainfall event, or

  - The Erosion Potential (Ep) in the receiving water channel will be approximately one, as determined by a Hydromodification Analysis Study and the equation presented in NPDES Permit Attachment J.

- If the proposed project cannot meet the previously mentioned Hydromodification Control Criteria, then it may satisfy this requirement by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems, or meet the watershed specific Hydromodification Control Plan, if one is developed for the Los Angeles River.

4.6.3.3 California Ocean Plan

The most recent version of the California Ocean Plan was adopted in October 2012 and became effective in August 2013. Its purpose is to protect the quality of ocean waters for use and enjoyment by the people of the state by controlling waste discharges and to establish beneficial uses and water quality criteria for the coastal waters of California. The beneficial uses of ocean waters that shall be protected include industrial water supply, water contact and non-contact recreation and Areas of Special Biological Significance (ASBS). The ocean plan also sets forth specific water quality objectives. Further, the plan is reviewed every three years to guarantee that the current standards are adequate and are not posing a threat to public health and/or marina species.

4.6.3.4 Los Angeles County Low Impact Development Ordinance

The LID Ordinance will improve water quality in the County by amending and expanding on the existing Standard Urban Stormwater Mitigation Plan (or SUSMP) requirements of capturing the first 0.75-inch of rain from a storm event for new and re-development projects that (1) require a building permit and (2) add or replace 500 square feet of impervious surface. The ordinance includes a set of site design approaches and best management practices (or BMPs) that are designed to address runoff and pollution at the source. These LID practices can effectively remove nutrients, bacteria, and metals while reducing the volume and intensity of stormwater flows.

4.6.3.5 Los Angeles County Low Impact Development Standards Manual

LID is a leading stormwater management strategy that seeks to mitigate the impacts of runoff and stormwater pollution as close to its source as possible. Los Angeles County has prepared a LID Standards Manual to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4- 2012-0175). The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the

County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges.

4.6.3.6 Los Angeles County Flood Control District

The Los Angeles County Flood Control Act (ACT) was adopted by the state legislature in 1915, after a disastrous regional flood took a heavy toll on lives and property. The Act established the Los Angeles County Flood Control District and empowered it to provide flood protection, water conservation, recreation, and aesthetic enhancement within its boundaries. The Flood Control District is governed, as a separate entity, by the County of Los Angeles Board of Supervisors.

In 1984, the Flood Control District entered into an operational agreement with the Los Angeles County Department of Public Works transferring planning and operational activities to the Department of Public Works. Watershed Management Division is the planning and policy arm of the Flood Control District. Public Works Flood Maintenance and Water Resources Divisions, respectively, oversee its maintenance and operational efforts.

The Flood Control District encompasses more than 3,000 square miles, 85 cities and approximately 2.1 million land parcels. It includes the vast majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including 500 miles of open channel, 2,800 miles of underground storm drain, and an estimated 120,000 catch basins.

4.6.4 IMPACT ANALYSIS

Impacts associated with implementation of the proposed Marina del Rey Parcel 44 Project are discussed for each of the threshold criteria identified below. Wherever a significance threshold criterion is exceeded or wherever there is the potential for a criterion to be exceeded, mitigation is identified where it is feasible.

4.6.4.1 Thresholds of Significance

According to the County of Los Angeles *Environmental Document Reporting Procedures and Guidelines*, County staff are concerned with any development subject to flood hazards and debris flows, including (1) flooding due to its location within a major drainage course, (2) flooding due to its location within a flood plain, and (3) high debris transport and deposition potential.

It should be noted the project is not situated within a major drainage course, a flood plain and is not subject to high debris and deposition potential. However, if any of the following events would occur as a

result of project implementation, project-related drainage and flooding impacts would be considered significant:

a) *flooding (on- and off-site),*

b) *increased erosion, and/or*

c) *increased sedimentation and debris production.*

In addition to thresholds of significance for flood-related impacts, the proposed project is also evaluated relative to its water quality impacts associated with construction and storm runoff during project operation. The County of Los Angeles includes thresholds of significance in its Initial Study checklist. In general, these thresholds are similar to the applicable thresholds listed in Appendix G of the *State CEQA Guidelines*. Where the thresholds differ it is noted below. Therefore, the proposed project would have a potentially significant impact with respect to hydrology and water quality if it would:

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

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)*

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

d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner 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) *Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality*

g) *Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)*

h) *Result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance*

i) Use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)

j) Otherwise substantially degrade water quality

k) 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, or within a floodway or floodplain

l) Place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain

m) 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

n) Place structures in areas subject to inundation by seiche, tsunami, or mudflow

The Initial Study determined that the project would result in less than significant impacts in regard to the thresholds listed below. Therefore these thresholds will not be discussed further in this document. The Initial Study has been attached to this document as **Appendix 1.0**.

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)

g) Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52

h) Result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance

i) Use on-site wastewater treatment systems in areas with known geological limitations (e.g., high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course.

k) 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, or within a floodway or floodplain

l) Place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain

m) 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

Impact 4.6-1 **Violate water quality standards or waste discharge requirements.**

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.

Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality.

Otherwise substantially degrade water quality

Construction

The delivery, handling, and storage of construction materials and wastes, as well as the use of construction equipment could introduce contaminants into storm drains. Spills or leaks from heavy equipment and machinery can result in oil and grease contaminations. Staging areas or building sites can also be the source of pollution due to the use of paints, solvents, cleaning agents, and metals during construction. Impacts associated with oil, grease, and metals in stormwater include toxicity to aquatic organisms and the potential contamination of drinking supplies. Larger pollutants, such as trash, debris, and organic matter, are additional pollutants that could be associated with construction activities. Because existing site improvements were originally constructed in the early 1960s, there is potential for asbestos and lead paint debris to enter storm flows unless the project contractor takes the required steps to remove and dispose of such materials pursuant to federal and state law.

As the project would require construction/grading on the site greater than 1 acre, construction of the proposed project would be subject to the General Construction Permit. The General Construction Permit would require implementation of a SWPPP that would include BMPs. The SWRCB has determined discharges in compliance with the General Construction Permit will not result in the lowering of water quality standards, and are, therefore, consistent with the provisions of the Clean Water Act. The SWRCB

further stated in adopting the Orders for the General Construction Permit that compliance with the General Permit will result in improvements in water quality.[16]

Implementation of a construction SWPPP, which is required under the General Construction Permit, has been identified by the SWRCB as protective of water quality during construction activities. Incorporation of required BMPs for materials and waste storage and handling, equipment and vehicle maintenance and fueling, as well as for outdoor work areas, would reduce potential discharge of stormwater pollutants during construction. The proposed project, therefore, would not violate any waste discharge requirements, violate water quality standards, or otherwise degrade water quality. For these reasons, stormwater runoff water quality impacts would be less than significant.

Operation

The project site is fully developed; 94 percent of the site is covered with impervious surface consisting of asphalt parking areas and building foundations. These impervious surfaces generate stormwater runoff containing urban pollutants. Because the proposed project would not result in stormwater flows or volumes that would substantially differ from existing conditions the major source of pollution in stormwater runoff would continue to be urban contaminants that have accumulated on rooftops and other impervious surfaces, such as driveways, pedestrian walkways, and parking areas. Pollutants associated with the operational phase of the project would be typical of urban development and would include nutrients, oil and grease, organics, pesticides, and non-chemical pollutants (including trash, debris, and bacteria).

Nutrients that may be present in stormwater runoff include nitrogen and phosphorous resulting from fertilizers applied to landscaping and atmospheric deposition. Excess nutrients can impact water quality by promoting excessive and/or a rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides can also enter stormwater runoff after application on landscaped areas and can be toxic to aquatic organisms and can accumulate in certain tissues in larger species, such as birds and fish. Oil and grease can enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals may enter stormwater runoff as surfaces corrode, decay, or leach. Potential nonchemical pollutants associated with operational activities include clippings associated with landscape

---

16 State Water Resources Control Board, Division of Water Quality, 2009 Water Quality Orders, WQO No. 2009-0009-DWQ/NPDES No. CAS000002 (National Pollutant Discharge Elimination System [NPDES] General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities), Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, General Findings 1.A.4 and 1.A.6 (adopted September 2, 2009). http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/wqo09.shtml.

maintenance, street litter, and pathogens (bacteria). Pathogens (from sanitary sewer overflows, spills, and leaks from portable toilets, pets, wildlife, and human activities) can impact water contact recreation, noncontact water recreation, and shellfish harvesting.

The proposed project could include the use of typical hazardous materials on-site. The addition of retail, office space and restaurant uses could contribute more pollutants (e.g., trash, debris) to stormwater runoff. Pesticides and nutrients used for landscaping would be expected to increase slightly for the proposed project as compared to existing conditions because the amount of landscaping at the site would increase. Urban pollutants (e.g., metals, nutrients, and other constituents), would be expected to be similar to existing conditions. Although the configuration and location of impervious surfaces would differ from existing conditions this would not substantially alter the overall site conditions that can be affected by urban pollutants.

The applicable waste discharge requirements pertaining to post-construction water quality for the project are the Municipal Stormwater NPDES Permit, under which the proposed project would have to comply with the Los Angeles County Master Drainage Plan and the SUSMP. Compliance with those regulations is within the authority of the County to enforce and monitor.

Due to the historically low depth of groundwater on the project site (groundwater was observed to be between elevations of +2 to -3 Mean Sea Level (MSL), which is less than 3 feet below ground surface), some design requirements of the County of Los Angeles, Low Impact Development Standards Manual (LID) may not be possible. The design requirements state on-site infiltration may not be possible in all development scenarios, and exceptions may include areas with high groundwater (within 10 feet of surface). Therefore, on-site infiltration is not a feasible option for the proposed project.

As required by LID, the next stormwater management option is storage and reuse. The proposed project does not include an adequate amount of landscaping to support a storage and reuse system, making this option also infeasible. The last method of LID design requires the site to manage stormwater through water conservation use. LID BMPs that percolate runoff through engineered soil and allow it to discharge downstream slowly are, therefore, proposed as part of the proposed project. Two forms of BMPs are proposed to be utilized to meet this requirement: planted paving surface with stormwater sub-base and flow through planters. The current grading of the site would allow sheet flow runoff to flow to the planted pavement, where it would be treated through bio-filtration, then infiltrate to the stormwater sub-base, lined with an impermeable liner. For the remaining site areas, runoff from catch basins and roof will be collected and diverted to the flow through planters, lined with an impermeable liner, to be treated through bio-filtration. This will allow for stormwater detention and a controlled discharge rate. Treated runoff will slowly be released to the existing 60-inch storm drain.

Based on calculations consistent with the Los Angeles County *Hydrology Manual*, runoff during a 25-year storm event would be similar to the existing condition should the Marina del Rey Parcel 44 Project be implemented. The site was divided into four sub areas to determine the peak discharge rate for existing conditions. Conditions for the proposed project were divided into five similar sub areas dependent on proposed grading and stormwater treatment locations. Stormwater treatment locations are shown in **Figure 4.6-2 Drainage Concept Plan**. As shown in **Table 4.6-1**, post project runoff would total 20.74 cubic feet per second (cfs) while the existing site condition totals 20.54 cfs. Based on the scale of the project, the slight increase in runoff is negligible.

Table 4.6-1
Existing and Proposed Runoff Flow Calculations

Drainage Area	Area (acres)	T_C (minutes)	Q_{PM} (cfs)	V_M (cubic feet)	Q_{25} (cfs)
Existing Conditions					
1	2.40	18	0.49	5,386	5.88
2	4.27	17	0.95	10,133	10.45
3	0.77	11	0.21	1,821	1.88
4	0.95	11	0.25	2,147	2.33
Proposed Project					
1	1.89	19	0.37	4,194	4.63
2	1.20	18	0.24	2,596	2.94
3	1.84	15	0.41	4,187	4.50
4	2.01	13	0.47	4,409	4.92
5	1.53	13	0.36	3,373	3.75

Source: Breen Engineering, Inc., Drainage Concept Report, *2014.*
T_C: Time of concentration
Q_{PM}: Peak mitigated flow
V_M: Volume mitigated
Q_{25}: 25-year storm event

No subterranean structures are proposed as part of the Marina del Rey Parcel 44 Project. However in the unlikely event that groundwater is encountered, dewatering may be required. If necessary, dewatering wells would be drilled and pumps would be placed in the wells as needed to draw down the water table. Excess groundwater would be treated as directed by conditions associated with the NPDES permit and discharged to the existing storm drain system.

Best Management Practices

Best Management Practices (BMPs) are intended to minimize pollutants entering the off-site storm drain system and may be required by the County. Best Management Practices are actions and procedures established to reduce pollutant loading in storm drain systems. The two main categories of BMPs, which may be part of public agency activities or, in some cases, applicable to development projects, are "source control" and "treatment control." Source control BMPs are usually the most effective and economical in preventing pollutants from entering storm and non-storm runoff. Examples of source control BMPs that are relevant to the project include:

- Public Education/Participation activities which make information available to tenants.
- Materials Management activities, such as:

    1. Materials Use Controls, which include good housekeeping practices (storage, use and cleanup) when handling potentially harmful materials, such as cleaning materials, fertilizers, paint, pool chemicals and, where possible, using safer alternative products;

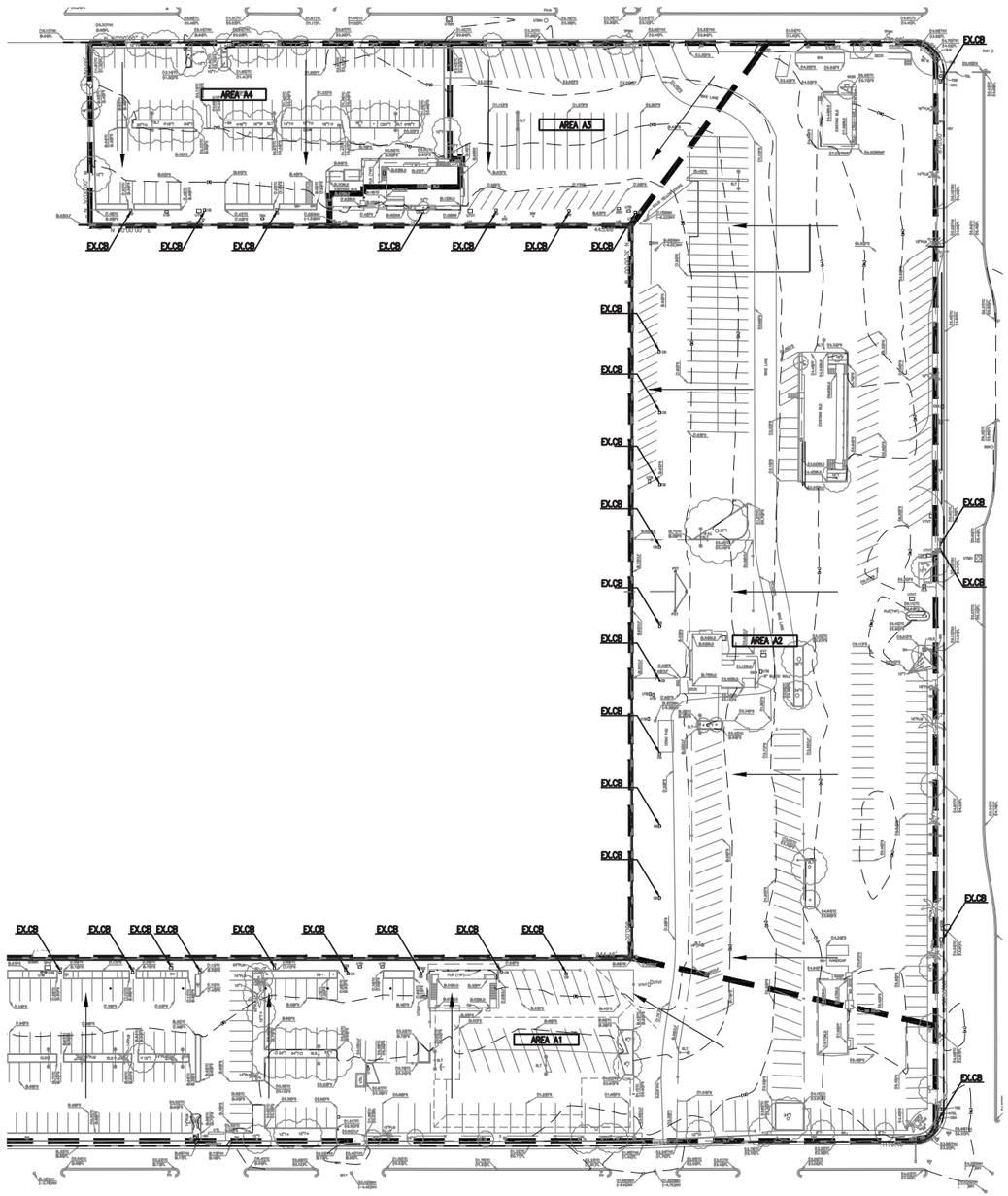
    2. Material Exposure Controls, which prevent and reduce pollutant discharge to storm water by minimizing the storage of hazardous materials (such as pesticides) on-site, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors; and

    3. Material Disposal and Recycling, which includes storm drain system signs and stenciling with language to discourage illegal dumping of unwanted materials. Household hazardous waste and used oil recycling at collection centers and round-up activities are very productive BMPs.

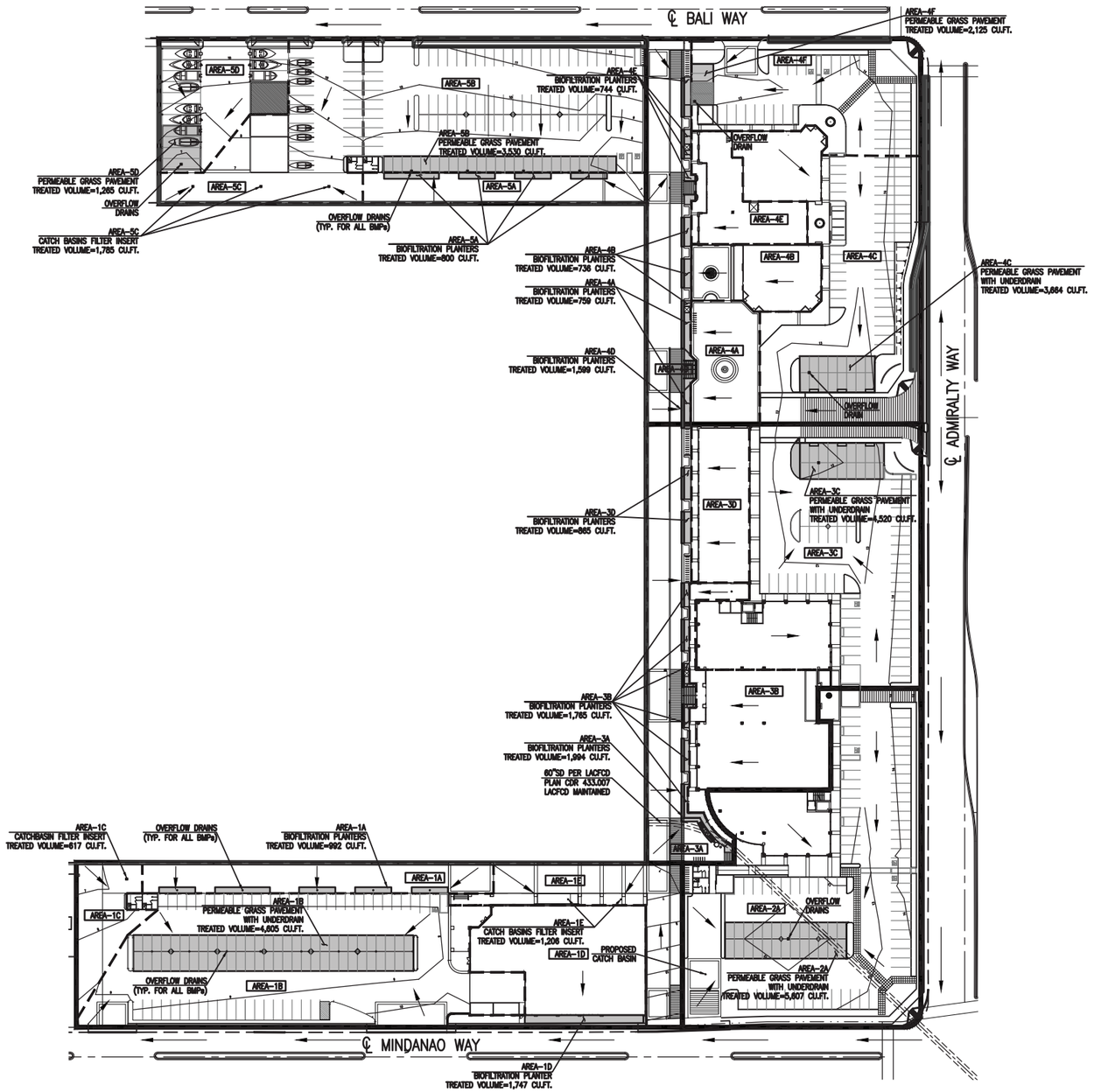
- Spill Prevention and Cleanup activities which are directed toward reducing the risk of spills during the outdoor handling and transport of chemicals, and toward developing plans and programs to contain and rapidly clean up spills before they get into the storm drain system.
- Street and Storm Drain Maintenance activities that control the movement of pollutants and remove them from pavement through catch basin cleaning, street sweeping, and by regularly removing illegally dumped material.
- Site design alternatives (e.g., roofs over dumpsters, spill containment curbs around stored material, etc.).

The following BMPs may also be implemented as part of the proposed project to satisfy SUSMP requirements:

- Insert filters in catch basins and storm drain inlets
- Stenciling catch basins and storm drain inlets with prohibitive language such as "No Dumping – Drains to Ocean" and/or graphical icon to discourage illegal dumping.



PRE-DEVELOPED CONDITIONS



POST DEVELOPED CONDITIONS

120 60 0 120

APPROXIMATE SCALE IN FEET

Source rendering is available in the appendices and includes engineering notes.

SOURCE: Breen Engineering, November 2013

FIGURE **4.6-2**

Drainage Concept Plan

- Regular sweeping of streets in the proposed development
- Provide trash cans and recycling receptacles along pedestrian walkways
- Post signs and prohibitive language and/or graphical icon to discourage illegal dumping
- Utilize non-toxic pesticides and fertilizers in the landscaping areas of the project
- Provide owners and renters with information and brochures outlining good housekeeping practices for the use and disposal of household products. Encourage the use of non-hazardous cleaning substances and to recycle unwanted household hazardous materials into a Countywide hazardous collection center

Treatment Control BMPs involve physical treatment of the runoff, usually through structural means. A variety of treatment control measures have been utilized throughout the country for storm water quality. However, the effectiveness of these controls is highly dependent on local conditions, such as climate, hydrology, soils, groundwater conditions, and extent of surrounding urbanization.

The Marina del Rey Parcel 44 Project proposes the use of planted pavement areas (i.e., flow through planters) where site runoff is treated through bio-filtration. Once treated, runoff would then infiltrate the sub-base that is lined with an impermeable barrier. Treated runoff will then be slowly released to the existing 60-inch storm drain that traverses the site near the intersection of Admiralty and Mindanao Way. With implementation of the planted pavement areas and other required BMPs, water quality impacts of the proposed project would not be significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact 4.6-2: **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.**

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.

The project site is currently developed with impervious surfaces. All stormwater runoff occurs in sheet flow and is conveyed towards the marina where it is diverted to catch basins along the sea wall. There is no form of pre-treatment or storage for the existing site runoff conditions. The grated catch basins along the sea wall collect water and are diverted to a 60-in reinforced concrete pipe storm drain, which comes through the site at the east corner between Admiralty Way and Mindanao Way and exits through the sea wall. The 60-in reinforced concrete pipe is owned and maintained by the County of Los Angeles Flood Control District.

Demolition and construction activities, which would disturb more than 5 acres (the project site totals 8.39 acres), would require an NPDES permit to mitigate demolition- and construction-related water quality impacts. As described above, the project applicant would be required to prepare an SWPPP pursuant to the NPDES that would identify the various BMPs that would be implemented on the site during demolition and construction (see below for a detailed discussion on BMPs). The project applicant is responsible for obtaining the necessary NPDES construction permit for the project site from the SWRCB. With compliance with the requirements of the NPDES construction permit, demolition- and construction-related erosion and flooding impacts would be less than significant.

As described in the Drainage Concept report for the proposed project (**Appendix 4.6**), new catch basins and storm drains on-site will collect and convey stormwater away from the proposed structures. Two single connections from the 60-inch LACFCD storm drain are proposed. One of the connections will be from the north/northeast portion of the site; the other connection is for the southern portion of the project site. All other drains will convey runoff through the sea wall, utilizing the existing design for drainage. As described above, peak runoff on the project site will be similar to existing conditions. Upon project occupancy, the project site would be covered with impervious surfaces and landscaping, and, therefore, would not be a source of erosion or siltation. While on-site drainage patterns would change because the configuration of buildings, roadways, and landscaping would differ as compared to existing conditions, all drainage would continue to be conveyed to Los Angeles County's storm drain system.

Operational impacts would be less than significant, because the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or off-site.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact 4.6-3: Place structures in areas subject to inundation by seiche, tsunami, or mudflow.

A tsunami is a large sea wave formed by the earth's movement or eruption of a volcano. A seiche is a wave caused by a tsunami, landslide, or winds that oscillate on the surface of an enclosed or partially enclosed body of water. As detailed in the Geotechnical Investigation, the Los Angeles County Seismic Safety Element (1990), the site is located in a tsunamis hazard zone. According to recently prepared tsunami related inundation maps by the State of California, the maximum potential run-up height for the Marina del Rey area could be up to 15 feet. The County of Los Angeles has included the site within the limits of a Tsunami Inundation Zone, and the site could be subjected to the effects of a seismic sea wave. All areas adjacent to the coastline have the potential to be impacted by a tsunami or a seiche. Hazard Areas Policy 4 of the Marina del Rey Land Use Plan requires that marina and harbor facilities "continue to be designed and constructed so as to reduce the potential impacts of tsunamis." The Land Use Plan states that "Public Works considers the developed portion of the Marina del Rey Local Coastal Plan (LCP) area as reasonably free of flood hazards."[17]

The Land Use Plan further states: "While low lying areas are statistically endangered by tsunami, they are isolated from the shoreline by distances of from 1,500 feet to 6,000 feet and are not considered directly exposed to tsunami hazard. The Marina del Rey Small Craft Harbor has sustained only minor damage in the past due to tsunami and seiche because of special design standards." While the risk of tsunami and seiche events is low, it is recognized that the site is in a Tsunami Inundation Zone.

The proposed project will not change the height of the existing bulkhead. As described in the Marina del Rey Land Use Plan, "no existing proposals are known which would provide protection to physical structures" from a tsunami. However, appropriate building techniques will be implemented to minimize the impact of a tsunami or seiche on the project site. Maintenance of a seawall on-site will reduce potential impacts of a tsunami or seiche. Tsunamis ranging in size from three to 5 feet have been reported along the coast of California after large earthquakes in the Pacific Rim; however, large destructive tsunamis (such as those caused by the earthquake in the Indian Ocean in 2004 and Japan in 2011) are extreme events. The proposed project will be constructed to modern design standards included the 2010 California Building Code requirements. With implementation of appropriate building design, no mitigation measures are necessary and impacts would be less than significant.

---

17 LUP, §C.10.d, p 10-5

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

4.6.4.2 Cumulative Impacts

Cumulative impacts for this analysis are discussed relative to the buildout of the upstream tributary watershed in which the project lies. Development and redevelopment projects in the watershed must comply with storm drainage design criteria that prohibit significant increases in post-development storm flows into the small-craft harbor and significant increases in storm flow velocities. As a result, overall storm runoff discharge quantities into the regional storm drain system would be no greater than under existing conditions.

Because on-site drainage facilities would have adequate capacity to capture and convey off-site flows from the site and from developed upstream areas, no significant increases in velocity and related scouring, and no significant cumulative project flooding impacts are expected to occur downstream of the site.

Furthermore, development and redevelopment of the remainder of the watershed would result in water quality impacts similar to those of the proposed project, and would be subject to the same types of water quality requirements as the project. Therefore, no cumulative water quality impacts are anticipated.

Cumulative Mitigation Measures

All cumulative projects within the tributary watershed are required to meet the same general flood control and water quality requirements as the proposed project, and other site-specific requirements that the affected jurisdiction and SWRCB would specifically identify for those projects. Implementation of these requirements would serve to avoid the potential for creating flooding, erosion, siltation, and water quality impacts in the small-craft harbor.

Residual Impacts

Cumulative impacts will be less than significant.

4.7 NOISE AND VIBRATION

4.7.1 INTRODUCTION

This section of the EIR describes the existing noise environment on the project site and in the surrounding area and evaluates the potential for noise impacts associated with implementation of the proposed project. The analysis focuses on the potential for the project to result in impacts on adjacent noise-sensitive uses. Results of the noise monitoring study performed for the proposed project are provided in **Appendix 4.7**. Effects related to permanent ambient noise increases and aircraft noise were found not to be significant in the Initial Study prepared for the project and included in **Appendix 1.0**.

4.7.1.1 Introduction to Noise

Noise is ordinarily described as unwanted sound. Sound is generally undesirable when it interferes with normal activities, causes actual physical harm, or has an adverse effect on health. The definition of "noise" as unwanted sound implies that it has an adverse effect on, or causes a substantial annoyance to, people and their environment.

Sound-pressure level alone is not a reliable indicator of loudness because the human ear does not respond uniformly to sounds at all frequencies. For example, the human ear is less sensitive to low and high frequencies than to the medium frequencies that more closely correspond to human speech. In response to the human ear's sensitivity, or lack thereof, to different frequencies, the A-weighted noise level, referenced in units of dB(A), was developed to better correspond with people's subjective judgment of sound levels. In general, changes in a noise level of less than 3 dB(A) are not noticed by the human ear.[1]

Changes from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. An increase of greater than 5 dB(A) is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound volume. A doubling of sound energy results in a 3 dB(A) increase in sound, which means that a doubling of sound wave energy (e.g., doubling the volume of traffic on a roadway), would result in a barely perceptible change in sound level. Common noise levels associated with certain activities are shown on **Figure 4.7-1, Common Noise Levels.**

1 US Department of Transportation, Federal Highway Administration, *Highway Noise Fundamentals*, (Springfield, Virginia: Federal Highway Administration, 1980) 81.

Noise sources occur in two forms: point sources such as stationary equipment or individual motor vehicles, and line sources such as a roadway with a large number of mobile point sources (motor vehicles). Sound generated by a stationary point source typically diminishes (attenuates) at a rate of 6 dB(A) for each doubling of distance from the source to the receptor at acoustically hard sites and at a rate of 7.5 dB(A) at acoustically soft sites.[2]

A hard or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt, concrete, and very hard-packed soil. An acoustically soft or absorptive site is characteristic of normal earth and most ground with vegetation. As an example, a 60 dB(A) noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dB(A) at 100 feet from the source and it would be 48 dB(A) at 200 feet from the source. Noise from the same point source at an acoustically soft site would be 52.5 dB(A) at 100 feet and 45 dB(A) at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dB(A) and 4.5 dB(A) per doubling distance from the source to the receptor for hard and soft sites, respectively.[3]

Artificial or natural barriers can also attenuate sound levels, as illustrated in **Figure 4.7-2, Noise Attenuation by Barriers.** Solid walls and berms may reduce noise levels by 5 to 10 dB(A).[4] The same point source at an acoustically soft site would be 52.5 dB(A) at 100 feet and 45 dB(A) at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dB(A) and 4.5 dB(A) per doubling distance from the source to the receptor for hard and soft sites, respectively.[5] Artificial or natural barriers can also attenuate sound levels, as illustrated in **Figure 4.7-2**. Solid walls and berms may reduce noise levels by 5 to 10 dB(A).[6]

The minimum attenuation of exterior to interior noise provided by typical structures in California is provided in **Table 4.7-1, Outside to Inside Noise Attenuation (dB(A)).**

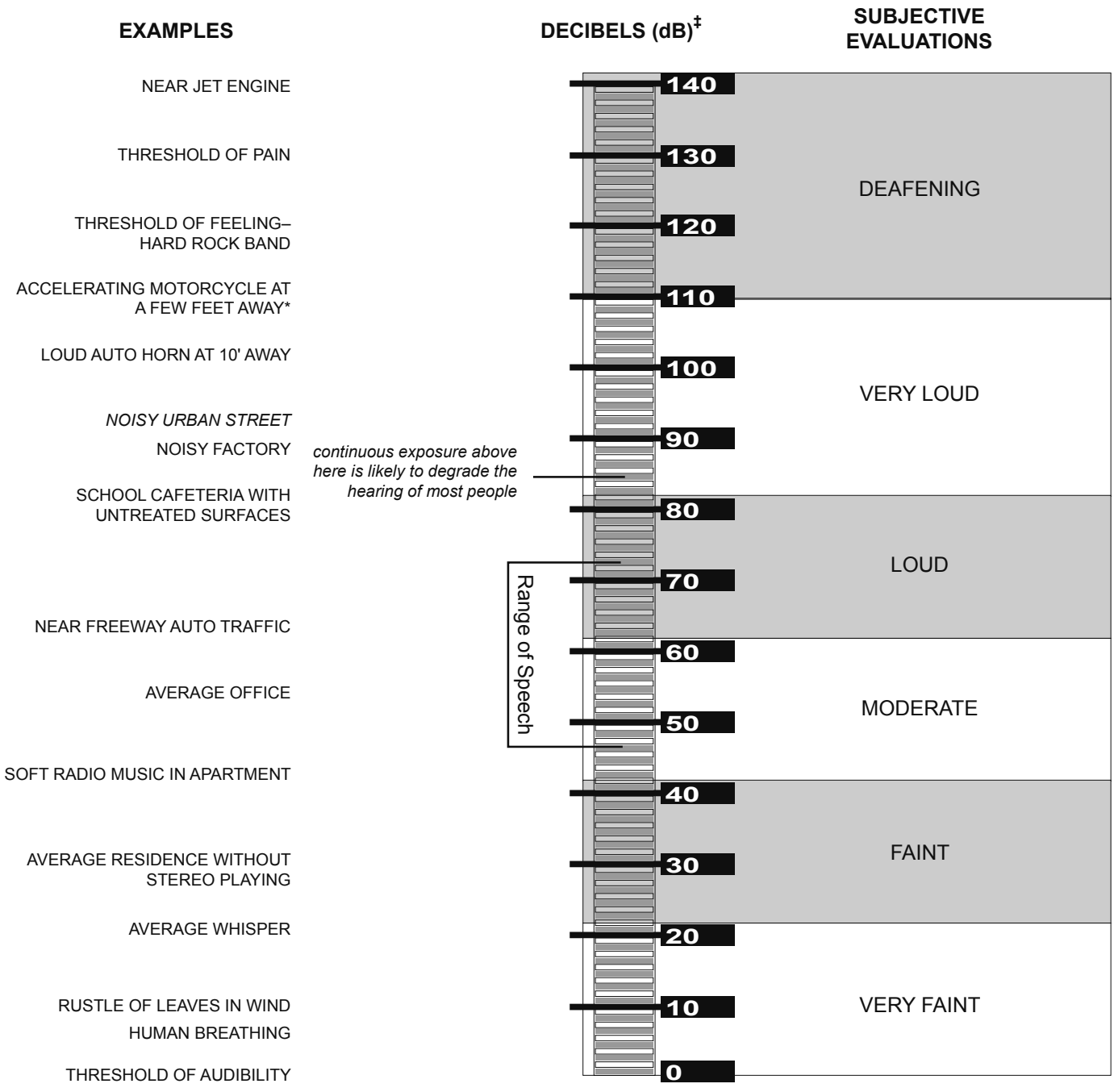
2 US Department of Transportation, *Highway Noise Fundamentals*, 97.

3 US Department of Transportation, *Highway Noise Fundamentals*, 97.

4 US Department of Transportation, *Highway Noise Fundamentals*, 18.

5 US Department of Transportation, *Highway Noise Fundamentals*, 18.

6 US Department of Transportation, *Highway Noise Fundamentals*, 18.

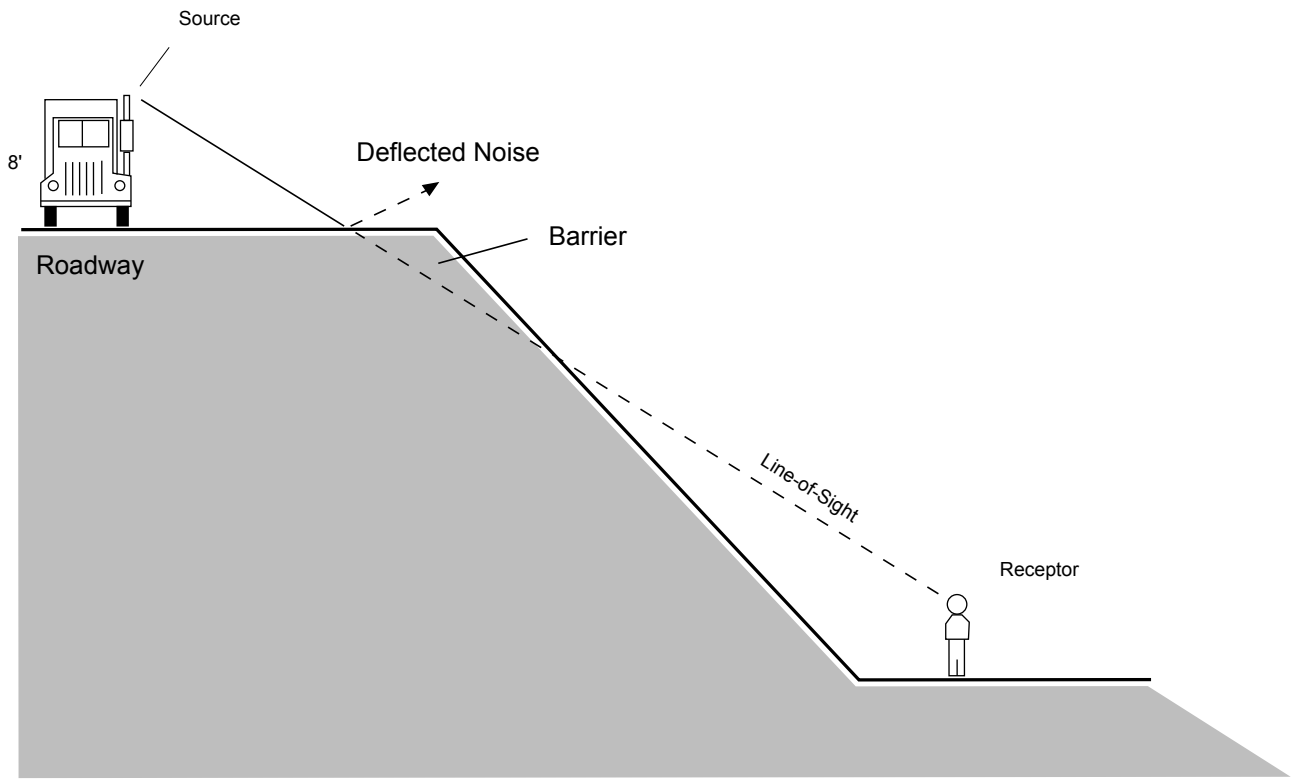


** NOTE: 50' from motorcycle equals noise at about 2000' from a four-engine jet aircraft.*

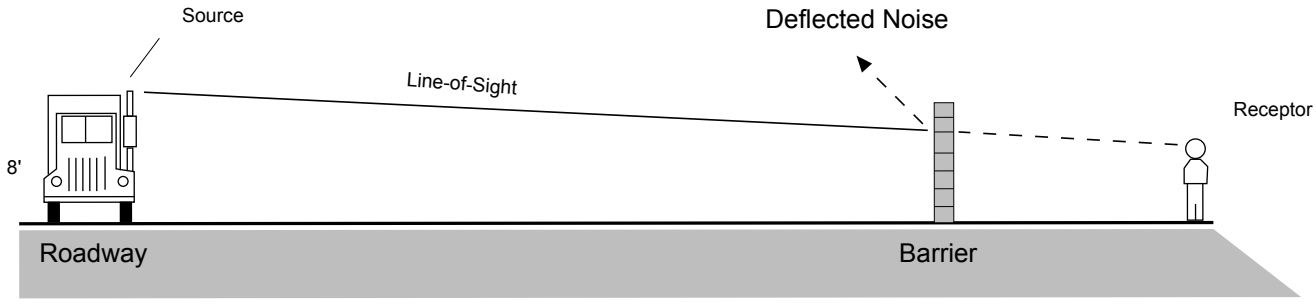
‡ *NOTE: dB are "average" values as measured on the A–scale of a sound–level meter.*

FIGURE **4.7-1**

Common Noise Levels



"Barrier Effect" Resulting from Differences in Elevation.



"Barrier Effect" Resulting from Typical Soundwall.

SOURCE: Impact Sciences, Inc., November 2013

FIGURE **4.7-2**

Noise Attenuation by Barriers

Table 4.7-1
Outside to Inside Noise Attenuation (dB(A))

Building Type	Open Windows	Closed Windows[1]
Residences	17	25
Schools	17	25
Places of Worship	20	30
Hospitals/Convalescent	17	25
Offices	17	25
Theaters	20	30
Hotels/Motels	17	25

Source: Transportation Research Board, National Research Council, Highway Noise: A Design Guide for Highway Engineers, National Cooperative Highway Research Program Report 117.
[1] *As shown, structures with closed windows can attenuate exterior noise by a minimum of 25 to 30 dB(A).*

When assessing community reaction to noise, there is an obvious need for a scale that averages sound-pressure levels over time and quantifies the result in terms of a single numerical descriptor. Several scales have been developed that address community noise levels. Those that are applicable to this analysis are the 1-hour equivalent continuous noise level (Leq) and community noise equivalent level (CNEL). Leq is the average A-weighted sound level measured over a given time interval. Leq can be measured over any period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods. CNEL is another average A-weighted sound level measured over a 24-hour period. However, this noise scale is adjusted to account for some individuals' increased sensitivity to noise levels during the evening and nighttime hours. A CNEL noise measurement is obtained by adding 5 decibels to sound levels occurring during the evening from 7:00 PM to 10:00 PM, and 10 decibels to sound levels occurring during the nighttime from 10:00 PM to 7:00 AM. The 5 and 10 decibel penalties are applied to account for increased noise sensitivity during the evening and nighttime hours. The logarithmic effect of adding these penalties to Leq measurements typically results in a CNEL measurement that is within approximately 3 dB(A) of the peak-hour Leq.[7]

4.7.1.2 Introduction to Vibration

Vibration consists of waves transmitted through solid material. The solid medium can be excited by forces, movements, or pressure fields. Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may comprise a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is

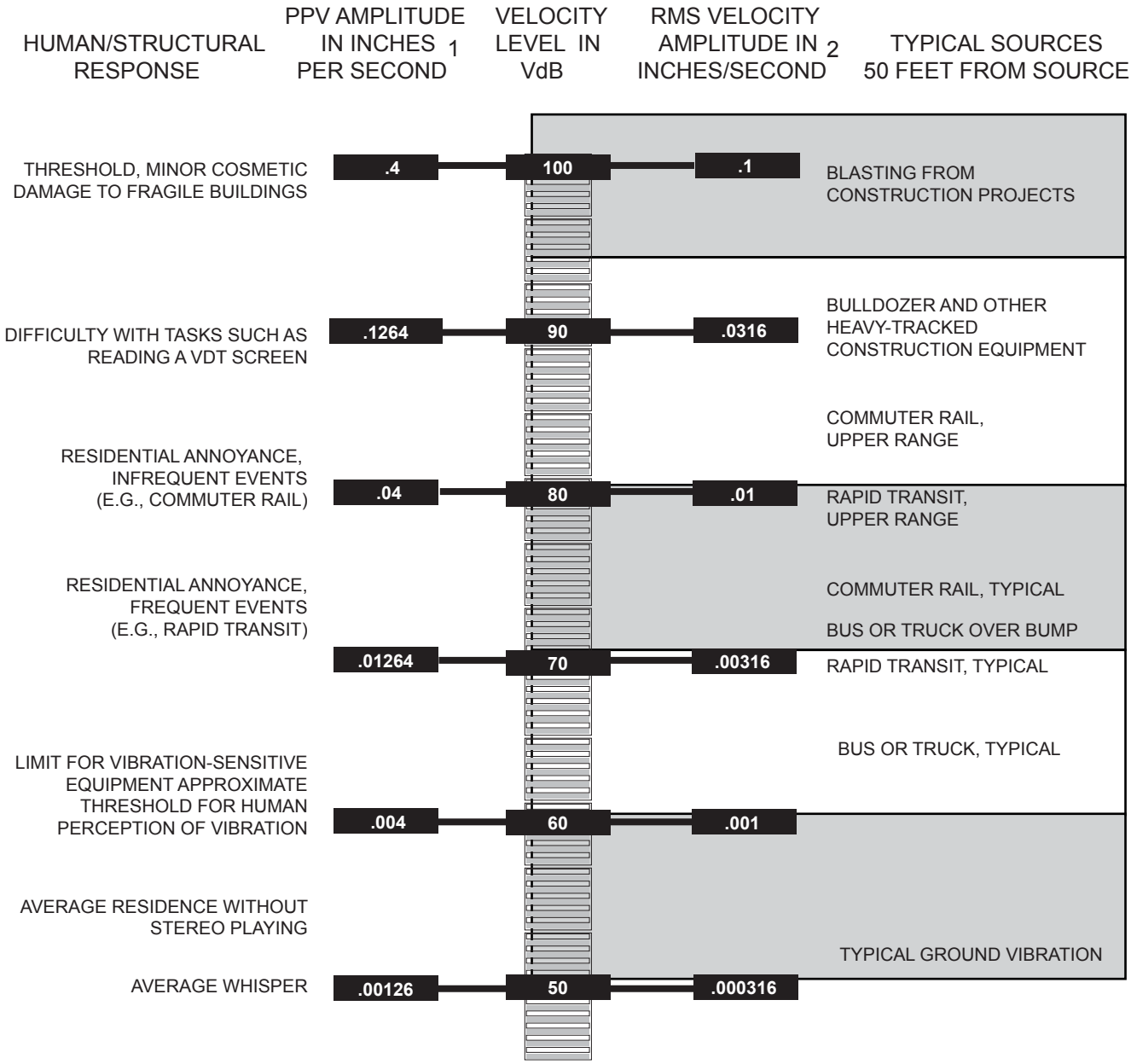
7 California Department of Transportation, *Technical Noise Supplement: A Technical Supplement to the Traffic Noise Analysis Protocol*, (Sacramento, California: October 1998), N51–N54.

oscillating, measured in hertz (Hz). Most environmental vibrations consist of a composite, or a "spectrum" of many frequencies, and generally are classified as broadband or random vibrations. The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration often is measured in terms of the peak particle velocity (PPV)[8]

Vibration energy spread out as it travels through the ground, causing the vibration amplitude to attenuate with distance from the source. High-frequency vibrations reduce much more rapidly than low-frequency vibrations, so that in the far-field from a source, the low frequencies tend to dominate. An example of high-frequency vibration would be the ultrasound used in medicine, while sources of low-frequency vibration include pumps, boilers, electrical installations, fans, and road and rail traffic. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, there is usually a ground-to-foundation coupling loss, but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows or items on shelves, or the motion of building surfaces.

Groundborne vibration can be perceived without instrumentation within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough groundborne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps. If traffic, typically heavy trucks, induces perceptible vibration in buildings, such as window rattling or shaking of small loose items, then it is most likely an effect of low-frequency airborne noise or ground characteristics. Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans. **Figure 4.7-3, Typical Levels of Groundborne Vibration**, identifies the typical groundborne vibration levels in inches/second PPV and human response to different levels of vibration.

8 Particle velocity is the velocity of a particle (real or imagined) in a medium as it transmits a wave.



[1] PPV is typically a factor 1.7 to 6 times greater than RMS vibration velocity. A factor of 4 was used to calculate noise levels.

[2] Vibration levels in terms of velocity levels are defined as: $V=20 \times \log_{10} (a/r)$
V=velocity levels in decibels
a=RMS velocity amplitude
r=reference amplitude (accepted reference quantities for vibration velocity are 1×10^{-6} inches/second in the United States)

FIGURE **4.7-3**

Typical Levels of Groundbourne Vibration

4.7.2 ENVIRONMENTAL SETTING

4.7.2.1 Project Site and Surrounding Development

Parcel 44 is a U-shaped parcel that wraps partially around Basin G and is currently developed with seven existing structures on the site totaling 14,724 square feet. The remainder of the site consists of paved surface parking. The existing landside structures were developed as office space for boat brokers, a boat repair shop, and a yacht club. The Marvin Braude Bike Path, which traverses the east side of Marina del Rey and connects the bicycle lanes on Washington Boulevard with the bike facilities along Fiji Way, runs north-south through the on-site parking and boat storage lots to the east of Basin G.

Marina del Rey is a highly urbanized area and is home to approximately 5,000 pleasure boats and a variety of land uses, including hotels, restaurants, office, and commercial centers, residential uses and public parks, beaches, and bike paths. Admiralty Way bounds the site to the east. Two mid to high-rise (approximately 10-story) office building are located on Admiralty Way between Mindanao Way and Bali Way. A two-story office building is located between the two high-rise buildings. Immediately north of the project site across Bali Way is additional paved parking.

The noise-sensitive use nearest to the project site is the Marina del Rey Hotel located at the western end of Basin G (at the terminus of Bali Way), approximately 600 feet west of the project site. Residential development at the eastern end of Basin C is located approximately 1,800 feet west of the project site, and would be the next nearest noise-sensitive use. Burton Chace Park is located at the terminus of the Mindanao Way mole road and is situated between Basins G and H approximately 600 feet southwest of the project site.

4.7.2.2 Existing Noise Environment

The primary source of noise in the project area is traffic on adjacent roads, including Admiralty Way, Bali Way, and Mindanao Way. Other sources of noise include boat engines and other boat-related activities in the adjacent marina.

Impact Sciences, Inc., conducted noise monitoring at four locations on and near the project site on March 30, 2012. Four sound level meters (SLMs) were placed at intersections and nearby noise-sensitive uses for 24-hour measurement of existing noise levels. The locations of the noise monitors are shown in **Figure 4.7-4, Noise Monitoring Locations**. The results of the noise monitoring are summarized in **Table 4.7-2, Existing Ambient Noise Levels**, and presented in **Appendix 4.7**.

Table 4.7-2
Existing Ambient Noise Levels

Location	Maximum (Leq)	Overall (Leq)
Location 1 – Mindanao Way mid-block	70.1	56.0
Location 2 – Bali Way mid-block	75.1	60.2
Location 3 – Admiralty Way mid-block	72.5	69.8
Location 4 – Admiralty Way at Bali Way	70.1	67.1

Source: Impact Sciences, Inc.

4.7.3 REGULATORY FRAMEWORK

4.7.3.1 Federal

Department of Housing and Urban Development

The US Department of Housing and Urban Development (HUD) has set a goal of 65 dB(A) Ldn (a 24-hour noise measurement equivalent to CNEL) as a desirable maximum exterior standard for residential units developed under HUD funding. While HUD does not specify acceptable interior noise levels, standard construction of residential dwellings constructed under Title 24 standards typically provides in excess of 20 dB(A) of attenuation with the windows closed. Based on this premise, a residence's interior Ldn should not exceed 45 dB(A) Ldn.[9]

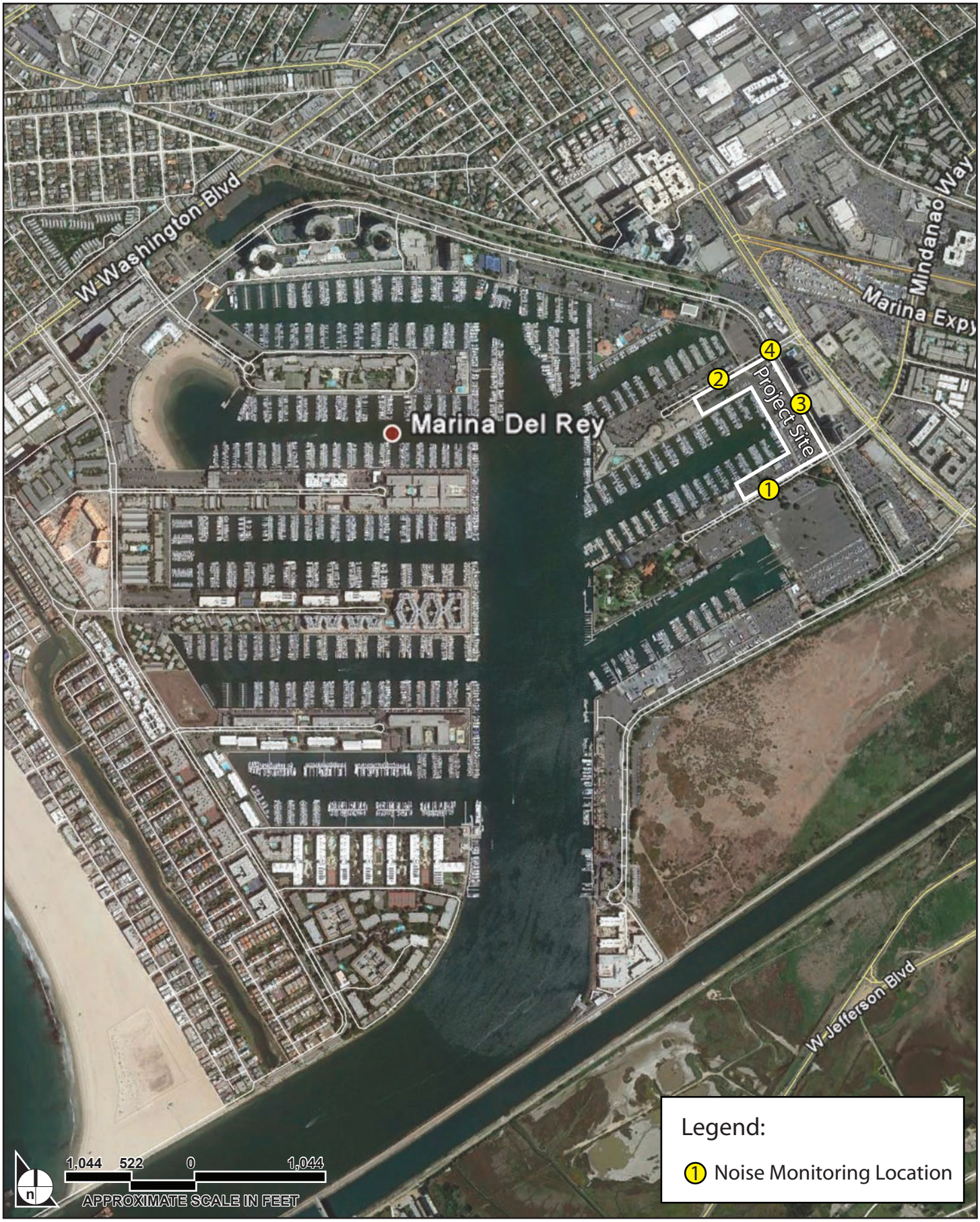
Federal Transit Administration

The Federal Transit Administration has published guidelines for assessing the impacts of groundborne vibration associated with construction activities, which have been applied by other jurisdictions to other types of projects. The Federal Transit Administration measure of the threshold of architectural damage for conventional sensitive structures (e.g., residential units) is 0.2 inch/second PPV.[10] The vibration threshold of perception is 0.01 inch/second PPV, which is approximately equal to 94 vibration decibels (VdB).[11]

9 24 Code of Federal Regulations 51, Housing and Urban Development, Environmental Criteria and Standards, revised April 1, 2004.

10 US Department of Transportation, Federal transit Administration, Office of Planning and Environment, *Transit and Vibration Impact Assessment*, FTA-VA-90-1003-06, May 2006.

11 Federal Transit Administration, Office of Planning and Environment, *Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06, 2006, 12–13. The Federal Transit Administration recommends that these limits be viewed as "criteria that should be used during the environmental impact assessment phase to identify problem locations that must be addressed during final design."



SOURCE: Google Earth, November 2013

FIGURE **4.7-4**

Noise Monitoring Locations

4.7.3.2 State

California Code of Regulations

The California Noise Insulation Standards of 1988[12] require that interior noise levels from exterior sources be reduced to 45 dB(A) or less in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed. Measurements are based on Ldn or CNEL. Where exterior noise levels exceed 60 dB(A) Ldn CNEL, an acoustical analysis is required to show that the proposed construction will reduce interior noise levels to 45 dB(A) Ldn CNEL.

California Department of Health

Noise

The State of California Department of Health Services, Environmental Health Division, has published *Guidelines for Noise and Land Use Compatibility* (the *State Guidelines*).[13] The *State Guidelines*, illustrated in **Figure 4.7-5, State Land Use Compatibility Guidelines for Noise**, indicate that residential land uses and other noise-sensitive receptors should generally be located in areas where outdoor ambient noise levels do not exceed 65 to 70 dB(A) (CNEL or Ldn). The Department of Health Services does not mandate application of this compatibility matrix to development projects; however, each jurisdiction is required to consider the *State Guidelines* when developing its general plan noise element and when determining acceptable noise levels within its community. However, the State Department of Housing and Community Development does require that new multi-family units not be exposed to outdoor ambient noise levels in excess of 65 dB(A) (CNEL or Ldn), and that, if necessary, sufficient noise insulation be provided to reduce interior ambient levels to 45 dB(A) Ldn/CNEL. The US EPA identified a maximum indoor noise level of 45 dB(A) as necessary to protect against sleep interference. Assuming a conservative structural noise insulation of 20 dB for typical dwellings, 45 dB(A) corresponds to an outdoor CNEL of 65 dB(A) as minimizing sleep interference.

Under the *State Guidelines*, an exterior noise level of 70 dB(A) Ldn/CNEL is typically the dividing line between an acceptable and unacceptable exterior noise environment for all noise-sensitive uses, including schools, libraries, places of worship, hospitals, day care centers, and nursing homes of conventional construction.

---

12 California Code of Regulations Title 24, Section 3501 et seq.

13 These guidelines are also published in *State of California General Plan Guidelines*, Appendix C: Guidelines for the Preparation and Content of the Noise Element of the General Plan (Sacramento, California: Governor's Office of Planning and Research, October 2003).

Noise levels below 75 dB(A) Ldn/CNEL are typically acceptable for office and commercial buildings, while levels up to 80 dB(A) Ldn/CNEL are typically acceptable for industrial uses. In unacceptable interior noise environments, additional noise insulation features, such as extra batting or resilient channels[14] in exterior walls, double-paned windows, air conditioners to enable occupants to keep their windows closed without compromising their comfort, solid wood doors, and noise baffles on exterior vents, are typically needed to provide acceptable interior noise levels. The best type of noise insulation is based on detailed acoustical analyses that identify all practical noise insulation features and that confirm their effectiveness.

4.7.3.3 Local

County of Los Angeles General Plan Noise Element

The general plan Noise Element outlines basic goals and policies for the County and its constituent municipalities to follow. It states as a general goal that noise mitigation costs should be assessed to the producers of the noise. Policy 16 of the Noise Element states that the County should "encourage cities to adopt definitive noise ordinances and policies that are consistent throughout the County." The Noise Element does not prescribe any specific standards for acceptable noise or vibration levels. Because the Marina del Rey area is in unincorporated Los Angeles County, the specific and applicable noise standards are addressed in the County Noise Control Ordinance (County Code Section 12.08). The Noise Control Ordinance prescribes standards for point and stationary source noise and construction-related noise, as well as general standards for vibration.

County of Los Angeles Noise Control Ordinance (For Point and Stationary Source Noise)

The County Noise Control Ordinance (County Code Section 12.08) provides standards for both interior and exterior noise standards and sets guidelines for a variety of activities. Section 12.08.390 identifies exterior noise standards for stationary and point noise sources, specific noise restrictions, exemptions and variances for exterior point or stationary noise sources. Several of these standards are applicable to the project and are discussed below.

The County Noise Control Ordinance states that exterior noise levels caused by stationary or point noise sources shall not exceed the levels identified below in **Table 4.7-3, County of Los Angeles Exterior Noise**

[14] A resilient channel is a pre-formed section of sheet metal approximately 0.5 inch deep by 2.5 inches wide by 12 inches long that is installed between wallboard panels and framing to reduce sound transmission through walls. By preventing the wallboard from lying against the studs, the channel inhibits the transmission of sound through the framing.

Standards for Stationary and Point Noise Sources, or the ambient noise level,[15] whichever is greater. The Noise Control Ordinance (Section 12.08.400 of the County Code) also states that interior noise levels (resulting from outside point or stationary sources) within multi-family residential units shall not exceed 45 dB(A) Leq between 7:00 AM and 10:00 PM and 40 dB(A) Leq between 10:00 PM and 7:00 AM. Conventional construction of buildings with the inclusion of fresh air supply systems or air conditioning will normally ensure that interior noise levels are acceptable (reference **Table 4.7-1** for noise reduction provided by conventional construction techniques).

Table 4.7-3
County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level dB(A) Leq[1]
I	Noise Sensitive Area[2]	Anytime	45
II	Residential Properties	10:00 PM to 7:00 AM	45
		7:00 AM to 10:00 PM	50
III	Commercial Properties	10:00 PM to 7:00 AM	55
		7:00 AM to 10:00 PM	60
IV	Industrial Properties	Anytime	70

Source: County of Los Angeles Noise Control Ordinance, County Code Section 12.08.390.

[1] ***Standard No. 1*** *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level; or, if the ambient L50 exceeds the forgoing level, then the ambient L50 becomes the exterior noise level for Standard No. 1.*
Standard No. 2 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from Standard No. 1 plus 5 dB(A); or, if the ambient L25 exceeds the forgoing level, then the ambient L25 becomes the exterior noise level for Standard No. 2.*
Standard No. 3 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 5 minutes in any hour. Standard No. 3 shall be the applicable noise level from Standard No. 1 plus 10 dB(A); or, if the ambient L8.3 exceeds the forgoing level, then the ambient L8.3 becomes the exterior noise level for Standard No. 3.*
Standard No. 4 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 1 minute in any hour. Standard No. 4 shall be the applicable noise level from Standard No. 1 plus 15 dB(A); or, if the ambient L1.7 exceeds the forgoing level, then the ambient L1.7 becomes the exterior noise level for Standard No. 4.*
Standard No. 5 *shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from Standard No. 1 plus 20 dB(A); or, if the ambient L0 exceeds the forgoing level, then the ambient L0 becomes the exterior noise level for Standard No. 5.*

[2] *Not defined in the County Noise Ordinance. To be designated by the County Health Officer.*

County of Los Angeles Noise Ordinance (For Construction Noise)

The County Noise Control Ordinance (County Code Section 12.08.440) identifies specific restrictions regarding construction noise. Operation of equipment used in construction, drilling, repair, alteration, or demolition work is prohibited between weekday hours of 7:00 PM to 7:00 AM and anytime on Sundays

15 Ambient noise level is defined as the existing background noise level at the time of measurement or prediction.

or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line.[16] The Noise Control Ordinance further states that the contractor shall conduct construction activities in such a manner that the maximum noise levels at affected buildings will not exceed those listed in **Table 4.7-4, County of Los Angeles Construction Equipment Noise Restrictions**. All mobile and stationary internal-combustion-powered equipment and machinery is required to be equipped with suitable exhaust and air-intake silencers in proper working order.

Table 4.7-4
County of Los Angeles Construction Equipment Noise Restrictions

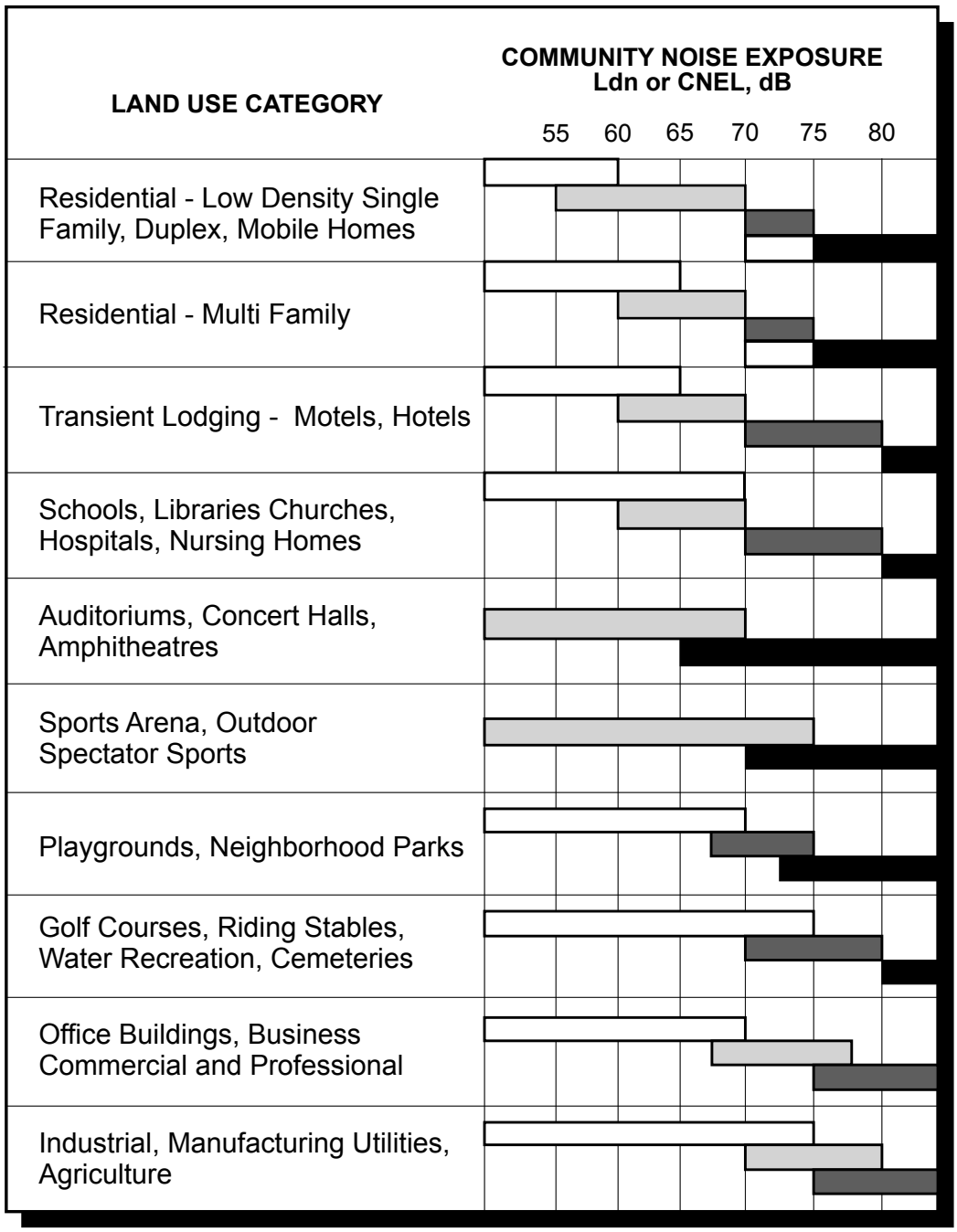
Residential Structures	Single-Family Residential	Multi-Family Residential	Commercial[1]
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment:			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	75 dB(A) Leq	80 dB(A) Leq	85 dB(A) Leq
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	60 dB(A) Leq	64 dB(A) Leq	70 dB(A) Leq
Stationary Equipment: Maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dB(A) Leq	65 dB(A) Leq	70 dB(A) Leq
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dB(A) Leq	55 dB(A) Leq	60 dB(A) Leq
Business Structures			
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment:			
Daily, including Sunday and legal holidays, all hours		85 dB(A) Leq	

Source: County of Los Angeles Noise Control Ordinance, County Code Section 12.08.440.
[1] *Refers to residential structures within a commercial area. This standard does not apply to commercial structures.*

Los Angeles County Code Vibration Guidelines (Section 12.08.560)

The County Code prohibits the operation or permission of operation of any device that creates vibration above the vibration perception threshold (motion velocity of 0.01 in/sec over the range of 1 to 100 hertz) at or beyond the property boundary on private property, or at 150 feet from the source if on a public space or public right of way. These guidelines apply to impacts associated with both project construction and operation.

16 Noise disturbance is not defined in the Noise Control Ordinance. The County Health Officer has the authority to define and determine the extent of a noise disturbance on a case-by-case basis.



NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise reduction features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

SOURCE: California Governor's Office of Planning and Research, State of California General Plan Guidelines, Appendix C: Guidelines for the Preparation and Content of Noise Elements of the General Plan, October 2003.

FIGURE **4.7-5**

State Land Use Compatibility Guidelines for Noise

4.7.4 IMPACT ANALYSIS

4.7.4.1 Thresholds of Significance

The County of Los Angeles includes thresholds of significance in its Initial Study checklist. In general, these thresholds are similar to the applicable thresholds listed in Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*. Where the thresholds differ, it is noted below. Therefore, the proposed project would have a potentially significant impact with respect to noise and vibration if it would:

a) Expose persons to or generate noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies.

b) Expose persons to or generate excessive groundborne vibration or groundborne noise levels.

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems.

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, result in exposure of people residing or working in the project area to excessive noise levels

f) For a project within the vicinity of a private airstrip, result in exposure of people residing or working in the project area to excessive noise levels

The Initial Study determined that the project would result in less than significant impacts in regard to the thresholds listed below. Therefore these thresholds will not be discussed further in this document. The Initial Study has been attached to this document as **Appendix 1.0**.

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas.

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

4.7.4.2 Methodology

Analysis of the future noise environment presented in this noise impact analysis is based on technical reports, noise prediction modeling, and empirical observations. Noise levels for some stationary activities were estimated based on available technical reports and literature. Noise modeling procedures involved calculating existing and future vehicular noise levels along individual roadway segments in the vicinity of the proposed project site. This task was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. Average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by the California Department of Transportation (Caltrans).[17] Caltrans data show that California automobile noise is 0.8 to 1.0 dB(A) higher than national levels, and that medium- and heavy-truck noise is 0.3 to 3.0 dB(A) lower than national levels.[18] Traffic volumes used as data inputs in the noise prediction model were provided by the project traffic engineer in **Section 4.8, Traffic**, of this EIR.

This section analyzes potential noise impacts using the County of Los Angeles exterior noise standards provided in **Table 4.7-3**, above. Analysis in this section addresses the existing and future noise environments on and off the proposed project site. The assessment of off-site noise levels focuses on how on-site activities and increased traffic levels would impact existing land uses near the project site.

This section specifically focuses on impacts to existing noise-sensitive uses, or those uses that would be most sensitive to an increase in noise levels. The noise-sensitive use nearest to the project site is the Marina del Rey Hotel located at the western end of Basin G, approximately 600 feet west of the project site. Burton Chace Park is located approximately 850 feet southwest of the project site. Residential development at the eastern end of Basin C is located approximately 1,800 feet west of the project site, and would be the next nearest noise-sensitive use. Noise levels were modeled with and without project traffic to determine those locations at which the project (via increased traffic) may have an impact on existing noise-sensitive uses.

---

17 Rudolf W. Hendriks, *California Vehicle Noise Emission Levels* (Sacramento, California: California Department of Transportation, January 1987), NTIS, FHWA/CA/TL-87/03.

18 Rudolf W. Hendriks, *California Vehicle Noise Emission Levels*, NTIS, FHWA/CA/TL-87/03.

4.7.4.3 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.7-1: **The project would not result in exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08).**

Analysis

Operational Roadway Noise

Implementation of the proposed project would result in noise from vehicular traffic on roads used to access the project site and from increased activity on the project site. As discussed above, the County of Los Angeles has established noise level standards for specific land use types. The applicable standards for the project site are 55 dB from 10:00 PM to 7:00 AM (nighttime) and 60 dB from 7:00 AM to 10:00 PM (daytime). The noise-sensitive use nearest to the project site is the Marina del Rey Hotel located at the western end of Basin G, approximately 600 feet west of the project site, Burton Chace Park is located approximately 850 feet southwest of the project site. The nearest residential development is situated at the eastern end of Basin C and is located approximately 1,800 feet west of the project site, and would be the next nearest noise-sensitive land use.

As shown above in **Table 4.7-2**, monitored noise levels at the project site ranged from 56 dB(A) to 69.8 dB(A). The monitored levels shown in **Table 4.7-2** indicate that existing ambient noise exceeds the County threshold at two of the four noise monitoring locations, and is at the threshold at a third location.

Based on the traffic study prepared for the proposed project, sound levels for existing traffic volumes with and without the project can be modeled for various locations near the project site. **Table 4.7-5, Existing Plus Project Traffic Noise Levels**, provides existing and future noise levels based on projected traffic increases at and near the project site.

Table 4.7-5
Existing Plus Project Traffic Noise Levels

Location	Noise Level - dB(A) CNEL Existing	Existing Plus Project	Change
Lincoln Blvd at Venice Blvd.	68.6	68.6	-
Pacific Ave. at Washington Blvd.	65.1	65.2	0.1
Via Dolce at Washington Blvd.	65.5	65.6	0.1
Via Marina at Washington Blvd.	65.9	66.0	0.1
Palawan Way at Washington Blvd.	66.3	66.3	-
Abbot Kinney Blvd. At Washington Blvd.	68.0	68.0	-
Lincoln Blvd. at Washington Blvd.	69.0	69.1	0.1
Glencoe Ave. at Washington Blvd.	68.4	68.5	0.1
Via Marina at Admiralty Way	66.8	66.8	-
Palawan Way at Admiralty Way	67.2	67.4	0.2
Lincoln Blvd. at Maxella Ave.	70.0	70.1	0.1
Glencoe Ave at Maxella Ave.	64.7	64.7	-
Lincoln Blvd. at Highway 90	70.1	70.2	0.1
Admiralty Way at Bali Way	68.1	68.2	0.1
Lincoln Blvd at Bali Way	68.8	68.8	-
Admiralty Way at Mindanao Way	67.3	67.4	0.1
Lincoln Blvd. at Mindanao Way	70.1	70.2	0.1
Mindanao Way at Highway 90 EB	66.3	66.4	0.1
Mindanao Way at Highway 90 WB	66.4	66.5	0.1
Mindanao Way at Glencoe Ave.	66.3	66.3	-
Admiralty Way at Fiji Way	64.9	64.9	-
Lincoln Blvd. at Fiji Way	70.9	71.0	0.1
Culver Blvd. at Highway 90 EB	67.9	67.9	-
Culver Blvd. at Highway 90 WB	67.5	67.5	-
Lincoln Blvd. at Jefferson Blvd.	71.0	71.0	-

Source: Impact Sciences, Inc.

As shown in **Table 4.7-5**, existing conditions exceed the County noise standard at all of the studied locations. Project-related increases in traffic would result in an incremental increase in the noise levels at these locations. However, increases would range from 0 to 0.2 dB(A) at the studied intersections, which would not be a perceptible increase in ambient noise levels. Therefore, in operation, the proposed project would not cause substantial increases in existing noise levels at the studied intersections and impacts would be less than significant.

Stationary/Point Source Noise

In operation, the proposed project would increase noise levels on the project site due to an increase in uses compared to existing conditions. Noise-generating activities within the project site would consist primarily of commercial activities such as retail, office, and restaurant uses. Additional point sources could include HVAC systems. Off-site sensitive receptors could potentially be affected by the introduction of such equipment. Typically, this type of equipment produces noise levels of approximately 56.0 dB(A) at 50 feet distance from the source. It is standard to measure the noise produced by this equipment at 50 feet. As discussed above, the nearest sensitive receptor to the proposed project is the Marina del Rey Hotel located at the western end of Basin G, approximately 600 feet west of the project site, Burton Chace park is located approximately 850 feet southwest of the project site. The nearest residential development is situated at the eastern end of Basin C and is located approximately 1,800 feet west of the project site. Due to the distance from the project site, noise generated by on-site equipment would not be perceptible at the nearest sensitive receptor.

Additional noise associated with the proposed project would be typical of the retail, office, and restaurant uses and would include people talking, doors slamming and similar activities. The restaurant uses would include outdoor dining. These uses have typical noise levels of 50 to 60 decibels (dB). The outdoor dining would likely be the noisiest use; however, the buildings would be sited so as to not directly face either the residences on Basin C, the Marina del Rey Hotel or Burton Chace Park at the terminus of Mindanao Way. Due to the distance from the project site to the nearest sensitive receptor, noise generated by the uses on-site would not be perceptible.

Therefore, operation of the proposed project would not contribute substantially to an increase in noise. Stationary noise sources associated with the proposed project would not expose off-site sensitive receptors to a noticeable noise level increase; therefore, impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact 4.7-2 **Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels**

Analysis

The primary vibration source associated with development involves the potential use of pile drivers during foundation construction; less severe vibration impacts could result from the use of other heavy equipment on- and off-site due to on-site grading/excavation activities and haul trucks passing on streets adjacent to sensitive receptors. Pile drivers are the pieces of construction equipment most likely to cause potential off-site vibration impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the groundwater-saturated zone. The proposed project does not include underground parking or other features that would require pile driving. The buildings constructed as part of the project would be one and two-story and would also not require pile driving to construct. As no pile driving would occur with the proposed project, vibration impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impact would be less than significant.

Impact 4.7-3 **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems**

Analysis

Construction

The project would be constructed in one phase beginning approximately in the last week of January 2015 and ending approximately in the last week of August 2016. Construction would include a demolition, grading, trenching, building construction, and architectural coating sub-phase. Construction of the proposed project would result in increases in ambient noise levels in the project area on an intermittent basis. This temporary increase in noise will likely be noticeable to nearby residents and on- and off-site

employees, as well as visitors to Marina del Rey. It must be emphasized that noise levels would fluctuate depending on the construction activity, equipment type and duration of use, the distance between the noise source and receptor and the presence or absence of noise attenuation barriers.

Construction of the project would involve the temporary use of heavy equipment, such as tractors, loaders, concrete mixers, and cranes. Smaller equipment, such as jackhammers, pneumatic tools, saws and hammers, would also likely be used throughout the site during demolition and construction stages.

The US Environmental Protection Agency (EPA) has compiled data regarding the noise-generating characteristics of specific types of construction equipment. Based on this data, **Table 4.7-6, Noise Levels of Typical Construction Equipment**, presents noise levels of typical construction equipment, which could be used on-site during various phases of construction. As shown, noise levels generated by heavy equipment can range from approximately 68 dB(A) to noise levels in excess of 100 dB(A) when measured at 50 feet. However, much of this noise would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance. Also, as noted, pile driving (the loudest construction-related activity noted in the below table) is not anticipated, given the type of construction being proposed.

Table 4.7-6
Noise Levels of Typical Construction Equipment

Equipment Type	Typical Equipment at 50 Feet (dB[A])	Quiet Equipment at 50 Feet (dB[A])[1]
Air Compressor	81	71
Backhoe	85	80
Concrete Pump	82	80
Concrete Vibrator	76	70
Truck Crane	88	80
Dozer	87	83
Generator	78	71
Loader	84	80
Paver	88	80
Pneumatic Tools	85	75
Pile Driver	100	NA
Water Pump	76	71
Power Hand Saw	78	70
Shovel	82	80
Trucks	88	83

[1] *Quieted equipment can be designed with enclosures, mufflers, or other noise-reducing features.*

Based on a review of the site plan, construction activity would occur as close as 600 feet from existing noise sensitive uses (the Marina del Rey Hotel) located west of the project site and 850 feet from Burton Chace Park. Uses at these locations could experience noise levels that reach 76 dB(A) for short periods. These, as well as any other locations that experience an uninterrupted line of sight to the construction noise sources, could be temporarily exposed to exterior noise levels which could exceed the County's Noise Control Ordinance standards for construction equipment as identified in **Table 4.7-4**. Therefore, construction noise is considered a temporary significant impact.

Construction noise would represent a short-term significant impact based on the potential to exceed County noise standards and the one-and-a-half-year construction period. Mitigation measures for construction noise impacts are provided below.

Haul Route Noise Impacts: Project construction will require the use of heavy trucks to haul equipment and materials to the site, as well as transport debris and earth excavated during demolition of existing structures and grading of the site. To limit noise impacts associated with construction traffic on nearby land uses, truck haul routes have been established which route vehicles away from sensitive uses to the maximum extent feasible. The most likely haul route extends north on Mindanao Way and south on the Marina Freeway.

To minimize potential neighborhood disruption and conflicts along the haul route, a construction traffic control plan will be developed for use during construction. The plan will identify all traffic control measures, signs, and time limits to be implemented by the construction contractor during the duration of demolition and construction activity. Measures likely to be used to reduce noise impacts include limitations on the hours and days in which construction activity may occur. All vehicles will be staged either within the property lines or at designated areas as established by a County approved haul route plan.

Trucks on average are expected to enter and leave the site on a daily basis over the construction period, but only during working hours. Trucks entering and exiting the site would make approximately 67 round trips per day during demolition. During site grading, trucks entering and exiting the site would travel approximately 20 miles round-trip, and would make approximately 210 round trips per day.[19] The Los Angeles County Department of Public Works (LACDPW), Construction Division, limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. This reduces the impact on local residents by restricting most construction-based noise generation to hours when most residents are at work and not generally home. The number of truck trips traveling along the designated haul route will vary daily, depending on the nature of the construction

19 Based on URBEMIS 2002 calculations

activity. Employment of standard noise attenuation practices would be implemented as required by the LACDPW. As previously discussed, noise sensitive land uses located along the haul route are residential in nature. Based on the information contained in **Table 4.7-6**, uses within 50 feet of the haul route could experience temporary noise events ranging from 83 to 88 dB(A) from trucks, which exceeds County standards outlined above. Therefore, a temporary significant impact would result from trucks traveling to and from the project site along the haul route during the projected buildout of the project.

Mitigation Measures

4.7-1: All construction equipment, fixed or mobile, that is utilized on the site for more than two working days shall be in proper operating condition and fitted with standard factory silencing features. In areas where construction equipment (such as generators and air compressors) is left stationary and operating for more than one day within 100 feet of residential land uses, temporary portable noise structures shall be built. These barriers shall be located between the piece of equipment and sensitive land uses. As the project is constructed, the use of building structures as noise barrier would be sufficient. The applicant's representative shall spot check to ensure compliance.

4.7-2: The project applicant shall post a notice at the construction site and along the proposed truck haul route. The notice shall contain information on the type of project and anticipated duration of construction activity, and shall provide a phone number where people can register questions and complaints. The applicant shall keep a record of all complaints and take appropriate action to minimize noise generated by the offending activity where feasible. A monthly log of noise complaints shall be maintained by the applicant and submitted to the County of Los Angeles Department of Public Health.

Residual Impacts

Even with inclusion of the above mitigation measures, temporary, periodic exceedances in noise on the project site could occur. Therefore, impacts related to construction noise and haul trucks during construction would be significant and unavoidable. These impacts would cease upon completion of construction.

4.7.5 CUMULATIVE IMPACTS

The proposed project in combination with related projects would not be expected to result in a cumulatively considerable permanent increase in ambient noise levels due to operation as all of the

related projects are located far enough from the project site (several hundred feet or more) such that the noise generated on one site would not be heard at another.

Other projects located within the vicinity of the proposed project have the potential to generate noise during their construction. Given that timing of construction activities for the related projects cannot be fully defined, and quantitative analysis that assumes multiple, concurrent projects would be speculative. In addition, each of the related projects would have to comply with the local noise ordinance as well as mitigation measures that may be incorporated pursuant to CEQA required environmental review that would reduce construction noise for each project. As such, individual construction noise impacts would only contribute to cumulative impacts when projects are in proximity to each other. These related projects are located far enough from the project site (several hundred feet or more) or are anticipated to undergo construction at a different time. One exception would be the renovation of the Parcel 44 pier, which is the nearest related project, and is located on the project site. It is assumed that the nearest related project would generate a similar maximum construction noise level as the proposed project. As shown, noise levels generated by heavy equipment can range from approximately 68 dB(A) to noise levels in excess of 100 dB(A) (for pile driving) when measured at 50 feet (without mitigation). The nearest noise-sensitive use to the project site is the Marina del Rey Hotel located at the western end of Basin G, approximately 600 feet west of the project site, Burton Chace Park is located approximately 850 feet southwest of the project site. At this distance, construction noise would be approximately 76 dB(A). Although intervening buildings and the additional distance to Burton Chace Park would reduce construction noise considerably, construction noise at the Marina del Rey Hotel could experience noise levels that reach 76 dB(A) This would increase the ambient noise levels in the project area that exceeds the County threshold; therefore, cumulatively, the Project would result in a cumulative construction noise impact.

Cumulative noise impacts could also occur as the result of increased traffic on local roadways due to ambient growth and other development in the vicinity of the project site.

Table 4.7-7, Existing, Existing Plus Project, and Cumulative Traffic Noise Levels, shows the modeled noise levels of anticipated future traffic based on related projects in the vicinity as well as an ambient growth factor included in the project traffic study to provide a conservative analysis.

Table 4.7-7
Existing, Existing Plus Project, and Cumulative Traffic Noise Levels

Location	Noise Level - dB(A) CNEL Existing	Cumulative	Cumulative Plus Project	Change	Project Change	Cumulatively Considerable?
Lincoln Blvd at Venice Blvd.	68.6	69.7	69.7	1.1	-	No
Pacific Ave. at Washington Blvd.	65.1	66.0	66.0	0.9	0.1	No
Via Dolce at Washington Blvd.	65.5	65.8	65.8	0.3	-	No
Via Marina at Washington Blvd.	65.9	66.2	66.2	0.	-	No
Palawan Way at Washington Blvd.	66.3	67.0	67.0	0.7	-	No
Abbot Kinney Blvd. At Washington Blvd.	68.0	68.6	68.6	0.6	-	No
Lincoln Blvd. at Washington Blvd.	69.0	70.0	70.1	1.0	0.1	No
Glencoe Ave. at Washington Blvd.	68.4	69.0	69.0	0.6	-	No
Via Marina at Admiralty Way	66.8	67.6	67.6	0.8	-	No
Palawan Way at Admiralty Way	67.2	68.0	68.1	0.9	0.1	No
Lincoln Blvd. at Maxella Ave.	70.0	70.9	70.9	0.9	-	No
Glencoe Ave at Maxella Ave.	64.7	64.8	64.8	0.1	-	No
Lincoln Blvd. at Highway 90	70.1	70.9	71.0	0.9	0.1	No
Admiralty Way at Bali Way	68.1	68.9	68.9	0.8	-	No
Lincoln Blvd at Bali Way	68.8	69.7	69.7	0.9	-	No
Admiralty Way at Mindanao Way	67.3	68.1	68.3	1.0	0.2	No
Lincoln Blvd. at Mindanao Way	70.1	70.8	70.9	0.8	0.1	No
Mindanao Way at Highway 90 EB	66.3	67.2	67.3	1.0	0.1	No
Mindanao Way at Highway 90 WB	66.4	66.7	66.7	0.3	-	No
Mindanao Way at Glencoe Ave.	66.3	66.6	66.6	0.3	-	No
Admiralty Way at Fiji Way	64.9	66.1	66.1	1.2	-	No
Lincoln Blvd. at Fiji Way	70.9	71.6	71.7	0.8	0.1	No
Culver Blvd. at Highway 90 EB	67.9	68.1	68.1	0.2	-	No
Culver Blvd. at Highway 90 WB	67.5	67.7	67.7	0.2	-	No
Lincoln Blvd. at Jefferson Blvd.	71.0	71.7	71.7	0.7	-	No

Source: Impact Sciences, Inc.

As shown in T**able 4.7-7**, project traffic would not contribute to a significant cumulative impact related to traffic noise. Further, the Los Angeles County General Plan and the Marina del Rey Land Use Plan would ensure implementation of compatible land uses so that noise sensitive receptors are not adversely affected by noise. The policies of the Los Angeles County General Plan and the Marina del Rey Land Use Plan reduce traffic noise by supporting alternative forms of transportation, promoting walkable neighborhoods and business districts, reducing the numbers of cars on roadways, and construction sound barriers. With implementation of such measures, the related projects would reduce cumulative impacts to less than significant.

Mitigation Measures

Implement **Mitigation Measures 4.7-1** and **4.7-2**.

Residual Impacts

Cumulative construction noise impacts could exceed County thresholds, therefore the proposed project could contribute to a cumulatively considerable temporary increase in noise. Impacts would be significant.

4.8 TRAFFIC AND ACCESS

4.8.1 INTRODUCTION

This section presents an overview of existing traffic and access characteristics in the Marina del Rey area. It also discusses potential impacts associated with development of the Parcel 44 project. Existing conditions are described followed by an impact analysis for the project. This section also includes a discussion of the cumulative impacts of the project in conjunction with other related projects. Where impacts are identified, mitigation measures are recommended to reduce such impacts to the maximum extent feasible.

The analysis in the section finds that the project could result in significant impacts at a total of seven intersections under the sole jurisdiction of the City of Los Angeles (three locations) or intersections exhibiting shared jurisdiction between the City of Los Angeles and the County of Los Angeles (four locations): Venice Boulevard and Lincoln Boulevard, Washington Boulevard and Lincoln Boulevard, Lincoln Boulevard and Marina Expressway, Lincoln Boulevard and Mindanao Way, Mindanao Way and eastbound Marina Expressway, Lincoln Boulevard and Fiji Way, and Lincoln Boulevard and Jefferson Boulevard,[1] each during the PM peak hour only under the "Future (year 2016) With Project" conditions. One intersection under the sole jurisdiction of the County would be impacted under the "Existing (year 2013) with Project" scenario: Admiralty Way and Mindanao Way, although this location would not be impacted under the future year analysis scenario (due to currently ongoing improvement at this intersection to install dual southbound left-turn lanes on Admiralty Way); no significant impacts were identified at any of the Los Angeles County-only intersections during the "Future with Project" scenario. No feasible roadway or traffic signal improvements are available at any of the seven impacted City-only or City/County shared jurisdiction intersections. As a result, the potential project-specific traffic impacts associated with the proposed project at these locations will remain significant and unavoidable.

4.8.2 TRAFFIC STUDY INTERSECTIONS

An analysis of current traffic conditions was conducted on the streets and highways serving the project area. Detailed traffic analyses for the project were performed at the following 25 intersections.

1. Venice Boulevard and Lincoln Boulevard
2. Washington Boulevard and Pacific Avenue
3. Washington Boulevard and Via Dolce/Dell Avenue

[1] Lincoln Boulevard is classified as a State Highway and under the jurisdiction of the State of California

4. Washington Boulevard and Via Marina/Ocean Avenue
5. Washington Boulevard and Palawan Way
6. Washington Boulevard and Abbot Kinney Boulevard
7. Washington Boulevard and Lincoln Boulevard
8. Washington Boulevard and Glencoe Avenue/Costco Plaza Drive
9. Admiralty Way and Via Marina
10. Admiralty Way and Palawan Way
11. Lincoln Boulevard and Marina Expressway (SR-90)
12. Maxella Avenue and Glencoe Avenue
13. Lincoln Boulevard and Marina Expressway (SR-90)
14. Admiralty Way and Bali Way
15. Lincoln Boulevard and Bali Way
16. Admiralty Way and Mindanao Way
17. Lincoln Boulevard and Mindanao Way
18. Mindanao Way and Eastbound Marina Expressway (SR-90)
19. Mindanao Way and Westbound Marina Expressway (SR-90)
20. Mindanao Way and Glencoe Avenue
21. Admiralty Way and Fiji Way
22. Lincoln Boulevard and Fiji Way
23. Culver Boulevard and Eastbound Marina Expressway (SR-90) On/Off Ramps
24. Culver Boulevard and Westbound Marina Expressway (SR-90) Off-Ramp
25. Lincoln Boulevard and Jefferson Boulevard

Based site access details described in **Section 3.0, Project Description** and a review of the proposed project's trip generation and, and following consultation and agreement with the Los Angeles County Department of Public Works, Traffic and Lighting Division, it was determined that the 25 intersections identified above and shown on **Figure 4.8-1, Study Intersection Locations**, are expected to be most directly affected by project traffic generation. Intersections in the project area are within the jurisdictions of either the County (intersections 9, 10, 14, 16, and 21), City of Los Angeles (intersections 1, 2, 6 through 8, 11 through 13, 18 through 20, and 23 through 25) or under shared County/City jurisdiction (3 through 5, 15, 17, and 22). Each of these intersections are currently traffic signal controlled, with the exception of Washington Boulevard and Palawan Way (intersection 5) which is a stop sign controlled "tee" intersection.

SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-1**

Study Intersection Locations

4.8.2.1 Critical Movement Analysis Methodology

Impacts for the 25 intersections were assessed using Critical Movement Analysis (CMA) methodology as the basis for the analysis and evaluation of traffic operations at signalized intersections; the CMA procedures are applicable for the evaluation of signalized intersection operations during the weekday peak hour analysis periods. This analysis technique, detailed in Circular Number 212 published by the Transportation Research Board (TRB), describes the operating characteristics of an intersection "Level of Service" based on intersection traffic volumes and other variables such as number and type of signal phasing, lane geometries, and other factors which determine both the quality of traffic that can move through an intersection (capacity) and the quality of that traffic (level of service).

The following is a description of the operating characteristics for each LOS category. As shown in **Table 4.8-1, Level of Service Operating Characteristics**, LOS A to C operate quite well. LOS D typically is the level for which a metropolitan area street system is designed. Level E represents volumes at or near the capacity of the highway, which might result in stoppages of momentary duration and fairly unstable flow. Level F occurs when an intersection is overloaded and is characterized by stop and go traffic with stoppages of long duration.

Table 4.8-1
Level of Service Operating Characteristics

Level of Service	Range of Description of Operating Characteristics
A	No congestion; all vehicles clear in a single cycle.
B	Minimal congestion; all vehicles still clear in a single cycle.
C	No major congestion; most vehicles clear in a single cycle.
D	Generally uncongested, but vehicles may wait through more than one cycle; short duration queues may form on critical approaches.
E	Increased congestion on critical approaches; long duration queues form at higher end of range.
F	Over capacity; forced flow with long periods of congestion; substantial queues form

Source: Hirsch/Green Transportation Consulting, Inc.

"Capacity" represents the maximum total hourly vehicle volume movement in the critical lanes which have a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. Intersection capacities for various levels of service, based on the number of traffic signal phases, are shown in **Table 4.8-2.** For intersection evaluation and planning purposes, the capacity of an intersection equates to the value of LOS E, which represents the highest level of traffic through urban area

intersections that can be adequately accommodated without a breakdown in operation resulting in stop and go conditions.

Table 4.8-2
Critical Movement Volume Ranges for Determining Levels of Service

Level of Service	Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	---------- Not Applicable ----------		

Source: Hirsch/Green Transportation Consulting, Inc.

The CMA indices used in this study were calculated by dividing the sum of critical movement volumes, as shown in **Table 4.8-2,** above, by the appropriate capacity value for the type of signal control present or proposed at the study area intersections. The LOS corresponding to a range of CMA values is shown in **Table 4.8-3, Level of Service as a Function of CMA Values**.

Table 4.8-3
Level of Service as a Function of CMA Values

Level of Service	CMA Values
A	≤0.600
B	>0.600 ≤0.700
C	>0.700 ≤0.800
D	>0.800 ≤0.900
E	>0.900 ≤1.000
F	>1.000

Source: Hirsch/Green Transportation Consulting, Inc.

Although designed for use with signalized intersections, the CMA methodology can also be useful in the analysis of unsignalized locations, and for purposes of this analysis, a modified CMA analysis assuming reduced intersection capacity to adjust for STOP sign control was used to analyze the unsignalized (STOP sign controlled) intersection of Washington Boulevard and Palawan.

Project Traffic Generation

The project site lies within the unincorporated Marina del Rey community of the County. Development within the Marina, including the methodology for estimating the trip generation of various land uses, is governed by the Marina del Rey Local Coastal Program (referred to herein as the "certified LCP" or "LCP"). The "Marina specific" trip generation rates included in the LCP are recognized as accurately representing the trip generation activity for developments within the Marina by the County's Department of Public Works Traffic and Lighting Division, and are therefore appropriate for use in estimating the traffic resulting from the proposed project.

The LCP identifies the weekday PM peak hour traffic-generating characteristics (i.e., trip generation rates) for a number of the existing and anticipated future land uses within Marina del Rey, including the retail, office, restaurant, and boat slip uses comprising portions of the existing site or the proposed project. These Marina del Rey-specific trip generation rates are recognized as accurately representing the trip generation activity for developments within the Marina by the County's Department of Public Works Traffic and Lighting Division, and are therefore appropriate for use in estimating the traffic resulting from the proposed project. However, the LCP data does not identify PM peak hour trip generation rates for several of the current or proposed uses on the Parcel 44 site, including the proposed "specialty market" and "community room" uses, or the "boat repair" and "yacht club" facilities that are part of both existing and proposed developments, nor are daily (24-hour) or AM peak hour trip generation rates identified in the LCP for any land use. Therefore, for purposes of the project's traffic generation analysis, the trip generation rates for these periods (daily and AM peak hour) for both the existing and/or proposed retail uses (both visitor-serving and marine-related) and office uses, were obtained from the 8th Edition of the Institute of Transportation Engineers (ITE) Trip Generation publication, as were the daily, AM, and PM peak hour trip generation rates for the proposed specialty market and community room components, and for the existing and proposed boat repair and yacht club uses. Trip generation rates used in the traffic analysis for the proposed project are shown in **Appendix 4.8**.

The LCP trip generation rates were developed specifically for use with projects located within unincorporated Marina del Rey, and were derived based on both empirical counts of vehicles entering and exiting the driveways of the subject land uses, as well as interviews and surveys of drivers accessing the subject surveyed sites, and therefore, generally reflect not only the amount of "direct" traffic generated by the use itself, but also intrinsically account for factors that can influence the amount of "net" traffic generation associated with the various land uses, such as "pass-by" traffic associated with each land use. Pass-by traffic refers to the "capture" by a particular project or land use of a vehicle that is already on the area roadway network for other purposes, such as a trip to or from work, by providing convenient amenities or services that result in the driver diverting from the existing trip to patronize the

site. Since such activity is only an interim stop along a trip which existed prior to the development of the project, vehicles making these stops are not considered to be newly generated project-related traffic. The County's Department of Public Works Traffic and Lighting Division acknowledged the effects of pass-by traffic on the proposed project's trip generation, and identified that approximately 1 percent of the existing traffic passing the project site along Admiralty Way (in the southbound direction only) would patronize the project's visitor and/or marine-related retail uses as an interim stop along an otherwise existing trip. As detailed in the traffic study contained in **Appendix 4.8**, the pass-by factor equates to a total of approximately 144 vehicles per day (144 inbound and 144 outbound trips), including approximately 18 trips (9 inbound and 9 outbound) during the AM peak hour and 24 trips (12 inbound and 12 outbound) during the PM peak hour.

A second factor affecting the potential trip generation characteristics of any particular land use is the "internal interaction" of patrons or employees of one use by another use within a particular development site (also known as "internal capture" or "multi-purpose trips"). However, a review of the project indicates that none of the proposed uses would be expected to exhibit any notable internal interaction activity, and therefore, for purposes of this study, no internal interaction reductions were assumed.

4.8.3 ENVIRONMENTAL SETTING

The Marina del Rey area containing the proposed project is served by both local and regional transportation facilities. While no direct freeway access to the site is provided, two freeways are easily accessible for access to and from the project area. The San Diego Freeway (I-405) is located approximately 2 miles east of the project site, and the Marina Freeway/Expressway (SR-90) is accessible approximately 0.25 mile east of the project site via Mindanao Way. In addition to these regional freeway facilities, the area is also served by a number of major and secondary arterials, along with a well-developed local street grid. The key transportation facilities in the project vicinity examined in this section are identified below.

4.8.3.1 Streets and Highways

San Diego Freeway (I-405) – The key north-south transportation facility in the area, this freeway generally provides five travel lanes per direction, plus additional lanes at ramps or interchanges. This facility serves the entire western portion of the Los Angeles basin, including the Los Angeles International Airport (LAX), from its departure from the Golden State Freeway (I-5) in the San Fernando community in the City of Los Angeles to the north to its reconnection back into the Golden State Freeway in the City of Irvine in Orange County, approximately 70 miles to the south.

Marina Freeway/Expressway (SR-90) – This is a short regional facility serving a roughly east-west alignment between Slauson Avenue (east of Sepulveda Boulevard) and Lincoln Boulevard. The elevated

freeway sections of this facility, between just west of Culver Boulevard on the west and the Slauson Avenue terminus on the east, provides three lanes in each direction configuration, with additional lanes provided at the interchange with I-405. The at-grade expressway portion of the facility from just west of Culver Boulevard to Lincoln Boulevard is developed with two lanes in each direction.

4.8.3.2 Major and Secondary Highways

Venice Boulevard – This generally east-west oriented Major Highway is located at the northern edge of the study area, approximately 1 mile north of the project site, and provides a key connection through the study area. Venice Boulevard is typically configured to provide two to three lanes plus a dedicated bicycle/parking lane in each direction, along with exclusive left-turn channelization at major intersections. On-street parking is typically allowed along both sides of the roadway throughout the study area.

Lincoln Boulevard – This Major Highway is located only a few hundred feet east of the project site, and provides a key access route between San Vicente Boulevard near the northern boundary of the City of Santa Monica and its terminus at Sepulveda Boulevard near LAX. In the project vicinity, Lincoln Boulevard is also classified as State Highway and is also under the jurisdiction of the State of California. Lincoln Boulevard provides three peak hour travel lanes per direction at most intersections north of Fiji Way. On-street parking is prohibited on this portion of Lincoln Boulevard at all times.

Washington Boulevard – Another Major Highway facility, this east-west oriented roadway is located approximately 0.5 mile to the north of the project site, and forms the northern boundary of Marina del Rey. Washington Boulevard is a major transportation facility in the study area, providing uninterrupted service between Pacific Avenue on the west and the City of Whittier to the east. In the study area, Washington Boulevard typically provides two through lanes in each direction.

Culver Boulevard – Located approximately 0.5 mile south of the project site, this roadway provides an important connection between the coastal areas on the west and the northeastern portion of the City of Culver City to the east. Culver Boulevard is designated as a Major Highway throughout much of the City of Los Angeles, although it is downgraded to a Secondary Highway west of Lincoln Boulevard. Within the study area, Culver Boulevard provides one travel lane in each direction west of Lincoln Boulevard. On street parking is prohibited along both sides of Culver Boulevard throughout the study area.

Jefferson Boulevard – Another Major Highway facility, this generally east-west oriented roadway is located to the south of the project area. Jefferson Boulevard intersects with Culver Boulevard west of Lincoln Boulevard, and travel eastward through the City of Culver City. In the study area, Jefferson Boulevard is developed to provide three through lanes in each direction. On-street parking is allowed along some portions of Jefferson Boulevard.

Maxella Avenue – This east-west oriented roadway provides localized service generally between Lincoln Boulevard on the west and Centinela Avenue on the east. Maxella Avenue is designated as a Secondary Highway between Lincoln Boulevard and Glencoe Avenue, and then is downgraded to a local street throughout the remainder of its length. Along the Secondary Highway portion of the roadway, Maxella Avenue provides two travel lanes in each direction. On-street parking is prohibited along the portion of this roadway.

Mindanao Way – Another east-west oriented Secondary Highway, Mindanao Way serves as the southern boundary of the project site and provides localized service between Burton Chase Park and the Marina del Rey "Basin G" berths west of Admiralty Way in the Marina itself and Centinela Avenue in the City of Los Angeles. West of Admiralty Way, including along the project frontage, Mindanao Way typically provides only a single travel lane in each direction, separated by a raised median island, while to the east of Admiralty Way, the roadway is typically striped to provide two lanes in each direction, with some sections widened to permit additional left-turn and or right turn lanes. Generally, on-street parking is not allowed on Mindanao Way west of Glencoe Avenue, with the exception of an approximately 200-foot section on the south side of the street immediately south/west of La Villa Marina.

Glencoe Avenue – This north-south roadway provides a local connection generally between Washington Boulevard on the north and Alla Road on the south, turning to an east-west orientation at Alla Road, and continuing a short distance as Bonaparte Avenue, a local street.

Pacific Avenue – Located at the western edge of the study area, Pacific Avenue provides the westernmost continuous north-south oriented roadway in the vicinity, and serves as a key alternative to Lincoln Boulevard between the northern portions of the City of Santa Monica and Marina del Rey. Pacific Avenue generally provides one travel lane plus on-street parking in each direction.

Admiralty Way – This roadway is the primary transportation facility through the north and east portions of Marina del Rey, connecting Via Marina on the west and Fiji Way on the southeast, and providing the eastern boundary for the project site. Throughout its length, Admiralty Way is typically configured with a raised median island separating two through travel lanes per direction, although additional left-turn and/or right turn lanes are provided at most street and driveway intersections. On-street parking is prohibited on both sides of this roadway.

Via Marina/Ocean Avenue – Generally a north-south "arterial collector" facility, Via Marina serves the western, primarily residential area of Marina del Rey. Via Marina generally extends southward from Washington Boulevard (where it aligns with Ocean Avenue) to provide access to the Marina del Rey "Basin A" through "Basin D" areas, in addition to Ballona Creek. Via Marina provides two to three

through lanes in each direction. Ocean Avenue provides only a single travel lane per direction with on-street parking.

Dell Avenue/Via Dolce – Another short arterial/local street combination, Dell Avenue, also provides a local connection between Venice Boulevard and Washington Boulevard, traveling through the Venice Canals area, before changing names to Via Dolce south of Washington Boulevard. Dell Avenue provides a single lane per direction with on-street parking along the short segment between Venice Boulevard and Washington Boulevard. Via Dolce generally provides two through lanes in each direction. On-street parking is generally allowed on both sides of the street along both the Dell Avenue and Via Dolce segments of this facility.

4.8.3.3 Local Streets

Bali Way – This short Local Street provides the northern boundary of the project site, and serves primarily as a local-access facility between Lincoln Boulevard and Admiralty Way and the Marina del Rey "Basin F" and "Basin G" areas. Bali Way provides three lanes per direction on the short segment between Lincoln Boulevard and Admiralty Way, but exhibits only a single lane in each direction, separated by a raised median island, to the west of Admiralty Way, including adjacent to the project site.

Fiji Way – This facility provides two lanes per direction to the west of Lincoln Boulevard and serves as access to the "Boat Yard" and "Fisherman's Village" portions of Marina del Rey, as well as to residential development and the US Coast Guard Harbor Patrol station and Department of Beaches and Harbors' administrative offices near the Ballona Creek "point." On-street parking is prohibited on the segment west of Lincoln Boulevard.

Palawan Way - This roadway generally provides two lanes per direction on the segment between Admiralty Way and Washington Boulevard. Although to the south of Admiralty Way, Palawan Way provides only a single travel lane in each direction. At the Admiralty Way signalized intersection, Palawan Way provides three lanes, including a left-turn only lane, a through lane, and a right-turn only lane.

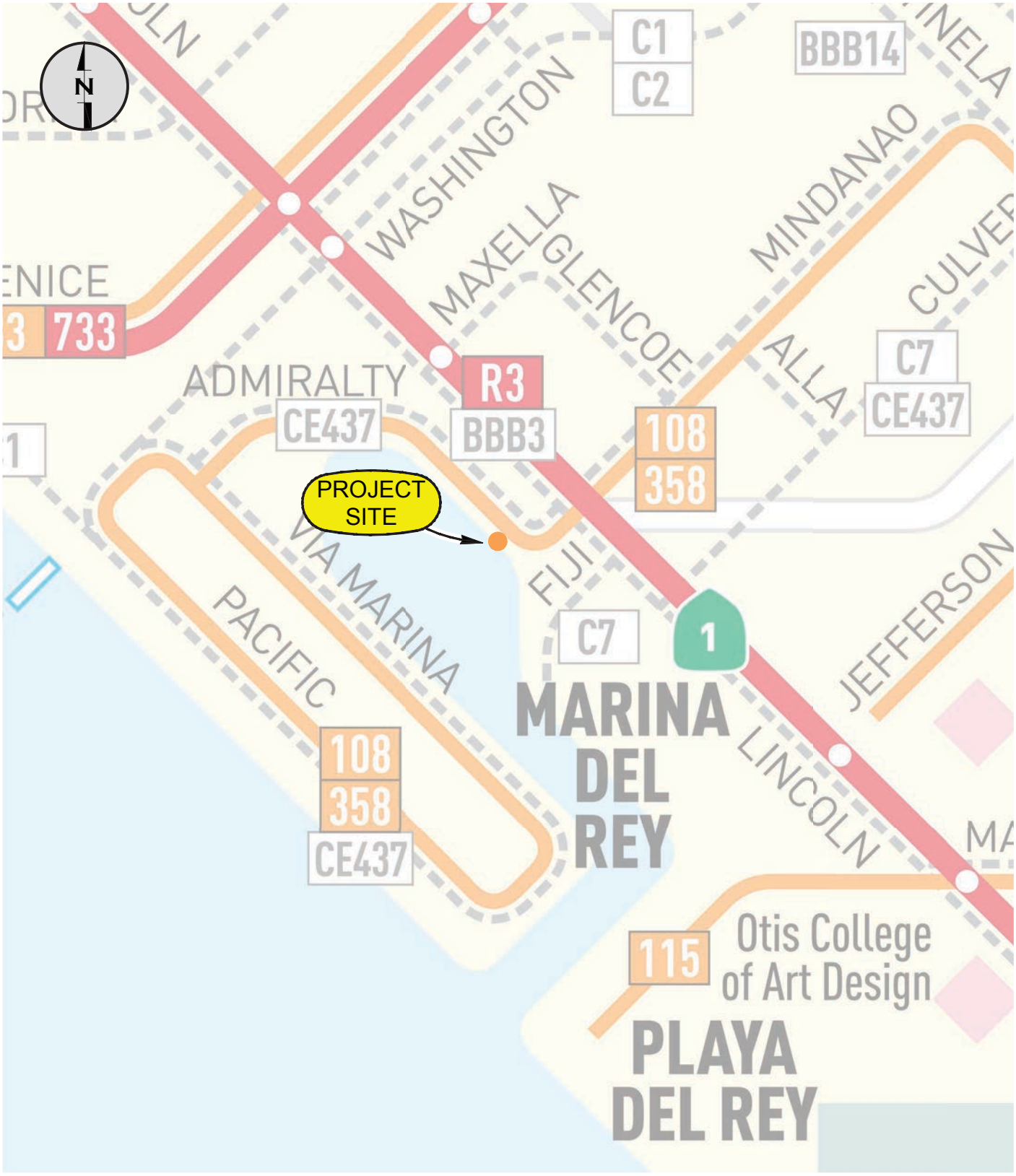
4.8.3.4 Public Transportation

The Los Angeles County Metropolitan Transportation Authority (Metro) has established an extensive grid system of public transit bus routes throughout the greater Los Angeles region, including the project vicinity, and several local jurisdictions including the cities of Los Angeles, Santa Monica (Big Blue Bus, aka BBB), and Culver City also provide public transit services through the Marina del Rey study area. Several of these existing bus lines currently serve the project site directly, along Admiralty Way or

Mindanao Way, or are located within convenient walking distance (less than 0.25 mile) along Lincoln Boulevard or Fiji Way. A map of the bus and rail transit service in the project vicinity is shown in **Figure 4.8-2 Existing Transit Service**. The key transit lines serving the project site and immediate project vicinity are described below in more detail.

Metro Lines 108/358 – Both Line 108 (local-stop service) and Line 358 (limited-stop service) provide weekday service between the west side of Marina del Rey and the Pico Rivera area, with also Line 108 providing additional weekend and holiday service. Within the immediate study area, Lines 108/358 operates on a loop route through the Marina, traveling along Admiralty Way between Mindanao Way and Via Marina, including a stop located adjacent to the proposed project site, then continues along Via Marina, Pacific Avenue, and Washington Boulevard before returning to Admiralty Way via Palawan Way. These lines then travel primarily along Mindanao Way/Short Avenue, Centinela Avenue, Jefferson Boulevard, and Slauson Avenue between Marina del Rey and Pico Rivera, serving the Fox Hills Mall, Culver City Transit Station (located adjacent to the mall parking lot), and office and residential developments east of Sepulveda Boulevard between Centinela Avenue and Slauson Avenue along the way. In the vicinity of the proposed project, Lines 108/358 operate between approximately 5:00 AM and 10:00 PM on weekdays, with peak period headways of approximately 15 to 20 minutes, although headways during the mid-day and other off-peak periods lengthen to upwards of 45 minutes. Weekend and holiday service (Line 108 only) is also provided during approximately the same periods, although headways on these days range from about 30 minutes during the peak periods to 1 hour throughout the rest of the day.

Commuter Express 437 – This local-stop bus line, a service of the Los Angeles Department of Transportation (LADOT), provides weekday peak period commuter service between Marina del Rey and downtown Los Angeles, with one-way eastbound service during the morning commute periods, and return (westbound) service during the afternoon/evening periods. Line 437 begins at Pacific Avenue and Washington Boulevard, then travels south along Pacific Avenue to Via Marina, follows Via Marina to Admiralty Way, and then continues along Admiralty Way to Mindanao Way, providing stops at both Bali Way and Mindanao Way adjacent to the project site. Line 437 then travels eastward out of the Marina, continuing along Mindanao Way to Alla Road, then south to Culver Boulevard, where it travels eastbound through Culver City before accessing the I-10 Freeway near Fairfax Avenue, to continue into downtown Los Angeles. Within downtown Los Angeles, Line 437 provides service along Grand Avenue, Olive Street, Flower Street, and Temple Street, ultimately terminating at the Federal Building at Temple Street and San Pedro Street before returning to the Marina area during the afternoon/evening, generally along the reverse route. In the project vicinity, Line 437 provides departing (eastbound) buses at 15 to 20 minute headways between approximately 6:00 AM and 8:00 AM. Returning (westbound) buses serve the project vicinity approximately every 15 to 30 minutes between about 4:30 PM and 7:00 PM. No weekend or holiday service is available on this line.



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-2**

Existing Transit Service

Culver City Line 7 – Another weekday-only bus line, Route 7 provides local-stop service from just northeast of downtown Culver City to the Fisherman's Village area of Marina del Rey, near the western end of Fiji Way. Beginning with a loop along Culver Boulevard, Venice Boulevard, Robertson Boulevard, and Washington Boulevard in Culver City, Route 437 travels to and from Marina del Rey along Culver Boulevard. From near the Marina Expressway (SR-90), Route 7 then turns to travel along Alla Road, Mindanao Way, Glencoe Avenue, Maxella Avenue, and Lincoln Boulevard before entering Marina del Rey at Bali Way, where it provides a stop at the project-adjacent intersection of Admiralty Way and Bali Way. Route 7 then continues along Admiralty Way to Fiji Way, where it provides service to Fisherman's Village and the surrounding commercial, retail, restaurant, and residential developments before beginning its return to Culver City along the reverse route. In the immediate project vicinity, Route 7 typically provides eastbound service between approximately 5:30 AM and 6:30 PM, and westbound service between approximately 6:30 AM and 7:30 PM, with 1-hour headways in both directions throughout the day; no weekend or holiday service is available via this route.

BBB Route 3 – This bus line provides weekday, weekend, and holiday service between the UCLA Campus in Westwood and the Metro Green Line Station at Imperial Highway and Aviation Boulevard to the southeast of LAX. Route 3 serves both the Hilgard and Ackerman Terminals at the UCLA campus, before traveling along Westwood Boulevard, Wilshire Boulevard, Federal Avenue, San Vicente Boulevard, and Montana Avenue to Lincoln Boulevard in the City of Santa Monica. Route 3 then travels along Lincoln Boulevard to Wilshire Boulevard, then through the downtown area of Santa Monica along 4th Street between Wilshire Boulevard to Pico Boulevard, before returning to its route along Lincoln Boulevard to continue through the project study area, including project-serving stops on Lincoln Boulevard at both Bali Way and Mindanao Way (in both directions), to Manchester Avenue in the Westchester community of the City of Los Angeles. From Manchester Avenue, Route 3 then provides service along Sepulveda Boulevard, 96th Street, including a stop at the LAX City Bus Center, along Airport Boulevard, Century Boulevard, and Aviation Boulevard before terminating at the Metro Green Line Station, and returning to UCLA via the reverse route. Route 3 operates in the project vicinity on weekdays from approximately 5:30 AM to 12:30 PM, with headways of approximately 15 minutes in both directions throughout the day. Weekend and holiday service is also provided during approximately the same hours, although headways can range from 15 to 30 minutes, depending on the time of day.

BBB Rapid 3 – This limited-stop bus line provides weekday morning and afternoon/evening service from downtown Santa Monica to the Metro Green Line Station at Imperial Highway and Aviation Boulevard near LAX. The Rapid 3 route loops along Arizona Avenue, 6th Street, and Wilshire Boulevard before travelling on 4th Street to Pico Boulevard, then along Pico Boulevard to Lincoln Boulevard before continuing on Lincoln Boulevard through the project vicinity, providing project-serving stops for both northbound and southbound travel at Maxella Avenue (approximately 0.33-mile walking distance from

the site) along the way. South of the project vicinity, Rapid 3 continues along Lincoln Boulevard, 96th Street, including a stop at the LAX City Bus Center, Airport Boulevard, Century Boulevard, and finally Aviation Boulevard to reach the Metro Green Line Station before returning to Santa Monica along the reverse route. Rapid 3 operates in the morning between approximately 5:45 AM and 10:30 AM, and again in the afternoon/evening between approximately 1:30 PM and 9:00 PM, with 15-minute headways in each direction throughout these service periods. Rapid 3 does not provide weekday midday (between 10:30 AM and 1:30 PM), weekend, or holiday service.

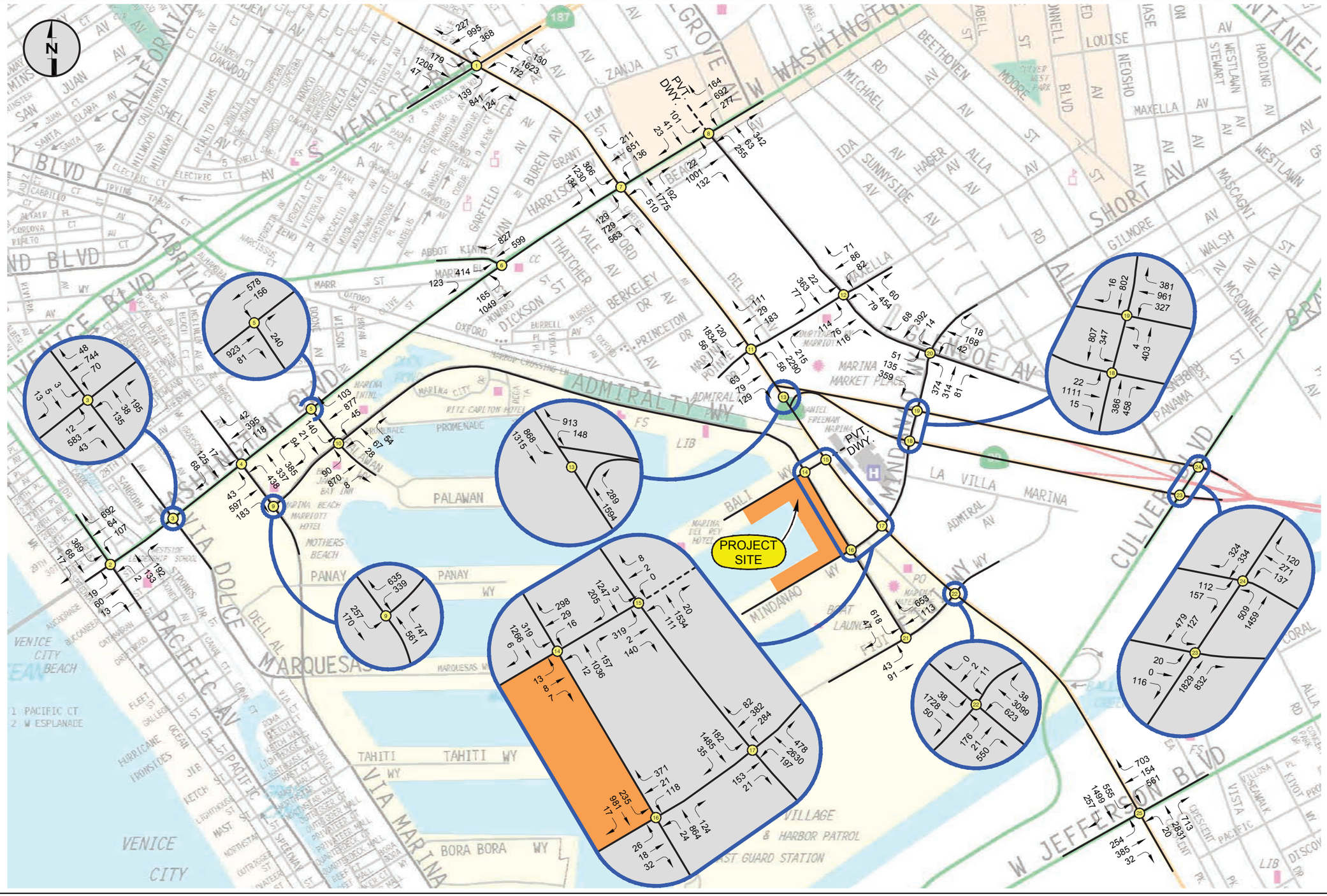
As described above, public transportation service is available either directly at or within convenient walking distance of the project site, and as such, it is likely that some of the project's employees and/or patrons could utilize public transit to travel to destinations within the local area, or throughout the larger metropolitan Los Angeles area via transfers to other service providers. However, based on the anticipated operations of the proposed project's uses, and to assure a conservative analysis of the project's potential traffic impacts, no significant transit use was assumed for the project beyond those nominal levels intrinsically included in the LCP or ITE trip generation data used to estimate the project's trips.

Existing Traffic Volumes

Existing (2013) traffic volumes during the AM and PM peak periods for the study intersections are shown on **Figure 4.8-3, Existing (2013) Traffic Volumes – AM Peak Hour**, and **Figure 4.8-4, Existing (2013) Traffic Volumes – PM Peak Hour**, respectively.

Project Trip Generation

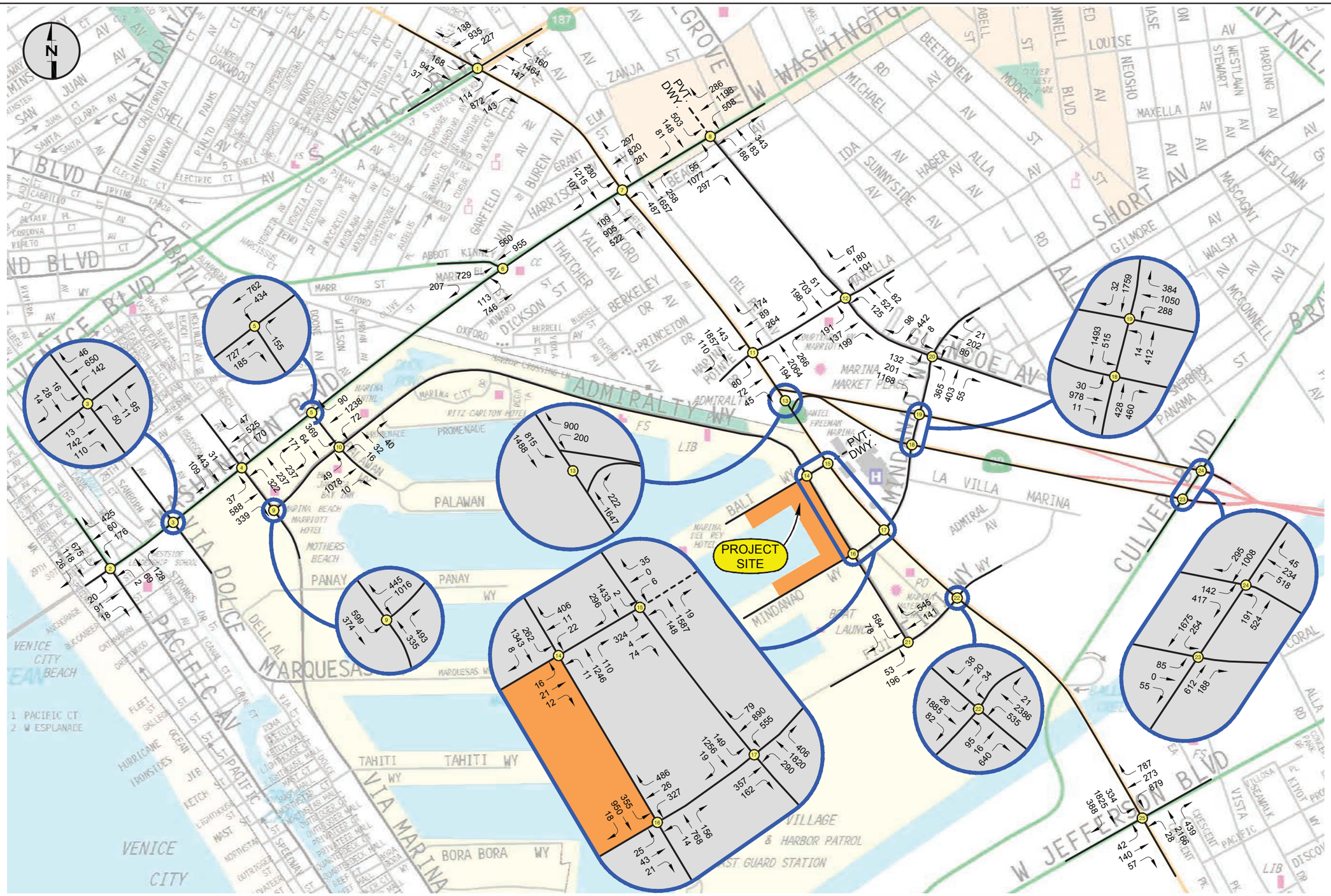
As shown in **Table 4.8-4 Project Trip Generation Estimates**, once completed and occupied, anticipated by the end of the year 2016, the proposed project itself is expected to result in a total of approximately 4,551 daily trips, including approximately 134 trips (85 inbound, 49 outbound) during the AM peak hour, and approximately 451 trips (224 inbound, 227 outbound) during the PM peak hour (including the previously discussed trip reductions to account for pass-by traffic activity). However, the demolition of the existing development will result in the removal of its associated trips from the "existing" area traffic volumes. As also shown in **Table 4.8-4**, the existing Parcel 44 site uses generate a total of approximately 798 daily trips, including 55 trips (32 inbound, 23 outbound) during the AM peak hour, and 64 trips (18 inbound, 46 outbound) during the PM peak hour. Therefore, accounting for the removal of the existing site-related trips, the proposed project is anticipated to result in a net increase in Parcel 44 site traffic of approximately 3,753 net new daily trips, including about 79 net new trips (53 inbound, 26 outbound) during the AM peak hour, and about 387 net new trips (206 inbound, 181 outbound trips) during the PM peak hour.



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-3**

Existing (2013) Traffic Volumes – AM Peak Hour



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-4**

Existing (2013) Traffic Volumes – PM Peak Hour

0889.005•10/14

Table 4.8-4
Project Trip Generation Estimates

Size/Use	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Proposed Project							
13,795 sf Visitor-Serving Retail	592	9	5	14	30	31	61
(Less 40% of Total Pass-by Trips) [1]	(114)	(4)	(4)	(8)	(5)	(5)	(10)
Subtotal Visitor-Serving Retail Trips	***478***	***5***	***1***	***6***	***25***	***26***	***51***
25,000 sf Marine-Related Retail (West Marine)	1,074	15	10	25	54	57	111
(Less 60% of Total Pass-by Trips) [1]	(174)	(5)	(5)	(10)	(7)	(7)	(14)
Subtotal Marine-Related Retail Trips	***900***	***10***	***5***	***15***	***47***	***50***	***97***
9,855 sf Restaurant(s) (382 total seats)	1,093	6	5	11	64	32	96
700 sf Boat Repair Offices	9	1	1	2	1	1	2
69 boat Dry and/or Mast-up Boat Storage	23	2	1	3	0	3	3
Subtotal Boat Repair/Boat Storage Trips	***32***	***3***	***2***	***5***	***1***	***4***	***5***
13,625 sf Supermarket	1,393	30	19	49	73	70	143
5,133 sf Boat Brokers Offices	57	7	1	8	2	9	11
9,170 sf General Offices	101	12	2	14	3	17	20
2,285 sf Marine Administrative Offices	25	4	0	4	1	4	5
1,150 sf Yacht Club	26	1	1	2	1	1	2
840 sf Community Room/Boater Lounge	19	1	0	1	0	1	1
148 -slip Boat Slips	427	6	13	19	7	13	20
1,700 sf Boater Bathrooms and Laundry (total)		---------- ancillary ----------					
Subtotal New Project Trips	***4,551***	***85***	***49***	***134***	***224***	***227***	***451***
Less Existing Site Uses							
7,844 sf Boat Brokers Offices (total)	86	11	1	12	3	14	17
1,000 sf Boat Repair (Seamark)	13	2	1	3	2	1	3
4,216 sf General Offices	46	6	1	7	2	7	9
1,080 sf Yacht Club	25	1	1	2	1	1	2
205 -slip Boat Slips	591	9	17	26	10	18	28
111 boat Dry Boat Storage	37	3	2	5	0	5	5
584 sf Boater Bathrooms		---------- ancillary ----------					
Subtotal Existing Site Trips	***798***	***32***	***23***	***55***	***18***	***46***	***64***
Total Net New Parcel 44 Site Trips	**3,753**	**53**	**26**	**79**	**206**	**181**	**387**

Note:
[1] Pass-by trips estimated at 1 percent of SB traffic passing project site on Admiralty Way (14,359 daily, 936 AM, 1,235 PM).
sf = square feet

Project Trip Distribution and Traffic Assignment

The general geographic distribution of the project trips was identified, based primarily on a review of existing travel patterns in the general site vicinity. This information was used to estimate the overall geographic distribution of project trips throughout the local area and surrounding region, which is summarized in **Table 4.8-5, Project Geographic Trip Distribution Percentages**. For purposes of the project's traffic generation analysis, it was assumed that the general geographic trip distributions shown in **Table 4.8-5** are representative of both the AM and PM commute peak hours, and that the existing and proposed site uses exhibit the same general geographic trip distributions.

Table 4.8-5
Project Geographic Trip Distribution Percentages

Direction	Percent
North	35%
South	35%
East	20%
West	10%
Total	100%

Source: Hirsch Green, 2013

Using the general geographic directional trip distribution percentages shown in **Table 4.8-5**, the approximate percentages of trips associated with both the existing site development and the proposed project's component uses on the key streets and freeway facilities in the project vicinity while traveling to or from the project site were determined, and are shown in **Figure 4.8-5 Project Trip Distribution**.

The general traffic assignments shown in **Figure 4.8-5** were then further refined to identify the specific movement of project traffic through each of the study intersections as it travels to and from the project site; this level of detail is necessary in order to assess the project's traffic effects at each location. This step considered a number of factors that could influence the project traffic's access routes and travel patterns, including turn restrictions at several of the study intersections and the locations and operations of the project-serving driveways.

SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-5**

Project Trip Distribution

0889.005•10/14

Each of the project site-adjacent roadways, Admiralty Way, Bali Way, and Mindanao Way, currently exhibit raised median islands along the length of the project frontages. Both Bali Way and Mindanao Way exhibit existing openings in the median islands that permit left-turns into and out of the Parcel 44 site. Although some modification of the locations and/or sizes of these existing median openings may be necessary in order to align with the proposed project's new driveways (as described later in this section), for purposes of the project's traffic generation analysis, each of the site's proposed driveways accessing either Bali Way or Mindanao Way is expected to allow both left and right-turn entry and exit movements.

Conversely, while there is an existing median island opening on Admiralty Way adjacent to the project's proposed new driveway, this median opening currently exhibits only a left-turn pocket for southbound travel, to allow left-turns both into and out of an existing driveway serving the medical/commercial office development opposite the project site, on the east side of Admiralty Way. However, this median island does not currently provide a left-turn pocket to facilitate northbound Admiralty Way traffic entry into the proposed project's new driveway; it is of note that northbound left-turns are not specifically prohibited at this location, but must make an undesirable turn from the innermost through travel lane which can block or impede other northbound through traffic. Similarly, while left-turn exists from the project site to northbound Admiralty Way are not prohibited, this move does not currently occur since no site driveway exists at the location of the existing median island location.

The project's proposed new Admiralty Way driveway will be located opposite the existing median island opening, and project-related traffic could physically enter and exit the site via this existing median island opening. However, due to the current configuration and operation of the median island opening, it is anticipated that both left-turn entry and left-turn exits (from and to northbound Admiralty Way, respectively) at the new project driveway would be prohibited due to safety and operational concerns.

Therefore, the proposed project includes a modification to the Admiralty Way median island to provide a new left-turn pocket in the median island at the existing opening, to facilitate left turns from northbound Admiralty Way into the project site without impeding other northbound traffic. However, due to safety concerns, existing left-turns from the driveway to northbound Admiralty Way will not be permitted. To address this recommendation, the Admiralty Way driveway design includes a raised triangular island to physically prevent left-turn exits and to direct all outbound project traffic onto southbound Admiralty Way; project patrons and employees wishing to travel north on Admiralty Way upon leaving the site will exit via one of the new project driveways on either Bali Way or Mindanao Way, then make a turn left at the signalized intersections at Admiralty Way to proceed north along that roadway.

While the project trip assignment percentages shown in **Figure 4.8-5** were generally assumed to be the same for each of the proposed project and existing site use components (retail, office, restaurant, etc.), it is likely that each of the project's components would access the project site using different driveways, depending on their locations within the project site. Similarly, since the existing driveway locations are different from those of the proposed project, these current uses would also be expected to exhibit somewhat different site access patterns from the project's uses. Specifically, the six intersections of Admiralty Way and Bali Way (no. 14), Lincoln Boulevard and Bali Way (no. 15), Admiralty Way and Mindanao Way (no. 16), Lincoln Boulevard and Mindanao Way (no. 17), Admiralty Way and Fiji Way (no. 21), and Lincoln Boulevard and Fiji Way (no. 22), would be expected to exhibit slightly different "inbound" or "outbound" trip percentages as compared to each other. Therefore, specific intersection-level turning movement trip assignment percentages were developed for each of the major project component buildings or uses. A comprehensive discussion of the methodology for the trips assignment is discussed in the Traffic Impact Analysis report provided in **Appendix 4.8**.

The "total net" project traffic volumes, representing the sum of the traffic expected to be generated by the total of the proposed project's component uses less those trips associated with the existing site uses, which will be removed, are shown in **Figure 4.8-6 Project Net Total Traffic Volumes – AM Peak Hour**, and **in Figure 4.8-7 Project Net Total Traffic Volumes – PM Peak Hour**. The volumes identified in these figures represent the incremental project traffic additions used in the traffic analysis to identify the potential project-related traffic impacts at each of the 25 study intersections.

4.8.4 REGULATORY FRAMEWORK

4.8.4.1 Congestion Management Plan

The state legislature, following the passage of Proposition 111 in 1990, enacted the Congestion Management Plan (CMP). The purpose of the CMP is to address the impact of local growth on the regional transportation system. The Los Angeles County MTA, the local CMP agency, has designated a highway network that includes all state highways and principal arterials within the County, along with traffic monitoring locations. Local jurisdictions are required to monitor the Level of Service standards at the designated locations within this network. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to be in conformance with the Countywide plan.

PROJECT SITE

NOTE: SEE SITE PLAN FOR ACTUAL DRIVEWAY CONFIGURATIONS

SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-6**

Project Net Total Peak Hour Traffic Volumes – AM Peak Hour

0889.005•10/14

PROJECT SITE

NOTE: SEE SITE PLAN FOR ACTUAL DRIVEWAY CONFIGURATIONS

SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-7**

Project Net Total Peak Hour Traffic Volumes – PM Peak Hour

0889.005•10/14

New projects within the County of Los Angeles must comply with the CMP for Los Angeles County. Appendix D of the CMP includes Transportation Impact Assessment (TIA) guidelines. The TIA guidelines require analysis at monitored street intersections and segments, including freeway on- or off-ramp intersections where a project is expected to add 50 or more peak hour vehicle trips and mainline freeway or ramp monitoring locations where a project is expected to add 150 or more peak hour trips. If a project does not add, but merely shifts, trips at a given monitoring location, the CMP analysis is not required. An evaluation of transit impacts is required by the CMP for all projects for which an EIR will otherwise be prepared.

4.8.4.2 Marina del Rey LCP—Transportation Improvement Program

Transportation and circulation improvements are identified in the Marina del Rey LCP Transportation Improvement Program (TIP) which are designed to fully mitigate the traffic generation of the Phase II development in Marina del Rey. All projects within the Marina, including the proposed project, are subject to the TIP and are required to pay a traffic mitigation-per-PM peak hour trip fee imposed by the County of Los Angeles pursuant to the TIP in order to fund the recommended TIP roadway improvements. These improvements address local traffic generated in and confined to the Marina, as well as trips that leave or pass through the Marina (regional trips).

4.8.4.3 County of Los Angeles Department of Public Works

The County Los Angeles Department of Public Works has established guidelines for the preparation of Traffic Impact Analysis (TIA) reports. The Department is concerned with adverse impacts on traffic when:

- traffic generated by a project considered alone or cumulatively with other projects, if added to existing traffic volumes, exceeds the design capacity of an intersection or roadway, contributes to an unacceptable LOS, or exacerbates an existing congested condition; and/or
- project-generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, parking facilities); and/or
- proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways); and/or
- non-residential uses generate commuter or truck traffic through a residential area; and/or
- project-generated traffic significantly increases on a residential street and alters its residential character.

The TIA Report for the proposed project has been prepared in accordance with the guidelines and criteria above.

4.8.5 IMPACT ANALYSIS

4.8.5.1 Thresholds of Significance

The County of Los Angeles includes thresholds of significance in its Initial Study checklist. In general, these thresholds are similar to the applicable thresholds listed in Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*. Where the thresholds differ, it is noted below. Therefore, the proposed project would have a potentially significant impact with respect to noise and vibration if it would:

- 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

- Conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highway

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

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

- Result in inadequate emergency access

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

The Initial Study determined that the project would result in less than significant impacts in regard to the thresholds listed below. Therefore these thresholds will not be discussed further in this document. The Initial Study has been attached to this document as **Appendix 1.0**.

- 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

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

4.8.5.2 Methodology

This section summarizes the findings of a TIA report prepared by Hirsch/Green Transportation Consulting, Inc., for the Parcel 44 in October 2013. A complete copy of this TIA report is included in **Appendix 4.8** of this EIR.

Traffic volume data for the weekday AM and PM peak hour study intersections were obtained from counts performed specifically for this project in December 2011. Based on traffic growth trends in the study area, it is expected that the traffic patterns and volumes identified in these counts will remain relatively constant, and continue to accurately reflect traffic conditions in the study area for some time. However, for purposes of the project's TIA, the December 2011 count data were increased using the County's recommended ambient traffic growth factor to estimate the traffic volumes for the year 2013 conditions identified in this study. The count data are representative of typical mid-week conditions during weeks with no holidays or other special events, and with all area businesses and schools in full, regular operation. The "peak hour" volumes described in this analysis reflects the highest four consecutive 15-minute periods within a larger 3-hour count windows; peak hour traffic volumes were determined individually for each of the study intersections, assuring that the "worst case" operational conditions at each location were analyzed in this study.

Both the LA County Department of Public Works (LACDPW) and LADOT define a significant traffic impact based on a "stepped scale" as defined in the County's "Traffic Impact Analysis Report Guidelines" and LADOT's "Traffic Study Policies and Procedures." These impact definitions recognize that intersections at high volume-to-capacity ratios are more sensitive to additional traffic than those operating with available surplus capacity. A significant traffic impact is identified as:

- an increase in the CMA value of 0.010 or more, when the final (With Project) LOS is E or F (CMA > 0.900);
- a CMA increase of 0.020 or more at LOS D (CMA > 0.800 to 0.900); and
- a CMA increase of 0.040 or more at LOS C (CMA > 0.700 to 0.800).

The project's TIA also evaluated the potential impacts on the regional transportation system utilizing the guidelines set forth in the CMP. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. According to the CMP, a traffic analysis is required at all arterial monitoring intersections where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours. In addition, a traffic analysis is also required at all mainline freeway monitoring locations where the project would add 150 or more trips, in

either direction, during either the AM or PM weekday peak hours. An analysis of parking demand and proposed supply is also presented.

4.8.5.3 Related Projects

A listing of specific projects located within the study area, an approximately 2.0-mile radius from the project site, was obtained from various sources, including the Los Angeles County Department of Regional Planning, the County Department of Beaches and Harbors, LADOT, and the City of Culver City Planning Department. Additionally, a field survey of the study area was conducted to identify any ongoing developments not on these lists. Related projects are listed in **Table 4.0-1**.

4.8.5.4 Analysis, Mitigation Measures, and Residual Impacts

The applicable thresholds of significance are listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts, if applicable.

Impact 4.8-1: **The proposed project would 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?**

Construction Impacts

Project construction activities on the project site would involve three principal phases: (1) demolition of existing structures and site clearance; (2) site grading, including excavation and site preparation; and (3) building construction. Demolition, site clearance and construction of all land-side improvements is conservatively expected to begin as early as January 2015 and ending the last week of August 2016.

Demolition of existing landside uses on the site is anticipated to last approximately two to three months with an average of 130 truckloads per day. The anticipated haul route is shown in **Figure 4.8-8 Proposed Project Haul Routes**. As can be seen in **Figure 4.8-8**, trucks exiting the project site are expected to use either the driveway on Bali Way and head east toward Admiralty Way, or exit directly onto Admiralty and head south on Admiralty Way and then head east on Mindanao Way to the 90 Freeway. Trucks would be expected to travel the reverse route coming to the project site. Demolition would require approximately 28 workers, not including truck drivers. It is anticipated that the demolition phase of the proposed project's development would begin as early as January 2015, and end as early as spring 2015.

SOURCE: Google Earth, July 2014

FIGURE **4.8-8**

Proposed Project Haul Routes

Grading of the project site after demolition would require approximately two to three months and would utilize approximately 18 workers and an average of 140 truck trips per day. It is anticipated that grading would begin in spring 2015 and would be completed fall 2015.

Construction is conservatively expected to begin in the fourth quarter of 2015 and last for approximately 10 months. Construction would involve approximately 550 workers (monthly average) and an average of 20 trucks trips per day. During project construction, staging of construction equipment, materials, and worker vehicles would occur on the project site. In the event that it becomes infeasible to accommodate all construction workers parking on the site, the project applicant would work with the Los Angeles County Department of Beaches and Harbors in securing its approval to utilize off-site parking facilities for the temporary parking of construction workers' vehicles.

The following Project Design Features would be implemented during the construction phase to ensure potential impacts remain less than significant:

- Maintain existing access for land uses in the proximity of the project site during project construction.
- Schedule deliveries and pick-ups of construction materials for non-peak travel periods.
- Coordinate haul trucks (according to designated haul routes), deliveries, and pick-ups to reduce the potential for trucks waiting to load or unload for protracted periods of time.
- Minimize obstruction of through-traffic lanes on Admiralty Way and prohibit obstruction of these same lanes that accommodate construction during peak hours.
- Construction equipment traffic from the contractors shall be controlled by flagman.
- Designated transport routes for heavy trucks and haul trucks to be used over the duration of the proposed project.
- Schedule vehicle movements to ensure that there are no vehicles waiting off-site and impeding public traffic flow on the surrounding streets.
- Establish requirements for loading/unloading and storage of materials on the project site, where parking spaces would be encumbered, length of time traffic travel lanes can be encumbered, sidewalk closings or pedestrian diversions to ensure the safety of the pedestrian and access to local businesses.
- Coordinate with adjacent businesses and emergency service providers to ensure adequate access exists to the project site and neighboring businesses.
- Prohibit parking for construction workers except on the project site and any designated off-site parking locations.

It is anticipated that construction related traffic would be largely freeway oriented. Construction workers would arrive and depart along the Marina Expressway, Lincoln Boulevard, and Admiralty Way. As such, worker trips occurring during project construction would have a less than significant impact. Construction impacts would be less than significant.

Operational Impacts

Existing Plus Project Analysis

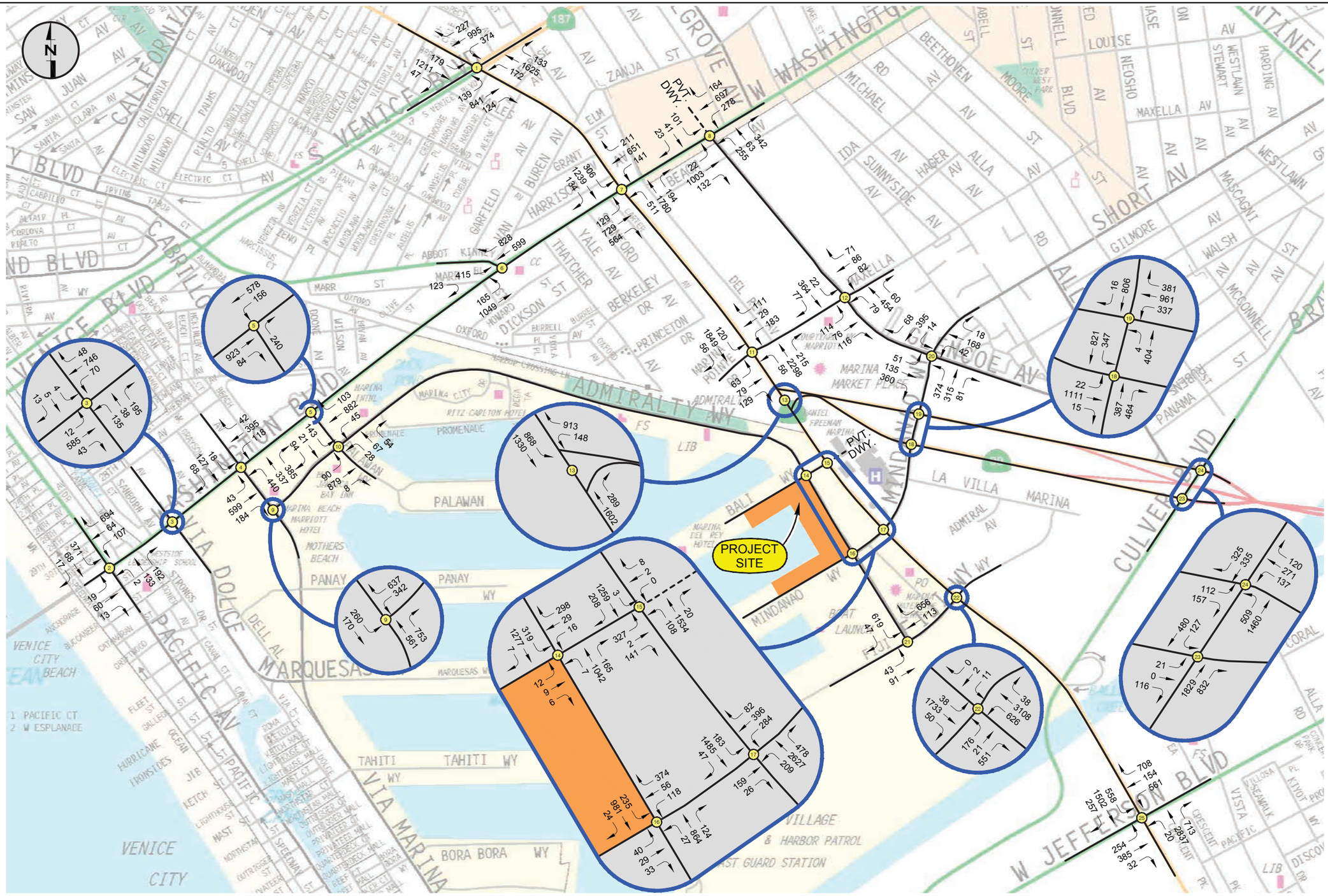
Although not currently required by the County, recent court decisions have mandated that, in addition to the "future conditions," all new traffic studies must include an analysis of potential project-related impacts based on the existing conditions in the project vicinity, in order to identify any "immediate" and project-specific traffic impacts within the study area which may result from development of the proposed project alone.

The "existing" (year 2013) weekday peak hour traffic volumes at each of the nine study intersections are shown in **Figure 4.8-3** for the AM peak hour conditions and in **Figure 4.8-4** for the PM peak hour conditions.

Existing With Project Conditions

The traffic volumes associated with this scenario were developed by adding the net project traffic volumes shown earlier in **Figure 4.8-6** and **Figure 4.8-7**) to the existing "No Project" year 2013 traffic volumes and the resulting "Existing (2013) With Project" scenario traffic volumes are shown in **Figure 4.8-9 Existing Volumes (2013) With Project Trips – AM Peak Hour** and **Figure 4.8-10 Existing Volumes (2013) With Project Trips – PM Peak Hour**.

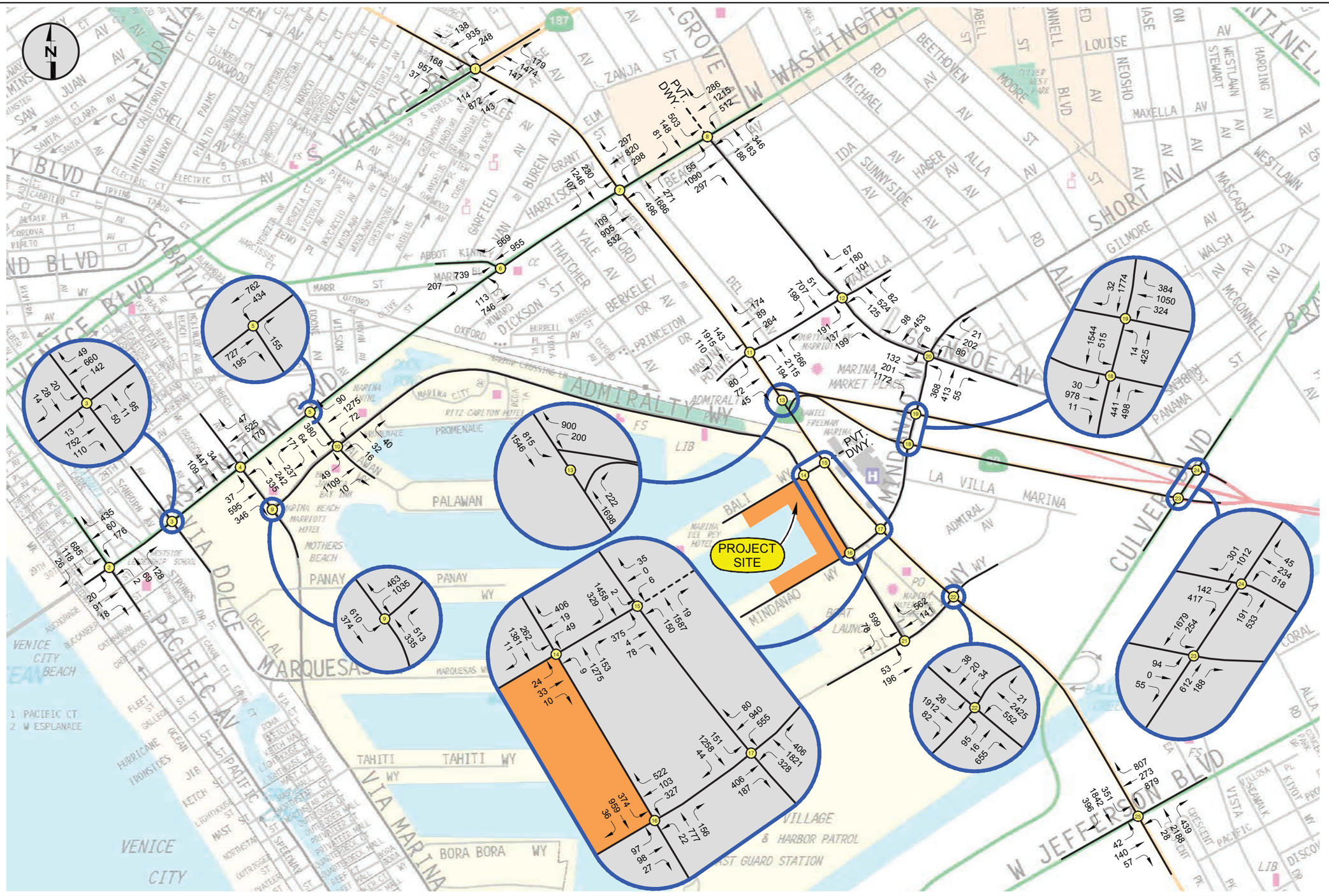
Using the CMA methodology described above, the existing (year 2013) weekday AM and PM peak hour operating conditions (CMA value and corresponding LOS) at each of the 25 study intersections were calculated, as summarized below in **Table 4.8-6, Critical Movement Analysis Summary.**



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-9**

Existing Volumes (2013) With Project Trips – AM Peak Hour



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-10**

Existing Volumes (2013) With Project Trips – PM Peak Hour

Table 4.8-6
Critical Movement Analysis Summary – Existing (2013) Without and With Project Conditions

Int. No.	Intersection	Peak Hour	No Project CMA	No Project LOS	With Project CMA	With Project LOS	Impact
1	Venice Boulevard and Lincoln Boulevard	AM	**1.026**	**F**	**1.028**	**F**	0.002
		PM	**0.944**	**E**	**0.954**	**E**	0.010*
2	Washington Boulevard and Pacific Avenue	AM	0.534	A	0.535	A	0.001
		PM	0.678	B	0.685	B	0.007
3	Washington Boulevard and Via Dolce/Dell Avenue	AM	0.260	A	0.261	A	0.001
		PM	0.314	A	0.320	A	0.006
4	Washington Boulevard and Via Marina/Ocean Avenue	AM	0.564	A	0.567	A	0.003
		PM	0.779	C	0.788	C	0.009
5	Washington Boulevard and Palawan Way [1]	AM	0.715	C	0.715	C	0.000
		PM	0.794	C	0.794	C	0.000
6	Washington Boulevard and Abbot Kinney Boulevard	AM	0.561	A	0.562	A	0.001
		PM	0.606	B	0.609	B	0.003
7	Washington Boulevard and Lincoln Boulevard	AM	0.819	D	0.822	D	0.003
		PM	0.897	D	**0.914**	**E**	0.017*
8	Washington Boulevard and Glencoe Avenue/Costco Plaza Driveway	AM	0.632	B	0.635	B	0.003
		PM	**1.032**	**F**	**1.039**	**F**	0.007
9	Admiralty Way and Via Marina [2]	AM	0.407	A	0.411	A	0.004
		PM	0.831	D	0.845	D	0.014
10	Admiralty Way and Palawan Way [2]	AM	0.461	A	0.464	A	0.003
		PM	0.669	B	0.689	B	0.020
11	Lincoln Boulevard and Maxella Avenue/Marina Pointe Drive	AM	0.651	B	0.653	B	0.002
		PM	0.644	B	0.656	B	0.012
12	Maxella Avenue and Glencoe Avenue	AM	0.345	A	0.345	A	0.000
		PM	0.493	A	0.495	A	0.002
13	Lincoln Boulevard and Marina Expressway (SR-90)	AM	0.732	C	0.734	C	0.002
		PM	0.729	C	0.741	C	0.012
14	Admiralty Way and Bali Way [2]	AM	0.596	A	0.601	B	0.005
		PM	0.652	B	0.687	B	0.035
15	Lincoln Boulevard and Bali Way/Auto Dealership Driveway	AM	0.456	A	0.461	A	0.005
		PM	0.576	A	0.611	B	0.035
16	Admiralty Way and Mindanao Way [2]	AM	0.565	A	0.556	A	-0.009
		PM	0.669	B	0.721	C	0.052*
17	Lincoln Boulevard and Mindanao Way	AM	0.847	D	0.851	D	0.004
		PM	0.861	D	0.891	D	0.030*
18	Mindano Way and EB Marina Expressway (SR-90)	AM	0.626	B	0.628	B	0.002
		PM	0.770	C	0.788	C	0.018
19	Mindano Way and WB Marina Expressway (SR-90)	AM	0.431	A	0.432	A	0.001
		PM	0.697	B	0.701	C	0.004
20	Mindano Way and Glencoe Avenue	AM	0.445	A	0.447	A	0.002
		PM	**1.040**	**F**	**1.047**	**F**	0.007

Int. No.	Intersection	Peak Hour	No Project CMA	No Project LOS	With Project CMA	With Project LOS	Impact
21	Admiralty Way and Fiji Way [2]	AM	0.231	A	0.231	A	0.000
		PM	0.243	A	0.249	A	0.006
22	Lincoln Boulevard and Fiji Way	AM	0.824	D	0.827	D	0.003
		PM	0.693	B	0.707	C	0.014
23	Culver Boulevard and Marina Freeway (SR-90) EB On/Off-Ramps	AM	0.469	A	0.469	A	0.000
		PM	0.515	A	0.523	A	0.008
24	Culver Boulevard and Marina Freeway (SR-90) WB Off-Ramp	AM	0.661	B	0.662	B	0.001
		PM	0.795	C	0.796	C	0.001
25	Lincoln Boulevard and Jefferson Boulevard	AM	**1.046**	**F**	**1.048**	**F**	0.002
		PM	0.827	D	0.837	D	0.010

Notes:

[1] Unsignalized intersection; capacity assumed as 1,200 vehicles per hour.

[2] Los Angeles County intersection.

** Significant impact per Los Angeles County Department of Public Works Traffic Impact Analysis Report Guidelines, January 1, 1997, or LADOT Traffic Study Policies and Procedures, June 2013.*

EB = eastbound, WB = westbound.

As shown in **Table 4.8-6**, each of the five study intersections under the jurisdiction of the County (intersections 9, 10, 14, 16, and 21), are currently operating at LOS A or LOS B during both the AM and PM peak hours, with the exception of Via Marina and Admiralty Way, which exhibits LOS D operations during the PM peak hour. Similarly, most of the remaining 20 study intersections (operated by or under sole or shared jurisdiction of the City of Los Angeles) generally also operate at LOS D or better, although four of the intersections, Lincoln Boulevard and Venice Boulevard, Washington Boulevard and Glencoe Avenue/Costco Plaza Driveway, and Mindanao Way and Glencoe Avenue, and Lincoln Boulevard and Jefferson Boulevard, operate at LOS E or F during one or both of the peak hours (indicated by bold text).

Most jurisdictions in Southern California typically identify LOS D as the "target" maximum acceptable operation for intersections in urban areas. As indicated in **Table 4.8-6**, a total of 21 of the 25 study intersections currently exhibit acceptable operating conditions during the most critical times of the day. As shown in **Table 4.8-7, Los Angeles County/LADOT Significant Traffic Impact Criteria**, the potential traffic impacts of the proposed project will be minimal, although based on the County/LADOT CMA criteria, significant traffic impacts would occur at four of the 25 study intersections, all during the PM peak hour. These locations include one County-jurisdiction location, the site-adjacent intersection of Admiralty Way and Mindanao Way, as well as the shared City/County intersection of Lincoln Boulevard and Mindanao, and the two City-only jurisdiction intersections of Venice Boulevard and Lincoln Boulevard, and Washington Boulevard and Lincoln Boulevard.

Table 4.8-7
Los Angeles County/LADOT Significant Traffic Impact Criteria

LOS	Final (with project) CMA Value	Project Related Increase in CMA Value
C	>0.700 ≥0.800	≥0.040
D	>0.800 ≥0.900	≥0.020
E or F	>0.900	≥0.010

Source: Hirsch Green, 2013

Future Year 2016 Traffic Conditions

Future (year 2016) traffic volumes in the project vicinity, and indeed throughout the region, are anticipated to increase as a result of a number of factors, although two factors contribute most significantly to area traffic growth. The first of these factors is ambient increases in the number of vehicles on the roadway system. Ambient traffic growth can occur for a number of reasons; increasing population (not tied to development), additional vehicles for existing households (as children become driving age or new multi-vehicle status for current single-vehicle families), economic factors such as new jobs creating new worker trips, and other factors.

The second factor is new traffic resulting from ongoing and continued development. A number of other development projects, both within Marina del Rey and outside the County jurisdiction within the City of Los Angeles, are currently either under construction or planned for construction in the project vicinity in the foreseeable future. These projects range from small "in fill" residential developments to large Master Plan projects incorporating hundreds of residential units and thousands of square feet of commercial office, retail, and community space, and each will likely contribute to future traffic volumes in the study area to some degree.

Therefore, since the proposed project is not expected to be occupied until the year 2016, its potential traffic additions, and associated traffic impacts, will occur on a roadway system that is anticipated to exhibit more traffic than identified in the "Existing (2013)" conditions described earlier. As such, the analysis of future traffic conditions within the study area was expanded to include potential traffic increases from both ambient traffic growth and from trips generated by other development projects in the vicinity that have not yet been developed. These "Future (2016) Without Project" scenarios represent the forecast traffic conditions in the study area at the time of the proposed project's completion, but prior to occupancy, and form the baseline for evaluating the effects of the project's potential incremental traffic additions.

To determine future (2016) traffic volumes, an ambient annual traffic growth factor of 0.6 percent was applied to the current (year 2013) traffic volumes. This growth factor, compounded annually, was applied to all of the turning movement volumes at the study intersections to form the baseline traffic volume conditions for the future study year 2016. Although the annual growth factor is expected to fully represent all potential area traffic increases, for the purposes of conservative analysis, traffic generated from nearby "related projects" was also added to these future baseline traffic volumes, to identify future cumulative traffic conditions in the area. LACDPW's Traffic and Lighting Division has determined that an annual traffic growth factor of 0.6 percent is appropriate. In fact, the CMP foresees actual anticipated traffic growth in the "West/Central Los Angeles" area encompassing the study vicinity to be approximately 0.14 percent annually, inclusive of both general ambient growth and traffic from cumulative area development (related projects), through the year 2016; as such, the assumed 0.6 percent annual growth factor is expected to be quite conservative. This "ambient traffic growth factor" is used to account for expected increases in traffic resulting from general ambient traffic growth in the study vicinity due to ongoing regional population growth, or from potential development projects not yet proposed or outside of the study area. The ambient growth factor, compounded annually, was applied to the 2013 traffic volumes to develop estimates of the future traffic volumes for the future year 2016 baseline conditions.

Traffic generated from nearby related projects was also added to these future baseline traffic volumes to identify future cumulative traffic conditions in the area. However, it should be noted that the assumed 0.6 percent annual ambient traffic growth factor is expected to accurately represent all area traffic growth within the study period; as such, the inclusion of additional traffic due to specific projects in the study area in addition to the assumed ambient background traffic growth may tend to overstate cumulative conditions. Therefore, so as not to inordinately deteriorate future traffic conditions and to more accurately predict future traffic volumes, for purposes of the project's TIA, related projects generating fewer than 20 net new peak hour trips or those located outside the 2.0-mile radius were generally not included as specific traffic generators, and were assumed to be included within the ambient traffic growth increases. However, in order to fully evaluate the cumulative traffic effects of ongoing or proposed development within Marina del Rey itself, all proposed projects located in the Marina were included in this analysis, regardless of their net traffic generation.

The traffic volumes of related projects were then distributed through the study area and assigned to the area roadway and freeway network. As with the proposed project traffic assignments, the distribution and assignment of traffic for related projects was assumed to exhibit the same travel paths during both the AM and PM peak hours. The resulting trip assignments of related projects are shown in **Figure 4.8-11**

Related Project Traffic Volumes – AM Peak Hour, and **Figure 4.8-12, Related Project Traffic Volumes – PM Peak Hour**.

Ongoing and/or Programmed Future Highway System Improvements

Few roadway, intersection, or traffic signal system improvements are planned for the area due its developed nature. However, Chapter C.11 of the Marina del Rey LCP includes programmed improvements to a number of intersections and roadways located within unincorporated Marina del Rey. The County began construction on several of these roadway improvements in July 2013, and anticipates completion in early 2014. As such, these improvements were included as baseline (pre-project) condition at the effected intersections for the forecast "future" (year 2016) analysis scenarios (i.e., the County's "Existing Plus Ambient Growth Only scenario and LADOT's "Without Project" conditions).

- Admiralty Way and Palawan Way – The County is currently constructing improvements to restripe the northbound approach of Palawan Way to convert the existing left-turn lane to a shared left-turn/through lane (the existing shared through/right-turn lane would remain), as well as to install a new right-turn only lane on the westbound approach of Admiralty Way, resulting in a future lane configuration of one left-turn lane, two through lanes, and right-turn only lane, although the eastbound approach would continue to exhibit its current configuration of one left-turn lane, one through lane, and one shared through/right-turn lane. Due to the proposed "shared through/left-turn lane" configuration on the northbound Palawan Way approach, this improvement is assumed to also require modification of the existing traffic signal to provide north/south "split" phasing operation.

- Admiralty Way and Bali Way – This intersection is currently being improved to add a second southbound left-turn lane on Admiralty Way at Bali Way, resulting in a final lane configuration for this approach of two left-turn lanes, one through lane, and one shared through/right-turn lane. The remaining approaches to this intersection would remain unchanged from their current configurations. This improvement can be implemented without the need for any roadway widenings along Admiralty Way.

- Admiralty Way and Mindanao Way – The roadway improvements currently being constructed at this location will install a second southbound left-turn lane on Admiralty Way at Mindanao Way (in addition to the existing one left-turn lane, one through lane, and one shared through/right-turn lane), although all other approaches at this intersection will remain unchanged. The signal phasing at this intersection will continue to exhibit the current east-west "split" phase operations.

The County has also recently approved an improvement to the currently STOP-sign controlled intersection at Washington Boulevard and Palawan Way to install a new traffic signal and to reconfigure the northbound approach of Palawan Way to provide dual-left turn lanes in addition to the existing right-turn only lane. The reconfiguration of the northbound approach of this intersection and the installation of a new traffic signal, which is not included in the updated Marina del Rey LCP "Revised Intersection Improvements" list, is designed to address increasing "pass-through" traffic in the area due primarily to developments located outside the Marina. This intersection improvement is also designed to relieve

growing congestion at the nearby intersections of Via Marina/Admiralty Way and Washington Boulevard/Via Marina & Ocean Avenue. The planned improvement will provide an alternative outlet for vehicles traveling westbound through the Marina with destinations to the north and west (in Venice and City of Santa Monica). This intersection improvement is expected to reduce the amount of traffic currently making the northbound left turn from Via Marina to Washington Boulevard, and improve the operations at this and other nearby intersections. However, although approved, there is no definitive timeline for installation of this measure; since the improvement cannot be guaranteed by the future (2016) study year, its effects are not incorporated into this analysis. No other significant roadway or traffic signal improvements within the study area were identified in either the City of Los Angeles Capital Improvements Program (CIP) or Los Angeles County Department of Public Works records for implementation by the anticipated 2016 completion date of the proposed project.

As discussed previously, the study intersections are located within two different jurisdictions, each of which evaluates future conditions and project-related traffic impacts in a slightly different manner. Although the proposed project is located within the County of Los Angeles, only five of the 25 study intersections examined in this analysis (intersections 9, 10, 14, 16, and 21) are under the jurisdiction of the County of Los Angeles, with the remainder shared with (no. 3, 4, 5, 15, 17, and 22) or located entirely within and/or operated and maintained by the City of Los Angeles, including intersections adjacent to the Marina along both Washington Boulevard and Lincoln Boulevard.

The County utilizes a two-step process in the evaluation of future conditions and the assessment of potential project traffic impacts. First, project-specific impacts on the future conditions are identified by using only the anticipated ambient growth traffic increases in the existing traffic ("With Ambient Growth Only" scenario) as the baseline, and then adding the project-specific traffic to this scenario (producing the "With Ambient Growth Plus Project" conditions) in order to identify the incremental effects of the project itself. This methodology separates potential project-specific traffic impacts from those that may be associated with cumulative development (related projects) in the study area, and allows for the identification of any traffic impacts which could result from development of the proposed project alone. Mitigation of these "project-specific" impacts is considered to be the responsibility of the individual project alone through installation of acceptable roadway and/or traffic signal improvements or other measures directly, or through contribution to funding mechanisms designed to improve locations significantly impacted by the project.

PROJECT SITE

PVT. DWY.

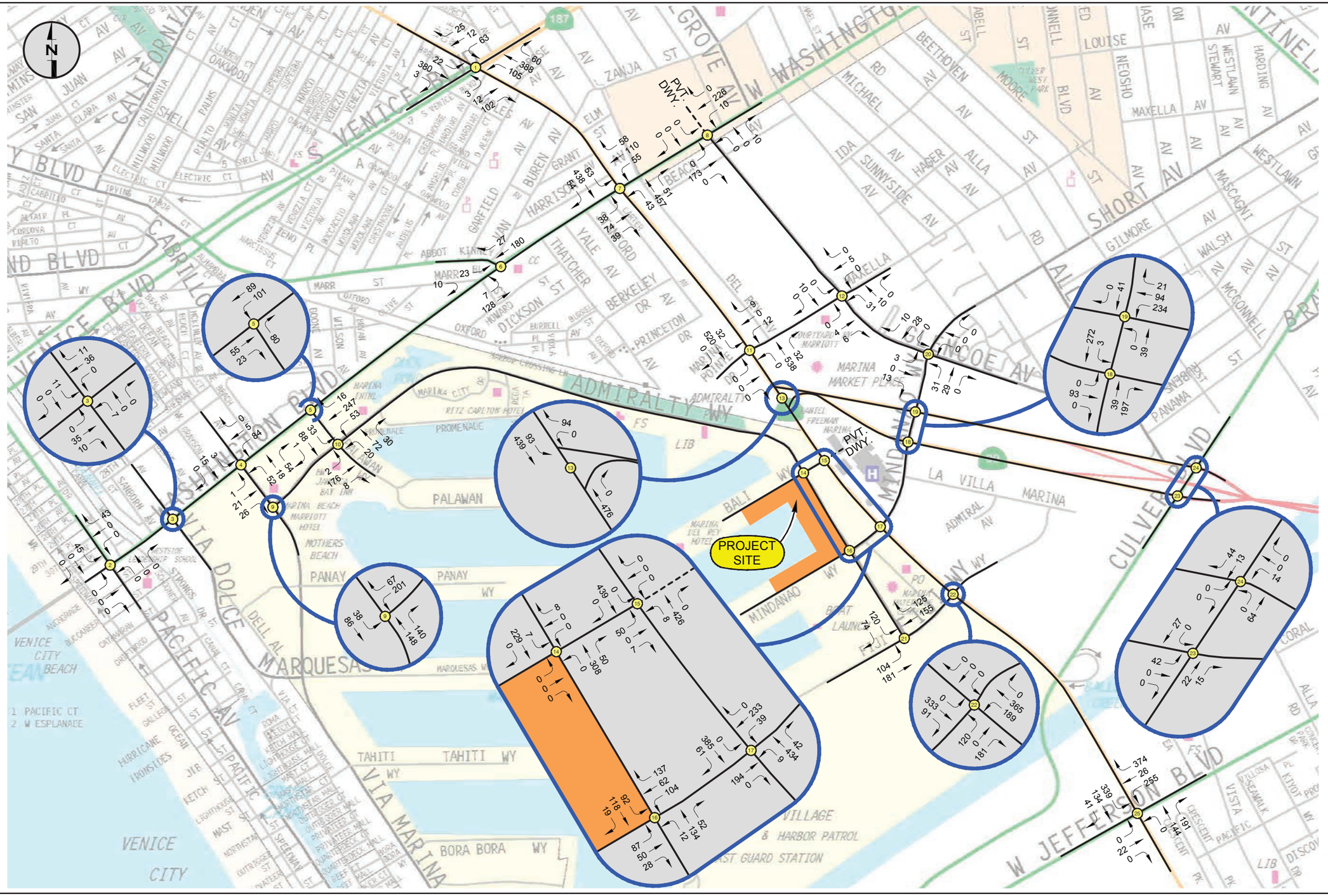
PVT. DWY.

SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-11**

Related Project Traffic Volumes – AM Peak Hour

0889.005•08/14


PROJECT SITE
PVT. DWY.
PVT. DWY.
PROMENADE
PALAWAN
PANAY
PANAY WY
TAHITI
TAHITI WY
BORA BORA WY
MARINA
MARINA MARKET PLACE
LA VILLA MARINA
VENICE CITY BEACH
VENICE CITY
1 PACIFIC CT
2 W ESPLANADE
ADMIRALTY PWY
VENICE BLVD
W WASHINGTON BLVD
W JEFFERSON BLVD
PACIFIC AV
VIA DOLCE
DELL AL MARQUESAS
VIA MARINA
MINDANAO WY
CULVER BLVD
SHORT AV
ABBOT KINNEY BLVD
MARR ST
DICKSON ST
OXFORD
MAXELLA
GILMORE
LOUISE
NEOSHO
MICHAEL
BEETHOVEN
HAGER
SUNNYSIDE
ZANJA
ELM
GRANT
HARRISON
GARFIELD
BURCHETT
THATCHER
YALE
BERKELEY
DR
PRINCETON
DR
DEL REY
CIR
MARINA POINTE
DR
MARINA CITY
RITZ CARLTON HOTEL
MARINA BEACH MARRIOTT HOTEL
MOTHERS BEACH
MARINA DEL REY HOTEL
MARINA DEL REY MARRIOTT
DANIEL FREEMAN MARINA
BOAT LAUNCH
PO
LIB
FS
CORAL
VISTA
PACIFIC
CRESCENT
ALLA
RD
MASCAGNI
WESTLAWN
WALSH
MCCONNELL
PANAMA
HARDING
STEWART
MOORE
TILDEN REST PARK
BEACH
ABELL
ST
LIDA
ST
ELECTRIC
AV
CABRILLO
AV
CALIFORNIA
AV
OCEAN
AV
BEACH
CT
BEACH
WALK
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40

Next, the cumulative traffic generated by the 30 identified related projects in the study area is added to the "With Ambient Growth Plus Project" traffic volume forecasts, to create the final "With Cumulative Development" traffic scenario, which includes all anticipated traffic increases within the study area, including those of the proposed project. These forecast conditions are then again compared to the earlier "With Ambient Growth Only" scenario to determine the potential cumulative impacts of all expected traffic increases in the study area for the future study year. This step allows for the identification of potential long-term roadway improvements that may be necessary to mitigate total anticipated traffic growth in the study area, but which are beyond the ability of any particular development to implement.

To address the combined effects of both project-specific and cumulative development traffic impacts, the County has identified a series of improvements for roadways and/or intersections located in and around Marina del Rey. These improvements are funded wholly or in part by the Marina del Rey traffic impact mitigation fees, originally identified in the LCP's now-superseded Transportation Improvement Program (TIP) and also incorporated into the recent Marina del Rey Local Coastal Program update. As part of the evaluation of potential project traffic impacts on the intersections under the jurisdiction of the County within Marina del Rey, the project's "fair share" contributions to any such cumulative improvements are also identified as a percentage of the total incremental cumulative impacts. This analysis methodology was used to identify future conditions, including both project-specific and cumulative (project plus related projects) impacts, only for those study intersections identified earlier as within Marina del Rey and under the County's jurisdiction.

LADOT does not specifically evaluate or identify the potential impacts of cumulative development on the area intersections; rather, LADOT combines the effects of both the forecast ambient traffic growth and traffic generated by related projects to estimate the future "Without Project" conditions. The project-related incremental traffic volumes are then added to this no-project baseline to form the City's "With Project" traffic forecasts, against which the incremental impacts of the proposed project are identified and evaluated. Like the County, LADOT also requires individual projects to mitigate any identified project-specific impacts. While the LADOT impact analysis methodology does not specifically identify either cumulative impacts or cumulative mitigation requirements at intersections under its jurisdiction, it is of note that the forecast LADOT "With Project" conditions are identical to those produced under the County's "With Cumulative Development" traffic forecast scenario.

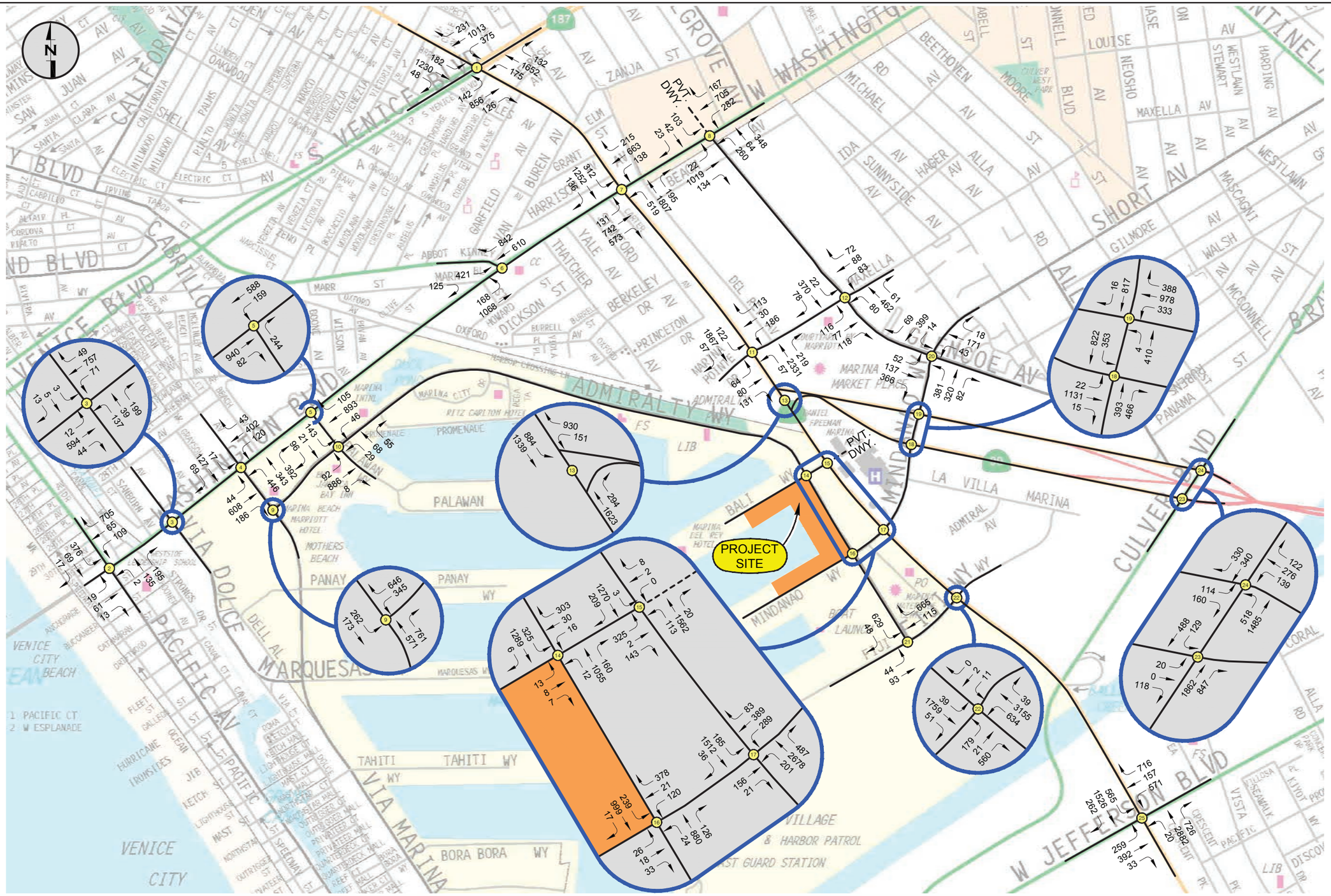
Further, the inclusion of traffic generated by the related projects in the pre-project future year baseline traffic conditions produces higher "Without Project" intersection LOS values against which the project's incremental traffic additions are compared, increasing the potential for project-specific impacts as compared to the County's evaluation methodology. As described earlier, both LADOT and LACDPW utilize the same significance criteria to evaluate project traffic impacts at study intersections. However,

LADOT's criteria exhibit smaller thresholds for significance as intersection LOS increases, with higher baseline (Without Project) conditions resulting in smaller project traffic increments being identified as "significant," and potentially resulting in project-specific impacts (and therefore requiring associated mitigation improvements) that would otherwise not be identified under the County's analysis methodology. In general, however, both analysis methodologies produce approximately equivalent results regarding the determination of project traffic impacts.

The future (year 2016) traffic volumes for the intersection conditions analyses described above were developed by combining the appropriate ambient traffic growth forecasts, related projects traffic estimates, and net project-specific traffic additions as noted for each analysis scenario. The County's "Ambient Growth Only" conditions are shown in **Figure 4.8-13 Peak Hour Ambient Growth Only – AM Peak Hou**r and **Figure 4.8-14 Peak Hour Ambient Growth Only – PM Peak Hour**, while the "With Ambient Growth Plus Project" conditions are shown in **Figure 4.8-15 Future (2016) Peak Hour Ambient Growth Plus Project Traffic Volumes – AM Peak Hour** and **Figure 4.8-16 Future (2016) Peak Hour Ambient Growth Plus Project – PM Peak Hour**. Similarly, the LADOT "Without Project" traffic volumes are shown in **Figure 4.8-17 Future (2016) Without Project Traffic Volumes – AM Peak Hour** and **Figure 4.8-18 Future (2016) Without Project Traffic Volumes – PM Peak Hour**. Finally, LADOT's "With Project" traffic volume scenario (which is the same as the County's "With Cumulative Development" conditions) is shown in **Figure 4.8-19 Future (2016) with project (Cumulative) Traffic Volumes – AM Peak Hour** and **Figure 4.8-20 Future (2016) With Project (Cumulative) Traffic Volumes – PM Peak Hour**. The results of the analysis of the traffic volume scenarios shown in these figures are shown in **Table 4.8-8 Critical Movement Analysis Summary – Future (2015) Without and With Project Conditions.**

Impact Analysis County of Los Angeles Intersections

Applying the County's intersection impact significance criteria to the analysis results summarized in **Table 4.8-8** indicates that the proposed project's potential significant impact at the site-adjacent intersection of Admiralty Way and Mindanao Way (during the PM peak hour under the "Existing Plus Project" conditions analyses shown earlier in) would no longer occur (reduced to less than significant levels), due primarily to the increase in intersection capacity resulting from completion of the ongoing installation of the new dual southbound left-turn lanes at that location. Therefore, the proposed project is not anticipated to create significant impacts at any of the five County-only study intersections under the forecast future (year 2016) conditions, and no project-specific mitigation measures are warranted for these locations.



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-13**

Peak Hour Ambient Growth Only – AM Peak Hour

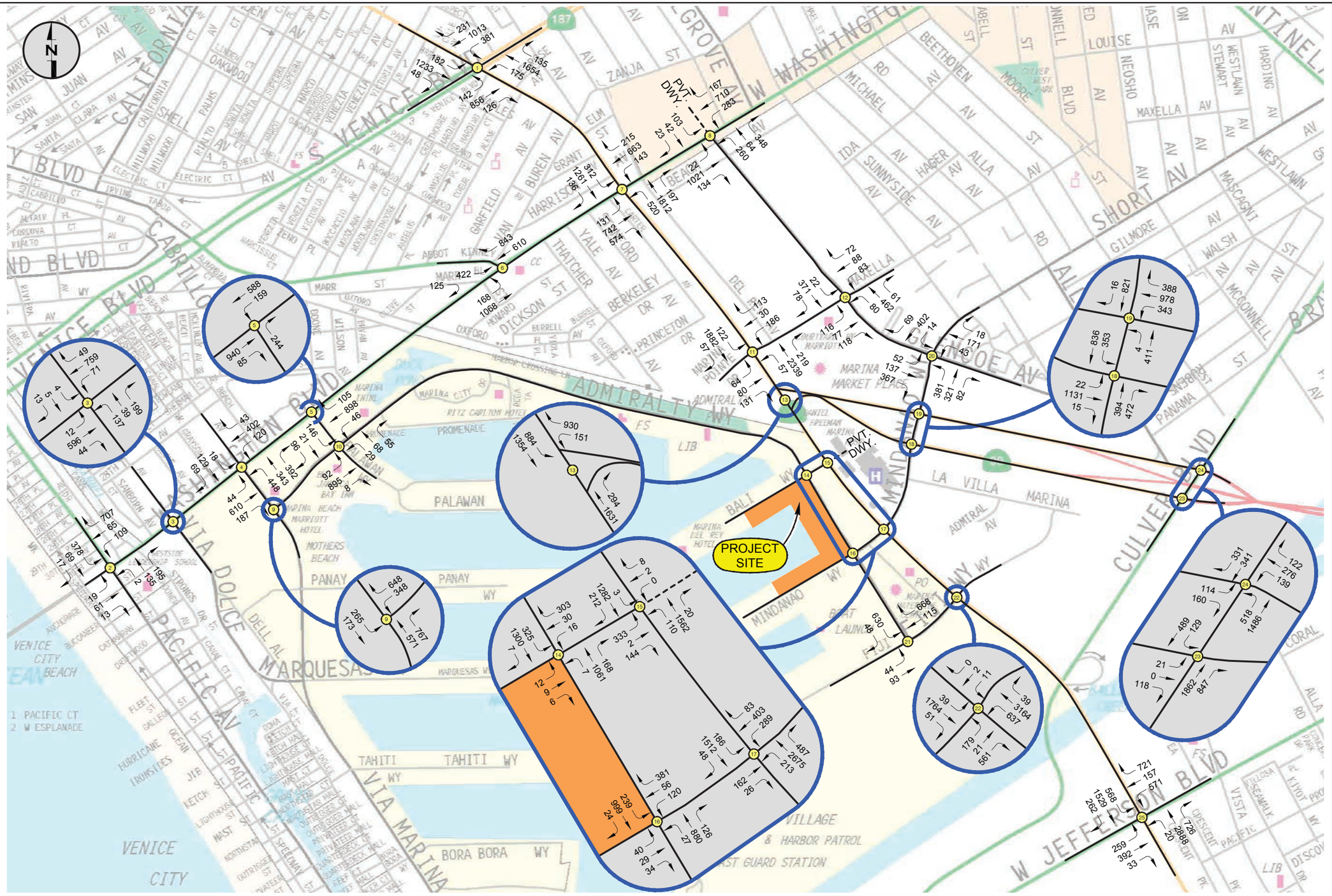
0889.005•08/14

PROJECT SITE

SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-14**

Peak Hour Ambient Growth Only – PM Peak Hour

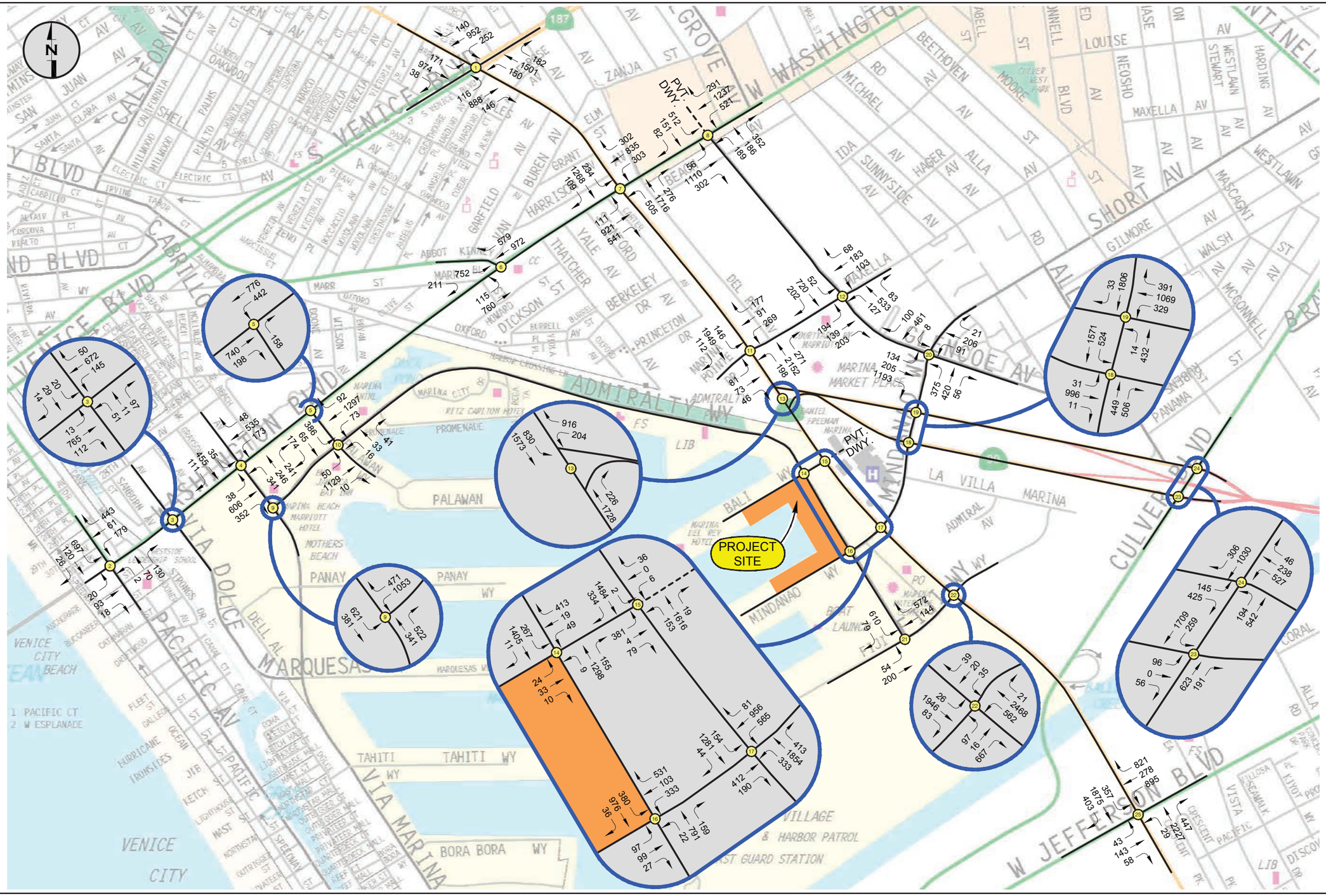


SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-15**

Future (2016) Peak Hour Ambient Growth Plus Project Traffic Volumes – AM Peak Hour

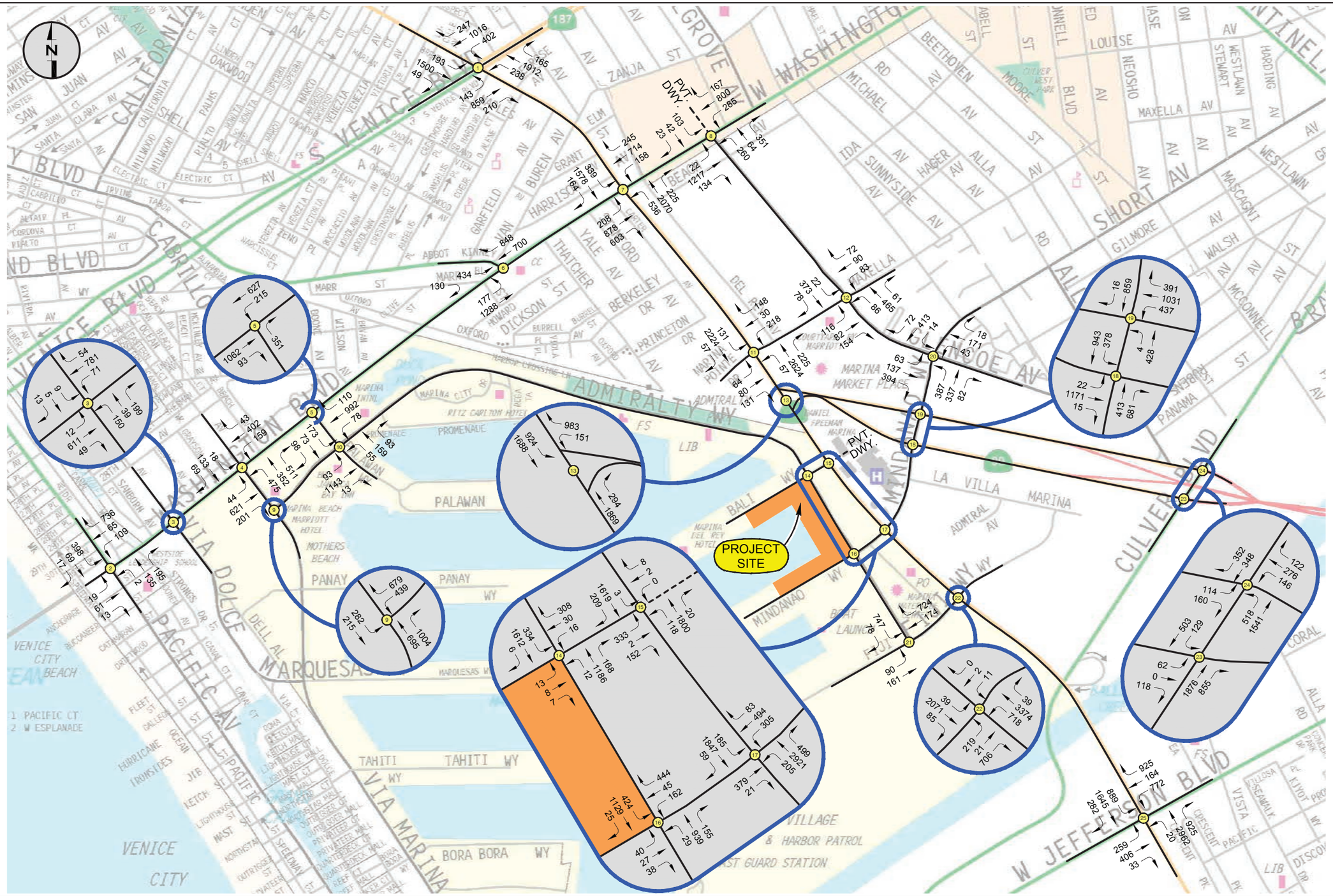
0889.005•08/14



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-16**

Future (2016) Peak Hour Ambient Growth Plus Project – PM Peak Hour

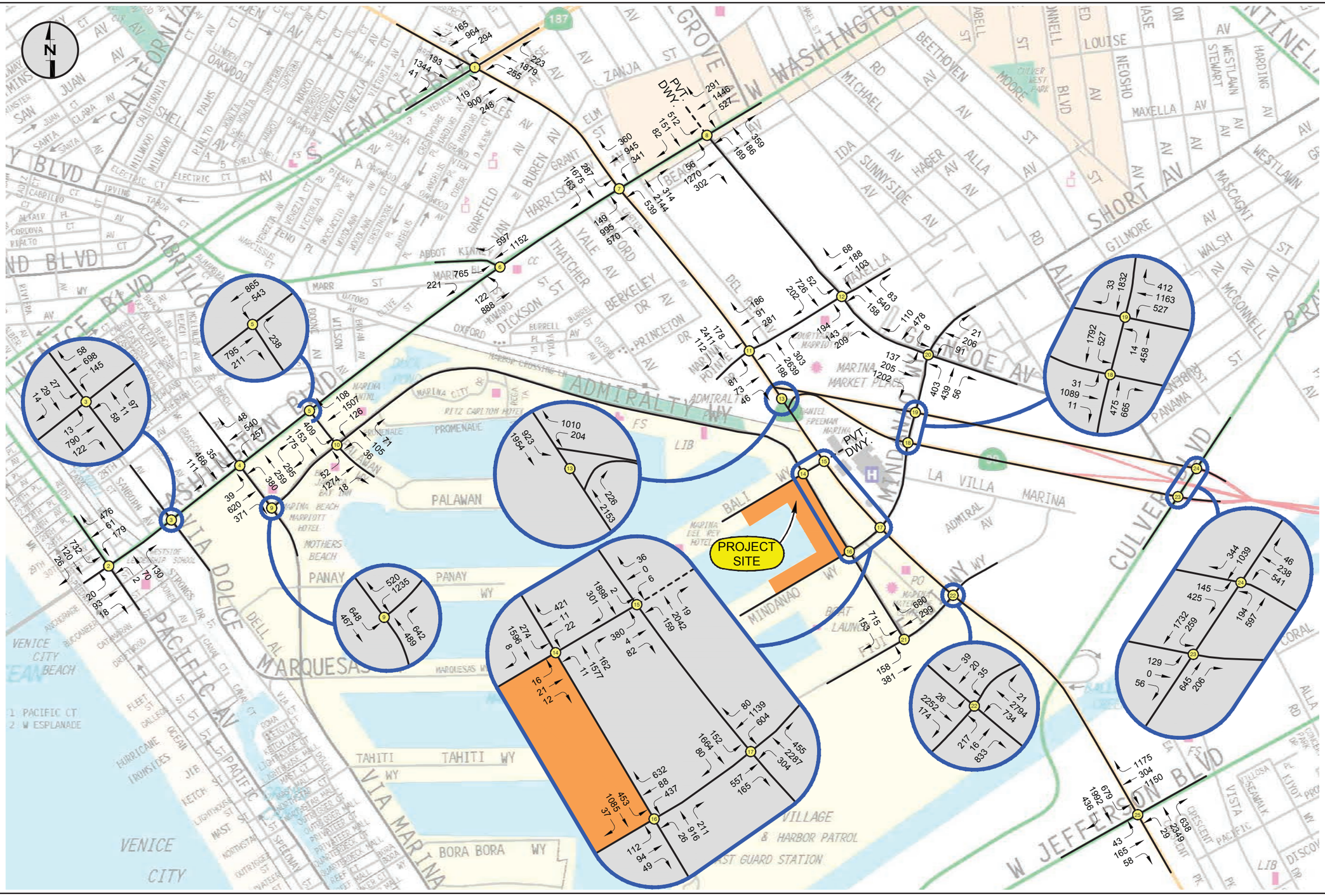


SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-17**

Future (2016) Without Project Traffic Volumes – AM Peak Hour

0889.005•08/14

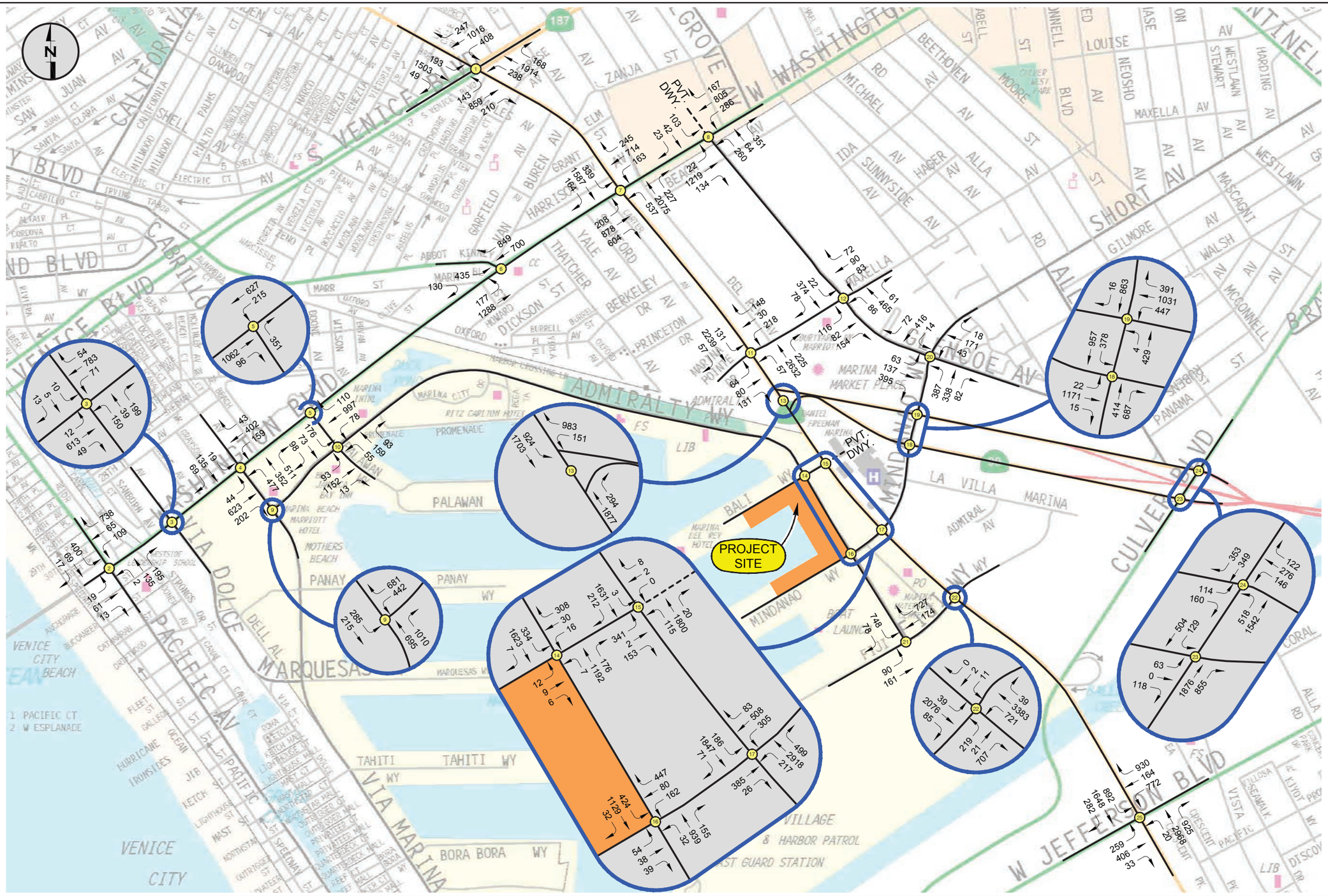


SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-18**

Future (2016) Without Project Traffic Volumes – PM Peak Hour

0889.005•08/14

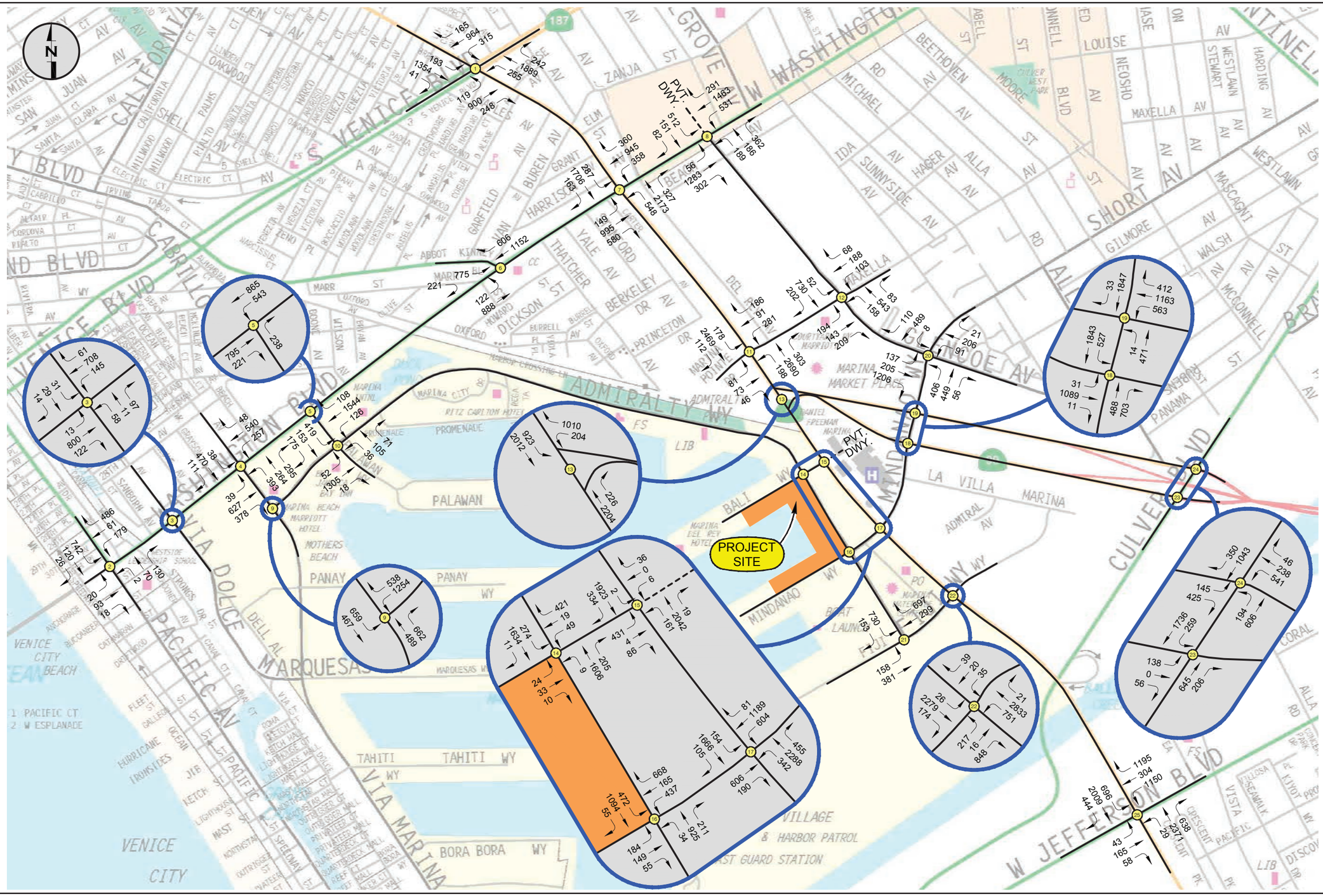


SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-19**

Future (2016) With Project (Cumulative) Traffic Volumes – AM Peak Hour

0889.005•08/14



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-20**

Future (2016) With Project (Cumulative) Traffic Volumes – PM Peak Hour

Table 4.8-8
Critical Movement Analysis Summary – Future (2016) Without and With Project Conditions

Int. No.	Intersection	Peak Hour	County Only Methodology: Existing Plus Ambient CMA	LOS	Existing Plus Ambient Plus Project CMA	LOS	Impact	LADOT Only Methodology: Without Project CMA	LOS	County/LADOT Methodology: With Project (Includes Cumulative) CMA	LOS	Project Impact	Cumulative Impact	Project Percent of Total Impact
1	Venice Boulevard and Lincoln Boulevard	AM	n/a	--	n/a	--	n/a	**1.159**	**F**	**1.161**	**F**	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**1.139**	**F**	**1.150**	**F**	0.011*	n/a	n/a
2	Washington Boulevard and Pacific Avenue	AM	n/a	--	n/a	--	n/a	0.567	A	0.568	A	0.001	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.722	C	0.729	C	0.007	n/a	n/a
3	Washington Boulevard and Via Dolce/Dell Avenue	AM	n/a	--	n/a	--	n/a	0.286	A	0.288	A	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.345	A	0.351	A	0.006	n/a	n/a
4	Washington Boulevard and Via Marina/Ocean Avenue	AM	n/a	--	n/a	--	n/a	0.674	B	0.677	C	0.003	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.885	D	0.894	D	0.009	n/a	n/a
5	Washington Boulevard and Palawan Way [1]	AM	n/a	--	n/a	--	n/a	**0.914**	**E**	**0.914**	**E**	0.000	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**0.983**	**E**	**0.983**	**E**	0.000	n/a	n/a
6	Washington Boulevard and Abbot Kinney Boulevard	AM	n/a	--	n/a	--	n/a	0.583	A	0.584	A	0.001	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.694	B	0.697	B	0.003	n/a	n/a
7	Washington Boulevard and Lincoln Boulevard	AM	n/a	--	n/a	--	n/a	**0.974**	**E**	**0.978**	**E**	0.004	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**1.109**	**F**	**1.126**	**F**	0.017*	n/a	n/a
8	Washington Boulevard and Glencoe Avenue/Costco Plaza Driveway	AM	n/a	--	n/a	--	n/a	0.720	C	0.722	C	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**1.123**	**F**	**1.131**	**F**	0.008	n/a	n/a
9	Admiralty Way and Via Marina [2]	AM	0.418	A	0.421	A	0.003	n/a	--	0.515	A	n/a	0.097	3.1%
		PM	0.847	D	0.861	D	0.014	n/a	--	**1.018**	**F**	n/a	0.171*	8.2%
10	Admiralty Way and Palawan Way [2]	AM	0.431	A	0.435	A	0.004	n/a	--	0.595	B	n/a	0.164	2.4%
		PM	0.673	B	0.692	B	0.019	n/a	--	0.847	D	n/a	0.174*	10.9%
11	Lincoln Boulevard and Maxella Avenue/Marina Pointe Drive	AM	n/a	--	n/a	--	n/a	0.752	C	0.753	C	0.001	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.805	D	0.818	D	0.013	n/a	n/a
12	Maxella Avenue and Glencoe Avenue	AM	n/a	--	n/a	--	n/a	0.356	A	0.356	A	0.000	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.529	A	0.531	A	0.002	n/a	n/a

Int. No.	Intersection	Peak Hour	County Only Methodology: Existing Plus Ambient CMA	LOS	Existing Plus Ambient Plus Project CMA	LOS	Impact	LADOT Only Methodology: Without Project CMA	LOS	County/LADOT Methodology: With Project (Includes Cumulative) CMA	LOS	Project Impact	Cumulative Impact	Project Percent of Total Impact
13	Lincoln Boulevard and Marina Expressway (SR-90)	AM	n/a	--	n/a	--	n/a	0.821	D	0.823	D	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.892	D	**0.904**	**E**	0.012*	n/a	n/a
14	Admiralty Way and Bali Way [2]	AM	0.538	A	0.541	A	0.003	n/a	--	0.596	A	n/a	0.058	5.2%
		PM	0.621	B	0.656	B	0.035	n/a	--	0.791	C	n/a	0.170*	20.6%
15	Lincoln Boulevard and Bali Way/Auto Dealership Driveway	AM	n/a	--	n/a	--	n/a	0.558	A	0.563	A	0.005	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.719	C	0.753	C	0.034	n/a	n/a
16	Admiralty Way and Mindanao Way [2]	AM	0.578	A	0.568	A	-0.010	n/a	--	0.655	B	n/a	0.077	-13.0%
		PM	0.649	B	0.685	B	0.036	n/a	--	0.893	D	n/a	0.244*	14.8%
17	Lincoln Boulevard and Mindanao Way	AM	n/a	--	n/a	--	n/a	**1.011**	**F**	**1.015**	**F**	0.004	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**1.069**	**F**	**1.109**	**F**	0.040*	n/a	n/a
18	Mindano Way and EB Marina Expressway (SR-90)	AM	n/a	--	n/a	--	n/a	0.718	C	0.720	C	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**0.915**	**E**	**0.933**	**E**	0.018*	n/a	n/a
19	Mindano Way and WB Marina Expressway (SR-90)	AM	n/a	--	n/a	--	n/a	0.470	A	0.471	A	0.001	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.755	C	0.758	C	0.003	n/a	n/a
20	Mindano Way and Glencoe Avenue	AM	n/a	--	n/a	--	n/a	0.481	A	0.483	A	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**1.092**	**F**	**1.100**	**F**	0.008	n/a	n/a
21	Admiralty Way and Fiji Way [2]	AM	0.237	A	0.237	A	0.000	n/a	--	0.350	A	n/a	0.113	0.0%
		PM	0.250	A	0.256	A	0.006	n/a	--	0.473	A	n/a	0.223	2.7%
22	Lincoln Boulevard and Fiji Way	AM	n/a	--	n/a	--	n/a	**0.923**	**E**	**0.925**	**E**	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**0.974**	**E**	**0.987**	**E**	0.013*	n/a	n/a
23	Culver Boulevard and Marina Freeway (SR-90) EB On/Off-Ramps	AM	n/a	--	n/a	--	n/a	0.481	A	0.481	A	0.000	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.563	A	0.571	A	0.008	n/a	n/a
24	Culver Boulevard and Marina Freeway (SR-90) WB Off-Ramp	AM	n/a	--	n/a	--	n/a	0.690	B	0.691	B	0.001	n/a	n/a
		PM	n/a	--	n/a	--	n/a	0.821	D	0.822	D	0.001	n/a	n/a

Int. No.	Intersection	Peak Hour	County Only Methodology: Existing Plus Ambient CMA	LOS	Existing Plus Ambient Plus Project CMA	LOS	Impact	LADOT Only Methodology: Without Project CMA	LOS	County/LADOT Methodology: With Project (Includes Cumulative) CMA	LOS	Project Impact	Cumulative Impact	Project Percent of Total Impact
25	Lincoln Boulevard and Jefferson Boulevard	AM	n/a	--	n/a	--	n/a	**1.366**	**F**	**1.368**	**F**	0.002	n/a	n/a
		PM	n/a	--	n/a	--	n/a	**1.112**	**F**	**1.123**	**F**	0.011*	n/a	n/a

Notes:

[1] *Unsignalized intersection; capacity assumed as 1,200 vehicles per hour.*

[2] *Los Angeles County intersection.*

* *Significant impact per Los Angeles County Department of Public Works Traffic Impact Analysis Report Guidelines, January 1, 1997, or LADOT Traffic Study Policies and Procedures, June 2013.*

Shared County/City of Los Angeles Intersections

Unlike the County's project-impact identification methodology, which evaluates the incremental project traffic additions to a future baseline condition that includes only anticipated ambient traffic growth, the City's project-specific impact evaluation methodology uses a future baseline traffic condition that includes both the anticipated annual ambient traffic growth (0.6 percent annually) and traffic generated by the 30 identified related projects, as shown in the "Without Project" volumes in **Figures 4.8-17** and **Figure 4.8-18**.

Based on the impact evaluation criteria summarized previously in **Table 4.8-7,** without mitigation, the proposed project would result in significant impacts at a total of seven of the City-only or shared City/County jurisdiction study locations: Venice Boulevard and Lincoln Boulevard, Washington Boulevard and Lincoln Boulevard, Lincoln Boulevard and Marina Expressway, Lincoln Boulevard and Mindanao Way, Mindanao Way and eastbound Marina Expressway, Lincoln Boulevard and Fiji Way, and Lincoln Boulevard and Jefferson Boulevard, each during the PM peak hour only. No feasible mitigation measures exist to reduce these impacts and therefore impacts would remain significant and unavoidable.

Transit

In order to present the most conservative analysis of the potential traffic impacts of the project to the nearby study intersections, no significant additional use of public transportation by project employees or visitors beyond that intrinsically included in the "Marina-specific" TIP or ITE trip generation rates was assumed. However, for purposes of assessing potential project-related impacts to the area transit system, it was assumed that up to approximately 5 percent of the vehicular trips generated by the proposed project could instead travel via bus service.[2]

Using this approach, the number of project trips that might travel to and from the project via the existing transit services was calculated. Based on the project trip calculations shown earlier, it was estimated that approximately 188 of the project's net new daily trips, including four trips (three inbound, one outbound) during the AM peak hour, and 19 trips (10 inbound, nine outbound) during the PM peak hour, could potentially travel to and from the project site on the area's transit facilities rather than traveling in privately owned vehicles. Applying a typical vehicle occupancy ratio of 1.2 persons per vehicle, it is estimated that the project could result in an increase in area transit ridership of approximately

2 The 2010 CMP indicates that in general, approximately 3.5 percent of the total "person trips" associated with any typical project can be assumed to use public transit. Therefore, the 5 percent assumed is consistent the recommended CMP guidelines and represents a slightly more conservative analysis.

225 persons per day, including five persons (three inbound, two outbound) during the AM peak hour, and 23 persons (12 inbound, 11 outbound) during the PM peak hour. While it is acknowledged that bus utilization in the project vicinity can be heavy during the peak weekday commute periods, this nominal level of new rider would likely be divided among several bus lines providing direct service to the project site. These lines alone provide a combined total of between 20 and 30 buses per hour serving the project site during both the weekday AM and PM peak commute periods, with a combined total of over 300 buses per day. As a result, the potential project-related increases in ridership on any single bus are expected to be nominal (an average of two or fewer new riders per bus during the peak commute periods). Therefore, impacts would be less than significant.

Mitigation Measures

Project Specific Measures – Los Angeles County Intersections:

4.8-1: **Admiralty Way and Mindanao Way** – Although as shown earlier in **Table 4.8-8**, the project could result in a significant impact at this intersection during the PM peak hour under the "Existing With Project" scenario, this location was assumed only to be improved with the project-required improvements to the eastbound approach of Mindanao Way for the analysis of potential project-related impacts for that scenario. However, as described earlier in this report, the County is currently underway with, and is nearing completion on, improvements to Admiralty Way that will install new southbound dual left-turn lanes at this intersection. As a result, as further shown in **Table 4.8-9**, once the ongoing installation of the new dual southbound left-turn lanes is completed, the project's impacts will become less than significant (during both peak hours). Therefore, no improvements to this intersection (beyond the project-required improvement to eastbound Mindanao Way and the ongoing improvements being installed by the County) are necessary.

Shared Los Angeles County/Los Angeles City Intersections

4.8-2a: **Lincoln Boulevard and Mindanao Way** – This intersection is under the shared jurisdiction of the County and City of Los Angeles. The "Revised Set of Intersection Improvements" contained in the updated LCP does not identify any roadway improvements for this location, although the (now-superseded) Transportation Improvement Program (TIP) of the prior LCP included an improvement to install a new northbound right-turn only lane on Lincoln Boulevard at Mindanao Way. However, as described earlier in this report, this measure has already been installed, and a review of

this intersection indicates that it currently provides exclusive left-turn and right-turn lanes, along with three through lanes, on the northbound approach, a left-turn lane, and three through lanes (including a shared through/right-turn lane) on the southbound approach, dual left-turn lanes along with two through lanes (including a shared through/right-turn lane) for the westbound approach, and two through lanes (including a shared through/right-turn lane) on the eastbound approach (eastbound left turns are prohibited at this intersection). There are no additional rights-of-way available to widen any of the intersection approaches, and as such, no feasible improvements are available at this location.

4.8-2b: **Lincoln Boulevard and Fiji Way** – This intersection is also under the shared jurisdiction of the County and City of Los Angeles, and as a result, the updated LCP does not identify any roadway improvements for this location, although the previous TIP included a measure to install a second eastbound left-turn lane on Fiji Way at Lincoln Boulevard (this recommendation has since been abandoned). This intersection currently provides dual left-turn lanes plus three through lanes (including a shared through/right-turn lane) on the northbound approach, a left-turn lane and three through lanes (including a shared through/right-turn lane) on the southbound approach, a left-turn lane, a through lane, and a right-turn only (free right) lane on the eastbound approach, and a single lane (shared left-turn/through/right-turn lane) on the westbound approach. No additional rights-of-way are currently available, and no further improvements are feasible.

City of Los Angeles Intersections

4.8-3: **Lincoln Boulevard and Venice Boulevard** – This intersection is already improved with dual left-turn lanes on each approach, in addition to exclusive right-turn only lanes on both the eastbound and westbound approaches (each with right-turn overlap phases concurrent with the northbound and southbound left-turn phases).

Lincoln Boulevard and Washington Boulevard – Similar to Lincoln Boulevard and Venice Boulevard, this intersection is also currently improved with dual left-turn lanes on each approach, plus exclusive right-turn only lanes (including right-turn overlap phases concurrent with the northbound and southbound left-turn phases) on both the eastbound and westbound approaches.

Lincoln Boulevard and Marina Expressway – This location is currently improved to provide both dual left-turn and dual right-turn lanes on the westbound approach of the Marina Expressway, as well as dual left-turns for southbound Lincoln Boulevard (left-turns for northbound travel are not permitted at this location).

Mindanao Way and Eastbound Marina Expressway – Improvements were recently completed at this intersection to install dual left-turn lanes on the southbound approach of Mindanao Way (onto the eastbound Marina Expressway), while the eastbound approach of the Marina Expressway is flared at the intersection in order to provide an exclusive left-turn lane (in addition to its typical two through lanes).

Lincoln Boulevard and Jefferson Boulevard – This intersection has recently been reconstructed to substantially enhance its capacity and operations (as mitigation for the adjacent Playa Vista development project), particularly in the northbound and southbound directions, and currently provides an exclusive right-turn only lane on the northbound approach, plus dual left-turn lanes on the southbound approach, and dual left-turn and dual right-turn lanes on the westbound approach.

Residual Impacts

Of the eight potential project-specific significant impacts identified in the project's TIA, only the impact at the site-adjacent intersection of Admiralty Way and Mindanao Way (which occurs only under the "Existing Plus Project" analysis scenario) exhibits any feasible mitigation; the County's installation of dual left-turn lanes on the southbound approach of Admiralty Way, which is currently under construction and scheduled for completion in the first quarter of 2014, will reduce the proposed project's potential impact at this location to less than significant levels, and as discussed earlier and shown in **Table 4.8-8**, the project's impact at this intersection are not significant under the any of the future (year 2016) analysis scenarios. However, no feasible roadway or traffic signal improvements are available at any of the remaining seven locations, and as shown in **Tables 4.8-9 Critical Movement Analysis Summary Existing (2013) With Project-Specific Mitigation Conditions** and **Table 4.8-10, Critical Movement Analysis Summary Future (2016) With Plus Project Specific Mitigation Measures**, the potential project-specific impacts at these intersections will remain significant and unavoidable.

Table 4.8-9
Critical Movement Analysis Summary Existing (2013) With Project-Specific Mitigation Conditions

Int. No.	Intersection	Peak Hour	Without Project CMA	Without Project LOS	With Project CMA	With Project LOS	With Project Impact	With Project Plus Project-Specific Mit. CMA	With Project Plus Project-Specific Mit. LOS	With Project Plus Project-Specific Mit. Impact
1	Venice Boulevard and Lincoln Boulevard	AM	**1.026**	**F**	**1.028**	**F**	0.002	**None Feasible (Impact Unchanged)**		
		PM	**0.944**	**E**	**0.954**	**E**	0.010*			
7	Washington Boulevard and Lincoln Boulevard	AM	0.819	D	0.822	D	0.003	**None Feasible (Impact Unchanged)**		
		PM	0.897	D	**0.914**	**E**	0.017*			
16	Admiralty Way and Mindanao Way [2]	AM	0.565	A	0.556	A	-0.009	0.556	A	-0.009
		PM	0.669	B	0.721	C	0.052*	0.672	B	0.003
17	Lincoln Boulevard and Mindanao Way	AM	0.847	D	0.851	D	0.004	**None Feasible (Impact Unchanged)**		
		PM	0.861	D	0.891	D	0.030*			

Notes:
[1] Los Angeles County intersection.
[2] "Mitigation" includes only ongoing County-installed dual southbound left-turn lanes on Admiralty Way.
[3] Shared County/City of Los Angeles intersection.
** Significant impact per Los Angeles County Department of Public Works Traffic Impact Analysis Report Guidelines, January 1, 1997, or LADOT Traffic Study Policies and Procedures, June 2013.*

Table 4.8-10
Critical Movement Analysis Summary Future (2016) With Plus Project Specific Mitigation Measures

Int. No.	Intersection	Peak Hour	No Project CMA	No Project LOS	With Project CMA	With Project LOS	With Project Impact	With Project Plus Project-Specific Mit. CMA	With Project Plus Project-Specific Mit. LOS	With Project Plus Project-Specific Mit. Impact
1	Venice Boulevard and Lincoln Boulevard	AM	**1.159**	**F**	**1.161**	**F**	0.002	**None Feasible (Impact Unchanged)**		
		PM	**1.139**	**F**	**1.150**	**F**	0.011*			
7	Washington Boulevard and Lincoln Boulevard	AM	**0.974**	**E**	**0.978**	**E**	0.004	**None Feasible (Impact Unchanged)**		
		PM	**1.109**	**F**	**1.126**	**F**	0.017*			
13	Lincoln Boulevard and Marina Expressway (SR-90)	AM	0.821	D	0.823	A	0.002	**None Feasible (Impact Unchanged)**		
		PM	0.892	D	**0.904**	**E**	0.012*			
17	Lincoln Boulevard and Mindanao Way	AM	**1.011**	**F**	**1.015**	**E**	0.004	**None Feasible (Impact Unchanged)**		
		PM	**1.069**	**F**	**1.109**	**F**	0.040*			
18	Mindano Way and EB Marina Expressway (SR-90)	AM	0.718	C	0.720	C	0.002	**None Feasible (Impact Unchanged)**		
		PM	**0.915**	**E**	**0.933**	**F**	0.018*			
22	Lincoln Boulevard and Fiji Way	AM	**0.923**	**E**	**0.925**	**E**	0.002	**None Feasible (Impact Unchanged)**		
		PM	**0.974**	**E**	**0.987**	**E**	0.013*			
25	Lincoln Boulevard and Jefferson Boulevard	AM	**1.366**	**E**	**1.368**	**E**	0.002	**None Feasible (Impact Unchanged)**		
		PM	**1.112**	**E**	**1.123**	**E**	0.011*			

Notes:
** Significant impact per LADOT Traffic Study Policies and Procedures, June 2013.*

Impact 4.8-2: **The proposed project could conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways.**

The CMP project TIA guidelines require detailed analyses of all CMP arterial monitoring intersections where a project could add a total of 50 or more trips (all directions) during either peak hour, as well as for all freeway segments where a project could add 150 or more trips in either direction during the peak hours.

The current CMP (2010) identifies eight arterial monitoring intersections within approximately 3 miles of the project site. Six of the CMP intersections are located within the City of Los Angeles, while one is located within the City of Santa Monica, and one is located within the City of Culver City. The eight CMP arterial monitoring intersections located within the project vicinity are listed below, and are shown in relation to the project site in **Figure 4.8-21, CMP Arterial Monitoring Intersection Locations**.

- Lincoln Boulevard and Pico Boulevard (Santa Monica)
- Venice Boulevard and Lincoln Boulevard (Los Angeles)
- Venice Boulevard and Centinela Avenue (Los Angeles)
- Venice Boulevard and Overland Avenue (Culver City)
- Lincoln Boulevard and the Marina Expressway (SR-90) (Los Angeles)
- Lincoln Boulevard and Manchester Avenue (Los Angeles)
- Manchester Avenue and Sepulveda Boulevard (Los Angeles)
- Lincoln Boulevard and Sepulveda Boulevard (Los Angeles)

Two of the CMP arterial monitoring intersections, Venice Boulevard and Lincoln Boulevard, and Lincoln Boulevard and the Marina Expressway (intersections 1 and 13, respectively) are already examined in detail as part of the 25 study intersections analyzed earlier, and therefore do not need to be re-analyzed to meet the CMP requirements.

A review of the project's anticipated traffic travel patterns into, out of, and through the study vicinity, shown previously in **Figure 4.8-5**, indicates that project traffic will disperse throughout the area roadway network outside the immediate study vicinity, and that project traffic volume additions to any of the CMP monitoring intersections are expected to be substantially less than the 50-trip threshold. Specifically, only about 5 percent of the project's trips are expected to travel along Lincoln Boulevard (north of Venice

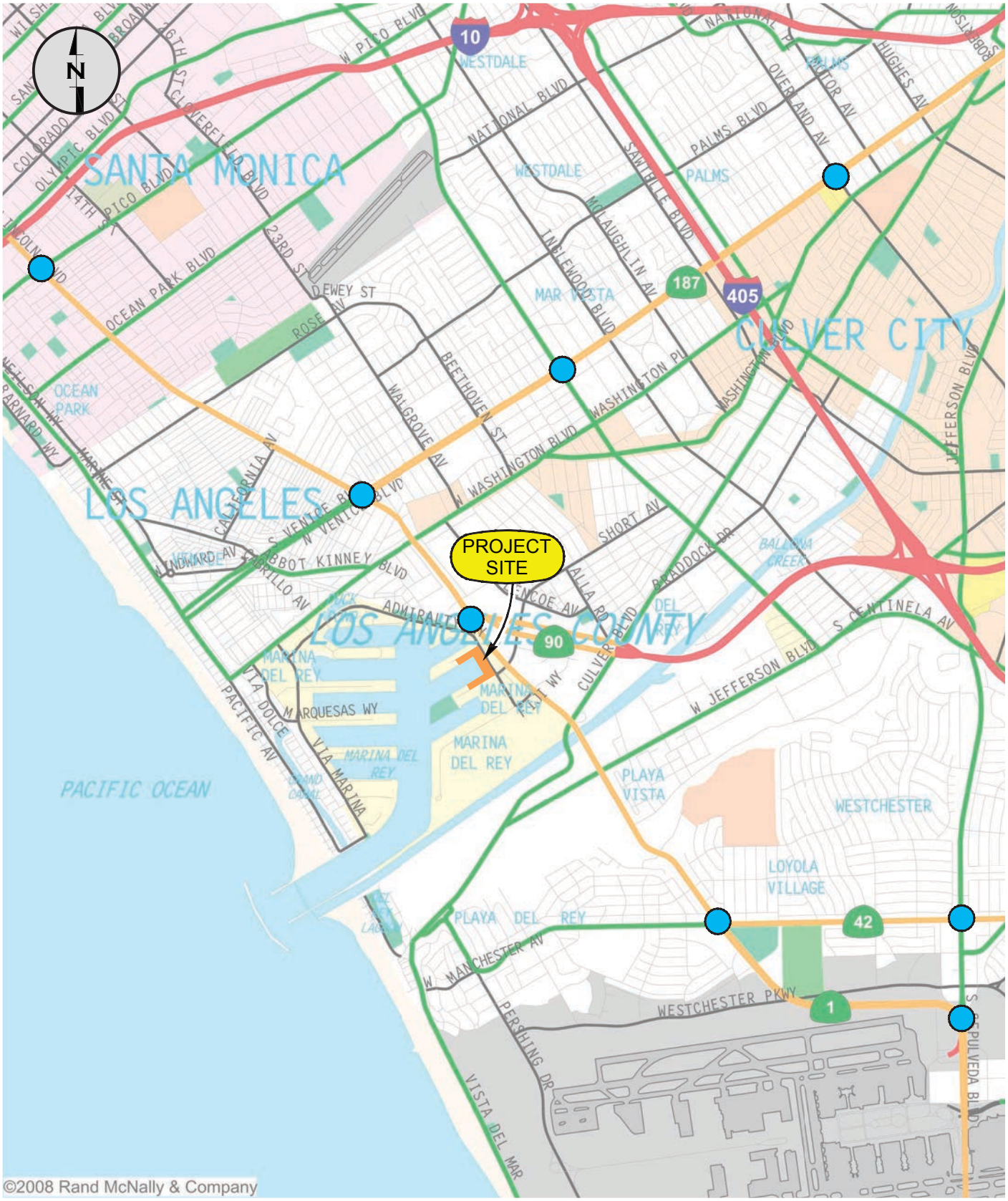
Boulevard) to or from the CMP arterial monitoring intersection at Lincoln Boulevard and Pico Boulevard. Based on the project's anticipated net trip generation, a total of only about five net new project-related trips (total both directions) would be expected to travel through this CMP arterial monitoring intersection during the AM peak hour, with a total of approximately 20 net new project trips trip doing so during the PM peak hour, as shown previously in **Figure 4.8-6** and **Figure 4.8-7**, which depict the project's net peak hour traffic volumes.

Similarly, approximately 10 percent of the project's trips are expected to travel to or from the east of the study area along Venice Boulevard (east of Lincoln Boulevard), potentially effecting the two CMP arterial monitoring intersections at Venice Boulevard and Centinela Avenue, and Venice Boulevard and Overland Avenue. Assuming that project traffic does not disperse onto other roadways or otherwise deviate from Venice Boulevard before it reaches these two locations, the project could result in a total of approximately nine net project trips during the AM peak hour, and a total of approximately 40 net trips during the PM peak hour travelling travel through these two CMP intersections.

An additional approximately 10 percent of the project's trips are anticipated to enter or leave the study area to the south along Lincoln Boulevard (south of Jefferson Boulevard), potentially travelling through one or more of the CMP locations (Lincoln Boulevard and Manchester Avenue, Manchester Avenue and Sepulveda Boulevard, and Lincoln Boulevard and Sepulveda Boulevard) to the south of the project site. As also shown **Figure 4.8-22, Project Driveway Volumes – AM Peak Hour**, a total of approximately nine project trips are anticipated to travel along Lincoln Boulevard to or from these CMP intersections during the AM peak hour, while **Figure 4.8-23, Project Driveway Volumes – PM Peak Hour** shows that a total of approximately 39 such project-related trips could occur during the PM peak hour. Therefore, based on these evaluations, the net project trip additions through the nearest CMP arterial monitoring intersections will be well below the levels at which a significant impact would be created. Therefore, impacts would be less than significant.

CMP Freeway Segments

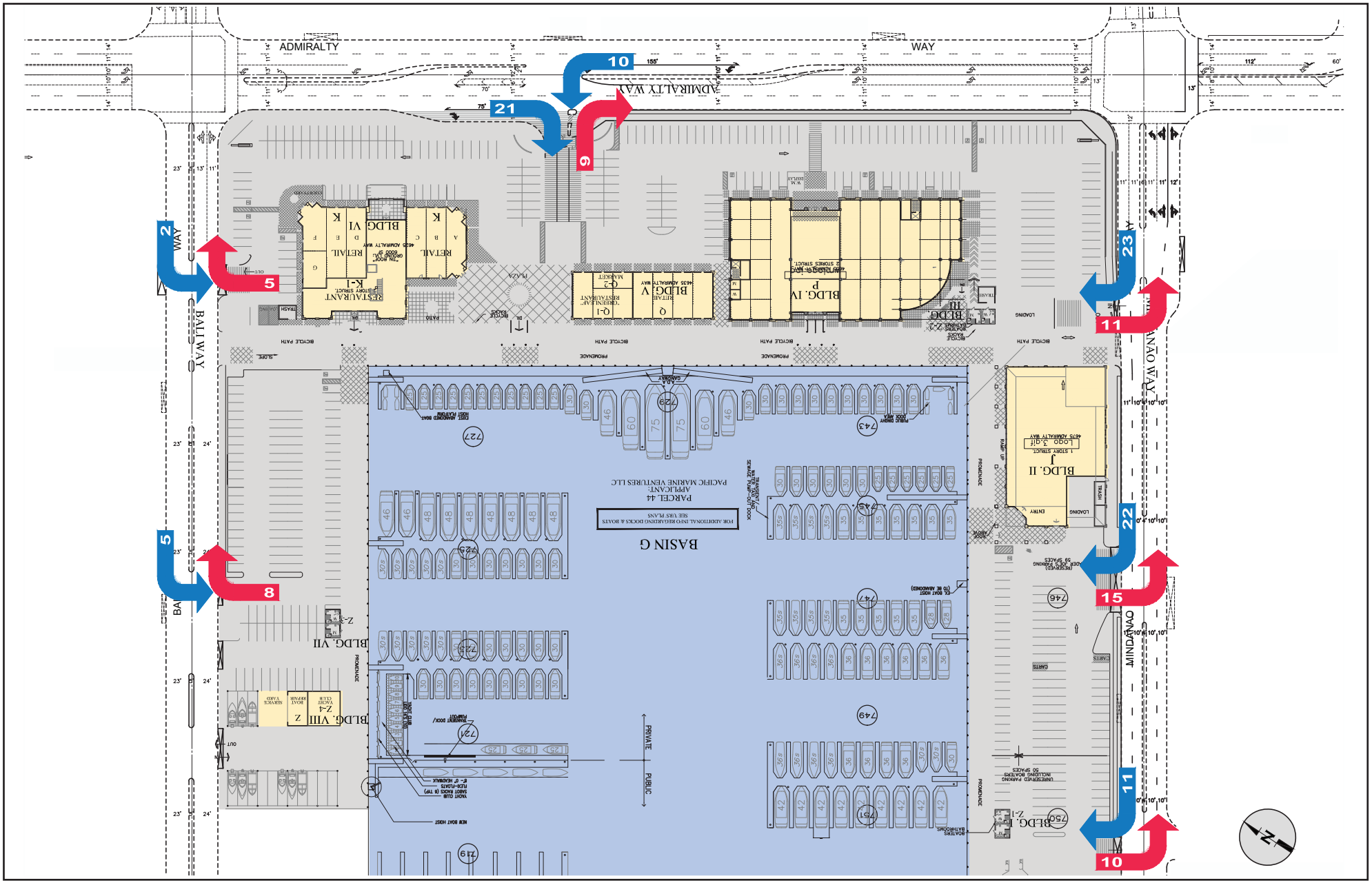
The CMP requires that detailed freeway impact analyses be prepared when a project is expected to add 150 or more peak hour trips in any direction to the area freeway system. The proposed project is expected to generate fewer than 150 directional trips during both the AM and PM peak hours although it is anticipated to result in more than 150 net directional trips (in both the "inbound" and "outbound" directions) during the PM peak hour.



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-21**

CMP Arterial Monitoring Intersection Locations



SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-22**

Project Driveway Volumes – AM Peak Hour

SOURCE: Hirsch Green Transportation Consulting, 2013

FIGURE **4.8-23**

Project Driveway Volumes – PM Peak Hour

As shown in **Figure 4.8-5 (Project Trip Distribution**), only a fraction of the project's total trips are anticipated to travel on the area freeways, with about 15 percent utilizing the nearby Marina Expressway/Freeway to access the project site, while a total of approximately 15 percent of the project's traffic will travel to and from the north of the project vicinity (north of Culver Boulevard) and an additional 10 percent will travel to and from the south of the study area (south of Jefferson Boulevard) along the San Diego (I-405) Freeway.

Based on these trip distributions, the proposed project would be expected to add a total of approximately nine westbound and five eastbound trips to the Marina Expressway/Freeway during the AM peak hour, and approximately 30 westbound and 29 eastbound trips during the PM peak hour. The project could also result in a total of approximately nine southbound and five northbound project trips during the AM peak hour, and approximately 31 southbound and 28 northbound project trips during the PM peak hour to the segments of the San Diego Freeway north of Culver Boulevard, while to the south of Jefferson Boulevard, the project could add a total of approximately four northbound and southbound trips during the AM peak hour, and 19 northbound and 18 southbound trips during the PM peak hour to this freeway facility. Therefore, the proposed project will result in considerably fewer freeway trips than the CMP's minimum 50 peak hour trip thresholds for detailed freeway analyses; impacts related to CMP intersections would be less than significant.

Mitigation Measures

None required

Residual Impact

Impacts would be less than significant.

Impact 4.8-3: **The proposed project could increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

In addition to the potential roadway improvements associated with the recommended traffic impact mitigation measures, the proposed project will also be required to implement a number of upgrades and/or improvements to the existing roadways, sidewalks, and other transportation infrastructure facilities adjacent to the site to the satisfaction of the County's Department of Public Works. These additional measures, which are not necessarily associated with any specific traffic impacts produced by the proposed project, but which will enhance vehicular traffic flows into and out of the project site, and/or improve safety for bicycle and pedestrian activity in the immediate project area, are summarized below.

As part of its development, the project proposes to construct a new site access driveway on Admiralty Way (eliminating the two existing driveways along this frontage), approximately opposite an existing driveway and opening in the median island that provides access to an existing medical/commercial office development on the east side of the street. The construction of the new project driveway will also include the installation of a new northbound left-turn lane at the existing median opening on Admiralty Way, to allow vehicles to enter the site from that direction of Admiralty Way (a move that is currently not allowed). Additionally, the project will construct a new deceleration lane on the Admiralty Way approach to the site driveway, to minimize disruptions to southbound through traffic flows from project-related traffic slowing to enter the project's new driveway.[3]

Other project site access-related improvements include modifications to several median islands along each of the site frontages (Admiralty Way, Mindanao Way, and Bali Way) to provide new openings in the medians to allow access to and from the site driveways, or to extend the existing medians to close openings adjacent to some of the existing driveways that will be removed as part of the project. The proposed project will also be required to improve the existing sidewalks adjacent to the project site to provide an 8-foot-wide sidewalk along the entire Admiralty Way frontage, along with 7-foot-wide sidewalks between Admiralty Way and the existing Marvin Braude Bike Path, and 5-foot-wide sidewalks provided along the remainder of the project frontages on both Mindanao Way and Bali Way. Modifications will also be required along the project's Mindanao Way frontage to reduce the width of the median islands by approximately 2 feet (from the existing 6 feet to 4 feet), including removal of the existing median trees and their replacement with compatible plantings, in order to provide for two westbound travel lanes along this segment of the roadway, and to increase the curb return radii adjacent to the project site at the intersections of Admiralty Way and Mindanao Way, and at Admiralty Way and Bali Way from 25 feet to 35 feet. Further, the County has indicated that it will require the project to improve the intersection of Admiralty Way and Mindanao Way by widening the south side of Mindanao Way west of Admiralty Way to install a third eastbound travel lane (this measure is a part of the programmed LCP improvements at this intersection).

The County has also indicated that it will require the project to provide several additional improvements that are not related specifically to the project's operations or potential impacts. These include, at a minimum, improvements to the existing Marvin Braude Bike Path crossings at both Bali Way and

---

3 Although the analyses indicate that installation of a traffic signal at the project's new Admiralty Way driveway is not warranted either under current (year 2013) or foreseeable future (year 2020) conditions, the County Department of Public Works has noted that the approval of the proposed project should include a condition that, should the project desire it, or if actual future traffic conditions trigger the need for a traffic signal at this location within a designated period of time (recommended by the County as a five-year period), the proposed project should be responsible for the design and construction/installation of such a signal.

Mindanao Way to install new speed humps in advance of the bicycle path crossing in both directions on both streets. Additional upgrades may also include elevating the bicycle crossing slightly above the grade of the roadways (such as with a speed table or other such device), installation of flashing lights and improved signage indicating a bicycle crossing, colored or textured pavement treatments for the crossings, or a combination of these or other measures, although no specific improvements have yet been identified by the County.

Finally, both the County Department of Public Works and the County Department of Beaches and Harbors have indicated that the existing (non-project) access driveways to both Public Parking Lot No. 5 (on the north side of Bali Way) and to the parking lot serving the Marina del Rey Visitor's Center (on the south side of Mindanao Way) should be relocated in order to align these driveways opposite the new proposed project driveways, as well as to minimize future conflicts between both existing and project-related vehicular traffic and bicyclists/pedestrians using the bike path.

Detailed plans of all requested/required roadway improvement measures will be submitted to both the County's Department of Public Works and Department of Beaches and Harbors for review and approval, with all agreed-upon improvements required to be completed, to the satisfaction of the County, prior to the issuance of any certificates of occupancy for any of the proposed project.

As also described earlier, the project will provide a total of approximately 477 on-site parking spaces (including approximately 34 tandem spaces) and 76 bicycle parking spaces to serve the proposed uses, which is about seven spaces fewer than are required. However, a shared parking analysis prepared for the proposed project, accounting for the variability in parking needs for the various project components throughout the day, indicates that the actual maximum parking demands anticipated for the new development will be somewhat lower than that identified using the "static" Zoning Code parking ratios, with a peak demand of approximately 457 vehicular parking spaces, or about 20 spaces fewer than are proposed to be provided. As such, the project's proposed 477-space parking supply will be sufficient to accommodate the anticipated peak parking demand periods, which occur generally during an approximately 2-hour period in the middle part of a typical weekday (the project's peak weekend vehicular parking demands are expected to be considerably lower, at a maximum of approximately 398 spaces), and as such, no on-site parking shortages or "overflow" parking onto adjacent streets or public parking areas are anticipated

The shared parking analyses also indicated that, during the peak weekday parking demand activity (from approximately 11:00 AM to 3:00 PM), the total parking demands for the project are expected to exceed the 443 "self-park" spaces provided (not counting the 34 tandem spaces), and therefore will necessitate use of approximately 20 of the tandem spaces to accommodate the anticipated parking demands during this

period. However, throughout the remainder of the typical weekday activity, the total project parking demands are expected to be less than 443 spaces, and as such, use of tandem spaces will not be needed, and all project-related parking can be accommodated within the "self-park" spaces. Therefore, it is recommended that any valet or parking attendant assisted parking for the project be required only during the peak weekday parking activity periods from approximately 11:00 AM to about 3:00 PM. No use of the tandem spaces will be necessary on weekends, and, as such, no valet or attendant assisted parking requirement is warranted.

Generally, the proposed project does not include any sharp curves or other design features that would increase hazards. However, an evaluation was conducted to determine whether adequate gaps in the existing southbound traffic flows along Admiralty Way exist to permit acceptable operation of the proposed new northbound left-turn lane; this supplemental analysis indicated that there are sufficient gaps in southbound Admiralty Way traffic to accommodate the anticipated project-related traffic demands. However, anticipated future traffic growth in the project vicinity (including trips generated by the proposed project itself) could result in increasing congestion along Admiralty Way adjacent to the project site, potentially reducing or eliminating the ability of project-bound vehicles to make the proposed new northbound left-turn across southbound Admiralty Way traffic into the new project driveway along Admiralty Way without the aid of a traffic signal or other traffic-control device. Therefore, additional analysis was conducted to determine whether the proposed new northbound left-turn would operate adequately in the future under the current (unsignalized) configuration, or if a new traffic signal would be required at this location to facilitate left-turns into the project site.

The analysis examined traffic conditions anticipated for the year 2020, five years after the anticipated completion of the proposed project site, and include an additional five years of ambient traffic growth, as well as new traffic generated by anticipated future development in the study area (related projects), including trips resulting from the Parcel 44 project itself. Additionally, the analyses included installation of the programmed roadway improvements to the intersections of Admiralty Way and Bali Way, and Admiralty Way and Mindanao Way.

The detailed results of the supplemental project driveway access analysis are provided in **Appendix 4.8**. The analyses indicated that the proposed new northbound left-turn on Admiralty Way into the new Parcel 44 driveway will operate acceptably under the cumulative year 2020 conditions, and that adequate gaps in southbound Admiralty Way traffic would continue to be available during both the AM and PM peak hours to accommodate the anticipated traffic demands of the proposed project. Average delays for inbound project traffic were approximately 15 to 20 seconds, and no long-term queuing in the new northbound left-turn lane is forecast. As a result, this proposed new site access location will not require signalization. The analyses also indicated that the County's programmed new southbound dual left-turn

lanes at both Admiralty Way and Bali Way, and at Admiralty Way and Mindanao Way will adequately accommodate the forecast future traffic demands for those moves, and that no significant vehicular "spillover" into the through travel lanes on Admiralty Way at either location will occur, although during the PM peak hour, southbound vehicular queues on Admiralty Way could be sufficiently long to temporarily prevent left-turning vehicles from accessing these lanes. It should also be noted that the analyses indicated that northbound vehicular queuing on Admiralty Way at Bali Way (from northbound vehicles stopped at the signal at Bali Way) could occasionally, although temporarily, back up sufficiently to block northbound access to the proposed new northbound left-turn lane (as well as access to the existing northbound left-turn lane at Bali Way) during both the AM and PM peak hours. As a result, the traffic study recommends "Keep Clear" signage and roadway markings be installed at the existing median cut on Admiralty Way to maintain clearance for vehicles using this access.

Therefore, the proposed new northbound left-turn access to the project site will adequately accommodate the project's anticipated traffic demands without need of a traffic signal or other traffic control device, although appropriate signage and/or pavement markings are recommended at the median cut to prevent blockages of this access location by vehicle queuing on northbound Admiralty Way at Bali Way. Therefore the project would not result in any unsafe design features. Impacts would be less than significant.

Mitigation Measures

None required

Residual Impacts

Impacts will be less than significant

Impact 4.8-4: Would the project result in inadequate emergency access?

The project has an adequate level of accessibility for emergency vehicles, both from a regional and a site perspective. Admiralty Way provides direct routes to the project site for emergency vehicles. Once emergency vehicles have reached the site, they can access the on-site structures through surface lanes available throughout the project site. Ingresses and egresses points are provided throughout the proposed project site. Impacts relating to emergency access are less than significant.

Mitigation Measures

None required

Residual Impacts

Impacts will be less than significant.

4.8.5.5 Cumulative Impacts

The cumulative traffic effects of ongoing and proposed development within or surrounding the study area, including the project itself, were evaluated for the five County intersections. The results of the analysis of these forecast cumulative conditions indicate that the addition of traffic generated by the identified 30 "related projects," along with the incremental new traffic generated by the project, is expected to result in substantial deterioration in the operations at one of the five County study intersections. As shown in **Table 4.8-8**, if all of the related projects are developed and occupied as currently proposed, the intersection of Admiralty Way and Via Marina could be reduced from its currently acceptable operations (LOS A during the AM peak hour and LOS D during the PM peak hour) to undesirable LOS F operations during the PM peak hour.

Additionally, the intersections of both Admiralty Way and Palawan Way, and Admiralty Way and Mindanao Way could exhibit declines in operational levels, from their existing LOS B to LOS D operations during the PM peak hour, although both locations are forecast to continue to exhibit good levels of service (LOS A and LOS B, respectively) during the AM peak hour. Similarly, the intersection of Admiralty Way and Bali Way could be reduced from its current LOS B conditions to LOS C operations, also during the PM peak hour, but is expected to remain at LOS A during the AM peak hour. However, despite these potential changes in level of service, the forecast cumulative conditions at each of these three locations are expected to remain at acceptable levels (LOS D or better) during both peak hours. No cumulative development-related changes to the levels of service at the intersection of Admiralty Way and Fiji Way are anticipated, as this location is forecast to continue to operate at LOS A during both the AM and PM peak hours.

Using the Los Angeles County/LADOT significance criteria shown in **Table 4.8-7**, the significance of the incremental cumulative traffic impacts at these five County intersections were assessed. As summarized in **Table 4.8-8**, the anticipated cumulative development traffic additions to these County intersections (including traffic from the proposed Parcel 44 project) could produce significant impacts at four of the five subject intersections (Admiralty Way and Fiji Way is not significantly impacted), each during the PM peak hour only. Further, as noted previously, although the proposed project itself is expected to result in a significant impact at only one of these five County-only jurisdiction intersections (at Admiralty Way and Mindanao Way during the PM peak hour, under the "Existing Plus Project" scenario only), it will contribute incrementally to each of the four cumulative significant impacts to some degree, and as such,

the magnitude (percent) of the Parcel 44 project's specific contributions toward the total cumulative impacts were also identified. As indicated in **Table 4.8-10**, the Parcel 44 project itself is expected to contribute between approximately 8 percent (Admiralty Way and Via Marina) and 21 percent (Admiralty Way and Mindanao Way) of the total incremental cumulative impacts (not cumulative volumes; it is important to make this distinction) during the PM peak hour, when each of the impacts occur. Measures designed to address these potential cumulative significant impacts are identified and analyzed below.

Supplemental Cumulative Analysis – Shared County/City Intersections

Because they are operated and maintained by the City of Los Angeles, as indicated previously, the six study intersections that exhibit shared jurisdiction between the County and the City were analyzed using LADOT's methodology, which does not specifically identify "cumulative impacts." Therefore, the County Department of Public Works Traffic and Lighting Division requested that a supplemental analysis of these six locations be prepared using their cumulative impact analysis approach in order to fully disclose all potential project and cumulative impacts in the study area.

This supplemental cumulative analysis was prepared using the analysis methodology described in the preceding section, wherein the potential cumulative effects associated with both the project-specific and related projects' traffic additions are identified by comparing the forecast "With Project" intersection operations shown earlier in **Table 4.8-8** (which, as described earlier, includes traffic generated by both the proposed project and anticipated cumulative development in the study area) against the County's forecast future (year 2016) "With Ambient Growth" scenario for each of the six shared jurisdiction intersections. The CMA and LOS values associated with the "With Ambient Growth" scenario for the six subject intersections, which are not identified under the LADOT "future conditions" analyses, were calculated based on the traffic volumes shown earlier in **Figure 4.8-13** and **Figure 4.8-14** using the same analysis procedures described in the "Project-Specific Impact Analysis - Los Angeles County Intersections" section of this report. The project-specific impacts for this scenario were also identified, using the traffic volumes shown earlier in **Figure 4.8-15** and **Figure 4.8-16**, in order to identify the project's incremental contributions to each of the cumulative impacts, as was determined and summarized for each of the five County-only intersections in **Table 4.8-8**. The results of this supplemental evaluation of potential cumulative impacts at the six shared jurisdiction locations are summarized in **Table 4.8-11, Critical Movement Analysis Summary Future (2016) With Project and Cumulative Development Conditions (Shared Los Angeles County/Los Angeles City Intersections**.

Table 4.8-11
Critical Movement Analysis Summary Future (2016) With Project and Cumulative Development Conditions
(Shared Los Angeles County/Los Angeles City Intersections

Int. No.	Intersection	Peak Hour	Existing Plus Ambient Growth Only		Existing Plus Ambient Growth Plus Project			"With Project" Including Cumulative Development			Project Percent of Total Impact
			CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact	
3	Washington Blvd. and Via Dolce/Dell Ave.	AM	0.265	A	0.267	A	0.002	0.288	A	0.023	8.7%
		PM	0.322	A	0.327	A	0.005	0.351	A	0.029	17.2%
4	Washington Blvd. and Via Marina/Ocean Ave.	AM	0.576	A	0.578	B	0.002	0.677	B	0.101	2.0%
		PM	0.795	C	0.804	D	0.009	0.894	D	0.099*	9.1%
5	Washington Boulevard and Palawan Wy. [1]	AM	0.728	C	0.728	C	0.000	0.914	E	0.186*	0.0%
		PM	0.808	D	0.808	D	0.000	0.983	E	0.175*	0.0%
15	Lincoln Boulevard and Bali Wy.	AM	0.467	A	0.472	A	0.005	0.563	A	0.096	5.2%
		PM	0.589	A	0.622	B	0.033	0.753	C	0.164*	20.1%
17	Lincoln Boulevard and Mindanao Wy.	AM	0.864	D	0.868	D	0.004	1.015	F	0.151*	2.6%
		PM	0.878	D	0.909	E	0.031*	1.109	F	0.231*	13.4%
15	Lincoln Boulevard and Fiji Wy.	AM	0.841	D	0.843	D	0.002	0.925	E	0.084*	2.4%
		PM	0.708	C	0.721	C	0.013	0.987	E	0.279*	4.7%

[1] *Unsignalized intersection; capacity assumed as 1,200 vehicles per hour.*
"*" *Significant impact per Los Angeles County Department of Public Works Traffic Impact Analysis Report Guidelines, January 1, 1997.*

As shown in **Table 4.8-11**, the anticipated development of the 30 related projects identified earlier in **Table 4.0-1** could result in deterioration of operations at several of the shared jurisdiction intersections. Although the intersections of Washington Boulevard and Via Dolce/Del Avenue, Washington Boulevard and Via Marina/Ocean Avenue, and Lincoln Boulevard and Bali Way are forecast to operate at acceptable (LOS A to LOS D) levels during the AM and PM peak hours under the cumulative development scenario, the intersections of Washington Boulevard and Palawan Way, and Lincoln Boulevard and Fiji Way could be reduced from their forecast acceptable operations (LOS C and LOS D, respectively, during the AM peak hour, and LOS D and LOS C, respectively, during the PM peak hour) to undesirable LOS E operations during both peak hours. The remaining intersection of Lincoln Boulevard and Mindanao Way could be reduced from acceptable LOS D to undesirable LOS F operations during both peak hours.

As also shown in **Table 14.8-11**, the anticipated cumulative development traffic (including traffic from the proposed Parcel 44 project) to the shared jurisdiction locations could result in significant impacts at five of the six shared jurisdiction intersections during one or both of the peak hours, with only Washington Boulevard and Via Dolce/Dell Avenue not significantly impacted. Further, it should be noted that the proposed project itself could produce a significant impact at the intersection of Washington Boulevard and Mindanao Way during the PM peak hour; this significant impact was not previously identified under the LADOT-methodology analyses summarized earlier in **Table 4.8-8** and should be noted for the record. Additionally, as noted earlier, traffic generated by the proposed Parcel 44 project will contribute incrementally to each of the five cumulative significant impacts. As also shown (below) in **Table 4.8-13**, the project is expected to contribute between about 2 percent (Washington Boulevard and Via Marina/Ocean Avenue) and about 20.1 percent (Lincoln Boulevard and Bali Way) toward the total cumulative impacts, although the proposed project exhibits a "zero" percent contribution to the cumulative impact at the intersection of Washington Boulevard and Palawan Way. Measures to address the potential cumulative significant impacts at the six shared jurisdiction intersections are also discussed later in the "Mitigation Measures" section of this report.

Mitigation Measures

In addition to the project-specific traffic impacts described in the preceding section of this report, the analysis of potential cumulative traffic impacts at the five study intersections under the exclusive jurisdiction of the County also indicated that traffic resulting from total development throughout the project vicinity, including the proposed project as well as projects located in the City of Los Angeles (and outside the County's jurisdiction), could produce significant impacts at four locations; Admiralty Way and Via Marina, Admiralty Way and Palawan Way, Admiralty Way and Bali Way, and Admiralty Way and Mindanao Way, each during the PM peak hour only.

The roadway improvements identified in the current LCP are designed to address traffic growth due to cumulative development within and surrounding the Marina, and the traffic impact mitigation fees identified in the LCP $5,690 per net PM peak hour trip) are designated toward implementation of these measures. Therefore, payment of the proposed Parcel 44 project's $2,338,590 Marina del Rey traffic impact mitigation fee (described and calculated earlier in this section) is intended to mitigate the proposed project's incremental contributions toward cumulative traffic growth and its resulting impacts in the study area.

As such, the roadway improvements listed in the LCP (and funded by the traffic impact mitigation fees) were reviewed to identity which measures may be effective in addressing the cumulative impacts in the study area. These roadway improvements are described below.

4.8-4a: **Admiralty Way and Via Marina** – Two potential roadway improvement alternatives are identified in the certified LCP to address cumulative traffic impacts at this intersection:

1. The first roadway improvement alternative (LCP A) includes the installation of a third left-turn lane (in addition to the two existing right-turn only lanes) on the westbound approach of Admiralty Way at Via Marina, and would also convert one of the three existing southbound through lanes to a new left-turn lane (resulting in a final southbound configuration of two left-turn lanes and two through lanes). The northbound approach of this intersection would remain unchanged, and continue to provide two through lanes and one right-turn only lane. The certified LCP does not identify whether roadway widenings are necessary to implement this improvement.

2. The second alternative (LCP B) would reconstruct this intersection to realign Admiralty Way and the south leg of Via Marina to operate as a "through roadway," with the north leg of Via Marina intersecting the realigned Admiralty Way/Via Marina roadway in a "T" configuration. The resulting intersection would include two through lanes in each direction along realigned Admiralty Way/Via Marina, with one westbound right-turn lane and dual eastbound left-turn lanes from this roadway onto the north leg of Via Marina, while the southbound approach of Via Marina at the intersection would provide two left-turn lanes and a single right-turn lane.

4.8-4b: **Admiralty Way and Palawan Way** – There are also two potential roadway improvements identified in the certified LCP to address the cumulative impact at this intersection:

1. In addition to the current County improvements to restripe northbound Palawan Way to convert the existing left-turn lane to a shared left-turn/through lane (with the existing shared through/right-turn lane remaining unchanged), and to add a new exclusive westbound right-turn only lane on Admiralty Way, the first improvement alternative (LCP A) would restripe the southbound approach of Palawan Way to

convert the existing through lane to a shared left-turn/through lane (but leave the existing left-turn and right-turn lanes unchanged), and would further improve the westbound approach of Admiralty Way to provide an additional through lane (west of the intersection with Palawan Way). This alternative improvement would also convert the new westbound right-turn only lane to a shared through/right-turn lane, to provide a future lane configuration of one left-turn lane, two through lanes, and one shared through/right-turn lane. The eastbound approach would continue to exhibit its current configuration of one left-turn lane, one through lane, and one shared through/right-turn lane. As with the ongoing improvement at this location, due to the proposed "shared through/left-turn lane" configuration for southbound Palawan Way, this alternative will require modification of the existing traffic signal to provide north/south opposed phasing operation.

2. The second certified LCP roadway improvement alternative (LCP B) is similar to the LCP A alternative described above, and would again modify westbound Admiralty Way to provide a third westbound lane west of the intersection, and convert the new westbound right-turn only lane to a shared through/right-turn lane (again with no changes to the eastbound approach lane configuration). However, this alternative would also restripe northbound Palawan Way to convert the existing shared through/right-turn lane to an exclusive right-turn only lane, while keeping the new shared left-turn/through lane currently being constructed. Additionally, this alternative would modify the southbound approach of Palawan Way to add a second left-turn lane (resulting in a final southbound lane configuration of two left-turn lanes, one through lane, and one right-turn only lane). As with the LCP A alternative, the traffic signal would be modified to operate with opposed north/south phasing.

4.8-4c: **Admiralty Way and Bali Way** – The LCP improvement to add a second left-turn lane on southbound Admiralty Way at Bali Way, resulting in a final lane configuration for this approach of two left-turn lanes, one through lane, and one shared through/right-turn lane is currently under construction, and no further improvements are proposed.

4.8-4d: **Admiralty Way and Mindanao Way** – In addition to the ongoing improvements to this intersection being installed by the County to provide a second southbound left-turn lane on Admiralty Way at Mindanao Way, and the project-required improvement to widen the south side of Mindanao Way to install a new shared through/right-turn lane on the eastbound approach of this street (and convert the current shared through/right-turn lane to a shared left-turn/through lane) described earlier (which is also part of the overall LCP improvement at this location), the remaining LCP improvements at this intersection would restripe the westbound approach of Mindanao Way to convert the existing shared left-turn/through lane to a shared left-turn/through/right-turn lane. The traffic signal phasing at this location will continue to exhibit the current east-west "split" phase operations, due to the proposed new eastbound/westbound lane configurations.

Residual Impacts

Similar to the "project-specific" mitigation measures described earlier, the effectiveness of these recommended cumulative impact mitigation measures was evaluated, again using the same intersection analysis techniques as described previously, but assuming that the recommended cumulative roadway improvement measures described above were installed. The results of the "With Cumulative Mitigation" analysis are summarized in **Table 4.8-12, Critical Movement Analysis Summary Future (2016) with Cumulative Development Plus Cumulative Mitigation**.

Table 4.8-12
Critical Movement Analysis Summary Future (2016) With Cumulative Development Plus Cumulative Mitigation

			Existing Plus Ambient Growth Only		With Cumulative Development			With Cumulative Development Plus Cumulative Mitigation			
Int. No.	Intersection	Peak Hour	CMA	LOS	CMA	LOS	Impact	Mit. Alt.	CMA	LOS	Impact
9	Admiralty Way and Via Marina [2]	AM	0.418	A	0.515	A	0.097	LCP A	0.384	A	-0.034
		PM	0.847	D	**1.018**	**F**	0.171*		0.648	B	-0.199
								LCP B	0.701	C	0.283*
									0.783	C	-0.064
10	Admiralty Way and Palawan Way [2]	AM	0.431	A	0.595	B	0.164	LCP A	0.558	A	0.127
		PM	0.673	B	0.847	D	0.174*		0.727	C	0.054*
								LCP B	0.581	A	0.150
									0.712	C	0.039
14	Admiralty Way and Bali Way [2]	AM	0.538	B	0.596	A	0.058	No Change [1]			
		PM	0.621	B	0.791	C	0.170*				
16	Admiralty Way and Mindanao Way [2]	AM	0.578	A	0.655	C	0.077*		0.610	B	0.032
		PM	0.649	B	0.893	D	0.244*		0.841	D	0.192*

Notes:
* *Significant impact per Los Angeles County Department of Public Works Traffic Impact Analysis Report Guidelines, January 1, 1997.*
[1] *LCP improvement currently under construction, and is included in baseline "With Cumulative Development" scenario.*

The potential traffic impacts resulting from the anticipated increases in traffic due to typical ambient traffic growth and the addition of traffic generated by cumulative development in the project vicinity (including the proposed Parcel 44 project) can be reduced to less than significant levels during both the AM and PM peak hours at the intersections of Admiralty Way and Via Marina, through implementation of LCP alternative improvement "A"; LCP alternative improvement "B" would reduce the cumulative PM peak hour impact at this location to less than significant levels, but would actually create a new secondary significant impact during the AM peak hour. Similarly, installation of LCP alternative

improvement "B" at Admiralty Way and Palawan Way would reduce the PM peak hour cumulative impact at this location to less than significant levels, while LCP alternative improvement "A" would reduce but not fully mitigate the impact. Therefore, it is recommended that LCP alternative improvement "A" be installed at the intersection of Admiralty Way and Via Marina, while LCP alternative improvement "B" be implemented at the intersection of Admiralty Way and Palawan Way in order to address the potential impacts of forecast future traffic growth in the project vicinity.

However, as also shown in **Table 4.8-12**, the intersection improvements identified in the current Marina del Rey LCP update are not expected to be sufficient to mitigate the anticipated cumulative impacts at the two site-adjacent intersections of Admiralty Way and Bali Way, and Admiralty Way and Mindanao Way. Further, an examination of these locations indicated that there are no additional feasible roadway improvement or mitigation alternatives available beyond the measures identified in the updated LCP, and as a result, the potential cumulative traffic impacts at both intersections will remain significant and unavoidable (although it is important to note that, as described earlier in this section, the project-specific impacts of the proposed Parcel 44 project at Admiralty Way and Mindanao Way will be fully mitigated; no project-specific impacts are identified at the intersection of Admiralty Way and Bali Way).

Nonetheless, as also shown in **Table 4.8-12**, it should be recognized that, while not fully mitigating the potential traffic impacts associated with anticipated cumulative development in and around the Marina, the implementation of the recommended LCP update roadway improvement at the intersection of Admiralty Way and Mindanao Way would be expected to maintain the operations of the intersection at an acceptable LOS D conditions during the PM peak hour, and LOS B during the AM peak hour. Additionally, the recommended LCP improvement at Admiralty Way and Bali Way (install new dual left turn lanes for southbound Admiralty Way) would be expected to maintain the operations of that intersection at LOS C conditions during the PM peak hour, and A during the AM peak hour.

The two other County-jurisdiction intersections significantly impacted by cumulative development (Admiralty Way and Via Marina, and Admiralty Way and Palawan Way) are also anticipated to operate at acceptable levels of service (LOS D or better) during both peak hours following the implementation of either of the two LCP alternative mitigation measures at these intersections (including those alternatives that do not fully mitigate the potential cumulative impacts); the remaining County-jurisdiction intersection of Admiralty Way and Fiji Way, which is not anticipated to experience any significant cumulative traffic impacts, is forecast to exhibit acceptable operational conditions during both peak hours without any additional roadway improvements. As such, while potential significant cumulative traffic impacts may remain at the site-adjacent intersections of Admiralty Way and Mindanao Way, and Admiralty Way and Bali Way following implementation of the LCP intersection and/or roadway improvements identified for these location, these measures will result in benefits to the traffic flows in the

project vicinity and throughout the Marina, and reduce the potential for future vehicular queuing and congestion in the study area.

The County Department of Public Works has historically expressed that it prefers to implement the roadway improvements identified in the Marina del Rey LCP, of which both the project-specific and cumulative mitigation measures recommended are a part, as a single major roadway improvement project in order to minimize traffic disruptions and construction time. As such, payment of the identified traffic impact mitigation fee is the recommended approach to address both the project-specific as well as cumulative impacts of the proposed Parcel 44 project, rather than the actual construction of any of the improvements by the project itself. However, it should also be noted that no feasible alternative improvements to either the project-specific or cumulative mitigation measures, beyond those already described, have been identified at any of the significantly impacted intersections. Therefore, should the recommended mitigation improvement(s) not be accepted by the County, the potential traffic impacts identified in this analysis would remain significant and unavoidable.

The Certified LCP, which incorporates the recently adopted Marina del Rey LCP Amendment, identifies a number of transportation and circulation improvements that are designed to mitigate the traffic generation of ongoing development in Marina del Rey, of which the proposed Parcel 44 project is a part. The LCP's "Revised Set of Intersection Improvements," which supersede the previous version of the LCP's Transportation Improvement Program (TIP) roadway improvement measures, include both local Marina and sub-regional cumulative roadway and/or intersection improvements that are designed to address both the incremental (project-specific) and cumulative traffic impacts from all projects developed within Marina del Rey itself (including the proposed project), as well as from increases in local and regional traffic demand created by other developments outside the County's jurisdiction that utilize the Marina roadway system.

The roadway improvements identified in the current LCP are funded (in part) by a traffic impact mitigation fee imposed by the County of Los Angeles, which all projects within the Marina, including the proposed development, are required to pay. These fees provide "fair share" contributions from each Marina development project toward the identified improvements based on the number of net new PM peak hour trips generated by each project. The County's current traffic impact mitigation fee structure identifies a fee amount of $5,690 per PM peak hour trip.

Therefore, based on the anticipated project trip generation of 411 net new PM peak hour trips (per Los Angeles County Department of Public Works policy, the number of project-related trips applicable to the traffic impact mitigation fee does not include the total 24-trip PM peak hour pass-by traffic reductions used to analyze the proposed project's potential traffic impacts, as described earlier in this report),

the proposed Parcel 44 redevelopment project will be required to pay a total of approximately $2,338,590 in traffic impact mitigation fees. As noted above, these fees will be applied toward the project's "fair share" costs of implementing the roadway and intersection improvements described in the certified LCP.

The County's Department of Public Works has expressed that it prefers to coordinate and implement the local and regional roadway improvements identified in the certified LCP itself, in order to reduce overall construction time and minimize traffic disruptions associated with these improvements. Therefore, payment of the traffic impact mitigation fee noted above is the recommended method of addressing the proposed project's traffic impact mitigation, rather than the incremental or partial construction of any of the relevant certified LCP roadway improvements by the project applicant. However, should the County determine that the immediate implementation of roadway improvements is necessary in order to address the potential project-specific traffic impacts of proposed Parcel 44 development project, identified earlier, **Mitigation Measures 4.8-1, 4.8-2a, 4.8-2b,** and **4.8-3** are recommended for each of the eight significantly impacted locations.

Supplemental Cumulative Impact Mitigation at Shared County/City Intersections

As also identified in the supplemental cumulative impact analysis using the County's analysis methodology at the six shared County/City jurisdiction intersections, cumulative impacts could occur at five of these locations during one or both of the AM and PM peak hours, along with a potential project-specific significant impact at the intersection of Lincoln Boulevard and Mindanao Way during the PM peak hour. However, as described previously in this section, the certified LCP does not include intersections that are not under the full or partial jurisdiction of the County; as a result, the certified LCP does not identify any programmed improvements at any of the six shared jurisdiction intersections. As noted earlier, all of the intersections in the study area, including each of the six shared jurisdiction locations, currently operate with the City's Automated Traffic Surveillance and Control System (ATSAC)/Adaptive Traffic Control System (ATCS) traffic signal coordination system, and as such, no further signal-related operational improvements are available. Additionally, as described previously in the discussion of potential project-specific impacts at those intersections that are now wholly under the jurisdiction of the County, detailed field surveys conducted at each of the subject shared jurisdiction intersections indicate that no feasible roadway improvements are available at any of these locations to address either the potential project-specific or cumulative impacts identified earlier. Therefore, as shown in **Table 4.8-13 Critical Movement Analysis Summary Future (2016) With Cumulative Development Plus Cumulative Mitigation Conditions (Shared County/City Intersections Only)**, the potential project and/or cumulative traffic impacts identified at these locations will remain significant and unavoidable.

Table 4.8-13
Critical Movement Analysis Summary Future (2016) With Cumulative Development Plus Cumulative Mitigation Conditions (Shared County/City Intersections Only)

Int. No.	Intersection	Peak Hour	Existing Plus Ambient Growth Only CMA	LOS	With Cumulative Development CMA	LOS	Impact	With Cumulative Development Plus Cumulative Mitigation CMA	LOS	Impact
3	Washington Boulevard and Via Dolce/Dell Ave	AM	0.265	A	0.288	A	0.023	**None Feasible (impact unchanged)**		
		PM	0.322	A	0.351	A	0.029			
4	Washington Boulevard and Via Marina/Ocean Ave	AM	0.576	A	0.677	B	0.01	**None Feasible (impact unchanged)**		
		PM	0.795	C	0.894	D	0.099*			
5	Washington Boulevard and Palawan Way[1]	AM	0.728	C	**0.914**	**E**	0.186*	**None Feasible (impact unchanged)**		
		PM	0.808	D	**0.983**	**E**	0.175*			
15	Lincoln Boulevard and Bali Way	AM	0.467	A	0.563	A	0.096	**None Feasible (impact unchanged)**		
		PM	0.589	A	0.753	C	0.175*			
17	Lincoln Boulevard and Mindanao Way	AM	0.864	D	**1.015**	**F**	0.151*	**None Feasible (impact unchanged)**		
		PM	0.878	D	**1.109**	**F**	0.231*			
22	Lincoln Boulevard and Fiji Way	AM	0.841	D	**0.925**	**E**	0.084*	**None Feasible (impact unchanged)**		
		PM	0.708	C	**0.987**	**E**	0.279*			

Notes:

* *Significant impact per Los Angeles County Department of Public Works Traffic Impact Analysis Report Guidelines, January 1, 1997.*

[1] *Unsignalized intersection, capacity assumes as 1,200 vehicles per hour*

4.9 PUBLIC SERVICES

This section addresses the potential impact of the Parcel 44 project (proposed project) on fire protection, emergency medical services, and police protection/sheriff services. The project's potential impact related to schools, parks, and other public services such as libraries was determined to be less than significant in the Initial Study prepared for the project and included in **Appendix 1.0**. The Los Angeles County Fire Department and the Los Angeles Sheriff's Department provided the information referred to in this section.

4.9.1 POLICE PROTECTION

4.9.1.1 INTRODUCTION

This section of the Draft EIR addresses existing police protection services in the Marina del Rey area and potential impacts to police protection as a result of development of the proposed project. This section also includes a discussion of the cumulative impacts of the proposed project in conjunction with other related projects. Information for this section was obtained from the Los Angeles County Sheriff's Department (County Sheriff's Department) and the Marina del Rey Land Use Plan.[1]

4.9.1.2 EXISTING CONDITIONS

4.9.1.2.1 Los Angeles County Sheriff's Department

Law enforcement within Marina del Rey is provided by the County Sheriff's Department, with assistance, on an as-needed basis, from the City of Los Angeles Police Department and the California Highway Patrol. The County Sheriff's Department services include the Harbor Patrol and police protection services for unincorporated County areas of Ladera Heights, Windsor Hills, and View Park.

The County Sheriff's Department is also party to a mutual aid agreement with the police departments of nearby cities, and the California Highway Patrol. Pursuant to these agreements, in the event of a significant event, police responders from the other jurisdictions may be called upon to respond to emergencies within the County Sheriff Department service area. Similarly, County Sheriff Department units may be called upon to assist police personnel in other cities.

As shown on **Figure 4.9.1-1, Sheriff Station Location**, the County Sheriff's Department operates one station in Marina del Rey. This station is located at 13851 Fiji Way, approximately 0.75 mile south of the project site. The Marina del Rey sheriff's station provides a 24-hour public counter for service, information and dispatching, 911 emergency operators, Harbor Patrol rescue services, detective services and complete landside law and parking enforcement services. The station presently has 70 sworn officers and 19 professional staff employees assigned to the station. Of the 70 sworn employees, 20 are supervisors/managers, four are detectives, two officers are assigned to special operations, and approximately 16 officers are assigned to staff the harbor operation boats. Field deployment in Marina del Rey consists of two deputies on all three shifts, EM (overnight), AM, and PM. Additionally, a field

1 Sergeant Tadashi E. Hiraoka, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, 25 June 2013.

sergeant and a two-deputy boat crew are deployed on every shift. The Marina del Rey station's physical facility is small but is not operating at capacity as far as staffing accommodations.

4.9.1.2.2 Harbor Patrol

In 1984, the County Sheriff's Department merged with the Harbor Patrol and assumed all harbor patrol functions. Marina del Rey sheriff's station personnel run boat operations. The Harbor Patrol, acting under the orders and jurisdiction of the County Sheriff, is responsible for law enforcement services in the Marina del Rey harbor and the Los Angeles County Maritime Region in general.

The Harbor Patrol operates 24 hours per day. The Harbor Patrol's responsibilities include regularly checking docks and anchorages for safety and local ordinance violations, enforcement stops for boating law violations and open water rescue and medical emergencies. In the past, the Harbor Patrol has been the first responder to incidents such as airplane crashes, boat fires and explosions, cars in the water, and capsized vessels. The Marina del Rey Station has a Dive/Rescue Team comprised of over 15 certified divers. Most Harbor Patrol deputies are certified Emergency Medical Technicians (EMT) and are Rescue/Recovery Dive Team members.

The Harbor Patrol also works closely with the United States Coast Guard, Los Angeles County Lifeguard Baywatch units and the Los Angeles County Fire Department, which has both land and water-based firefighting vessels attached to Fire Station 110.[2]

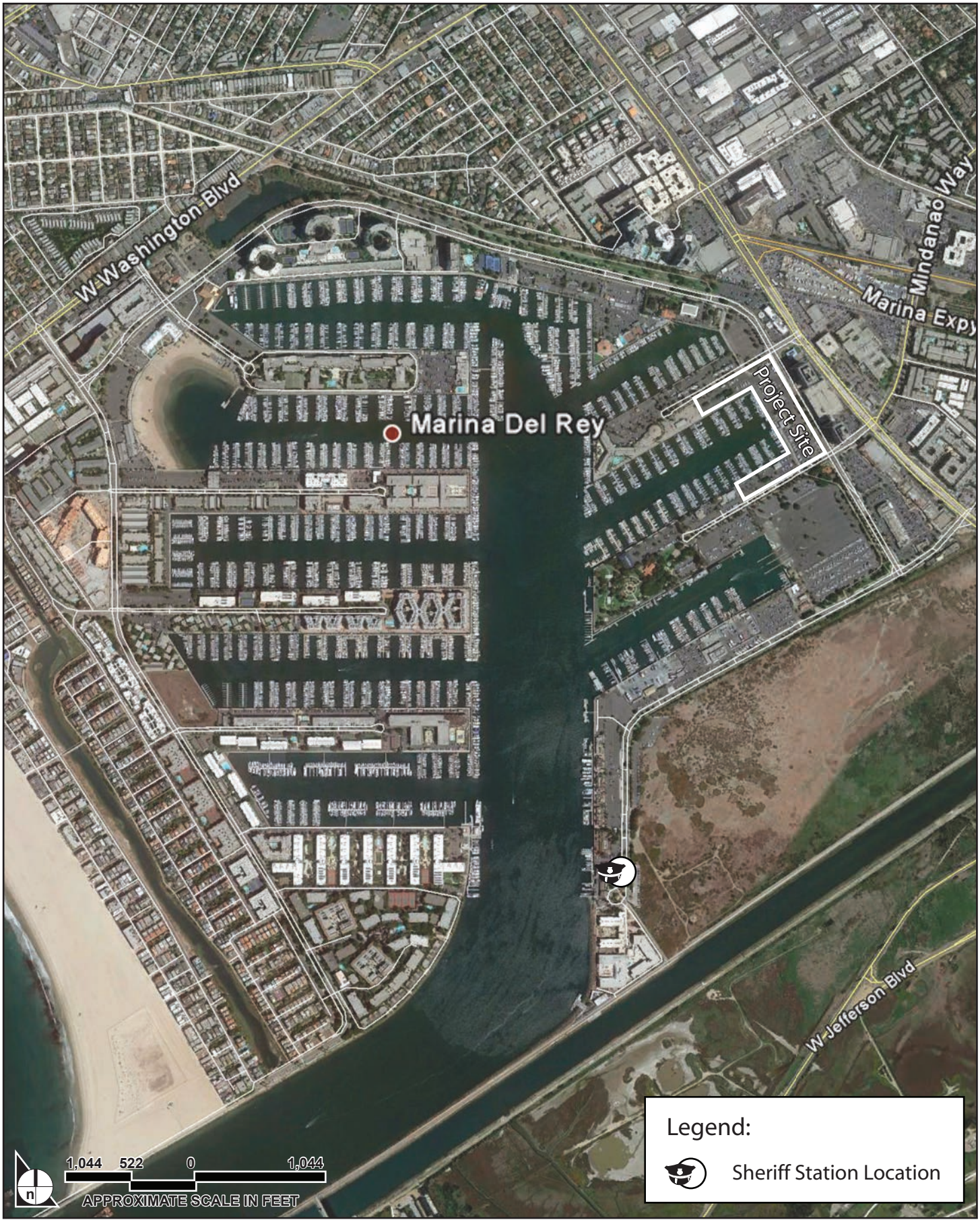
4.9.1.2.3 Bicycle Patrol

During the summer months, from Memorial Day to Labor Day, the Marina del Rey station staffs a full-time bicycle law enforcement team.[3] The Summer Enforcement Team (SET) generally consists of six deputies and a sergeant. The team is supplemented by two additional Harbor Patrol deputies who police the additional summer boating traffic with two one-man 20-foot patrol boats.

---

2 Los Angeles County Sheriff's Department, "Marina del Rey station," http://shq.lasdnews.net/content/uoa/MDR/MDR-AboutUs.pdf, accessed November 20, 2012.

3 Los Angeles County Sheriff's Department, "Marina del Rey station," http://shq.lasdnews.net/content/uoa/MDR/MDR-AboutUs.pdf, accessed November 20, 2012.



SOURCE: Google Earth, July 2013

FIGURE **4.9.1-1**

Sheriff Station Location

4.9.1.2.4 Level of Service Standards

Deployment of deputies within the County is based on an "appropriate level of service" standard. Factors used to determine the appropriate level of service for a particular area include consideration of residential population, types of crimes, statistical reports, size of area, type of land uses, actual and expected service calls, transient and visitor population and response time.

The Sheriff Contract Law Unit has determined that the officer–to-population ratio for the Marina del Rey area is 1.48 officers to every 1,000 residents.[4]

4.9.1.2.5 Response Times

The County Sheriff's Department has established an optimal response time for services of 10 minutes or less for emergency response incidents (a crime that is presently occurring and/or a life or death situation), 20 minutes or less for priority (immediate) incidents (a crime or incident that is currently occurring, but is not a life or death situation) and 60 minutes or less for routine (non-emergency) responses (a crime that has already occurred and is not a life or death situation). These response times represent the range of time required to accommodate a service call, which is measured from the time a call is received until the time a patrol car arrives at the incident scene. Response times are generally variable, particularly because the nearest responding patrol car may be located anywhere within the station's patrol area and may not necessarily respond directly from the station itself. During the period of May 1, 2013, through May 31, 2013, the average response times in the Marina del Rey area specific to Marina del Rey averaged approximately 5.2 minutes for emergency response incidents, 6.7 minutes for priority incidents and 29.4 minutes for routine calls.[5] Therefore, response times are within the optimal (as defined by the County Sheriff's Department) response time criteria.

4.9.1.2.6 Types of Crimes in the Marina del Rey Area

In 2012, Marina del Rey station units responded to 1,644 Part I and Part II Criminal Calls for service in Marina del Rey. Fifty-seven percent of calls received were for Part I Crimes, including robbery, aggravated assault, forcible rape, homicide, burglary, grand theft auto, larceny theft, and arson. Over half of the calls received categorized under Part I Crimes were for larceny theft, followed by burglary calls. Crimes classified as Part II Crimes can include drunk driving, vandalism, non-aggravated assault, and

---

4 Sergeant Michael Mangen, County of Los Angeles Sheriff Department, verbal communication April 21, 2014

5 Sergeant Tadashi E. Hiraoka, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, 25 June 2013.

family disturbances. The top five Part II Crime offenses were: vehicle/boating, fraud and NSF check, vandalism, non-aggravated assault, and narcotics[6].

4.9.1.2.7 Sheriff's Department Operational Funding

Operational funding for the County Sheriff's Department comes from tax revenues from property and sales taxes generated and deposited in the County's General Fund and the State Treasury. A portion of these revenues is then allocated to maintain staffing and equipment levels for the County Sheriff's Department, including the Marina del Rey sheriff's station, in response to related demands.

4.9.1.3 ENVIRONMENTAL IMPACTS

4.9.1.3.1 Project Characteristics

Implementation of the proposed project would result in the development of eight new buildings containing a total of approximately 83,253 square feet. The new buildings will include: boaters' restroom facilities; a specialty grocery store; marine-related retail, administrative offices, boater amenities, and a "community room"; waterfront restaurants; general retail; a yacht club facility; a boat repair shop; and dry boat storage. The site will be accessible to motorists by use of seven driveways, including three driveways along Bali Way and Mindanao way, and a single driveway along Admiralty Way. Bicycle and pedestrian access to the site will be improved via a pedestrian promenade and improvements to the existing bike path. The promenade will include 8 feet of landscaping, a 20-foot pedestrian promenade, and a 5.5-foot-wide bike path.

4.9.1.3.2 Thresholds of Significance

The *County of Los Angeles California Environmental Quality Act (CEQA) Guidelines* identify criteria for determining whether a project's impacts on Sheriff/police protection services would be significant, including, as applicable, whether the project would:

> *(a) create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, sheriff protection, schools, parks, libraries, other public facilities.*

---

6 Los Angeles County Sheriff Department Marina del Rey 2011 Incident and Arrest Summary, http://www.lasdhq.org/sites/yir9600/yir2011/mdr/1.htm, (July 18, 2013).

4.9.1.3.3 Impact Analysis

Impact 4.9.1-1: **Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for Sheriff's protection.**

Analysis:

Construction Impacts: Site development and construction would normally not require services from the County Sheriff's Department, except in the cases of trespass, theft, and/or vandalism. Such activities at a construction site are usual but do not typically place undue demands on law enforcement services. Construction activity would increase traffic both on and adjacent to the project site during working hours due to commuting construction workers, trucks and other large construction vehicles that would increase traffic volumes during the AM peak hour. Slow moving construction-related traffic along local roadways may reduce optimal traffic flows and conceivably could incrementally increase response times and incrementally increase vehicle accident potential. During construction, the County Sheriff's Department would require ample access for emergency vehicles and access for Sheriff's vehicles conducting routine patrol. With adequate access, response times would not be extended and the ability of deputies to provide proactive policing and efficient crime suppression would not be diminished. Implementation of standard construction-traffic control procedures such as flagmen and signage would further reduce any potential impact. Potential construction impacts related to Sheriff's emergency access and adequacy of Sheriff's response times is considered less than significant.

Typical calls to the County Sheriff's Department are complaints from citizens regarding construction traffic and noise from the numerous construction projects in the area. During construction, the contractor will be responsible for adherence to the County of Los Angeles ordinances pertaining to construction noise (refer to Title 12, Chapters 12.08 and 12.12 Los Angeles County Code).

Based on the above information, construction-related impacts to the County Sheriff's Department are considered less than significant.

Operation Impacts; Level of Service: During project operation, the County Sheriff's Department would have the responsibility to provide police protection services for the project site. It is anticipated that demands for Sheriff's services would increase above current levels upon buildout of the project due to increased utilization of the site by the public and patrons.

The proposed project would have a transient population associated with the retail and marina/boat spaces. This population will include visitors to the commercial shops and the marina, and boat space

users. Assuming a person per vehicle ratio of 2:1, the proposed project could generate a transient population of up to 960 persons. Based on the current parking code requirements for Los Angeles County, the proposed project will require 484 spaces, 477 spaces are included in the proposed project. However, a shared parking analysis prepared for the proposed project, accounting for the variability in parking needs for the various project components throughout the day, indicates that the actual maximum parking demands anticipated for the new development will be somewhat lower than what is required by zoning, with a peak demand of 457 spaces. The County Sheriff's Department has indicated that an adequate number of parking spaces that are appropriately located will be required so that current parking congestion in Marina del Rey is not exacerbated. Nonetheless, the proposed project includes the request for a minor Parking Adjustment to permit a parking reduction for the project. A discussion of parking impacts can be found in **Section 5.8, Traffic/Access**, of this Draft EIR. With this minor Parking Adjustment approval, all County mandated parking requirements would been satisfied by the proposed project, parking impacts are not considered significant.

Operational Impacts; Response Times: As discussed above, County Sheriff's Department response times in the Marina del Rey area are in conformance with County Sheriff's Department optimal response time criteria.

Increased vehicle traffic generated at buildout of the proposed project could adversely affect the operating condition of the local roadway network. Increased traffic could slow emergency response vehicles. The County Sheriff's Department anticipates reduced response times based upon heavier traffic and a denser transient population in the area. However, mitigation measures are provided in **Section 5.8, Traffic and Access**, of this Draft EIR that will maintain operation of the local roadway network at levels that are consistent with County Department of Public Works standards. As measures are provided to maintain adequate traffic flow and access, impacts are not considered significant.

Operational Impacts; Calls for Service: The retail and marina uses proposed are not new or unique to the area. However, there would be an increase in traffic and transient population density as a result of project implementation. The County Sheriff's Department anticipates reduced response times and an increase in calls for service based upon heavier traffic and a denser transient population in the area. The Sheriff's Department anticipates an increase in calls for service proportional to the increase in transient population. The Marina del Rey station presently assigns two, one-deputy patrol cars in the Marina del Rey area per shift.[7] The County Sheriff's Department does not anticipate the increase in calls for service to be so great as to require the permanent assignment of additional patrol cars to Marina del Rey.

---

7 Sergeant Tadashi E. Hiraoka, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, 25 June 2013.

Potential significant impacts to Sheriff's Department protective services could be reduced with the incorporation of security features into the project design, such as the use of appropriate landscape materials and building orientation. As proposed, the Parcel 44 project would incorporate security features into the project design that would potentially reduce the number of calls for police protection services. Project design features such as parking area lighting would contribute to the overall safety of the project site. Implementation of project design features is ensured by project conditions of approval.

The County Sheriff's Department would also review the site design during the planning and building plan-check process with respect to lighting, landscaping, building access and visibility, street circulation, building design and defensible space. Incorporation of the Department's recommendations would further reduce the potential law enforcement and protection impacts. With the incorporation of safety design techniques into the project design, potentially significant security impacts to persons and property and calls for service to the County Sheriff's Department would be reduced to a less than significant level.

Operational Impacts; Harbor Patrol: The proposed project does not include the redevelopment of the Parcel 44 anchorage that is located on the waterside portion of the subject parcel (the Parcel 44 anchorage redevelopment has been previously approved by the California Coastal Commission under a separate Coastal Development Permit approval). The County Sheriff's Department does not foresee an increase in the calls for service for the Harbor Patrol because of the nature of the project. Given the above, no significant impacts to the Harbor Patrol of the County Sheriff's Department will occur.

Operational Impacts; Sheriff's Department Funding/Fiscal Impact: During operation, the proposed project would generate ground lease rent, tax revenues from property and sales taxes that would be deposited in the County's General Fund and the State Treasury. A portion of these revenues could then be allocated to maintain staffing and equipment levels for the Marina del Rey sheriff's station in response to related demands. Although the Parcel 44 Project would increase demand for sheriff's services, these service demands can be met through the allocation of revenues collected from the project using existing sources. Therefore, impacts are considered less than significant.

Based on the above information, implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Mitigation Measures

No mitigation measures are proposed or required.

Residual Impacts

Impacts will be less than significant.

4.9.1.4 CUMULATIVE IMPACTS

As discussed above, project implementation would not result in the need for new or physically altered police facilities. As such, the project's contribution is not cumulatively considerable in regard to adverse physical impacts. However, **i**t is anticipated that demands for Sheriff's services in the project area would increase above current levels upon buildout of other related projects. Cumulative projects ongoing and planned in the Marina would increase the demand for services from the Marina del Rey Sheriff's station. These projects may require the permanent assignment of additional patrol cars to Marina del Rey and may necessitate additional deputy staffing. **Table 4.9.1-1, Cumulative Development Summary**, shows the types and amounts of growth expected to occur as a result of related projects. This table provides development summaries for those projects that are located within the County of Los Angeles and would require Sheriff's services.

Table 4.9.1-1
Cumulative Development Summary

Land Use[1]	Size/Units
Residential[2]	2,432 du
Restaurant	93,084 sf
Hotel	420 rooms
Commercial/Office	68,984 sf
Commercial/Retail[3]	257,322 sf
Institutional/Community Services[4]	28,000 sf
Boat Dock/Storage	1,172 boats
Park	7.64 acres
Supermarket	51,500 acres
Public Parking Lot	236 spaces

Source: Hirsch/Green Transportation Consulting, Inc. Traffic Impact Analysis Report, (2013) 72-75.

[1] *Includes proposed projects only in Los Angeles County within a 2 mile radius of the project site*

[2] *Includes apartment, condominium, senior care facility*

[3] *Includes Shopping centers, showroom, and pharmacy*

[4] *Includes County facilities, and health clubs*

As shown in T**able 4.9.1-1, Cumulative Development Summary**, related projects in Marina del Rey would add 2,432 new residential units within the County's Sheriff Marina del Rey Station's jurisdiction.

Based on the average household size for Marina del Rey of 1.58 residents per dwelling unit, this would result in an increase of approximately 3,843 residents. Based on the service standard of 1.48 officer per 1,000 residents, this would require the provision of an additional six sheriff deputies in order to maintain the existing ratio of officers to residents. (The Marina del Rey Sheriff Station has confirmed that the facility would be able to accommodate the six additional staff members).[8].

Based on the related projects information, a significant impact on the current level of Sheriff's Department protection services throughout the Marina del Rey area would occur unless the staff and equipment at the County Sheriff's Department are increased proportionately. Increased revenues from ground lease rentals, property tax, and special tax revenue from the related projects can be used to fund increases in staffing and equipment. Furthermore, all proposed projects are required to submit to the County Sheriff's Department project site designs during the planning and building plan-check process. In conformance with normal County procedures, these plans shall be reviewed by the County Sheriff's Department with respect to lighting, landscaping, building access, and visibility, street circulation, building design and defensible space. Incorporation of such reviews would avoid any significant cumulative impacts to governmental facilities. Therefore, there will be no significant impacts on Sheriff's Department staffing or equipment.

Increased vehicle traffic generated at buildout of proposed project and the related projects could adversely affect the operating condition of the local roadway network. Increased cumulative traffic could slow police response times. Mitigation measures for cumulative traffic impacts are provided in **Section 5.8**, **Traffic and Access**, of this Draft EIR. Upon implementation of these measures, no significant impacts on Sheriff's Department services would occur when compared with accepted response time criteria. However, if implementation of these measures is delayed or does not occur, there could be a cumulative impact on Sheriff's Department services under the response time criteria, and in such case, the project's contribution would be cumulatively considerable.

Based on the above information, implementation of proposed project and other related projects would not result in cumulatively considerable adverse physical impacts associated with the provision of new or physically altered governmental facilities and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

8 Marina del Rey Sheriff Station, Sergeant Hiraoka written communication March 26, 2014.

Mitigation Measures

None are required.

Residual Impacts

Impacts would not be cumulatively considerable.

4.9.2 FIRE PROTECTION

4.9.2.1 INTRODUCTION

This section of the Draft EIR addresses existing fire protection services in the Marina del Rey area and potential impacts to fire protection as a result of development of the proposed project. This section also includes a discussion of the cumulative impacts of the proposed project in conjunction with other related projects. Information for this section was obtained from the Los Angeles County Fire Department and the Marina del Rey Land Use Plan.

4.9.2.2 EXISTING CONDITIONS

4.9.2.2.1 Los Angeles County Fire Department

The County Fire Department is the commonly used name for the Consolidated Fire Protection District of Los Angeles County. The County Fire Department provides fire protection services in Marina del Rey.

The County Fire Department provides fire prevention, fire protection, and emergency services to more than 3.9 million people who reside in unincorporated areas of Los Angeles County and in the 58 district cities that contract with the County Fire Department. These services are provided as outlined in the Los Angeles County Fire Code and the General Plan Safety Elements for these various cities. The County Fire Department operates 171 fire stations in unincorporated Los Angeles County.[1]

Units from the closest available fire station usually provide emergency response. Should a significant incident occur, the County Fire Department is able to dispatch units from any station in the entire County Fire Department system, not just the station(s) closest to the site. The County Fire Department is also party to an automatic aid agreement with the fire departments of nearby cities, including the Los Angeles (City) Fire Department, the Culver City Fire Department, and the Santa Monica Fire Department. Pursuant to these agreements, in the event of a significant fire event, fire responders from the other jurisdictions may be called upon to respond to emergencies within the County Fire Department service area. Similarly, County Fire Department units may be called upon to assist fire personnel in other cities.

As shown on **Figure 4.9.2-1, Fire Station Location**, the County Fire Department operates one station in Marina del Rey, Fire Station 110, located at 4433 Admiralty Way. This is the closest station to the project site and, therefore, is most likely to provide initial fire protection and limited paramedic response to service calls from the project sites. Fire Station 110 is located less than 0.5 mile northwest of the project

1 Los Angeles County Fire Department Website, http://fire.lacounty.gov/PDFs/2011_StatSummary.pdf.

site. Fire Station 110 is equipped with a three-person fire assessment engine with some limited paramedic capabilities, a two-person fireboat and a four-person quint (a combination of an engine and ladder truck apparatus). There are no planned expansions or upgrades to this station[2].

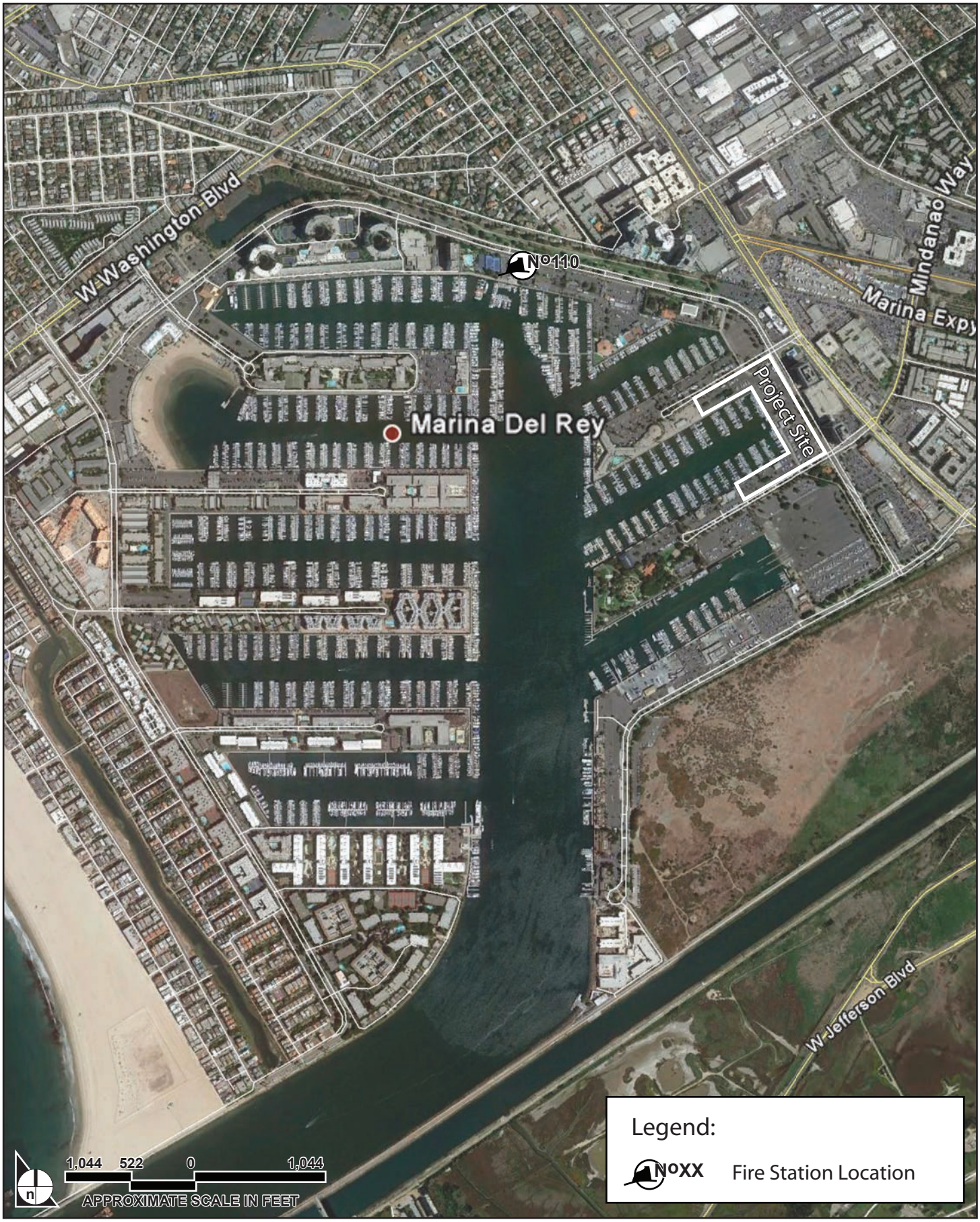
Fire Station 58, also part of the County Fire Department system, is located at 5757 South Fairfax Avenue in Baldwin Hills and is the second closest station to the project site. Fire Station 58 is located approximately 6 miles (approximately 14 minutes) from the project site. This station is equipped with a four-person engine and a two-person paramedic squad. There are no planned expansions or upgrades to this station[3].

Other fire stations could provide aid in the event of an emergency. Fire stations located within 3 miles of the project site are listed below.

- City of Los Angeles Station 63; 1930 Shell Avenue, Venice
- City of Los Angeles Station 62; 3631 Centinella Avenue, Los Angeles
- City of Los Angeles Station 51, 10435 Sepulveda Blvd., Los Angeles
- City of Los Angeles, Station 5, 6621 W. Manchester, Los Angeles
- City of Los Angeles Station 80; 6911 World Way West, Los Angeles
- City of Los Angeles Station 5; 8900 South Emerson Avenue, Los Angeles
- Santa Monica Station 122; 222 Hollister Avenue, Santa Monica
- Santa Monica Station 125; 2450 Ashland Avenue, Santa Monica
- Santa Monica, Station 121, 1444 7th Street, Santa Monica
- Culver City Station 1, 9600 Culver Blvd, Culver City
- Culver City, Station 2, 11252 Washington Blvd, Culver City
- Culver City, Station 3, 11304 Segrell Way, Culver City

2 Written correspondence, Judith Leslie-Thomas, Fire Department, Forestry Division, County of Los Angeles, (June 25, 2013)

3 Written correspondence, Judith Leslie-Thomas, Fire Department, Forestry Division, County of Los Angeles, (June 25, 2013)



SOURCE: Google Earth, July 2013

FIGURE **4.9.2-1**

Fire Station Location

0889.005•07/13

The County Fire Department includes a Health Hazardous Materials Division that responds to accidental releases and improper handling, storage, transportation and disposal of hazardous materials and wastes. The nearest hazardous materials squad is in Fire Station 105, located in the Dominguez unincorporated area east of Carson, approximately 24 miles from the project site.[4]

4.9.2.2.2 Fire Codes

The Los Angeles County Fire Code establishes standards for the distribution, design, construction, and location of fire protection facilities, including systems incorporated into private development projects. These standards specify fire-flow criteria, minimum distances to fire stations, public and private specifications, and the location criteria and access provisions for fire-fighting vehicles and personnel.

4.9.2.2.3 Service Standards

County Fire department service standards are associated with the County Fire Department's Capital Resources Plans. Adequacy of fire protection services for a given area are based on a combination of assessment factors including (1) fire-flow requirements, (2) response time from available fire service facilities, and (3) the County Fire Department's judgment for anticipated frequency and nature of occurrences or needs in an area.

The level of service provided for areas within the fire district is determined by the County Fire Department. The County Fire Department uses response time guidelines for urban areas of 5 minutes for an engine, 8 minutes for a paramedic squad, and 10 minutes for a truck. During the year 2012, Engine 58 had an emergency response time of 4:26 minutes and Paramedic Squad 58 had an emergency response time of 4:45 minutes. During the year 2012, Engine 110 had an emergency response time of 4:34 minutes and Truck 110 had an emergency response time of 3:45 minutes.

4.9.2.2.4 Fire Flow

The availability of sufficient on-site water pressure is a basic requirement of the County Fire Department. The County Fire Department requires sufficient capacity for fire flows of 1,250 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for a 2-hour duration for single-family detached homes and a minimum of 2,000 gpm at 20 psi residual pressure for a 5-hour duration for non-residential (commercial/institutional) and high-density residential uses.[5] These rates, and rates for a proposed project, are determined based upon the size of the buildings, their relationship to other structures,

---

4 Written correspondence, Judith Leslie-Thomas, Fire Department, Forestry Division, County of Los Angeles, (June 25, 2013)

5 *Water Availability Study Parcel 44*, Breen Engineering, 2012.

property lines, and type of construction. Final fire flow rates and durations for a proposed project are determined at the plan check stage.

Fire flows on and near the project site are 1,900 gpm.[6] The existing water distribution system in Marina del Rey is operated and maintained by the Los Angeles County Department of Public Works (LACDPW) via its Waterworks Division. The Waterworks Division is currently upgrading the water distribution system for Marina del Rey replacing the undersized 12-inch-diameter water mains that currently serve the area, with approximately 957 linear feet of new 18-inch-diameter steel pipeline. Phase II of the project was completed in December of 2012, with Phase IIIA completed in June of 2013 and Phase IIIB is expected to be complete in March of 2014[7]. Based on the timing of the planned improvements, it is anticipated that the improvements would be completed prior to the completion of the proposed project. Analysis of fire flow capacities for the project site is also included in **Section 4.10.2, Water**.

4.9.2.2.5 Response Time

Response times relate directly to the time to travel the linear distance of the circulation system (i.e., mileage between a station and the location of a service site) and the County Fire Department's ability to successfully navigate access-ways within that circulation system. The County Fire Department's required maximum response times for the first arriving unit within urban areas is 5 minutes, and 8 minutes for an advance life support (paramedic) unit. Roadway congestion and intersection level of service along the response route can affect time. The County Fire Department's judgment of need is based on historic trends or comparisons from similar uses at other locations, or from past experience on the site or within the project vicinity. All these factors are interrelated and are considered together. Fire Station 110, approximately 0.5 mile from the project site has an engine company, ladder truck, and limited paramedic abilities.

4.9.2.2.6 County Fire Department Funding

The County Fire Department annually updates its five-year Capital Plan, which identifies facilities that will be needed during a five-year planning horizon. Funding for land acquisitions, facility improvements and new equipment is generated through ground lease rentals in the Marina, property taxes and special tax revenue and in part, and where applicable, through the County Fire Department's Developer Fee Program.

---

6 Verbal communication, Shawky Dakhoum, Assistant Engineer, County of Los Angeles Waterworks Department Malibu Facility, July 18, 2013.

7 Department of Public Works Los Angeles County Waterworks Districts http://dpw.lacounty.gov/wwd/web/About/Projects.aspx, accessed July 1,2013

4.9.2.3 ENVIRONMENTAL IMPACTS

4.9.2.3.1 Project Improvements

Implementation of the proposed project would result in the development of eight new buildings containing a total of 83,253 square feet. The new buildings will include: boaters' restroom facilities; a specialty grocery store; marine-related retail, administrative offices, boater amenities, and a "community room"; waterfront restaurants; general retail; a yacht club; a boat repair shop; and dry boat storage. The project proposes 477 on-grade parking spaces on the project site, of which 282 are standard-dimensioned spaces, 11 are accessible spaces, and 184 are compact-parking spaces. The project proposes 76 bicycle parking spaces. The site will be accessible to motorists by use of seven driveways, including three driveways along Bali Way and Mindanao way, and a single driveway along Admiralty Way.

4.9.2.3.2 Thresholds of Significance

The *County of Los Angeles California Environmental Quality Act (CEQA) Guidelines* identify criteria for determining whether a project's impacts on fire protection services would be significant, including, as applicable, whether the project would:

> *(a) create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, sheriff protection, schools, parks, libraries, other public facilities.*

4.9.2.3.3 Impact Analysis

Impact 4.9.2-1: **Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection.**

Analysis:

Construction Impacts: During construction, a large amount of wood framing and other flammable construction materials would be present on the project site. In association with framing operations, electrical, plumbing, communications, and ventilation systems would be installed in each structure. Although rare, fires do occur at construction sites. It is expected that the electrical, plumbing, and mechanical systems for the development would be properly installed during framing operations. These potentially hazardous systems would be subject to County codes and inspection by County personnel

prior to installation of drywall. In addition, the construction site would incorporate fencing, private security services and would be subject to County requirements relative to water availability and accessibility to firefighting equipment. Therefore, adherence to County codes and requirements during construction would reduce the potential for fire hazards at the project site during construction to below the threshold of significance.

In addition, construction traffic would occur on and near the project site during working hours due to commuting construction workers, trucks and other large construction vehicles that would increase traffic volumes during the AM peak hour. Slow-moving, construction-related traffic on local adjacent roadways may temporarily reduce optimal traffic flows on local roadways and could incrementally increase response times and increase vehicle accident potential. This impact is not considered significant given the temporary nature of any construction-related traffic. Further, with the use of flagmen and other standard construction practices such as traffic detour plans, haul routes, hours of operation, protective devices, warning signs and access to abutting properties during construction, no significant impacts will occur.

Operation Impacts; Response Time: The project site is within an existing County Fire Department service area that is considered to have adequate response times. As previously mentioned, the County Fire Department's required maximum response times for urban areas are 5 minutes for an engine and 8 minutes for a paramedic squad. County Fire Station 110, equipped with a three-person fire assessment engine with some limited paramedic capabilities, a two-person boat and a four-person truck company, is located only approximately 0.5 mile from the project site.[8] The proposed project would increase the intensity of development on the site by adding commercial, retail, restaurant, and boater serving uses. With the addition of the proposed project, emergency calls would be expected to incrementally increase. However, the types of uses associated with the proposed project would not be expected to generate a large number of service calls (commercial, office, retail), in addition the project would be required to comply with all County codes and regulations regarding access requirements for commercial areas and design standards for fire prevention (e.g., emergency plans and evacuation routes). With inclusion of all required County design standards, the proposed project would not increase calls such that new or expanded facilities would be required.

Increased vehicle traffic generated at build out of the proposed project could adversely affect the operating condition of the local roadway network. Increased traffic could also slow emergency response times in and around the project site. Project design features and mitigation measures for project-generated traffic are provided in **Section 4.8**, **Traffic and Access**, of this EIR. Given that the site is within

8 Written correspondence, Judith Leslie-Thomas, Fire Department, Forestry Division, County of Los Angeles, (June 25, 2013)

an existing response district and measures are provided to maintain traffic flow and access, no significant impacts would occur when compared with accepted response time criteria.

Fire-Flow: Preliminary review of the proposed project by the County Fire Department indicates that the maximum required fire flow would be 2,000 gpm at 20 pounds per square inch (psi) residual pressure for a 5-hour duration from public fire hydrants at the project site.[9] As discussed above, the County is in the process of upgrading the existing system. Once upgraded, fire flow and duration will be adequate to meet the fire flow capacity requirements established by the County. Existing fire flow levels are provided to the County Fire Department by the local water purveyor. Final required fire flows for the project would not be determined until the building plan check stage and could be lower, depending on the building design, the design of fire sprinkler systems and the proximity and capacity of fire hydrants on the project site.

The LACDPW has a system whereby an applicant can pay for water system upgrades in order to satisfy the need for a new project. Under the LACDPW system, other subsequent developments made within a 10-year period of system improvements whose projects benefit from these improvements must reimburse the original applicant with fair share contributions. Although the County has devised this system and coordinates reimbursements, it does not itself directly reimburse the original applicant for the improvements. The applicant will be required to submit a Fire Safe Plan and have the Plan approved by the County of Los Angeles Fire Department prior to issuance of building permits for the proposed project. The Fire Safe Plan shall include information regarding water flow and duration requirements, building sprinkler requirements, internal and external fire access. Based on the above, with incorporation of **Mitigation Measure 5.12-1** no significant project impacts would occur with respect to fire flow problems.

Special Fire Protection Problems: Uses planned within the proposed project are typical of commercial projects throughout California and are not considered to be exceptional generators of calls for fire protection services. In general, the types and number of calls for service would be consistent with those presently occurring in the area, including medical emergencies and structure fires. All such fires can be adequately suppressed with the types of fire equipment found at County fire stations (inclusive of Fire Station 110). Even so, increased development intensity associated with project buildout would incrementally increase demand for fire protection facilities, equipment, and staffing. The proposed project will adhere to all County codes and requirements, including those relative to providing adequate fire protection to the site. With adherence to the County codes and regulations, impacts would be less than significant.

---

9 *Water Availability Study Parcel 44*, Breen Engineering, 2012.

County Fire Department Funding/Fiscal Impact: As defined above, the County Fire Department annually updates its five-year Capital Plan, which identifies anticipated facilities that will be needed in Marina del Rey through a five-year planning horizon. Funding for land acquisitions, facility improvements and new equipment is generated through, ground lease rentals in the Marina, property taxes and special tax revenue and in part, and where applicable, through the County Fire Department's Developer Fee Program. Developer Fee Programs do not apply to projects in Marina del Rey, and as such, improvements to fire facilities in Marina del Rey are funded through the County's General Fund.

Revenues collected through ground lease rentals in the Marina and normal taxes would adequately fund fire service to the proposed project. The project would be required to meet County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project. As a result, operation of the proposed project would not diminish the staffing or the response times of existing fire stations in the Marina del Rey area and would not create a special fire protection problem on the site that would result in a decline of existing services levels in Marina del Rey.

Based on the above information, implementation of the proposed project would not create capacity or service level problems or result in substantial adverse physical or economic impacts associated with the provision of new or physically altered governmental facilities and/or the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives.

Mitigation Measures

See **Section 4.8**, **Traffic and Access**, for construction traffic related project design features and project specific traffic mitigation measures.

Residual Impacts

Impacts will be less than significant.

4.9.2.4 CUMULATIVE IMPACTS

As discussed above, project implementation would not result in the need for new or physically altered fire facilities with the incorporation of mitigation. As such, the project's contribution is not cumulatively considerable in regard to adverse physical impacts. However, it is anticipated that demands for fire services in the project area would increase above current levels upon buildout of other related projects. Cumulative projects ongoing and planned in the Marina could increase the demand for services from the

Los Angeles County Fire Stations 110 and 58. **Table 4.9.2-1, Cumulative Development Summary**, shows the types and amounts of growth expected to occur as a result of related projects. This table provides development summaries for those projects that are located within the County and would require County fire protection services.

Table 4.9.2-1
Cumulative Development Summary

Land Use[1]	Size/Units
Residential[2]	2,432 du
Restaurant	93,084 sf
Hotel	420 rooms
Commercial/Office	68,984 sf
Commercial/Retail[3]	257,322 sf
Institutional/Community Services[4]	28,000 sf
Boat Dock/Storage	1,172 boats
Park	7.64 acres
Supermarket	51,500 acres
Public Parking Lot	236 spaces

Source: Hirsch/Green Transportation Consulting, Inc. Traffic Impact Analysis Report, (2013) 72–75.

[1] *Includes proposed projects only in Los Angeles County within a 2 mile radius of the project site*

[1] *Includes proposed projects only in Los Angeles County*

[2] *Includes apartment, condominium, senior care facility*

[3] *Includes Shopping centers, showroom, and pharmacy*

[4] *Includes County facilities, and health clubs*

Increased revenues from ground lease rentals, property tax, and special tax revenue from the related projects can be used to fund increases in staffing and equipment. Furthermore, all proposed projects are required to submit to the County Fire Department project site designs during the planning and building plan-check process. In conformance with normal County procedures, these plans shall be reviewed by the County Fire Department with respect to access and building design. Incorporation of such reviews would avoid any significant cumulative impacts to governmental facilities. Therefore, cumulative impacts concerning Fire Department staffing and equipment are not determined to be significant.

Increased vehicle traffic generated at buildout of proposed project and the related projects could adversely affect the operating condition of the local roadway network. Increased cumulative traffic could slow fire response times. Mitigation measures for cumulative traffic impacts are provided in **Section 4.8**, **Traffic and Access**, of this EIR. Upon implementation of these measures, no significant impacts on fire protection services would occur when compared with accepted response time criteria. However, if implementation of these measures is delayed or does not occur, there could be a cumulative impact on

fire protection services under the response time criteria, and in such case, the project's contribution would be cumulatively considerable.

Based on the above information, implementation of proposed project and other related projects would not result in cumulatively considerable adverse physical impacts associated with the provision of new or physically altered governmental facilities and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Mitigation Measures

None are required.

Residual Impacts

Impacts would not be cumulatively considerable.

4.10 UTILITIES AND SERVICE SYSTEMS

The following sections address water supply and sewage conveyance, collection, and treatment. Information on water supply and sewage conveyance and treatment referred to in this section was collected from the County of Los Angeles.

4.10.1 Wastewater

4.10.1.1 INTRODUCTION

This section provides a discussion of wastewater service systems that may be affected by the implementation of the proposed project. The existing wastewater systems that provide services to the project are identified and evaluated for potential impacts. The following analysis is based on information provided in the Sewer Area Study prepared for the project site by Breen Engineering, Inc., provided in **Appendix 4.10.1** of the Draft EIR, as well as Los Angeles County Department of Public Works' (LACDPW) evaluation of the proposed project's sewer-related impacts.

4.10.1.2 ENVIRONMENTAL SETTING

Wastewater collection and treatment for the Marina del Rey area is provided by LACDPW and the City of Los Angeles Hyperion Treatment Plant (HTP). The LACDPW's Sewer Maintenance Division is charged with maintaining the sewer collection and conveyance system, which is regulated in the Marina Sewer Maintenance District (MSMD). Wastewater collected within the MSMD system is ultimately directed to the City of Los Angeles HTP treatment facility under a contract between the City and the County of Los Angeles.

4.10.1.3 REGIONAL WASTEWATER TREATMENT FACILITIES

Wastewater from the Marina del Rey area, including the existing development on Parcel 44, is treated at the HTP in El Segundo, located southwest of the Los Angeles International Airport. The drainage area served by the HTP is approximately 328,000 acres of developed land. The HTP treats wastewater from portions of the City of Los Angeles as well as from seven cities that it contracts with, including Santa Monica, Beverly Hills, Burbank, Culver City, El Segundo, Glendale, and San Fernando. HTP also treats wastewater from portions of Los Angeles County and 29 contract agencies.[1]

Completed in 1950, the HTP was originally designed with a treatment capacity of 320 million gallons per day (mgd). Since that time, the plant's capacity has increased to 800 mgd and now includes full secondary treatment of wastewater. The HTP is currently treating 230 to 250 mgd of effluent flow to secondary treatment standards, 550 to 570 mgd below its maximum operating capacity.[2]

The HTP service area also includes two inland reclamation plants: the Los Angeles/Glendale Water Reclamation Plant (LAGWRP) and the Tillman Water Reclamation Plant (TWRP). These plants partially

1 http://www.lasewers.org/treatment_plants/hyperion/index.htm, Accessed December 13, 2012.

2 Chris Granados, Hyperion Treatment Plant, telephone conversation, December 7, 2012.

treat upstream flows generated by urban uses in the San Fernando Valley and route the partially treated flows to the HTP. The LAGWRP was completed in 1976 and processes approximately 20 mgd of wastewater.[3] The TWRP became operational in 1985 and was designed to process 40 mgd of wastewater. An expansion of TWRP was completed in October 1991, which increased its current capacity to 80 mgd.[4]

The Regional Water Quality Control Board (RWQCB) regulates the treatment of wastewater at treatment plants and the discharge of the treated wastewater into receiving waters. Therefore, the HTP is responsible for adhering to RWQCB regulations as they apply to wastewater generated by the uses on the project site.

4.10.1.3.1 Wastewater Collection System

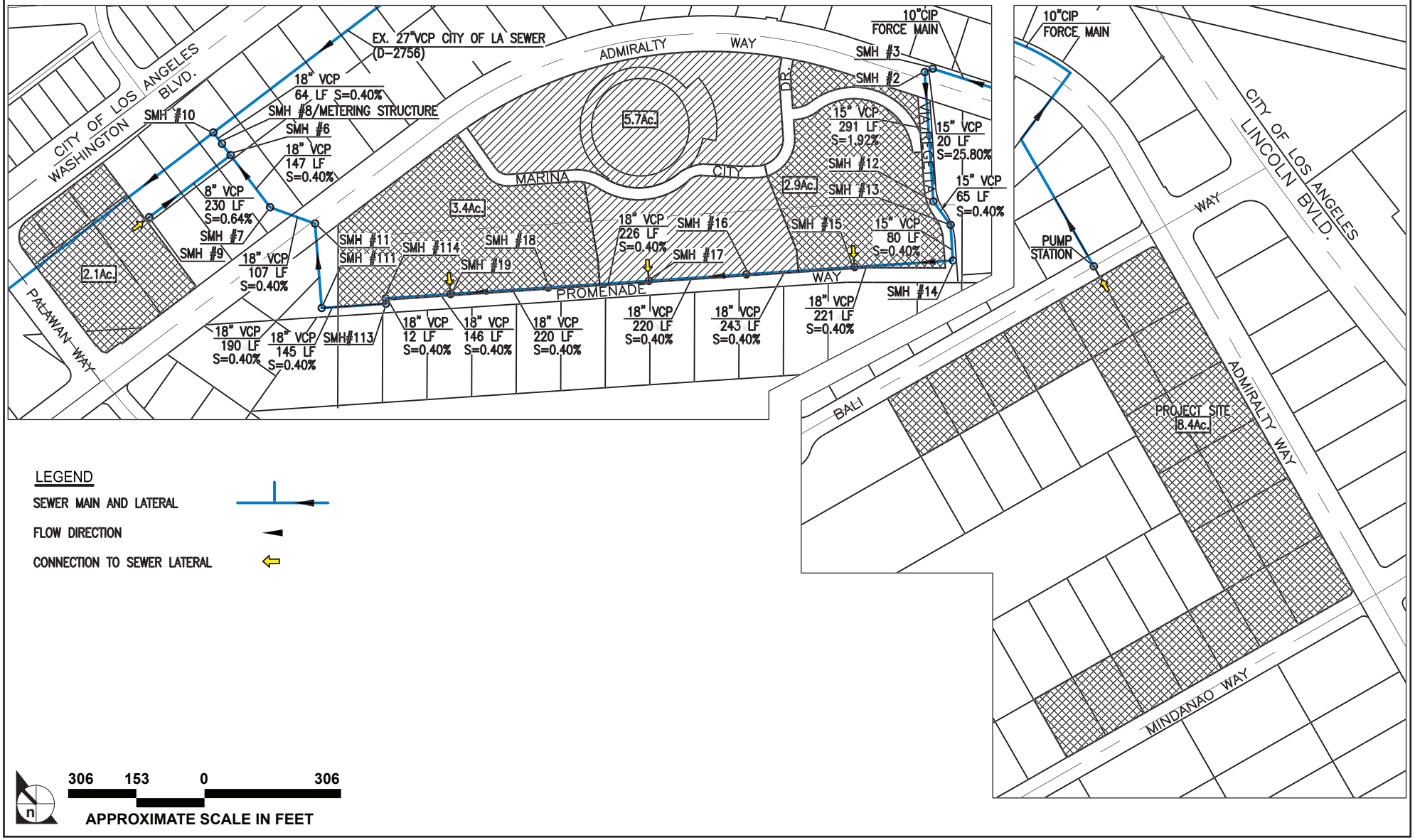
As shown in **Figure 4.10.1-1, Existing Sewer System,** there is an existing 15-inch sewer main that runs through the northeastern edge of the property along Bali Way. The existing 15-inch main drains by gravity through the eastern portion of the Marina del Rey sewer system until it enters the Marina pump station near Bali Way. That effluent is pumped via a 10-inch force main to Admiralty Way and Via Regatta where it becomes gravity flow. This sewer joins the City of Los Angeles sewer approximately 400 feet north of Basin E in Washington Street via a metering structure.

Sewage is then pumped via the Venice Pumping Plant at Hurricane Street and Esplanade. The pump station has five pumps: three running and two parallel force main systems. Based on growth in the marina and other projects that occur in the marina area, this system of pumps is reaching capacity. The Los Angeles City Council (City) is currently seeking to enhance capacity through a series of improvements. The City is proposing to construct a new 54-inch-diameter force main sewer that will cross Grand Canal from the Venice Pumping Plant (VPP) at 140 Hurricane Street easterly to Marquesas Way, then southerly along Via Marina crossing the Marina Del Rey and Ballona Creek Channels to an existing Coastal Interceptor Sewer junction structure on Vista Del Mar near Waterview Street. If implemented, the new force main would operate as a parallel system in conjunction with the existing 48-inch force main, which runs along the beach, to meet current peak wet weather flows, and to add operational flexibility and reliability. The City certified the EIR for the improvements to the proposed VPP on January 12, 2010. Los Angeles County subsequently filed a lawsuit against the City, challenging the EIR and the selection of the proposed route for this pipe. As a result of pending litigation, the City has not been able to move forward with the project.

---

3 "Los Angeles – Glendale Water Reclamation Plant" http://www.lasewers.org/treatment_plants/la_glendale/index.htm, accessed December 6, 2012

4 "Donald C. Tillman Water Reclamation Plant" http://www.lasewers.org/treatment_plants/tillman/index.htm, accessed December 6, 2012



SOURCE: Breen Engineering, Inc., October 2012

FIGURE **4.10.1-1**

Existing Sewer System

A critical part of the Venice Dual Force Main project includes the replacement of the aging pump discharge manifold for the Venice Pumping Plant, located outside of the Plant beneath Hurricane Street. Due to the urgency for completing this part of the project, the City has created a separate project to address the manifold replacement. This project began construction in April 2013 and will be completed in fall 2014.[5] The costs of these improvements are paid for by sewer connection fees paid by developers to the City of Los Angeles.

From the Venice Pumping Plant, sewage flows via the Coastal Interceptor Sewer (CIS) System, which transmits sewage to the HTP. Currently, construction is underway for a new parallel force main system to provide relief for the existing CIS System.[6]

4.10.1.3.2 Funding

The LACDPW requires that new local sewer lines connect to the MSMD's existing sanitary sewer system. Moreover, LACDPW requires that any developer constructing a new local sewer line or sewer network not only coordinate its construction with the MSMD, but also dedicate the sewer line or network to the MSMD. Upon dedication, the MSMD would be responsible for future operation and maintenance. Prior to any demolition/construction, the City of Los Angeles must ensure adequate capacity in the receiving trunk sewers and receiving water reclamation plant. If adequate capacity does not exist in the City of Los Angeles' system to accommodate the additional flows, the receiving trunk sewers and/or water reclamation plant (WRP) may require expansion.

The mechanism used to fund improvements to the City of Los Angeles' system is the sewer connection fee program. This connection fee program occurs through a developer fee paid to the City of Los Angeles. Prior to connection of the local sewer network to the City of Los Angeles' system, all new users are required to pay a fair share contribution for City of Los Angeles' sewage system expansions. This "connection fee" is used by the City of Los Angeles to finance periodic expansion of treatment capacity and trunk lines. The connection fee varies in relation to the number of plumbing fixtures associated with a proposed project.

---

5 LADPW Public Affairs Office, Ron Charles, verbal communication November 13, 2013.

6 "Coastal Interceptor Relief Sewer Project Schedule" http://www.lapropo.org/sitefiles/CIRS/cirsschedule.htm Accessed December 13, 2012.

4.10.1.4 IMPACT ANALYSIS

4.10.1.4.1 Thresholds of Significance

The *County of Los Angeles California Environmental Quality Act (CEQA) Guidelines* identify criteria for determining whether a project's impacts on wastewater would be significant, including, as applicable, whether the project would:

a) Exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Board;

b) Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; or

c) Create drainage system capacity problems, 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.

Appendix G of the most recent update of the *State CEQA Guidelines* also includes criteria for determining impacts related to sewer service. According to Appendix G, impacts are considered significant if the project would:

a) Exceed wastewater treatment requirements by the applicable Regional Water Quality Control Board;

b) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

c) Result in the determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Thresholds "a" and "b" of the *State CEQA Guidelines* are encompassed within thresholds "a" through "c" of the County of Los Angeles Guidelines; therefore, the County Guidelines are used for this analysis. Threshold "c" relates to project drainage and is addressed in **4.6 Hydrology and Water Quality**.

4.10.1.4.2 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.10.1-1: Exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Board;

Impact 4.10.1-2: Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of

existing facilities, the construction of which would cause significant environmental effects.

Construction Impacts: Construction of the proposed project is projected to begin in the last week of January 2015 and conclude the last week of August 2016.

Demolition of existing on-site uses would not disrupt sewer services to adjacent uses, as the lines will be disconnected prior to removal of the existing structures. Construction contractors would provide portable on-site sanitation facilities for use during demolition and construction that would be serviced at approved disposal facilities and/or treatment plants. The amount of construction-related wastewater that would be generated would not have a significant impact on wastewater disposal and treatment facilities due to the temporary nature of construction activity and the available capacity of the treatment facilities.

Operation Impacts – Wastewater Collection System Improvements: The LACDPW requires that any developer constructing a new sewer line must coordinate the construction and dedication of the sewer with the department's Sewer Maintenance Division for future operation and maintenance. All local collector sewer lines within the project boundaries would be constructed to the standards set forth by LACDPW, and would be sized to accommodate sewage flows generated at project buildout. The proposed project Sewer Area Study prepared by Breen Engineering, Inc., includes calculations to determine the capacity for five surrounding manholes, as identified by the County. Based on the study's calculations provided in **Appendix 4.10.1,** in an overflow condition, the existing sewer system which would accept overflow from the Bali Way Pump station to the metering structure at Marquesas Way, can accommodate the calculated flow resulting from the proposed project. Thus, the existing sewers can accommodate the proposed project and the sewer system in the area has sufficient capacity available to serve the project.[7] Calculations and the full study are provided in **Appendix 4.10.1** LACDPW has analyzed the proposed project and has confirmed that local sewer lines serving the project site have sufficient existing capacity to accommodate the proposed project, (including an overflow condition), and that off-site sewer line upgrades are thus not necessary in conjunction with development of the proposed project (see LACDPW comment letter provided in **Appendix 4.10.1**. As the existing sewer has adequate capacity to accommodate the proposed project, impacts to the wastewater collection system would be less than significant.

Operation Impacts – Wastewater Treatment System: As shown in **Table 4.10.1-1**, the project site currently generates approximately 1,895 gallons of wastewater per day. **Table 4.10.1-2**, below, shows the wastewater generation amounts for the proposed project.

7 *Sewer Area Study for Parcel 44 PC 12234-AS*, Breen Engineering, 2014

Table 4.10.1-1
Existing Wastewater Generation

Use Type	Square Footage	Generation Factor[1]	Average Daily Flow
Commercial	10,518	100 gallons per 1,000 square feet	1,051.8 gallons
Office	4,216	200 gallons per 1,000 square feet	843.2 gallons
		Total	1,895 gallons

Source: Impact Sciences, November 2013
[1] *Generation factors used are from the Los Angeles County Wastewater Generation sheet.*

The proposed project would generate approximately 8,325.3 gallons per day (gpd) of domestic wastewater. This represents a net increase of 6,430.3 gpd.

Sewage generated on the project site would be conveyed to the HTP for treatment, as described above. With the HTP currently operating at 550 to 570 mgd below capacity, the addition of approximately 6,430.3 net gpd generated by the proposed Parcel 44 Project would not result in the plant exceeding capacity. Therefore, adequate capacity exists to treat sewage generated by the project, and the impact of the proposed project on the sewage treatment system is less than significant. The RWQCB is responsible for regulating the treatment of wastewater at treatment plants. Compliance with wastewater treatment requirements would not represent a significant impact.

Further, the project applicant must pay connection fees to the City of Los Angeles in order to purchase the additional capacity necessary to convey and treat project-generated wastewater and fund incremental expansion of treatment capacity. The project applicant must also obtain a "will serve" letter prior to issuance of building permits demonstrating the ability of the treatment plant and collection system to accommodate project generated effluent. The proposed project will be required to design and construct all on-site sewer lines to the specifications and standards defined by LACDPW. Also, the project applicant will be required to pay the sewer connection and capacity fees that are used to fund expansion of facilities.

Table 4.10.1-2
Parcel 44 Wastewater Generation

Use Type	Square Footage	Generation Factor[1]	Average Daily Flow
Trader Joe's	13,625	100 gallons per 1,000 square feet	1,362.5 gallons
West Marine and Retail	38,795	100 gallons per 1,000 square feet	3,879.5 gallons
General Office	12,677	100 gallons per 1,000 square feet	1,267.7 gallons
Community Room/Boater's lounge	840	100 gallons per 1,000 square feet	84 gallons
Boater's bathrooms/laundry	1,700	100 gallons per 1,000 square feet	170 gallons
Boat Repair	700	100 gallons per 1,000 square feet	70 gallons
Boat Broker's Office	3,911	100 gallons per 1,000 square feet	391.1 gallons
Yacht Club	1,150	100 gallons per 1,000 square feet	115 gallons
Restaurant	9,855	100 gallons per 1,000 square feet	985.5 gallons
		Total	8,325.3 gallons
		Existing On-Site Wastewater Generation	1,895 gallons
		Net Increase	6,430.3 gallons

Source: Impact Sciences, November 2013
[1] *Generation factors used are from the Los Angeles County Wastewater Generation sheet.*

Mitigation Measures

With payment of appropriate fees and issuance of a "will serve" letter by the LACDPW, impacts would be less than significant; no mitigation measures are required.

Residual Impacts

Based on the above, no significant impacts to wastewater treatment facilities will occur as a result of the proposed project.

4.10.1.5 CUMULATIVE IMPACTS

4.10.1.5.1 Proposed Project

As stated above, the HTP is operating at 550 to 570 mgd below capacity. In addition, Marina del Rey has had contractual rights to 0.97 mgd of treatment capacity at the HTP, which covers treatment of effluent generated by existing uses within Marina del Rey, and a contract for an additional 2.03 mgd of treatment capacity is currently in-place to accommodate future demand (inclusive of this project). Therefore, capacity is available at the HTP under current contracts. **Table 4.10-1-3, Cumulative Development**

Wastewater Generation, provides the estimated wastewater treatment demand that would be generated by related projects.

Table 4.10.1-3
Cumulative Development Wastewater Generation

Land Use	Size/Units	Generation Factor[1]	Average Daily Flow (Gallons)
Residential	8,235 du	250 gallons per unit	2,058,750.0
Restaurant	66,280 sf	100 gallons per 1,000 square feet	66.3
Hotel	450 rooms	150 gal/room	67,500.0
Commercial/Office	3,351,026 sf	100 gallons per 1,000 square feet	3,351.0
Commercial/Retail	519,248 sf	100 gallons per 1,000 square feet	519.2
Institutional/Community Services	105,000 sf	100 gallons per 1,000 square feet	105.0
Boat Dock/Storage	661 boats	n/a	-
Park	7,64 acres	n/a	-
Total			**2,130,291.5**

Source: Impact Sciences, November 2013
[1] *Generation factors used are from the Los Angeles County Wastewater Generation sheet.*

As shown in T**able 4.10.1-3**, related projects would generate approximately 2.13 mgd of wastewater that would require wastewater treatment. This would exceed the existing contracted treatment capacity at the HTP by 0.10 mgd. In order to safely treat the projected wastewater generated by related projects, the County of Los Angeles would need to acquire additional contracted treatment capacity at the HTP, which, as discussed above, has from 550 to 570 mgd of currently available capacity. As capacity exists to serve the proposed project and related projects, the combination of the proposed project with related projects would not require the construction of new wastewater treatment facilities. In addition, each future project is required to provide adequate capacity to convey sewage to a safe point of discharge and pay fees to connect to the sewage system. In this manner, the existing sewage collection and conveyance system would be upgraded to accommodate sewage created by the development of future projects.

Mitigation Measures:

None required.

Residual Impacts

Cumulative impacts would be less than significant.

4.10.2 Water

4.10.2.1 INTRODUCTION

This EIR section presents an overview of the existing water distribution system in the project site area. This section also includes a discussion of the cumulative impacts of the proposed project in conjunction with other related projects. Where impacts are identified, mitigation measures are recommended to reduce impacts to acceptable levels. This analysis is primarily based on information obtained from the Water Availability Study prepared by Breen Engineering, Inc., October 10, 2012. This study is included in **Appendix 4.10.2** of this EIR.

4.10.2.2 ENVIRONMENTAL SETTING

4.10.2.2.1 Los Angeles County Water Works District Number 29, Malibu

Marina del Rey is supplied water from Water Works District (WWD) No. 29, which is a purveyor for the Metropolitan Water District (MWD) of Southern California. WWD No. 29 is responsible for providing water to its customers while meeting all applicable federal and state water quality standards. The Los Angeles County Department of Public Works (LACDPW) operates and maintains the Marina del Rey water system for the Los Angeles County Department of Beaches and Harbors, via the Waterworks and Sewer Maintenance Division. The service area of WWD No. 29 includes Marina del Rey, the City of Malibu, and unincorporated territory within Topanga Canyon.

In accordance with the California Urban Water Management Act, as amended, WWD No. 29 prepared an Urban Water Management Plan. Malibu and the Marina del Rey Water System Urban Water Management Plan (UWMP) was approved in June 2011. The purpose of the UWMP is to assist water agencies to plan for future water supply and demand within their service areas. The UWMP notes that the commercial sector of the service area, which includes the proposed project site, is expected to have minimal growth over the next 20 years due to the built-out nature of the area.

The Marina del Rey Water System is a smaller system served directly off the transmission main delivering water to the Malibu System. Marina del Rey's service area encircles the Marina del Rey harbor, providing service to businesses as well as apartment and condominium complexes in the marina through approximately 300 service connections.

4.10.2.2.2 Metropolitan Water District of Southern California

WWD No. 29 purchases water from the West Basin Municipal Water District, which purchases water from the MWD. The MWD serves 26 member agencies. The MWD imports water from the Colorado River Aqueduct (CRA) and the State Water Project (SWP) in the Sacramento–San Joaquin Delta and distributes this water to its member agencies.

Based on projected growth, MWD expects that water demand in its service area will rise from a current demand of 3.6 million acre-feet per year (afy) to 4.8 million afy by 2020. To accommodate this projected growth, MWD developed an integrated resources program (IRP) in 1996. The IRP is a 25-year comprehensive water resources plan for Southern California and was last updated in 2003. The plan is a multifaceted approach towards the development and maintenance of reliable water supplies that are necessary to meet an increasing demand. The IRP proposes to combine water conservation, surface and groundwater storage, water transfers and exchanges, water recycling and water imports as a managed and integrated strategy to provide a stable and reliable source of water to its customers. The MWD's objective is to ensure reliability, affordability, quality, diversity, and adaptability of the regional water supply. Implementation of plans and programs identified in the IRP will allow the MWD to provide water to all the firm's wholesale water demands of its member agencies through 2025.

4.10.2.2.3 Marina del Rey Water Distribution System

Gravity storage for the Marina del Rey water system is provided at WWD No. 29's Sunset Mesa Reservoir site. This site is located northeast of the intersection of Pacific Coast Highway and Topanga Canyon. The reservoir maintains a storage capacity of 4 million gallons which can be used to meet domestic needs and a portion of the flows required for fire protection[1]. The balance of water necessary for fire protection is supplied through emergency interconnections with the City of Los Angeles Department of Water and Power via connections at Marquesas Way and Via Dolce and Mindanao Way and Lincoln Boulevard.

The existing water supply and infrastructure system serving the Parcel 44 site includes a 14-inch cement water main in Admiralty Way, and 8-inch cement water main in Bali Way, and a 10-inch cement water main in Mindanao Way. The existing Marina del Rey water system was originally designed in 1961–1962 to accommodate low density, two-story structures. As the Phase II development was completed in 2012 in the Marina, the County of Los Angeles Department of Beaches and Harbors (LADBH) implemented phased water system improvements. Implementation of the area-wide water system improvements

1 Los Angeles County Waterworks District 29 Malibu Office, Engineer Jonathan King, verbal communication November 12, 2013.

provided sufficient water service and water availability to the Parcel 44 site; therefore, no new water infrastructure is planned as part of the proposed project.[2]

4.10.2.2.4 Existing Water Consumption

Operation of the existing development located on the project site requires a total of 8,180 gallons per day (gpd) or 5.68 gallons per minute (gpm). A breakdown of the existing water demand on the project site is shown in **Table 4.10.2-1**.

Table 4.10.2-1
Existing Water Demand on the Project Site

Land Use	Units	Average Daily Flow Factor	Sewage ADF	Sewage PDF	Demand (gpd)	Demand (gpm)	Demand (afy)
Office	6	200 gal/1000 sf	2,944.8	7,362	8,180	5.68	9.2

Source: Breen Engineering, Inc., October 2012.
sf = square feet; gal = gallon; gpd = gallons per day; gpm = gallons per minute; afy = acre feet per year
ADF = Average Daily Flow; PDF = Peak Daily Flow

4.10.2.3 REGULATORY FRAMEWORK

4.10.2.3.1 Federal

The primary federal legislation concerning domestic water supply is the Safe Drinking Water Act (SDWA) of 1974. The SDWA provides the US Environmental Protection Agency (USEPA) with the authority to regulate water supplies. The SDWA required USEPA to set interim primary drinking water regulations that establish recommended maximum contamination levels (RMCLs) for each contaminant that may have an adverse effect on human health. Since promulgation of the National Primary Drinking Water Regulations (NPDWR), USEPA has developed additional drinking water quality standards for volatile organic chemicals, fluoride, surface water treatment, total coliform bacteria, lead, copper, synthetic organic contaminants, and inorganic contaminants. All domestic water supplies are required to meet these standards.

2 County of Los Angeles Department of Beaches and Harbors, Paul Wong, Special Projects Management, written communication September 23, 2013.

4.10.2.3.2 State

In addition to the water quality standards identified above, Title 20 (Sections 1604 and 1606) and Title 24 (Sections 2-5307 and 2-5352) of the California Administrative Code (CAC) establish efficiency standards (i.e., maximum flow rates) for all new showerheads, lavatory faucets, and sink faucets. These regulations also prohibit the sale of fixtures that do not comply with the current regulations; prohibit the installation of fixtures unless the manufacturer has certified compliance with the flow rate standards; and address pipe insulation requirements that can reduce water used before hot water reaches fixtures. Other applicable state water conservation laws include the Health and Safety Codes.

State Senate Bills (SB) 610 and 221 were adopted in 2001. SB 610 and 221 require lead agencies to obtain an assessment from the local water supplier to determine the sufficiency of the water supply for a proposed development. SB 610 applies at the time an EIR is prepared; SB 221 applies at the time a Tentative Tract Map or other related project actions are approved.

As defined in Public Resources Code 10910, a city or county determines whether the projected water demand associated with a proposed project was included as a part of the most recently adopted urban water management plan. If the water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, the water supply assessment for the project must include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry and multiple dry water years during a 20-year projection would meet the projected water demand associated with the proposed project, in addition to the water systems' existing and planned future uses.

4.10.2.4 IMPACT ANALYSIS

4.10.2.4.1 Thresholds of Significance

The County of Los Angeles includes thresholds of significance in its Initial Study checklist. In general, these thresholds are similar to the applicable thresholds listed in Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*. Where the thresholds differ it is noted below. Therefore, the proposed project would have a potentially significant impact with respect to available water supply if it would:

> *d) have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses.*

4.10.2.4.2 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.10.2-1: **The proposed project would have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses.**

Analysis:

Construction Impacts: Water would be used during demolition and construction primarily as a dust palliative and to moisten the fill dirt to achieve the required compaction during all grading and excavation activities. During construction, no residential water use would occur on the project site and it is expected that low volumes of water would be consumed for construction uses. The amount of water required for construction uses is anticipated to be less than what is currently used on-site making construction impacts less than significant.

Operation Impacts; Water System Improvements: As mentioned above, the water supply and infrastructure system serving the project site includes 14-inch cement water main in Admiralty Way, and 8-inch cement water main in Bali Way, and a 10-inch cement water main in Mindanao Way. As discussed, area wide improvements were recently completed in December 2012 to accommodate Phase II development in the marina. Therefore, no specific improvements are required as part of the proposed project. The proposed domestic water needs for the proposed project can be met through existing on-site water infrastructure. Preliminary review of proposed project by the County Fire Department indicates that the maximum required fire flow would be 2,000 gpm at 20-psi residual pressure for a 5-hour duration from public fire hydrants at the project site[3]. Calculations to determine the adequacy of the existing mains with the proposed project confirmed the mains have adequate pressure to accommodate the necessary fire flow.[4] Therefore, no upgrades to the existing water system would be necessary and impacts would be less than significant.

Operation Impacts; Water Supply: As shown in **Table 4.10.2-2, Proposed Project Water Demand**, the proposed project would require approximately 41,380 gpd, or about 45.5 afy. This represents a net increase of approximately 33,200 gpd, or 36.3 afy, over existing site use.

Water supply entitlements have been secured through WWD No. 29 and are adequate to serve existing uses as well as projected growth in Marina del Rey. The volume of water sold to WWD No. 29 in 2010 was 8,289 acre-feet (af), of which 7,620 af were distributed to uses within Marina del Rey. WWD No. 29

3 Water Availability Study Parcel 44, Breen Engineering 2012.

4 Water Availability Study Parcel 44, Breen Engineering, 2012.

purchases water from the West Basin Municipal Water District, which purchases water from the MWD. MWD includes adequate water resources in its IRP. Therefore, WWD No. 29 will be able to adequately supply the proposed project.

Table 4.10.2-2
Proposed Project Water Demand

Land Use	Area (sf)	Average Daily Flow Factor (gal/1000 sf)	Sewage ADF* (gpd)	Sewage PDF** (gpd)	Water Demand (gpd)	(gpm)	(afy)
Trader Joe's	13,625	100 gal/1,000 sf	1,362.5	3,406.3	3,784.7	0.9	4.2
Yacht Club	1,150	200 gal/1,000 sf	115.0	575.0	638.9	0.2	0.7
Boat Brokers Offices	3,911	100 gal/1,000 sf	391.1	977.8	1,086.4	0.3	1.2
West Marine	25,000	200 gal/1,000 sf	5,000.0	12,500.0	13,888.9	3.5	15.3
Community Room/Boaters Lounge	840	200 gal/1,000 sf	84.0	420.0	466.7	0.1	0.5
Retail	13,795	200 gal/1,000 sf	1,379.5	6,897.5	7,663.9	1.9	8.4
Restaurant	9,855	200 gal/1,000 sf	985.5	4,927.5	5,475.0	1.4	6.0
Offices	12,677	200 gal/1,000 sf	1,267.7	6,338.5	7,042.8	1.8	7.7
Boat Repair Offices	700	200 gal/1,000 sf	70.0	350.0	388.9	0.1	0.4
Boaters Bathroom/Laundry	1,700	200 gal/1,000 sf	170.0	850.0	944.4	0.2	1.0
				Total	41,380.6	10.3	45.5

Source: Breen Engineering, Inc., October 2012.
sf = square feet; gal = gallon; gpd = gallons per day; gpm = gallons per minute; afy = acres per year.
** Average Daily Flow, ** Peak Daily Flow*
*Please see **Appendix 4.10** for calculation worksheets.*

The proposed project will be required to meet the Los Angeles County Green Building Ordinance, which includes the County's Drought-Tolerant Landscaping Ordinance. In addition, as part of the project, the following features will be incorporated to reduce overall water demand:

> *The proposed project shall incorporate into the building plans water conservation measures as outlined in the following items:*
>
> - *Health and Safety Code Section 17921.3 requiring low-flow toilets and urinals;*
> - *Title 24, California Administrative Code, which establishes efficiency standards for shower heads, lavatory faucets and sink faucets, as well as requirements for pipe insulation, which can reduce water used before hot water reaches equipment or fixtures; and*
> - *Government Code Section 7800, which requires that lavatories in public facilities be equipped with self-closing faucets that limit the flow of hot water.*

With the above "low-impact" design measures, overall water usage would be reduced. Guidelines concerning drought-tolerant and native landscaping included in the County's Green Building Ordinance and the Drought-Tolerant Landscaping Ordinance will also reduce the proposed project's water demands. Regulations such as, at least 75 percent of the project's total landscaped area must be comprised of specified drought tolerant plants, will reduce the site's water usage and runoff. A supplementary measure to the ordinances referenced above, Government Code Section 7800, will further ensure limited personal excess use of water by installing self-regulated public faucets. In addition, mitigation is recommended that requires the proposed project to provide the County Department of Regional Planning with a letter from WWD No. 29 confirming their ability to serve the project. This letter shall be required prior to the issuance of grading, building or construction permits. With the addition of the above project features impacts related to water supply would be less than significant.

Mitigation Measures:

None required.

Residual Impacts

Project features would ensure the proposed project would be adequately served by the water provider. Impacts would be less than significant.

4.10.2.5 CUMULATIVE IMPACTS

4.10.2.5.1 Proposed Project and Other Related Projects

Entitlements for water have been secured and are adequate to serve existing uses and projected growth in Marina del Rey. **Table 4.10.2-3, Cumulative Development Water Demand**, provides estimates of the water demand that would be created by related projects using the generation factors discussed above.

Table 4.10.2-3
Cumulative Development Water Demand

Land Use	Size/Units	Generation Factor[1]	Sewage ADF (gpd)	Sewage PDF (gpd)	Water Demand (afy)
Residential	8,235 du	250 gallons per unit	2,058,750.0	5,146,875.0	6,405.8
Restaurant	66,280 sf	100 gallons per 1,000 sf	66.3	165.8	0.2
Hotel	450 rooms	150 gal/room	67,500.0	168,750.0	210.0
Commercial/Office	3,351,026 sf	100 gallons per 1,000 sf	3,351.0	8,377.5	10.4
Commercial/Retail	519,248 sf	100 gallons per 1,000 sf	519.2	1,298.0	1.6
Institutional/Community Services	105,000 sf	100 gallons per 1,000 sf	105.0	262.5	0.33
Boat Dock/Storage	661 boats	n/a	-		
Park	7,64 acres	n/a	-		
Total			**2,130,291.5**	**5,325,728.8**	**6,628.4**

Source: Impact Sciences, December 2012
[1] *Generation factors used are from the Los Angeles County Wastewater Generation sheet.*

As shown in **Table 4.10.2-3**, related projects would create demand for an estimated 6,628.4 afy of water. Combined with project demand, this would create a total water demand of 6,673.9 afy. As discussed above, WWD No. 29 distributed 7,620 af of water to uses within Marina del Rey in 2010. Thus new demand created by the proposed project and related projects would represent an increase of 87 percent over water currently distributed to users within Marina del Rey. This would constitute a substantial increase in water demand in the project area. The proposed project's contribution would constitute less than 1 percent (approximately 0.7 percent) of the increased demand, and would therefore not be cumulatively considerable.

As discussed above, MWD's IRP provides a long-range plan for addressing increased water demand in its service area and the growth described in **Table 4.10.2-3** is consistent with the Marina del Rey land use plan. In addition, each future project would be required to provide to the Los Angeles County Department of Regional Planning a letter from WWD No. 29 stating that it is able to provide water service to the project phase under consideration. Grading permits shall not be issued until such time that WWD No. 29 indicates that the distribution system and water supply are adequate to serve the project. Therefore impacts would not be cumulatively considerable.

Residual Impacts

Impacts would be less than significant.

4.10.3 Solid Waste

4.10.3.1 INTRODUCTION

This section provides a discussion of solid waste service systems that may be affected by the implementation of the proposed project. The existing solid waste systems that provide services to the project are identified and evaluated for potential impacts. The following analysis is based on information provided by the Los Angeles County Sanitation Department and the Los Angeles County Department of Public Works (LACDPW).

4.10.3.2 ENVIRONMENTAL SETTING

The LACDPW has the responsibility to develop plans and strategies to manage solid waste (including hazardous waste) generated in the County's unincorporated areas and to address the disposal needs of Los Angeles County as a whole. In the past, solid waste was simply collected and disposed of at landfills in the local vicinity. More recently, many jurisdictions, including the County of Los Angeles, have maintained that existing local landfill space may reach capacity in the near future. While solid waste (including hazardous waste) continues to be generated and the public expects it to be collected and disposed of, the public has paradoxically strongly opposed opening new facilities or expanding existing ones. Even with waste reduction and recycling efforts, many jurisdictions are having difficulty siting new landfills or alternative means of disposal to address the anticipated shortage.

Options to reduce the amount of waste disposed of in landfills have traditionally included curbside pickup of recyclable materials and separate processing of these materials at recycling facilities. Solid waste collection has become highly privatized in recent years and a number of companies have created sophisticated recycling facilities that can process and sort recyclables from other wastes. In this free-enterprise system, private industries now compete for contracts to collect and dispose of solid waste. After materials separation, these private haulers dispose of the remaining solid waste at whatever landfill they choose that can accept the materials. These facilities may be within the local geographic region, outside the County, or even outside the state. The LACDPW maintains that prudent public policy includes a balance of in-County and out-of-County disposal capacity to provide for the long-term disposal needs of the County. Without multiple options, the County would have little negotiating leverage against unfavorable pricing structures.

Landfills in the Los Angeles County area are nearing capacity; however, it is unlikely that all existing landfill space will reach capacity and that no new landfill space or disposal options will be made available. Because untreated solid waste is a public health risk (e.g., from disease), it will be necessary for

either local agencies or the state to intervene to assist with implementing new landfills and/or other disposal options. Discussion of such intervention is currently taking place at the state level.

Because of the difficulty in predicting what facilities private haulers will use, or predicting future waste disposal sites or methods, it was necessary in this Draft EIR to formulate a method to evaluate impacts on presently available landfills that are likely to serve the project site. Specifically, this Draft EIR section compares the solid waste generation of the proposed project with: (1) the capacity of the existing landfills operating within Los Angeles County that accept waste from unincorporated areas including the project site; (2) landfills located outside the County that are owned and operated by the Los Angeles County Sanitation District; and (3) capacity at landfills outside the County that is available based on existing agreements. This narrow threshold of analysis is considered a worst-case evaluation scenario. It acknowledges, but does not assume or consider other disposal options that are available to local private haulers.

4.10.3.3 REGULATORY FRAMEWORK

4.10.3.3.1 State

California Integrated Waste Management Act

In response to reduced landfill capacity, the State of California passed in 1989 the California Integrated Waste Management Act (CIWMA). This legislation (generally known by the name of the enacting bill "AB 939") requires cities and counties to reduce the amount of solid wastes entering existing landfills, through recycling, reuse and waste prevention efforts.

AB 939 requires every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction planned to meet mandatory state waste diversion goals of 25 percent by the year 1995, and 50 percent by the year 2000. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." Noncompliance with the goals and timelines set forth within the act can be severe, as the bill imposes fines up to $10,000 per day on jurisdictions not meeting these recycling and planning goals. In addition Assembly Bill 341 (AB 341) also requires mandatory commercial recycling for businesses that generate four cubic yards or more of solid waste per week. AB 341 went into effect July 2012 and establishes a 75 percent diversion rate for the year 2020 as a statewide goal.

AB 939 requires jurisdictions to utilize "integrated waste management"—a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The act establishes the following waste management hierarchy:

- *Source Reduction: "Source reduction" means any action that causes a net reduction in the generation of solid waste. "Source reduction" includes, but is not limited to, reducing the use of nonrecyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of yard waste generated, establishing garbage rate structures with incentives to reduce the amount of waste that generators produce, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic, and other materials. "Source reduction" does not include steps taken after the material becomes solid waste.* (California Public Resources Code, Sec. 40196)

- *Recycling: "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. "Recycling" does not include transformation.* (California Public Resources Code, Sec. 40180)

- *Composting: "Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or that are separated at a centralized facility. "Compost" includes vegetable, yard, and wood wastes that are not hazardous waste.* (California Public Resources Code, Sec. 40116)

- *Transformation: "Transformation" means incineration, pyrolysis, distillation, or biological conversion other than composting. "Transformation" does not include composting, gasification, or biomass conversion.* (California Public Resources Code, Sec. 40201)

- *Disposal: "Solid waste disposal" or "disposal" means the final deposition of solid wastes onto land, into the atmosphere, or into the waters of the state.* (California Public Resources Code, Sec. 40192)

California Integrated Waste Management Board Model Ordinance

Subsequent to the passage of CIWMA, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Reuse and Recycling Access Act of 1991 (Section 42900–42911 of the Public Resources Code) directs the California Integrated Waste Management Board (now the Department of Resources Recycling and Recovery, or CalRecycle) to draft a "model ordinance" for the provision of adequate areas for collecting and loading recyclable materials in development projects. If, by September 1, 1994, a local agency did not adopt its own ordinance based on the CalRecycle model, the CalRecycle model ordinance took effect for that local agency. The County of Los Angeles chose to use the CalRecycle model ordinance.

4.10.3.3.2 Local

County of Los Angeles Solid Waste Management Action Plan

In 1988, the County of Los Angeles Board of Supervisors approved the Los Angeles County Solid Waste Management Action Plan to provide long-range management of the solid waste generated within the County. This plan includes such approaches as source reduction, recycling and composting programs, household hazardous waste management programs and public education awareness programs. The plan concludes that land filling will remain an integral part of the waste management system and calls for the establishment of 50 years of in-County permitted landfill capacity, as well as the County's support for the development of disposal facilities out of the County.

County of Los Angeles Source Reduction and Recycling Element

The Source Reduction and Recycling Element (SRRE) was prepared as required by AB 939. It describes policies and programs implemented by the County for the County's unincorporated areas to achieve the state's mandates of 25, 50, 60, and 75 percent waste disposal reductions for the years 1995, 2000, 2015, and 2020, respectively. Per the Integrated Waste Management Act of 1989, the SRRE projects disposal capacity needs for a 15-year period. The current SRRE 15-year period commenced in 2006.

County of Los Angeles Non-Disposal Facility Element

AB 939 requires every city and county within the state to prepare and adopt a Non-Disposal Facility Element (NDFE) to identify all existing, proposed expansions of, and proposed new non-disposal facilities. These include source reduction and recycling facilities that are needed to implement the local jurisdiction's SRRE. Los Angeles County's NDFE identifies 20 existing materials recovery facilities/transfer stations, and nine proposed material recovery facilities as non-disposal facilities. In addition, the County's NDFE also identifies the utilization of four landfill facilities, operated by the County Sanitation Districts of Los Angeles County, for diversion of yard/green waste which is intended to be used as alternative daily cover at the landfills.

Future Solid Waste Management Conditions

Currently, most solid waste is disposed of in local landfills. In the future, the amount of waste diverted from landfills is expected to increase as capacity limitations occur and despite jurisdictions throughout the state achieving compliance with the provisions of AB 939. This diversion will increase the life expectancy of landfills, but not eliminate the need for new landfills. As growth occurs throughout

Southern California, new landfill capacity will be required and/or other waste disposal alternatives will require implementation.

Options that have been discussed include expanding existing landfills, developing new landfills locally, transferring solid waste out of the County or state by truck or rail, or the incineration of solid waste in co-generation plants that generate electricity. New and expanded landfills are expected to be approved as part of a comprehensive solid waste program.

As described above, the transfer of solid waste either out of the County, or state, is also an option. One landfill, which receives Los Angeles area waste by rail car, provides some long-term solid waste disposal for Los Angeles County. The Mesquite Regional Landfill in southern Imperial County is owned by the Sanitation Districts of Los Angeles County (Sanitation Districts). The operation of the site provides 100 years of disposal capacity for Los Angeles County. The Mesquite Regional Landfill is permitted to accept up to 20,000 tons of waste each day.[1]

Though some landfills are currently restricted to accept solid waste from a limited geographical area, the US Supreme Court has held that any restriction limiting inter-jurisdictional transfers to landfills willing to accept solid waste is unconstitutional because such restrictions infringe on the landfill operator's ability to actively participate in interstate commerce.[2] It is therefore likely that inter-jurisdictional transfers will increase as a method of managing solid waste.

Incineration facilities provide a dual function of disposing of solid waste and generating regional power supplies; their use may increase in the future as new plants are built.

Because the siting of future landfills, expansions of recycling efforts, and construction of co-generation plants at this time may be speculative, this EIR methodology will focus only on landfills occurring in Los Angeles County and/or those contracted to take waste from Los Angeles County.

---

1 Mesquite Regional Landfill, http://www.mrlf.org/index.php?pid=5, accessed November 27, 2012.

2 *Philadelphia v. New Jersey*, 437 U.S. 617 (1978).

4.10.3.3.3 Existing Solid Waste Generation

Statewide Solid Waste Generation

In the State of California, approximately 29.6 million tons of solid waste was disposed of in 2011.[3] Some of the solid waste stream was diverted from landfills through various source reduction, recycling, and re use efforts. The diversion rate in the state was estimated to be 65 percent in 2011.[4]

Regional Solid Waste Generation

A total of 881,556 tons of solid waste was collected within unincorporated Los Angeles County for the year 2011.[5] Some of the solid waste stream was diverted from landfills through various source reduction, recycling, and re-use efforts. The biennial review has not been conducted yet for years 2010 and 2011, but is estimated to be at 41.5 percent.[6] For the purpose of this EIR, the 50 percent diversion rate mandated by the CalRecycle will be used.

4.10.3.3.4 Parcel 44 Project

The proposed Parcel 44 Project site is currently developed with assorted commercial and office uses. As shown in **Table 4.10.3-1**, operation of the existing uses on the project site generates a total of 77.84 pounds per day, or 14.2 tons per year, of solid waste. These quantities represent a worst-case scenario for solid waste sent to landfills as information on the quantity diverted through recycling is not available.

---

3 CalRecycle, http://www.calrecycle.ca.gov/LGCentral/Reports/ReportViewer.aspx?ReportName=ReportEDRSAnnualWaste, accessed November 27, 2012.

4 CalRecycle, http://www.calrecycle.ca.gov/LGCentral/GoalMeasure/DisposalRate/Graphs/EstDiversion.htm, accessed November 27, 2012.

5 CalRecycle, http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=OriginJurisdictionIDs%3d274%26ReportYear%3d2011%26ReportName%3dReportEDRSJurisDisposalByFacility accessed November 27, 2012

6 CalRecycle Diversion Rate Statistics, http://www.calrecycle.ca.gov/LGCentral/Reports/jurisdiction/diversiondisposal.aspx, accessed November 27, 2012

Table 4.10.3-1
Parcel 44 Project – Existing Solid Waste Generation (No Recycling)

Land Use	Units	Quantity	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)
Commercial	sf	10,508	5 lbs/1,000 sf/day	52.54	9.6
Office	sf	4,216	6 lbs/1,000 sf/day	25.3	4.6
			Total:	**77.87**	**14.2**

Source: Impact Sciences, Inc., November, 2012.
sf = square feet; lbs = pounds.
[1] *Commercial rates based on Co. of Los Angeles Dept. of Regional Planning, Vesting Tentative Tract No. 47905, etc. 1992. Office rates based on Stevenson Ranch Draft EIR (Phase IV), LA County, 1992*

4.10.3.3.5 Existing Solid Waste Collection

Commercial and industrial trash collection in unincorporated Los Angeles County, including the Marina del Rey, area is handled by private haulers. Once collected, the waste may be taken to any landfill that is willing to accept it.

4.10.3.3.6 Existing Solid Waste Disposal

Four types of solid waste facilities occur within Los Angeles County: (1) Class III landfills; (2) Unclassified landfills; (3) transformation facilities; and (4) materials recovery facilities (MRF). A Class III landfill is a facility that accepts household waste and where site characteristics and containment structures isolate non-hazardous solid waste from the waters of the state. Unclassified landfills are facilities that accept materials such as soil, concrete, asphalt and other construction and demolition debris. Transformation facilities involve the incineration of municipal solid waste in order to generate energy. MRFs recover recyclable materials from other waste to provide for the efficient transfer of the residual waste to permitted landfills for proper disposal.

The *Los Angeles County Integrated Waste Management Plan 2011 Annual Report*, prepared by the Los Angeles County Department of Public Works, indicates that residents and businesses in Los Angeles County (both incorporated cities and unincorporated areas) disposed of approximately 8.22 million tons of solid waste in landfills in and out of Los Angeles County and at waste-to-energy facilities in 2011. Of this amount, approximately 6.3 million tons were disposed of at Class III landfills within Los Angeles County; approximately 1.9 million tons were exported to out-of-County Class III landfills; approximately

71,854 tons were disposed of in Unclassified (Inert) landfills; and approximately 524,021 tons were disposed of at transformation facilities.[7]

The estimated remaining capacity of permitted Class III landfills at the end of 2011 in Los Angeles County was approximately 127 million tons.[8] Based on the 2011 average disposal rate of 28,187 tons per day (six days a week), including waste being imported to the County, local permitted Class III landfills will be at capacity in the year 2025. However, ultimate landfill capacity would be determined by several factors, including (1) expiration of various permits (e.g., Land Use Permits, Waste Discharge Requirements Permits, Solid Waste Facilities Permits, and air quality permits); (2) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; and (3) operational constraints.

The capacities of unclassified landfills are affected by these same factors, but they are not affected to the same extent. The total estimated remaining capacity of inert landfills at the end of 2011 in Los Angeles County was approximately 64.2 million tons.[9][10] Based on a 2011 average disposal rate of 357 tons of inert waste per day (six days per week), there is remaining capacity for approximately 576 years.

Currently most solid waste collected within Los Angeles County by private haulers is disposed of within the County. However, it is likely that independent solid waste haulers will continue to take solid wastes to facilities outside the County. Greater inter-County transfer of solid waste may occur in the near future if landfills outside of Los Angeles County provide greater economic advantages to haulers, or if landfills within the County reach capacity.

4.10.3.3.7 Hazardous Materials Collection and Disposal

Certain uses and activities generate hazardous waste that cannot be disposed of at Class III or unclassified landfills. The California Hazardous Waste Control Law (Health and Safety Code Section 25100 through Section 25249) requires that these hazardous materials be transported and disposed of or treated at a licensed facility. The disposal and transport of hazardous materials is complicated by the fact that there are many forms of hazardous materials. Operations that use hazardous materials and/or generate hazardous waste are responsible for the disposal of the waste.

---

7 County of Los Angeles Department of Public Works, *Los Angeles County Integrated Waste Management Plan 2011 Annual Report*, 2012.

8 County of Los Angeles DPW, *Los Angeles County Integrated Waste Management Plan 2011 Annual Report*, 2012.

9 County of Los Angeles DPW, *Los Angeles County Integrated Waste Management Plan 2011 Annual Report*, 2012.

10 According to CalRecycle inert waste is a "A category of waste that includes concrete, asphalt, asphalt roofing, aggregate, brick, rubble, and soil..

LACDPW has indicated that existing hazardous waste management facilities within the County are inadequate to meet the waste currently generated within Los Angeles County. However, there are several Class I and II landfills that exist in Southern and Central California that can accept hazardous waste generated within the County. Each is identified briefly below.

- Laidlaw Landfill, Buttonwillow, Kern County, California: This facility accepts hazardous and non-hazardous waste and is permitted as a Class I landfill. The facility has no restrictions for the amount of waste that can be accepted on a daily basis.

- Kettleman Hills Landfill, Kettleman City, Kings County, California: This is a Class I permitted landfill that accepts hazardous and non-hazardous waste with no capacity restrictions.

- McKittrick Waste Treatment Site, McKittrick, Kern County, California: This facility is a Class II permitted landfill that accepts hazardous and non-hazardous waste. The facility has a capacity restriction of 412 cubic meters daily.

As discussed above, Los Angeles County has prepared a Household Hazardous Waste Element (HHWE) to provide for management of household hazardous waste generated by the residents within its jurisdiction.

4.10.3.4 IMPACT ANALYSIS

4.10.3.4.1 Thresholds of Significance

The County of Los Angeles Department of Regional Planning has not adopted County-specific significance thresholds. Based on Appendix G of the most recent update of the *California Environmental Quality Act (CEQA) Guidelines*, impacts related to solid waste service are considered less than significant if the project would:

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

The Initial Study determined that the project would result in less than significant impacts in regard to the thresholds listed below. Therefore these thresholds will not be discussed further in this document. The Initial Study has been attached to this document as **Appendix 1.0**.

The project would:

> *b) Comply with federal, state, and local statutes and regulations related to solid waste.*

4.10.3.4.2 Analysis, Mitigation Measures, and Residual Impacts

Impact 4.10.3-1 **The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.**

As proposed, the project would require the removal of the existing structures, and parking facilities located on the project site. Demolition of existing uses and subsequent construction activities would generate solid waste.

A pre-demolition assessment of the project site found asbestos containing materials (ACM) and lead-based paints (LBPs) in the existing structures that will need to be removed prior to demolition.[11, 12] These studies are included in **Appendix 4.10.3** of this Draft EIR. All ACM waste will first be abated and properly disposed of by a licensed and Cal/OSHA registered asbestos abatement contractor registered in accordance with Cal/OSHA regulation 1529.[13] Although the LBPs would not need to be removed prior to demolition, all LBPs would have to be removed and disposed of by trained personnel in accordance with all applicable federal, state, and local regulations.

Waste materials generated during construction and operation are expected to be typical construction debris, including concrete, stucco, asphalt, rocks, building materials, wood, paper, glass, plastic, metals, cardboard, food waste, and other inert wastes (i.e., wastes that are not likely to produce leachates of environmental concern), and green wastes.

On January 4, 2005, Los Angeles County adopted an amendment to Title 20, Utilities, of the Los Angeles County Code, to add Chapter 20.87, Construction and Demolition Debris Recycling, to provide for the recycling and reuse of construction and demolition debris in the unincorporated areas of the County of Los Angeles. The proposed project would comply with this amendment. The project proponent is required to prepare a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. Reports would be submitted to the Los Angeles County Environmental Programs Division for review and approval.

Waste generated during demolition and construction would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities generally within Los Angeles County. It is anticipated that demolition debris will be trucked from the site to one of three locations depending on the type of material. It is anticipated that trash and wood would be delivered to

---

11 Andersen Environmental, Limited Lead-Based Paint Inspection Report, August 2012.

12 Andersen Environmental, Pre-Demolition Asbestos Assessment Report, August 2012.

13 http://www.dir.ca.gov/dosh/dosh_publications/ConstGuideOnline.pdf, accessed May 29, 2013

the Downtown Diversion facility located in Los Angeles, while it is anticipated that asphalt would be delivered to the Lovco crushing facility in Wilmington. Moreover, it is anticipated that hazardous materials would be disposed of at the Kettleman facility in Kings County. Given the sufficiency of available capacity, the disposal of demolition and construction debris would not result in impacts that are considered significant. No mitigation is proposed or is required.

Operation Impacts; Solid Waste Generation and Disposal: As shown in **Tables 4.10.3-1** and **4.10.3-2**, the proposed project would generate a net increase in solid waste generation over existing uses of approximately 354.81 pounds per day (0.18 tons per day), or about 64.76 tons per year. These quantities represent a worst-case scenario, with no recycling activities in place. Should recycling occur in accordance with current state law, the project would generate a total of approximately 32 tons per year of solid waste per year of solid waste (a 50 percent reduction). Should the project include a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables) the project would meet at least the minimum recycling level established by Los Angeles County and would be required to comply with the requirements of AB 341 which requires mandatory recycling.

Table 4.10.3-2
Proposed Project Solid Waste Generation (No Recycling)

Land Use	Units	Quantity	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)
Commercial	sf	66,665	5 lbs/1,000 sf/day	333.33	60.83
Offices	sf	16,558	6 lbs/1,000 sf/day	99.35	18.13
Subtotal:				**432.68**	**78.96**
Existing Uses				77.87	14.2
Total:				**354.81**	**64.76**

Source: Impact Sciences, Inc., November 2013.
sf = square feet.
[1] *Generation factor provided by the solid waste daily generation rates in tons per year are derived from CalRecycle.ca.gov. Commercial Sector: Estimated Solid Waste Generation and Disposal Rates*

The County of Los Angeles identifies landfill capacity in 15-year planning periods.[14] As discussed above, this analysis of this Draft EIR section compares the solid waste generation of the proposed project with: (1) the capacity of the existing landfills operating within Los Angeles County that accept waste from unincorporated areas including the project site); (2) landfills located outside the County that are owned

14 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2011 Annual Report*, 2012.

and operated by the Los Angeles County Sanitation District; and (3) capacity at landfills outside the County that is available based on existing agreements. This narrow threshold analysis (i.e., this analysis does not consider the allowed transfer of solid waste to landfills outside of County owned landfills or landfills out of state) is considered a "worst-case" evaluation scenario. As discussed above, the estimated remaining capacity of permitted Class III landfills at the end of 2011 in Los Angeles County was approximately 127 million tons. Further, the Kettleman Landfill, located outside the County has 100 years of capacity available to Los Angeles County based on existing agreements. The proposed project (assuming no diversion) would add 74.63 tons of solid waste to existing landfills annually. As existing capacity exists within Los Angeles County and based on existing agreements outside the County, the project would be served by a landfill with sufficient capacity. Therefore, impacts would be less than significant.

Although impacts were determined to be less than significant, and no mitigation measures are necessary, in order to reduce the amount of solid waste created by the proposed project, mitigation measures are recommended to reduce the amount of project-generated solid waste disposed of at County landfills. This mitigation will ensure that impacts related to solid waste disposal will continue to be less than significant.

Hazardous waste generation and disposal during project operation will be handled and disposed of in accordance with all appropriate state and federal laws. Because of the many laws and regulations associated with the disposal of hazardous waste, it would have to be determined at the time of disposal where any certain hazardous waste would be taken. At this time, hazardous wastes cannot be disposed of within Los Angeles County. However, hazardous debris generated during construction and operation can be accommodated by the permitted Class I and II landfills currently in operation within southern and central California, and no significant impact to hazardous waste disposal facilities are expected as a result of the proposed project.

Mitigation Measures

4.10.3-1: The proposed project shall comply with Title 20, Chapter 20.87, of the Los Angeles County Code, Construction, and Demolition Debris Recycling. The project proponent shall also provide a Construction and Demolition Debris Recycling and Reuse Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. The Construction and Demolition Debris Recycling and Reuse Plan shall be provided to the County of Los Angeles Department of Public Works for review and approval, prior to the issuance of the grading permit.

4.10.3-2: To reduce the volume of solid and hazardous waste generated by the operation of the project, a solid waste management plan shall be developed by the project applicant. This plan shall be reviewed and approved by the County of Los Angeles Health Department. The plan shall identify methods to promote recycling and re-use of materials, as well as safe disposal consistent with the policies and programs contained within the County of Los Angeles Source Reduction and Recycling Element. Methods shall include locating recycling bins in proximity to dumpsters used by future on-site customers and business operators.

Residual Impacts

Impacts would be less than significant.

4.10.3.5 CUMULATIVE IMPACTS

The County of Los Angeles identifies landfill capacity in 15-year planning periods and anticipates sufficient capacity through the year 2015.[15] Further, the County's *Countywide Integrated Waste Management Plan 2012* Annual Report includes strategies for maintaining adequate disposal capacity through 2027 and to ensure that current diversion rates are met while continuing to increase the Countywide diversion rate to guarantee that adequate disposal capacity is available in future years.[16] As discussed above, several landfills within the County have sufficient capacity to serve the County's anticipated waste disposal needs; in addition, the County has an agreement with the Kettleman Landfill, which has identified 100 years of capacity available to Los Angeles County. **Table 4.10.3-3, Cumulative Development Solid Waste Generation Estimate**, shows the projected daily and annual solid waste disposal for related projects. As for the proposed project, the waste disposal amounts shown in **Table 4.10.3-3** do not reflect any diversion of solid waste by recycling programs, and therefore represent a worst-case scenario. However, each project would be required to provide adequate areas for collecting and loading recyclable materials in accordance with the County's model ordinance to reduce the volume of solid waste entering landfills

As discussed above, the estimated remaining capacity of permitted Class III landfills at the end of 2011 in Los Angeles County was approximately 127 million tons. Further, the Kettleman Landfill, located outside the County, has 100 years of capacity available to Los Angeles County based on existing agreements.

---

15 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2011 Annual Report*, 2012.

16 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2012 Annual Report*, 2014.

However, solid waste facilities are a finite resource and existing hazardous waste management facilities in the County are inadequate. Therefore, the cumulative increase in solid and hazardous waste generation would cause a significant impact unless additional landfill space or other disposal alternatives are approved.

Table 4.10.3-3
Cumulative Development Solid Waste Generation Estimate

Land Use	Size/Units	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)
Residential	8,235 du	12.23/unit/day	100,714.1	18,380.3
Restaurant	66,280 sf	0.005 lb/sf/day	331.4	60.5
Hotel	450 rooms	2 lbs/room/day	900.0	164.3
Commercial/Office	3,351,026 sf	6 lbs/1000 sf/day	20,106.2	3,669.4
Commercial/Retail	519,248 sf	5 lbs/1000 sf/day	2,596.2	473.8
Institutional/Community Services	105,000 sf	6 lbs/1000 sf/day	630.6	115.1
Total			**125,278.5**	**22,863.4**

Source: Impact Sciences, Inc. November 2013.

[1] *Solid waste daily generation rates provide by CalRecycle.ca.gov.*

Mitigation Measures

There are no cumulative mitigation measures known to be available that would mitigate significant impacts to a level of insignificance.

Residual Impacts

Impacts would be cumulatively considerable.

5.0 ALTERNATIVES

5.0.1 INTRODUCTION

This section of the Environmental Impact Report (EIR) provides a comparative analysis of the merits of alternatives to the proposed project pursuant to Section 15126.6 of the *California Environmental Quality Act (CEQA) Guidelines*, as amended. The purpose of the alternatives analysis is to explain potentially feasible ways to avoid or minimize significant effects of the project. According to the *State CEQA Guidelines*, the EIR need only examine in detail those alternatives that could feasibly meet most of the basic objectives of the project. When addressing feasibility, the *State CEQA Guidelines* Section 15126.6 states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to alternative sites." The *State CEQA Guidelines* also specify that the alternatives discussion should not be remote or speculative, and need not be presented in the same level of detail as the assessment of the project.

Therefore, based on the *State CEQA Guidelines*, several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of analytical detail that should be provided for each alternative. These factors include (1) the nature of the significant impacts of the project, (2) the ability of alternatives to avoid or lessen the significant impacts associated with the project, (3) the ability of the alternatives to meet the objectives of the project, and (4) the feasibility of the alternatives. These factors would be unique for each project.

5.0.1.1 Project Objectives

As set forth in **Section 3.0**, the applicant proposes to redevelop uses on the project site in order to meet the following objectives:

Project Objectives:

- To create a vibrant, marine-oriented retail experience for the visiting public, as well as, provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way;
- To provide high quality, visitor-serving restaurants, retail and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the Local Coastal Program (LCP);
- To improve the coastal recreational opportunities for the visiting public by greatly enhancing the public's access to and passive recreational use of the landside portions of the site;

- To provide marine-related retail space and accommodate the boating supply needs of boaters throughout the marina;
- To provide retail space for a Trader Joe's (or similar) specialty market and allow for the convenient sale of food and beverage for visitors, Burton Chase Park users, and boaters, as well as, the greater Marina del Rey community;
- To improve boater amenities on the project site by providing boater related uses such as a yacht club, boat repair shop, and boat storage.
- To design buildings which are attractive on all sides and from every vista;
- To provide safe, convenient pedestrian access from Admiralty Way, Mindanao Way and Bali Way;
- To increase and improve the parcel's view corridors to the Marina waters;
- To provide an improved and safer bicycle path travel through the site via realignment of the existing bike path on the site;
- To provide bicycle racks convenient to visitors using the bike path;
- To provide improved fire department access to the site and marina;
- To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan) of the certified Marina del Rey Land Use.

5.0.2 SELECTION OF ALTERNATIVES FOR ANALYSIS

According to the *State CEQA Guidelines*, the discussion of alternatives should focus on alternatives to a project or its location that can feasibly avoid or substantially lessen the significant effects of the project. The *State CEQA Guidelines* indicate that the range of alternatives included in this discussion should be sufficient to allow decision makers a reasoned choice. The alternative discussion should provide decision makers with an understanding of the merits and disadvantages of these alternatives.

Section 4.0, Environmental Impact Analysis, of this EIR concludes that proposed project implementation would result in significant and unavoidable environmental impacts. These impacts include short-term noise and groundborne vibration impacts during construction; solid waste project operations cumulative impacts and long-term traffic impacts during operation.

In response to these impacts, the Lead Agency identified and considered several alternatives to the proposed project to determine if these alternatives could avoid or substantially lessen these significant impacts. These alternatives included the no-project alternative, a reduced density alternative and mixed use (retail with residential) alternative.

5.0.2.1 Alternatives considered but not evaluated in detail

Section 15126.6(c) of the *State CEQA Guidelines* states that an EIR should briefly describe the rationale for selecting the alternatives to be discussed and the reasons for eliminating alternatives from detailed consideration in an EIR. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is failure to meet most of the basic project objectives, infeasibility, or inability to avoid or substantially reduce significant environmental impacts. Provided below are the reasons for not providing detailed evaluation of some of the alternatives initially developed by the Lead Agency.

Alternative Sites

The proposed project consists of the redevelopment of the Parcel 44 site. Specifically, the objectives of the project focus on the redevelopment of this site (parcel 44) and the creation of a vibrant marina-serving project. The ability of the applicant to find and purchase an alternative site, located in the marina that is available for redevelopment is considered speculative. In addition, the development of an alternative site may not be able to meet the project objectives in that it may not be located in an area with a waterfront promenade. Lastly, the development of the same uses at a different location would likely result in similar construction related noise and operational traffic impacts (due to existing traffic volumes in the marina and traffic generated by the proposed project). Thus, the selection of an alternative site may not avoid significant impacts.

As indicated in *State CEQA Guidelines* Section 15126.6(c) "among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are (1) failure to meet most of the project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts." As discussed above, the relocation of the project to an alternative site would not be feasible because obtaining an alternative site that meets the project objectives is considered speculative, and because development on an alternative site would not necessarily avoid or substantially lessen any of the significant effects of the project. Therefore, this alternative has been eliminated from detailed consideration.

5.0.3 PROJECT ALTERNATIVES

Section 4.0, Environmental Impact Analysis, determined that implementation of the proposed project would result in the following significant and unavoidable impacts:

- Short-term project-level construction impacts related to noise
- Short-term project-level construction impacts related to vibration
- Cumulative project operation impacts to solid waste

- Project level impacts at seven intersections
- Cumulative traffic related impacts

Please refer to **Section 1.0, Executive Summary,** for a complete list of all project impacts, cumulative impacts, and mitigation measures related to the proposed project.

Based on considerations of avoiding or substantially reducing significant impacts associated with the proposed project, as well as consideration of the basic objectives of the project, public comments received in response to the Notice of Preparation (NOP), discussions with County staff, the public, and other public agencies, the following three alternatives to the proposed project were selected for analysis:

- Alternative 1: No Project/No Development Alternative
- Alternative 2: Reduced Density Alternative
- Alternative 3: Mixed Use Alternative

5.0.3.1 Alternative 1 – No Project/No Development

Under *State CEQA Guidelines* Section 15126.6(e)(3)(B), the No Project Alternative analysis may involve two separate evaluations. The first involves analysis of a No Project Alternative that compares the proposed project's significant impacts to the existing development on the project site No Project/No Development Alternative). The second No Project Alternative analysis evaluates the consequences of foreseeable development if the proposed project is not approved. Under this analysis, if disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "No Project" (i.e., No Project/Foreseeable Development) consequence should be discussed. Although it is foreseeable that another proposal for development of the site would occur in the future if the proposed project were not approved, however, the physical characteristics of such a future development cannot be known at this time. Consequently, any discussion of a No Project/Foreseeable Development alternative would be purely speculative. CEQA does not require speculative analysis.[1] As defined in this EIR, this foreseeable development scenario would be the continuation of the existing uses on the project site. The rest of this section only analyzes the No Project/No Development Alternative.

Visual Resources

Under the No Project/No Development Alternative, the project site would continue operation of the existing condition. The seven existing structures on the site in use as office space for boat brokers, a boat

1 *State CEQA Guidelines* Section 15145

repair shop, and a yacht club would remain in operation. The visual quality of the project site would remain as is, views of, from and through the project site would remain unaffected, and no new shading or shadow impacts would result. As such, impacts to visual resources would be reduced when compared to the proposed project. However, no significant and unavoidable impacts to visual resources were assessed to occur at the project or cumulative level as a result of the development of the proposed project.

The No Project/No Development Alternative would not improve the current visual or aesthetic character of the project site, which is a key objective of the proposed project. Further, this Alternative does not meet several other project objectives such as creating a vibrant marine-oriented retail experience and improved public access through development of an expansive waterfront promenade. This alternative is not consistent with the stated goals of the Marina del Rey Local Coastal Program (LCP) that call for a transition of existing Phase 1 uses to a more contemporary attraction. In particular, the LCP encourages redevelopment of aging sites (such as the project site) with new attractive uses. Such a change would not occur with No Project/No Development Alternative as the existing uses would remain on the site. Therefore, the proposed project is considered to be superior to the No Project/No Development Alternative when considering impacts to the visual resources environment.

Air Quality

Under the No Project/No Development Alternative, the project site would continue operation of the existing condition. Under this alternative, site grading, excavation, or construction activities would not occur. Therefore, no new emissions would occur. Operational emissions generated under existing conditions are shown below in **Table 5.0-1.** Although no significant air quality impacts were identified, air quality impacts under the No Project/No Development Alternative would be less than those associated with implementation of the proposed project, as shown in **Table 4.2-7**. The No Project/No Development Alternative would be superior to the proposed project in terms of project and cumulative impacts to air quality environment.

Biota

Under the No Project/No Development Alternative, no changes in site characteristics are proposed. The seven existing structures on the site in use as office space for boat brokers, a boat repair shop, and a yacht club would remain in operation. As described above, the project site is currently paved with surface parking lots and developed with commercial buildings. Ornamental landscaping is located on the project site, but there is no natural or native plant life located on the project site. No special status animals, plants, habitats, wetlands regulated by the state of federal government or defined wildlife movement corridors occur on the project site.

Table 5.0-1
No Project/No Development Alternative Operational Emissions

	Emissions in Pounds per Day					
Emissions Source	**VOC**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
No Project Alternative						
Area/Stationary Sources	0.39	0.03	0.02	0.00	0.00	0.00
Mobile Sources	2.46	5.42	23.71	0.04	2.67	0.78
Total pounds per day:	**2.85**	**5.45**	**4**	**4**	**2.67**	**0.78**
SCAQMD Threshold:	55	55	550	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc., (2013). Emissions calculations are provided in ***Appendix 4.2****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.
VOC = volatile organic compounds; NOx = oxides of nitrogen; CO = carbon monoxide; SOx = sulfur oxides.
PM10 = respirable particulate matter; PM2.5 = fine particulate matter; SCAQMD = South Coast Air Quality Monitoring District.

There are no significant impacts to either the terrestrial or marine environments that occur on the project site or in the surrounding natural habitat from the proposed project. Given that the No Project/No Development Alternative would not alter existing site conditions, no significant impacts to the biological resources environment are anticipated.

Due to the reduced development intensity, secondary project impacts to adjacent biological resources under this alternative would be incrementally reduced. Therefore, the No Project/No Development Alternative would be comparable to the proposed project in terms of impacts to biological resources.

Geotechnical and Soil Resources

Under the No Project/No Development Alternative, existing conditions on the project site would not be altered. As such, no disturbances would occur to geotechnical and soil resources on the project site.

The proposed project determined no significant impacts to either the geotechnical or soil resources environments would occur. Given that the No Project/No Development Alternative would not alter existing site conditions, no significant impacts to the geotechnical and soil resources environments are anticipated. Therefore, the No Project/No Development Alternative would be comparable to the proposed project in terms of impacts to the geotechnical and soil resources environments.

Greenhouse Gas Emissions

Under the No Project/No Development Alternative, the project site would continue operation of the existing condition; site grading, excavation, or construction activities would not occur. Therefore, no new

greenhouse gas emissions would occur. Operational emissions generated under existing conditions are shown below in **Table 5.0-2.** Operational impacts associated with the intensified uses proposed on the project site would also not occur. Although no significant greenhouse gas emissions impacts were identified; impacts under the No Project/No Development Alternative would be less than those associated with implementation of the proposed project as shown in **Table 4.5-4**. The No Project/No Development Alternative would be superior to the proposed project in terms of greenhouse gas emissions.

Table 5.0-2
No Project/No Development Alternative Estimated Operational GHG Emissions

Source	GHG Emissions (Metric Tons CO_2e/year)
Energy	67
Mobile Sources	487
Waste	11
Water	11
Total GHG Emission	**576**
SCAQMD Threshold	**3,000**
Exceeds Threshold?	**NO**

*Source: Impact Sciences, Inc. (2013). Emission calculations are provided in **Appendix 4.2**.*
Note: Totals in table may not appear to add exactly due to rounding.
GHG = greenhouse gas; CO_2e = carbon dioxide equivalents.

Hydrology and Drainage

Under the No Project/No Development Alternative, existing conditions on the project site would not be altered. The seven existing structures on the site in use as office space for boat brokers, a boat repair shop, and a yacht club would remain in operation. The proposed project defined no significant impacts to either the hydrology or drainage environments as similar amounts of runoff were calculated. Given that the No Project/No Development Alternative would not alter existing site conditions, no significant impacts to the hydrology and drainage environments are anticipated. Therefore, the No Project/No Development Alternative would be comparable to the proposed project in terms of impacts to the hydrology and drainage environments.

Noise

Under the No Project/No Development Alternative, existing conditions on the project site would not be altered. The seven existing structures on the site in use as office space for boat brokers, a boat repair shop, and a yacht club would remain in operation.

Under the No Project/No Development Alternative, site grading, excavation, or construction activities would not occur. Therefore, significant construction noise impacts associated with the proposed project would not occur with the No Project/No Development Alternative. As such, significant and unavoidable project noise impacts associated with construction of the proposed project would be avoided with implementation of this alternative.

Noise impacts with operation of the No Project/No Development Alternative would be incrementally less than those associated with implementation of the proposed project due to a reduced development intensity and reductions in projected traffic demand. Therefore, the No Project/No Development Alternative would be superior to the proposed project in terms of project impacts on the noise environment.

Public Services (Fire Protection and Police Protection)

Under the No Project/No Development Alternative, the existing uses on Parcel 44 would continue to be serviced by the existing fire and police service providers. No population increases would result from implementation of this project alternative; as such, no increase in demand for these public services would occur from the No Project/No Development Alternative. As no significant impacts related to police and fire protection were found to occur with the proposed project, impacts associated with the No Project/No Development Alternative would be similar to the proposed project in terms of impacts.

Public Utilities (Water Service, Sewer Service and Solid Waste Service)

Under the No Project/No Development Alternative, the existing uses on Parcel 44 would continue to be serviced by the existing water, sewer, and solid waste service providers. No population increases would result from implementation of this project alternative; as such, no increase in demand for these public utility services would occur from the No Project/No Development Alternative. However, County capacity at landfills will be in a deficit as compared to demand in upcoming years. Therefore, significant and unavoidable project level and cumulative level solid waste impacts would not be avoided if this Alternative was adopted as opposed to the proposed project.

Traffic/Access

Under the No Project/No Development Alternative, existing uses on Parcel 44 would not be altered. The No Project alternative would result in the elimination of those significant project impacts associated with the traffic environment. No population increases or decreases would result from implementation of this project alternative; as such, no increase or decrease in traffic levels and parking demand would occur.

Given that impacts associated with the traffic environment under the No Project/No Development Alternative would be less than those associated with implementation of the proposed project and that significant traffic impacts would be eliminated, the No Project Alternative would be superior to the proposed project in terms of project and cumulative impacts to traffic environment.

This Alternative, however, does not meet project objectives (as described below) and is not consistent with land planning goals defined in the Marina del Rey LCP that promote parking facilities with entrances in several locations for easy access to appropriately accommodate the visitors and boaters and improve public pedestrian access to the waterfront, nor is it consistent with the LCP goals to redevelop older Phase I projects.

Relationship of Alternative 1 to Project Objectives

This alternative would not meet the following objectives for the proposed project:

Project Objectives:

- To create a vibrant, marine-oriented retail experience for the visiting public, as well as provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way.
- To provide high quality, visitor-serving restaurants, retail, and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP.
- To improve the coastal recreational opportunities for the visiting public by greatly enhancing the public's access to and passive recreational use of the landside portions of the site.
- To provide retail space for a Trader Joe's (or similar) specialty market and allow for the convenient sale of food and beverage for visitors, Burton Chase Park users, and boaters as well as the greater Marina del Rey community.
- To improve boater amenities on the project site by providing boater related uses such as a yacht club, boat repair shop, boat storage, and boater bathrooms.
- To design buildings which are attractive on all sides and from every vista.

- To provide safe, convenient pedestrian access from Admiralty Way, Mindanao Way, and Bali Way.
- To increase and improve the parcel's view corridors to the Marina waters.
- To provide an improved and safer bicycle travel through the site via realignment of the existing bike path on the site.
- To provide bicycle racks convenient to visitors using the bike path.
- To provide improved fire department access to the site and marina.
- To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan) of the certified Marina del Rey Land Use.

Table 5-0-3 Comparison of the Proposed Project to the No Project/No Development Alternative, shows how project objectives would or would not be met.

Table 5.0-3
Comparison of the Proposed Project to the No Project/No Development Alternative

Objective	Consistency
To create a vibrant, marine-oriented retail experience for the visiting public, as well as provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way	The No Project/No Development Alternative would not meet this objective. Under the No Project/No Development Alternative, no improvements would be made to the site. Public access and the waterfront would not be improved. The bike path would not be realigned.
To provide high quality, visitor-serving restaurants, retail, and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP	The No Project/No Development Alternative would not meet this objective. Under the No Project/No Development Alternative, no high-quality visitor serving restaurants or retail would be located on the site. Pedestrian access to the waterfront would not be enhanced.
To improve the coastal recreational opportunities for the visiting public by greatly enhancing the public's access to and passive recreational use of the landside portions of the site	The No Project/No Development Alternative would not meet this objective. Access to the recreational uses on the landside portion of the site would not be enhanced under the No Project/No Development Alternative.
To provide marine-related retail space and accommodate the boating supply needs of boaters throughout the marina	The No Project/No Development Alternative would partially meet this objective. The existing boater serving uses would be maintained on the site; however, no retail space would be provided and improvements to the outdated uses would not be made.
To provide retail space for a Trader Joe's (or similar) specialty market and allow for the convenient sale of food and beverage for visitors, Burton Chase Park users, and boaters as well as the greater Marina del Rey community	The No Project/No Development Alternative would not meet this objective. Under the No Project/No Development Alternative, space for a specialty market would not occur.
To improve boater amenities on the project site by providing boater related uses such as a yacht club, boat repair shop, boat storage, and boater bathrooms	The No Project/No Development Alternative would not meet this objective. Under the No Project/No Development Alternative, boater amenities would not be improved.

Objective	Consistency
To design buildings which are attractive on all sides and from every vista	The No Project/No Development Alternative would not meet this objective. Under the No Project/No Development Alternative, no new buildings would be designed.
To provide safe, convenient pedestrian access from Admiralty Way, Mindanao Way and Bali Way	The No Project/No Development Alternative would not meet this objective. Under the No Project/No Development Alternative pedestrian access would not be improved.
To increase and improve the parcel's view corridors to the Marina waters;	The No Project/No Development Alternative would not meet this objective. Views of the marina would not be improved under the No Project/No Development Alternative.
To provide an improved and safer bicycle travel through the site via realignment of the existing bike path on the site	The No Project/No Development Alternative would not meet this objective. Bicycle safety would not be improved through the realignment of the bike path under the No Project/No Development Alternative.
To provide bicycle racks convenient to visitors using the bike path	The No Project/No Development Alternative would not meet this objective. Bicycle racks would not be provided under the No Project/No Development Alternative.
To provide improved fire department access to the site and marina	The No Project/No Development Alternative would not meet this objective. Fire department access would not be improved under the No Project/No Development Alternative.
To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan) of the certified Marina del Rey Land Use	The No Project/No Development Alternative would not meet this objective. No increases in General Fund revenue would occur under the No Project/No Development Alternative.

5.0.3.2 Alternative 2: Reduced Density

Development of Reduced Density Alternative would include a total of 59,603 square feet of new development and would eliminate the retail/restaurant uses in buildings V and VI, which represents a 30 percent reduction compared to the proposed project. Proposed building heights in this Alternative would be the same as those included in the proposed project. The Reduced Density alternative would develop the remaining buildings (I, II, III, IV, VII, and VIII) in a similar fashion as designed in the proposed project, including the waterfront promenade and bicycle path. The buildings would have the same massing as they proposed project. The intent of this Alternative is to avoid or reduce the severity of project-related significant impacts resulting from construction and operation by reducing the amount of development on the project site.

Visual Resources

Under the Reduced Density Alternative, the project site would be developed with six new buildings new and surface parking. This Alternative reduces development intensity by 30 percent and would reduce the

number of buildings on the site by two buildings. As the number of buildings proposed would be reduced, this reduction in development intensity would potentially increase vistas of the marina and minimize the scale of the project. Although the proposed project does not result in significant aesthetic impacts, the Reduced Density Alternative would incrementally reduce the severity of the project's less than significant impacts to visual resources.

As stated above, the Reduced Density Alternative would reduce development intensity, by developing fewer structures on the project site, which would allow for a measured increase in visual access from Admiralty Way towards the Main Channel of the Marina, and vice versa. As such, impacts to the visual resources environment associated with the Reduced Density Alternative would be incrementally reduced as compared to the proposed project and is considered environmentally superior. However, no significant and unavoidable project or cumulative impacts to the visual resources environment were identified in association with construction or operation of the proposed project. Therefore, the Reduced Density Alternative would not avoid or substantially lessen the severity of a significant project or cumulative impact. Moreover, the proposed project fulfills multiple LCP objectives calling for increases and/or enhancements to boater, marine and visitor-serving uses in the Marina and intensification of leasehold improvements consistent with the criteria for new development outlined in the certified LCP.

Air Quality

Under the Reduced Density Alternative, the project site would be developed with six new buildings and new surface parking. No significant impacts were identified related to air quality; however as fewer buildings would be constructed overall construction duration would be reduced thereby reducing the overall air quality emissions compared to the proposed project. Specifically, in the areas where there would be two additional buildings under the proposed project, additional open space amenities such as landscaping and open-air pedestrian areas would be located. Parking areas would also be reduced slightly, as parking would only be provided in accordance with code and less parking would be required compared to the proposed project. As a result, air quality emissions could be reduced from the reduction in building construction and architectural coatings, etc. Air quality emissions would be incrementally reduced compared to the proposed project as shown in **Table 5.0-4** and **Table 4.2-7,** and would not exceed significance thresholds.

Table 5.0-4
Reduced Density Alternative Operational Emissions

	Emissions in Pounds per Day					
Emissions Source	**VOC**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Reduced Density Alternative						
Area/Stationary Sources	1.68	0.15	0.13	0.00	0.01	0.01
Mobile Sources	11.21	22.59	97.18	0.21	14.13	3.98
Total pounds per day:	**12.89**	**22.74**	**97.31**	**0.21**	**14.15**	**3.99**
Existing						
Area/Stationary Sources	0.39	0.03	0.02	0.00	0.00	0.00
Mobile Sources	2.46	5.42	23.71	0.04	2.67	0.78
Total pounds per day:	**2.85**	**5.45**	**3**	**4**	**2.67**	**0.78**
Net Total:	**10.04**	**17.29**	**8**	**7**	**11.48**	**3.21**
SCAQMD Threshold:	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc., (2014). Emissions calculations are provided in ***Appendix 4.2****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

No significant and unavoidable air quality impacts were identified as part of the proposed project. However, as fewer uses would be constructed on the site, overall operational emissions would be reduced compared to the proposed project. No significant and unavoidable project or cumulative impacts related to operational air quality were identified in association with operation of the proposed project. Therefore, the Reduced Density Alternative would not avoid or substantially lessen the severity of a significant project or cumulative impact.

Biota

Under the Reduced Density Alternative, the project site would be developed with six new buildings. However, this Alternative does not change the nature or pattern of development. Ornamental landscaping would be removed and replaced with a similar ornamental landscape palate. However, no natural or native plant life occurs on the project site, and none is proposed.

No significant and unavoidable project or cumulative impacts to biota were identified with implementation of the proposed project. Similarly, the Reduced Density Alternative would not significantly impact biological resources present on the project site.

Geotechnical and Soil Resources

Under the Reduced Density Alternative, the project site would be developed with six new buildings and associated surface parking. However, this Alternative reduces development intensity by 30 percent by eliminating two buildings compared to the proposed project. Demolition, excavation, grading, and structure development parameters associated with this for this Alternative would be similar to the proposed project.

No significant and unavoidable project or cumulative impacts to geotechnical and soil resources were identified with implementation of the proposed project. Given the similar but reduced development intensity associated with the Reduced Density Alternative, no significantly impact geotechnical and soil resources environments can be reasonably anticipated.

Greenhouse Gas Emissions

Under the Reduced Density Alternative, the project site would be developed with six new buildings and associated surface parking. However, this Alternative reduces development intensity by 30 percent. Demolition, excavation, and grading associated with this for this Alternative would be similar to the proposed project. Given the relatively small contribution of construction emissions in overall GHG emissions, construction emissions are assumed to be similar as well.

The reduction in development intensity would reduce overall operational emissions. Greenhouse gas emissions would be reduced as compared to the proposed project as shown in **Table 5.0-5** and **Table 4.5-4,** and would not exceed significance thresholds**.**

No significant and unavoidable project or cumulative impacts to greenhouse gas emissions were identified with implementation of the proposed project. Given the similar but reduced development intensity associated with the Reduced Density Alternative, no significant impact related to greenhouse gas emissions can be reasonably anticipated.

Table 5.0-5
Reduced Density Alternative Estimated Operational GHG Emissions

Source	GHG Emissions (Metric Tons CO_2e/year)
Energy	368
Mobile Sources	2,176
Waste	57
Water	55
Amortized Construction	17
Reduced Density Alternative GHG Emissions	2,673
Existing GHG Emission	576
Net GHG Emissions	**2,097**
SCAQMD Threshold	**3,000**
Exceeds Threshold?	**NO**

*Source: Impact Sciences, Inc. (2014). Emission calculations are provided in **Appendix 4.2**.*
Note: Totals in table may not appear to add exactly due to rounding.

Hydrology and Drainage

Under the Reduced Density Alternative the development intensity on the site would be reduced by 30 percent. Demolition, excavation, grading, and structure development parameters associated with this Alternative would be similar to the proposed project.

No significant and unavoidable project or cumulative impacts to the hydrology and drainage environments were identified with implementation of the proposed project. Given the similar but reduced development intensity associated with the Reduced Density Alternative, no significantly impact hydrology and drainage environments can be reasonably anticipated.

Noise

Under the Reduced Density Alternative development intensity on the project site would be reduced by approximately 30 percent. Demolition, excavation and grading and grading requirements associated with this Alternative would be similar to what would be required for the proposed project although the duration of construction would be reduced.

Significant and unavoidable construction noise and vibration impacts would occur as a result of both the Reduced Density and proposed project although the duration of construction would be incrementally reduced as a result of fewer buildings being constructed on the site. Significant impacts would still be

expected under the Reduced Density Alternative as temporary construction noise could exceed thresholds.

No significant and unavoidable project or cumulative impacts to noise environment were identified with operation of the proposed project. Similarly, the Reduced Density Alternative would not significantly impact operational noise impacts. Therefore, operational impacts associated with noise would be similar under the Reduced Density Alternative and the proposed project.

Public Services (Fire Protection and Police Protection)

Police Protection

Under the Reduced Density Alternative, the project site would be developed with six new buildings and new surface parking. However, this Alternative reduces development intensity by 30 percent.

As the Reduced Density Alternative would result in fewer buildings constructed on the site and a 30 percent reduction in density, an incremental reduction in the number of police calls compared to the proposed project could occur. However, no significant and unavoidable project or cumulative impacts to police protection were identified with implementation of the proposed project. Similarly, the Reduced Density Alternative would not significantly impact current police protection service to the project site.

Fire Protection

Under the Reduced Density Alternative, the project site would be developed with six new buildings and new surface parking. However, this Alternative reduces development intensity by 30 percent.

As the Reduced Density Alternative would result in fewer buildings constructed on the site and a 30 percent reduction in density, an incremental reduction in the number of fire calls compared to the proposed project could occur. However, no significant and unavoidable project or cumulative impacts to fire protection were identified with operation of the proposed project. Similarly, the Reduced Density Alternative would not significantly impact current fire protection service to the project site.

Public Utilities (Sewer Service, Water Service, and Solid Waste Service)

Sewer Service

Under the Reduced Density Alternative, the project site would be developed with six new buildings and new surface parking. However, this Alternative reduces development intensity by 30 percent. No significant and unavoidable project or cumulative impacts to sewer service were identified with operation of the proposed project. Similarly, the Reduced Density Alternative would not significantly impact the sewer service environment.

Water Service

Under the Reduced Density Alternative, the project site would be developed with six new buildings and new surface parking. However, this Alternative reduces development intensity by 30 percent. No significant and unavoidable project or cumulative impacts to water service were identified with operation of the proposed project. Similarly, the Reduced Density Alternative would not significantly impact water supply environment.

Solid Waste Service

Under the Reduced Density Alternative, the project site would be developed with six new buildings and new surface parking. However, this Alternative reduces development intensity by 30 percent. As shown in **Table 5.0-6**, the quantity of solid waste generated during from this Alternative would be reduced by approximately 30 percent or 21.55 tons per year. Similar to the proposed project, no project level solid waste impacts would occur for either construction or operation. Therefore, project level impacts associated with the Reduced Density Alternative would be similar to the proposed project. However, County capacity at landfills will be in a deficit as compared to demand in upcoming years. The reduction of 21.55 tons per year would be minimal compared to the 22,863.4 tons per year identified associated with related projects. Therefore, significant and unavoidable cumulative level solid waste impacts would not be avoided given implementation of the Reduced Density Alternative.

Table 5.0-6
Solid Waste Generation Proposed Project vs. Reduced Density Alternative

Land Use	Units	Quantity	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)
Proposed Project					
Commercial	sf	66,665	5 lbs/1,000 sf/day	333.33	60.83
Offices	sf	16,558	6 lbs/1,000 sf/day	99.35	18.13
Total:				**432.68**	**78.96**
Reduced Density Alternative					
Commercial	sf	43,045	5 lbs/1,000/sf/day	215.23	39.28
Office	sf	16,558	6 lbs/1,000/sf/day	99.35	18.13
Total:				**314.58**	**57.41**

Source: Impact Sciences, Inc., 2014.
sf = square feet.
[1] *Generation factor provided by the solid waste daily generation rates in tons per year are derived from CalRecycle.ca.gov. Commercial Sector: Estimated Solid Waste Generation and Disposal Rates*

Traffic/Access

Once completed and fully occupied (anticipated by the end of 2016), the proposed project could result in a net increase in site-related trips (following adjustments to account for the removal of traffic generated by the existing site development) of approximately 3,753 net daily trips, including approximately 79 net new trips (53 inbound, 26 outbound) during the AM peak hour, and approximately 387 net new trips (206 inbound, 181 outbound) during the PM peak hour. Under the Reduced Density Alternative, the project site would be developed with six new buildings and new surface parking. However, this Alternative reduces development intensity by 30 percent. Alternative 2 would result in 2,458 total trips (1,295 fewer trips than the proposed project). Alternative 2 would also result in a total of 41 AM peak trips (23 inbound, 18 outbound) and 254 PM peak hour trips (136 inbound and 118 outbound). This Alternative would reduce trips by more than 30 percent. This reduction in trips could incrementally reduce project level impacts, although not to a level of less than significant. However, similar to the proposed project, Alternative 2 would represent a small percentage of the cumulative effects and therefore, cumulative impacts would remain significant.

Relationship of Alternative 2 to Project Objectives

This alternative would meet the project objectives; however it would be to a lesser extent than the proposed project. **Table 5.0-7** provides a summary of the project objectives and a discussion of the Reduced Density Alternative's ability to meet the project objectives.

Table 5.0-7
Proposed Project vs. Reduced Density Alternative Comparison

Objective	Consistency
To create a vibrant, marine-oriented retail experience for the visiting public, as well as provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way	The Reduced Density Alternative would partially meet this objective. Under the Reduced Density Alternative, improvements would be made to the site that include improvements to the promenade and the waterfront. However, this alternative would provide 23,620 fewer square feet of retail/restaurant space. As a result, the site would not be as active as the proposed project with fewer opportunities for activity on the waterfront.
To provide high quality, visitor-serving restaurants, retail, and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP	The Reduced Density Alternative would partially meet this objective. Under the Reduced Density Alternative, retail and marine commercial facilities would be provided; however, this alternative would provide 23,620 fewer square feet of retail/restaurant space. As a result, this alternative would provide fewer points of interest along the waterfront. Further, this alternative would be consistent with the LCP as it would include only a moderate increase in density on the site.

Objective	Consistency
To improve the coastal recreational opportunities for the visiting public by greatly enhancing the public's access to and passive recreational use of the landside portions of the site	The Reduced Density Alternative would partially meet this objective. However, this alternative would provide 23,620 fewer square feet of retail/restaurant space. As a result, the site would not be as active as the proposed project with fewer opportunities for activity on the waterfront.
To provide marine-related retail space and accommodate the boating supply needs of boaters throughout the marina	The Reduced Density Alternative would meet this objective. This alternative would provide marine-related retails space and accommodate boaters.
To provide retail space for a Trader Joe's (or similar) specialty market and allow for the convenient sale of food and beverage for visitors, Burton Chase Park users, and boaters as well as the greater Marina del Rey community	The Reduced Density Alternative would meet this objective. Under the Reduced Density Alternative, space for a specialty market would be provided.
To improve boater amenities on the project site by providing boater related uses such as a yacht club, boat repair shop, boat storage, and boater bathrooms	The Reduced Density Alternative would meet this objective. Under the Reduced Density Alternative, boater amenities would not be provided.
To design buildings which are attractive on all sides and from every vista	The Reduced Density Alternative would meet this objective. Under the Reduced Density Alternative, attractive buildings would be constructed on the project site.
To provide safe, convenient pedestrian access from Admiralty Way, Mindanao Way and Bali Way	The Reduced Density Alternative would meet this objective as pedestrian improvements would be provided.
To increase and improve the parcel's view corridors to the Marina waters	The Reduced Density Alternative would meet this objective. Views of the marina would be improved under the Reduced Density Development Alternative compared to existing conditions.
To provide an improved and safer bicycle travel through the site via realignment of the existing bike path on the site	The Reduced Density Alternative would meet this objective. Bicycle safety would be improved through the realignment of the bike path under the Reduced Density Alternative.
To provide bicycle racks convenient to visitors using the bike path	The Reduced Density Alternative would meet this objective. Bicycle racks would be provided under the Reduced Density Alternative.
To provide improved fire department access to the site and marina	The Reduced Density Alternative would meet this objective. Fire department access would be improved under the Reduced Density Alternative.
To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan) of the certified Marina del Rey Land Use	The Reduced Density Alternative would partially meet this objective. The Reduced Density would increase rents and add to the General Fund; however this objective would be met to a lesser extent than the proposed project.

5.0.3.3 Alternative 3: Mixed Use (Retail/Residential) Alternative

The Mixed Use (Retail/Residential) Alternative would develop the site with a combination of retail and residential uses. The height of four of the buildings would be increased from two to three stories to allow two floors of residential uses above the ground floor retail. Specifically, buildings II, IV, V, and VI would be increased to three stories (compared to two stories with the proposed project) with retail on the ground floor and 24 residential units above. The retail space would consist of 13,625 square feet of market uses, 25,000 square feet of west marine uses, 6,650 square feet of retail/restaurant/market uses and

7,500 square feet of restaurant use for a total of 52,775 square feet of retail/restaurant uses (a reduction of 13,890 square feet). The boater serving uses (restrooms, yacht club, etc.) would be accommodated in the remaining buildings similar to the proposed project. Dedicated residential parking would also be necessary to accommodate the residential uses, overall, approximately the same surface area would be dedicated to parking as with the proposed project this would be because although a minimum of 24 spaces would be necessary for residential parking, the reduction in commercial square footage would reduce the amount of parking necessary for commercial uses.

Visual Resources

Under this alternative, residential uses would be accommodated by increasing the height of four of the eight proposed buildings. The massing would also be modified slightly to accommodate additional residential units.

No significant and unavoidable project or cumulative impacts to the visual resources environment were identified with operation of the proposed project. The Mixed Use (Retail/Residential) Alternative would not be consistent with the parcel's current land use designations per the certified LCP, and would thus require an LCP amendment to effectuate; the proposed project is consistent with the LCP's existing land use designations for the parcel and requires no amendments to the certified LCP. Moreover, under this alternative, structure heights would need to be increased in order to facilitate development of residential units on the parcel, which, in turn, could potentially trigger significantly adverse visual resource impacts that the proposed project avoids.

Air Quality

The Mixed Use (Retail/Residential) Alternative would result in four three-story buildings on the project site which would represent an increase in development compared to the proposed project. Also included in this Alternative would be additional surface parking compared to the proposed project.

Although the Mixed Use (Retail/Residential) Alternative would incrementally increase the duration of construction compared to the proposed project, it is not expected that air quality impacts would occur during demolition, excavation, grading, and construction. However, this Alternative could have a greater potential due to increased building heights to disrupt wind patterns in the Marina del Rey main channel due to increased building heights.

Given the increased intensity of development when compared with the proposed project, operational impacts to air quality would be slightly higher, as shown below in **Table 5.0-8**, but would not exceed significance thresholds.

Table 5.0-8
Mixed Use (Retail/Residential) Alternative Operational Emissions

	Emissions in Pounds per Day					
Emissions Source	**VOC**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Mixed Use Alternative						
Area/Stationary Sources	9.05	1.00	14.74	0.02	1.90	1.90
Mobile Sources	14.20	29.67	126.78	0.28	18.86	5.31
Total pounds per day:	**23.25**	**30.67**	**141.53**	**0.31**	**20.77**	**7.21**
Existing						
Area/Stationary Sources	0.39	0.03	0.02	0.00	0.00	0.00
Mobile Sources	2.46	5.42	23.71	0.04	2.67	0.78
Total pounds per day:	**2.85**	**5.45**	**23.72**	**4**	**2.67**	**0.78**
Net Total:	**20.40**	**25.22**	**117.81**	**0.27**	**18.10**	**6.43**
SCAQMD Threshold:	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc., (2015). Emissions calculations are provided in ***Appendix 4.2****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Therefore, no significant and unavoidable air quality impacts related to proposed project operation would occur.

Biota

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings. These buildings would include a reduction of 30,448 square feet of retail/restaurant uses, but would add residential uses on the second and third floors. Ornamental landscaping would be removed and replaced with a similar ornamental landscape palate. However, no natural or native plant life occurs on the project site, and none is proposed.

No significant and unavoidable project or cumulative impacts to biota were identified with implementation of the proposed project. Similarly, the Mixed Use (Retail/Residential) Alternative 3 would not significantly impact biological resources present on the project site.

Geotechnical and Soil Resources

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. Demolition, excavation,

grading, and structure development parameters associated with this for this Alternative would be similar to the proposed project.

No significant and unavoidable project or cumulative impacts to geotechnical and soil resources were identified with implementation of the proposed project. Given the similar but reduced development intensity associated with the Mixed Use (Retail/Residential) Alternative, no significantly impact geotechnical and soil resources environments can be reasonably anticipated.

Greenhouse Gas Emissions

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. Demolition, excavation, grading, and structure development parameters associated with this for this Alternative would be similar to the proposed project. Therefore, given the relatively small contribution of construction emissions in overall GHG emissions, construction emissions are assumed to be similar as well.

The residential units would increase development intensity and so would increase overall operational emissions. Greenhouse gas emissions would be increase as compared to the proposed project as shown in **Table 5.0-9** and **4.5-4,** and would exceed significance thresholds.

Table 5.0-9
Estimated Operational GHG Emissions

Source	GHG Emissions (Metric Tons CO_2e/year)
Area/Energy	731
Mobile Sources	2,981
Waste	76
Water	77
Amortized Construction	17
Mixed Use Alternative GHG Emissions	3,882
Existing GHG Emission	576
Net GHG Emissions	**3,306**
SCAQMD Threshold	**3,000**
Exceeds Threshold?	**YES**

*Source: Impact Sciences, Inc. (2014). Emission calculations are provided in **Appendix 4.2**.*
Note: Totals in table may not appear to add exactly due to rounding.

No significant and unavoidable project or cumulative impacts to greenhouse gas emissions were identified with implementation of the proposed project. However, in adding the residential uses, overall emissions associated with the mixed-use alternative would increase slightly from just below the significance threshold to above it. Therefore, impacts with The Mixed Use (Retail/Residential) Alternative would be significant.

Hydrology and Drainage

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. Demolition, excavation, grading, and structure development parameters associated with this for this Alternative would be similar to the proposed project.

No significant and unavoidable project or cumulative impacts to the hydrology and drainage environments were identified with implementation of the proposed project. Given the similar development intensity (generally in the form of the amount of impervious surface) associated with the Mixed Use (Retail/Residential) Alternative, no significantly impact hydrology and drainage environments can be reasonably anticipated.

Noise

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. Demolition, excavation, grading, and structure development parameters associated with this for this Alternative would be similar to the proposed project.

Significant and unavoidable construction noise and vibration impacts would occur as a result of the proposed project. Similarly, the Mixed Use (Retail/Residential) Alternative would have significant and unavoidable construction noise and vibration impacts.

No significant and unavoidable project or cumulative impacts to noise environment were identified with operation of the proposed project. While the introduction of residential uses would result in a new noise sources compared to the proposed project (i.e., uses typically associated with residential uses such as doors slamming, talking, dogs barking, etc.) due to the small number of units and the ambient noise in the area, it is not expected the residential uses would substantially increase noise levels such that the noise threshold would be exceeded. Similarly, the Mixed Use (Retail/Residential) Alternative would not significantly impact operational noise impacts.

Public Services (Fire Protection and Police Protection)

Police Protection

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. Demolition, excavation, grading, and structure development parameters associated with this for this Alternative would be similar to the proposed project.

No significant and unavoidable project or cumulative impacts to police protection were identified with operation of the proposed project. By adding residential units, the Mixed Use (Retail/Residential) Alternative could increase the need for police protection on the project site. However, due to the small number of residential units, it is not expected that significant impacts would occur.

Fire Protection

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. Demolition, excavation, grading, and structure development parameters associated with this for this Alternative would be similar to the proposed project.

No significant and unavoidable project or cumulative impacts to fire protection were identified with operation of the proposed project. By adding residential units, the Mixed Use (Retail/Residential) Alternative could increase the need for fire protection on the project site. However, due to the small number of residential units, it is not expected that significant impacts would occur.

Public Utilities (Water Service, Sewer Service and Solid Waste Service)

Sewer Service

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. No significant and unavoidable project or cumulative impacts to sewer service were identified with operation of the proposed project. Similarly, the Mixed Use (Retail/Residential) Alternative would not significantly impact sewer service to the project site.

Water Service

Alternative 3 would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. No significant and unavoidable project or cumulative impacts to water service were identified with operation of the proposed project. Similarly, the Mixed Use (Retail/Residential) Alternative would not significantly impact water supply and service to the project site even with the addition of 24 residential units.

Solid Waste Service

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors. As shown in **Table 5.0-10**, the quantity of solid waste generated during from this Alternative would be greater than the proposed project. Although, it is not expected the incremental increase in solid waste generated by the Mixed Use (Retail/Residential) Alternative (an increase of 1.83 tons per year) would result in a project level impact, County capacity at landfills will be in a deficit as compared to demand in upcoming years. Therefore, significant and unavoidable cumulative level solid waste impacts would not be avoided if this alternative was adopted as opposed to the proposed project.

Table 5.0-10
Solid Waste Generation – Proposed Project vs. Mixed Use (Retail/Residential) Alternative

Land Use	Units	Quantity	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)
Proposed Project					
Commercial	sf	66,665	5 lbs/1,000 sf/day	333.33	60.83
Offices	sf	16,558	6 lbs/1,000 sf/day	99.35	18.13
Total:				**432.68**	**78.96**
Reduced Density Alternative					
Commercial	sf	52,775	5 lbs/1,000/sf/day	263.87	48.15
Office	sf	16,558	6 lbs/1,000/sf/day	99.35	18.13
Residential	units	24	4 lbs/unit/day	96	17.51
Total:				**456.22**	**80.79**

Source: Impact Sciences, Inc., 2014.
sf = square feet.
[1] *Generation factor provided by the solid waste daily generation rates in tons per year are derived from CalRecycle.ca.gov. Commercial Sector: Estimated Solid Waste Generation and Disposal Rates*

Traffic/Access

The Mixed Use (Retail/Residential) Alternative would consist of four three-story buildings and four one-story buildings on the project site. These building would include a slightly reduced amount of restaurant and retail uses, but would add residential uses on the second and third floors.

This Alternative would result in a slightly different trip generation compared to the proposed project. Intersection impacts would not be avoided with this Alternative. The Mixed Use (Retail/Residential) Alternative would result in 2,618 total trips (1,135 fewer than the proposed project). This Alternative would result in 53 AM peak hour trips (25 inbound and 28 outbound) and 262 PM peak hour trips (142 inbound and 120 outbound). This reduction in trips would incrementally reduce project level impacts although impacts would not be reduced to a less than significant level, and it is expected project level intersection impacts would remain. Further, as the Mixed Use (Retail/Residential) Alternative would represent a small percentage of the cumulative impacts, cumulative impacts would remain significant.

Relationship of Alternative 3 to Project Objectives

As shown in **Table 5.0-11**, this alternative would not meet the following objectives for the proposed project:

Primary Project Objectives:

- To provide high quality, visitor-serving restaurants, retail, and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP.

The Mixed Use (Retail/Residential) Alternative would not be consistent with the LCP which does not allow for mixed-use development on this parcel and therefore would not achieve the objective related to the LCP. In addition, the increased massing and height would be beyond what is allowed within the LCP. The remainder of the project objectives would be achieved, although to a lesser extent than the proposed project.

Table 5.0-11
Proposed Project vs. Mixed Use (Residential/Retail) Alternative Comparison

Objective	Consistency
To create a vibrant, marine-oriented retail experience for the visiting public, as well as provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way	The Mixed Use (Retail/Residential) Alternative would meet this objective. Under the Reduced Density Alternative, improvements would be made to the site, including improvements to the promenade and the waterfront.
To provide high quality, visitor-serving restaurants, retail, and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP	The Mixed Use (Retail/Residential) Alternative would not meet this objective. This Alternative would not be consistent with the LCP as residential uses are not allowed within the marina zone. Further, the height increases would be beyond what is allowed under the current LCP.
To improve the coastal recreational opportunities for the visiting public by greatly enhancing the public's access to and passive recreational use of the landside portions of the site	The Mixed Use (Retail/Residential) Alternative would meet this objective.
To provide marine-related retail space and accommodate the boating supply needs of boaters throughout the marina	The Mixed Use (Retail/Residential) Alternative would meet this objective.
To provide retail space for a Trader Joe's (or similar) specialty market and allow for the convenient sale of food and beverage for visitors, Burton Chase Park users, and boaters as well as the greater Marina del Rey community	The Mixed Use (Retail/Residential) Alternative would meet this objective.
To improve boater amenities on the project site by providing boater related uses such as a yacht club, boat repair shop, boat storage, and boater bathrooms	The Mixed Use (Retail/Residential) Alternative would meet this objective.
To design buildings which are attractive on all sides and from every vista	The Mixed Use (Retail/Residential) Alternative would meet this objective

Objective	Consistency
To provide safe, convenient pedestrian access from Admiralty Way, Mindanao Way and Bali Way	The Mixed Use (Retail/Residential) Alternative would meet this objective
To increase and improve the parcel's view corridors to the Marina waters	The Mixed Use (Retail/Residential) Alternative would partially meet this objective. Although view corridors would be provided, this alternative would increase heights on the project site beyond what is allowed in the LCP and what is included in the proposed project.
To provide an improved and safer bicycle travel through the site via realignment of the existing bike path on the site	The Mixed Use (Retail/Residential) Alternative would meet this objective
To provide bicycle racks convenient to visitors using the bike path	The Mixed Use (Retail/Residential) Alternative would meet this objective
To provide improved fire department access to the site and marina	The Mixed Use (Retail/Residential) Alternative would meet this objective
To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan) of the certified Marina del Rey Land Use	The Mixed Use (Retail/Residential) Alternative would meet this objective

5.0.3.4 Alternatives Summary and Comparison

Table 5.0-12, Environmental Impact Comparison to the Proposed Project, compares the severity of each alternative's impact to impacts associated with implementing the proposed project. Alternatives either result in fewer, comparable or more impacts than the proposed project.

Table 5.0-12
Environmental Impact Comparison to the Proposed Project

Resource Topic	Alternative 1 No Project	Alternative 2 Reduced Density	Alternative 3 Mixed Use
Visual Resources	Comparable	Comparable	Proposed Project Superior
Air Quality – Construction	Alternative Superior	Comparable	Comparable
Air Quality – Operations	Alternative Superior	Comparable	Comparable
Biota	Comparable	Comparable	Comparable
Geotechnical & Soils	Comparable	Comparable	Comparable
Greenhouse Gas Emissions	Alternative Superior	Comparable	Alternative Worse; significant impact
Hydrology & Drainage	Comparable	Comparable	Comparable
Noise – Construction	Alternative Superior	Comparable	Comparable
Noise – Operations	Comparable	Comparable	Comparable
Public Services	Alternative Superior	Comparable	Comparable
Public Utilities	Alternative Superior	Comparable	Comparable
Traffic	Alternative Superior	Alternative Superior	Alternative Superior

5.0.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the *State CEQA Guidelines* indicates that an analysis of alternatives to the proposed project shall identify one alternative as the environmentally superior alternative. Furthermore, if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. Based on the analysis included herein, Alternative 1: No Project/No Development would be considered environmentally superior to the proposed project because it would avoid and/or substantially reduce the severity of significant impacts associated with implementing the proposed project. Alternative 1, however, would not meet any of the project objectives.

A secondary environmentally superior alternative would be Alternative 2 Reduced Density Alternative. As shown in **Table 5.0-12,** the Reduced Density Alternative would incrementally lessen significant noise and traffic impacts associated with the proposed project, although these impacts would not be substantially lessened. However the Reduced Density Alternative would only partially attain some of the primary project objectives and would attain other project objectives, but it would be to a lesser extent than the proposed project:

- To create a vibrant, marine-oriented retail experience for the visiting public, as well as provide improved public access through development of an expansive waterfront promenade and realignment of the bike path to be sited along the parcel's water frontage on Admiralty Way;

The Reduced Density Alternative would create a marine-oriented retail experience and would include the expansive waterfront promenade. However, this Alternative would include a reduction of approximately 30 percent of square footage of retail and restaurant uses compared to the proposed project. Therefore it would not maximize the uses on the site to create a vibrant experience and would only partially achieve this objective.

- To provide high quality, visitor-serving restaurants, retail, and marine commercial facilities, enhanced and improved public pedestrian access to the waterfront and continuous points of interest along public waterfront promenade consistent with the LCP.

The Reduced Density Alternative would provide restaurant, retail, and marine commercial facilities, as well as enhanced public space. However, this Alternative would not represent the increase in density envisioned in the LCP. Therefore, the Reduced Density Alternative would only partially achieve this objective.

To further the economic viability of the Marina through replacement of the parcel's physically outdated structures with new structures, consistent with Priority Objective No. 2 of Chapter eight (Land Use Plan)

of the certified Marina del Rey Land Use. Alternative 2 would generate additional General Fund revenue to the County; however as Alternative 2 would represent a 30 percent reduction in total square footage, this objective would be partially met.

Please refer to **Table 5.0-12** for a comparison of impacts between the proposed project and the three Alternatives discussed in this section.

6.0 OTHER CEQA CONSIDERATIONS

Section 15126.2 of the *California Environmental Quality Act* (*CEQA) Guidelines* requires the discussion of the ways in which a project could directly or indirectly foster economic growth, population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. This discussion should also include projects that would remove obstacles to population growth. It should include the characteristics of a project, which may encourage and/or facilitate other activities that could significantly affect the environment, either individually or cumulatively. CEQA emphasizes that growth in an area should not be considered beneficial, detrimental, or of little significance. The purpose of this section is to evaluate the growth-inducing potential and impact of this project. The following discussion will focus on a summary of significant environmental effects, growth-inducing impacts, and mitigation measures for the proposed project.

6.0.1 Growth Inducing Impacts

In general terms, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the following criteria:

- The project removes an impediment to growth (e.g., the establishment of an essential public service or the provision of new access to an area)
- The project results in the urbanization of land in a remote location (leapfrog development)
- Economic expansion or growth occurs in an area in response to a project (e.g., changes in revenue base, employment expansion, etc.)
- The project establishes a precedent-setting action (e.g., a change in zoning or general plan amendment approval)

Should a project meet any of these criteria, it can be considered growth inducing under CEQA. An evaluation of this project compared against these growth inducing criteria is provided below.

6.0.2 Removal of an Impediment to Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of essential public services (e.g., water service), while planning impediments may include restrictive zoning and/or general plan designations.

The project area contains established land uses and supporting infrastructure. The construction of proposed uses would require minimal modification and/or improvements to existing infrastructure as the site is currently developed with boater-serving uses. Such modifications and improvements to infrastructure are discussed in further detail below. Given the urban nature of the site and its surroundings, and the existence of established infrastructure, no growth-inducing impacts would result from project development.

An established transportation network exists in the surrounding area that offers local and regional access to the project site. Access to the site would be provided primarily via Admiralty Way, although driveways would also allow access from Bali Way and Mindanao Way.

The water and energy (electricity and natural gas) infrastructure required to support the proposed project would be available to the project site from surrounding streets. No new water mains other than those required to serve the project site would be constructed. As such, the development of on-site water infrastructure to serve the project would not induce growth within the area.

Electricity and natural gas transmission infrastructure presently exists on, and in the vicinity of, the project site. Development of the project would necessitate the construction of an on-site distribution system to convey this energy to uses on the site. This system would be designed to accommodate the uses proposed within the project, and would not extend beyond the requirements or boundary of the project. The on-site service lines would be sized to meet the demands of the proposed project. No growth-inducing impacts, due to the extension of electrical or natural gas service lines, would occur with the development of the project.

In summary, the design and construction of roadway, water, and energy infrastructure needed to accommodate the project would not induce growth within undeveloped areas in the project area.

6.0.3 Urbanization of Land in Remote Locations (Leapfrog Development)

Under this criterion, the project would be considered growth inducing if it would result in the urbanization of land in a remote location. This means that the development would not be contiguous to existing urban development and would "leap" over large areas of undeveloped land. The project site is located in an urbanized area of the County adjacent to other boater serving, commercial and residential uses. Because the project is contiguous to existing development, it is not growth inducing under this criterion.

6.0.4 Economic Growth

Under this criterion, the project would be considered growth inducing if it would cause economic expansion or economic growth to occur in the project area. Examples of economic expansion or growth would include changed in revenue base, employment expansion, etc.

Buildout of the project could result in temporary increases in construction-related job opportunities. Potential employees would likely be drawn from the existing labor force in the County of Los Angeles, City of Los Angeles, City of Santa Monica, City of Culver City and the Los Angeles Metropolitan area.

Long-term growth, should it occur, would be primarily in the form of an economic response to the new retail and restaurant uses proposed on the project site. Uses on the site that would be expected to generate economic revenue or response include a grocery store, two retail/restaurant spaces, West Marine, and a yacht club. Although these uses would represent an increase from the intensity of uses currently on the project site, given the relatively small size of the project in relation to County population, the economic contribution of this project alone would not be considered growth inducing.

6.0.5 Precedent-setting Action

Changes from a project that could be precedent setting include (among others) approval of zone change that could have implications for other properties, or that could make it easier for other properties to develop.

Per the certified Local Coastal Program (LCP), the subject parcel is designated "Marine Commercial," "Visitor-Serving/Convenience Commercial," "Boat Storage," and "Water" with a "Waterfront Overlay" (WOZ) designation which land use designations support the uses being proposed for the project; no amendments to the certified LCP are necessary to effectuate the proposed project. The surrounding uses are similar to the proposed uses. Consequently, the project is not considered to be considered growth inducing under this criterion.

6.0.6 Conclusion

It must be emphasized that the *State CEQA Guidelines* require an EIR to "discuss the ways" a project could be growth inducing and "discuss the characteristics of some projects that may encourage…activities that could significantly affect the environment." However, the *State CEQA Guidelines* do not require an EIR to predict or speculate where such growth would occur, in what form it would occur, or when it would occur. Attempting to determine the environmental impacts created by growth that might be induced by the proposed project is speculative because the size, type, and location of specific future projects that may

be induced by this project are unknown at the present time. Therefore, such impacts are too speculative to evaluate (see *State CEQA Guidelines* Section 15145). To the extent that specific projects are known (as discussed in **Section 4.0, Environmental Impact Analysis,** of this EIR), those projects have already been or would be subjected to their own environmental analyses. Additionally, due to the variables that must be considered when examining the mechanics of urban growth (e.g., market forces, demographic trends, etc.), it would be speculative to state conclusively that implementation of the project alone would induce growth in the surrounding area. Further analysis of impacts associated with growth in the Marina del Rey area, and corresponding cumulative impact assessment methodology, can be found in the cumulative analyses for each individual topic addressed in **Section 4.0**.

7.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

7.0.1 INTRODUCTION

Section 15126.2(c) of the 2008 *California Environmental Quality Act (CEQA) Statutes and Guidelines* states that use of nonrenewable resources during the initial and continued phases of a proposed project may be irreversible if a large commitment of these resources makes their removal, indirect removal, or non-use thereafter unlikely. This section of the environmental impact report (EIR) evaluates whether the project would result in the irretrievable commitment of resources, or would cause irreversible changes in the environment. Also, in accordance with Section 15126.2 of the *State CEQA Guidelines*, this section identifies any irreversible damage that could result from environmental accidents associated with the proposed project.

7.0.2 IRREVERSIBLE COMMITMENT OF RESOURCES

The proposed project would replace approximately 14,724 square feet (sf) of development consisting of office space, boat repair, and a yacht club with approximately 85,984 square feet of new uses, to include marine- and visitor-serving retail, restaurant space, and boater serving uses. A total of eight new buildings would be constructed (including two small boater restrooms). In addition, an open-air boat stacking/rack system is included, allowing outdoor storage of up to 56 boats (stacked 3-to-4 boats-high). All existing buildings will be removed from the site to accommodate the proposed project.

The project proposes 477 on-grade parking spaces on the parcel, of which 282 are standard-dimensioned spaces, 11 are handicap accessible spaces and 184 are compact parking spaces; approximately 75 of the parking spaces are in a tandem configuration. The project also proposes 76 bicycle parking spaces. Bicycle racks would be provided at four locations along the western boundary of the project site. With the maximum vehicle parking reduction allowed under County Code for the bicycle parking spaces being provided on-site (County Code allows a reduction of 25 vehicle parking spaces, given the number of bicycle parking spaces being provided on-site in the project), the project's proposed uses require 482 spaces per Code. Therefore, the Applicant will be filing for a Parking Permit to permit commercial tandem parking and a modest parking reduction for the project, in order to provide some flexibility regarding parking configuration and numbers to account for installation of site infrastructure improvements (i.e., transformers, etc.) during construction. Vehicular access to the site and the parking facilities would be provided by a total of nine driveways, including five driveways along Bali Way, four driveways along Mindanao Way and a single driveway along the site's Admiralty Way frontage.

Nonrenewable resources used during the construction of the project include construction materials and fossil fuels to power construction equipment. During operation of the project, water, and also energy resources in the form of natural gas and electricity, would be required. Impacts would also result from the incremental increase in air pollution generated by the additional vehicular traffic resulting from project operation. However, as discussed in the analysis within this EIR, impacts associated with increased resource use and consumption are not deemed to be significant. Nonetheless, the relatively modest resources utilized for the proposed project would be permanently committed to the project and therefore considered irreversible.

The demand for all such resources is expected to increase regardless of whether or not the project is developed. The Southern California Association of Governments (SCAG) forecasts that the population of Southern California is anticipated to increase 23 percent between 2008 and 2035. These increases in population would directly result in the need for more retail, commercial and residential facilities in order to provide the needed services associated with this growth. If not consumed by this project, these resources would likely be committed to other projects in the region intended to meet this anticipated growth. Furthermore, the investment of resources in the project would be typical of the level of investment normally required for commercial uses of this scale. Mitigation measures have been included in this EIR to reduce and minimize project and cumulative impacts.

7.0.3 IRREVERSIBLE ENVIRONMENTAL CHANGES

Irreversible long-term environmental changes associated with the proposed project would include a change in the visual character of the site as a result of the implementation of the project, as further described in the Aesthetics chapter of this EIR. Additional irreversible environmental changes would include the increase in local and regional vehicular traffic, and the resultant increase in air pollutants and noise emissions generated by this traffic, among other impacts. Design features have been incorporated into the development proposal and mitigation measures are proposed in this EIR that would minimize the effects of the environmental changes associated with the development of the project to the maximum degree feasible. In addition, the project site is located in a heavily urbanized community, and the implementation of the project would improve this location. Even with this being the case, the project would result in significant and unavoidable short-term noise impacts during construction and traffic impacts during operation.

7.0.4 POTENTIAL ENVIRONMENTAL DAMAGE FROM ACCIDENTS

The project proposes no uniquely hazardous uses, and its operation would not be expected to cause environmental accidents that would affect other areas. The project site is located within a seismically active region and would be exposed to ground shaking during a seismic event. Conformance with the regulatory provisions of the County of Los Angeles, the Uniform Building Code, and all other applicable building codes pertaining to construction standards would minimize, to the extent feasible, damage and injuries in the event of such an occurrence. Given the existence of older structures on the project site, asbestos-containing building material (ACBM), lead paint, light ballasts/polychlorinated biphenyls (PCB), and soil contamination maybe of concern on the project site. Because development of the project would require the demolition/dismantling and removal of all the existing structures located on the project site, these materials could cause health and safety problems to on-site construction workers and the community. Project design features as outlined in the Notice of Preparation/Initial Study contained within **Appendix 1.0**, and provided below, in addition to **Mitigation Measure 4.4-1 and Mitigation Measure 4.4-2,** are included and would be implemented as part of the project. The inclusion of these features would reduce potential impacts to a less than significant level.

4.4-1: The following notes shall appear on all building plans prepared and submitted for the proposed project:

a. The proposed project will be designed to withstand a peak ground acceleration (PGA) of 0.50 g (where g is gravitational force) as stated in the geotechnical report prepared for the project site.

b. During design of the project, an allowable passive fluid pressure of 300 pounds per cubic foot and an allowable sliding friction coefficient of 0.35 for foundations and slabs placed in structural fill or in undisturbed, stiff native soils.

c. Footings should have a minimum width of 18 inches and be embedded a minimum of 18 inches below lowest adjacent grade. Footings should be founded on a minimum of 3 feet of compacted fill. For Footings with the specified minimum width and embedment, an allowable bearing pressure of 2,500 pounds per square foot may be used. Bearing pressures may be increased by one third for temporary seismic and wind loads.

d. Settlement of the shallow footings will depend on the actual structural loads and footing size. Based on the preliminary structural loads and maximum footing size of 6 feet by 6 feet, we expect that the total static settlement to be on the order of 1.2 inches. In addition to static settlement, the proposed structure should be designed for the potential dynamic settlements. Differential settlement (static plus seismic) between adjacent similarly loaded columns is estimated to be on the order of 0.5 inch.

e. An allowable passive fluid pressure of 300 pounds per cubic foot and an allowable sliding friction coefficient of 0.35 may be used for design, for foundations and slabs placed in structural fill or in undisturbed, stiff native soils. Both passive and sliding resistance may be used in combination without reduction.

f. An allowable passive fluid pressure of 300 pounds per cubic foot and an allowable sliding friction coefficient of 0.35 may be used for design, for foundations and slabs placed in structural fill or in undisturbed, stiff native soils. Both passive and sliding resistance may be used in combination without reduction.

4.4-2: The following notes shall appear on all grading permits issued for the project site:

a. Any old fill should be considered to be uncertified and should not be used for support of the planned structures. Any existing fill should be removed and replaced with properly compacted fill. All removals should extend a minimum of 5 feet outside the building pad and all areas where new improvements will be located.

b. To provide uniform support for the buildings it should be planned that the building pad should be over excavated and recompacted as structural fill to a minimum depth of 5 feet. The actual limits for all removals should be determined by the project geotechnical engineer during grading, depending on the actual conditions encountered. Footings should be supported by a minimum 3 feet of compacted fill.

c. A geotechnical consultant approved by the County shall observe the bottom of any excavated area to verify that the foundation conditions are acceptable prior to backfilling. Compaction tests may be performed to confirm that the foundations will be supported in competent soils.

d. Temporary excavations shall be sloped at 1 (horizontal) to 1 (vertical), or shoring shall be used. Where an existing structure, street, or other improvements fall within the 1 to 1 plane projected up from the bottom of the excavation, temporary shoring shall also be used.

e. Where feasible, the excavated bottom shall be proof-rolled with heavy equipment. Any areas of loose or pumping soils shall be over excavated at the direction of the geotechnical engineer.

f. Structural fill shall be free of expansive clay, rock greater than 3 inches in size, debris and other deleterious materials. Fill soils shall be moisture conditioned to plus or minus 2 percent of optimum moisture content. All structural fill, except wall backfill, shall be compacted to at least 95 percent of the maximum dry density determined by ASTM D 1557-91. Wall backfill and fill placed in non-structural and landscape areas shall be compacted to at least 90 percent.

g. Compaction shall be done in maximum 8-inch lifts. All earthwork and grading should be performed under the observation of the geotechnical engineer. Compaction testing of the fill soils shall be performed at the discretion of the geotechnical engineer. Testing should be performed for approximately every 2 feet in

fill thickness or 1,000 cubic yards of fill placed, whichever occur first. If specified compaction is not achieved, additional compactive effort, moisture conditioning of the fill soils, and/or removal and recompaction of the below-minimum-compaction soils will be required.

h. The use of heavy equipment and vibration will be avoided, whenever feasible.

i. Buried walls and retaining walls shall be backfilled with non-expansive granular soils with a Plastic Index (PI) of less than 15 and with less than 15 percent fines (clay/silt) passing the No. 200 sieve. In addition, a drainage system should also be provided behind the walls as shown in Figure 8 of the Geotechnical Study.

j. Underground utility trenches below structures and/or pavement shall be backfilled with properly compacted fill. Fill shall be placed in loose lifts appropriate for the type of compaction equipment utilized. Fill shall be compacted to a minimum of 90 percent of the maximum density as determined by ASTM D1557-91. Jetting or flooding of backfill materials shall not be allowed.

k. All materials used for asphalt concrete and aggregate base shall conform to the current version of "Green Book" or the equivalent, and shall be compacted to at least 95 percent relative compaction.

l. If, in the opinion of the geotechnical engineer, contractor, or owner, an unsafe condition is created or encountered during grading, all work in the area shall be suspended until measures can be taken to mitigate the unsafe condition. An unsafe condition shall be considered any condition that creates a danger to workers, on-site structures, on-site construction, or any off-site properties or persons.

m. Soil gas monitoring (e.g., methane) will be conducted during excavation. If soil gas levels exceed industry-established thresholds then work in the affected area will stop. The soil-gas monitoring expert will then determine the requirements for restarting work.

8.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

In accordance with Section 15128 of the *California Environmental Quality Act (CEQA) Guidelines*, an Environmental Impact Report (EIR) must contain a statement briefly indicating the reasons that various potential significant effects of a project were determined not to be significant. Based on the Initial Study prepared for the proposed project, and included in **Appendix 1.0**, the County of Los Angeles has determined that the proposed project would not have the potential to cause significant adverse effects associated with the issues identified below. These topics have not, therefore, been addressed in detail in this EIR.

8.0.1 AGRICULTURAL AND FOREST RESOURCES

The project site is located in the Los Angeles County unincorporated community of Marina del Rey, which is designated as a Specific Plan Zone as zoned under the County of Los Angeles. The project site's land use designations per the certified Local Coastal Program (LCP) are Marine Commercial, Boat storage, Visitor-serving/Convenience-commercial and Water with a Waterfront Overlay Zone designation.[1] The project site does not support and is not zoned for, nor is it located near an area that is zoned for or developed with, forestland, timberland, or agricultural land. The Marina del Rey community contains no agricultural, forest, or timber lands.[2] Therefore, no impact is identified for this issue.

8.0.2 CULTURAL RESOURCES

The project site is located in an area of Marina del Rey that is currently developed and has been developed for the past 50 years. The project site is not considered a historical site nor does it contain historical structures, known archaeological resources, or known paleontological resources. Further, the project site is not known to contain any human remains and the proposed project entails minimal excavation and minor surface grading. Therefore, no impact is identified for this issue.

8.0.3 ENERGY

The proposed project will comply with the County Green building Ordinance, the County of Los Angeles Green Building Standards, and with the County's Drought Tolerant Landscaping Ordinance. In addition, the proposed project would comply with applicable state regulations regarding energy efficiency and

1 County of Los Angeles, Marina del Rey Specific Plan, Land Use Plan.

2 County of Los Angeles, Marina del Rey Specific Plan, Land Use Plan, Map 8.

would not be expected to use extraordinary amounts of energy or to involve inefficient use of energy resources.[3] Therefore, no impact is identified for this issue.

8.0.4 HAZARDS AND HAZARDOUS MATERIALS

The development proposed under the project would not require the routine use of acutely hazardous materials and does not include provisions for storage of large quantities of boat fuel on site. The proposed boat repair shop would not store large amounts of fuel or other hazardous materials and would be responsible for disposing of all hazardous waste in accordance with state and federal requirements. The proposed project could use hazardous materials such as paints, cleaning agents, aerosol cans, landscaping-related chemicals, and common household substances such as bleaches during construction and renovation activities on the project site, as well as during operation of the uses on the project site upon buildout. All uses and storage of these materials would be subject to federal, state, and local laws pertaining to the use, storage, and transportation of these hazardous materials. The project site is located within 0.25 mile of sensitive land uses; however, the proposed project would not include the storage of large quantities of hazardous materials or pressurized tanks.

In addition, the project site is not located on a parcel of land that has been included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[4] Further, the project site is not located within the Santa Monica Airport Influence Area[5] or the Los Angeles International Airport Influence Area,[6] and would not result in a safety hazard for people in the project area. Therefore, no impact is identified for this issue.

8.0.5 LAND USE AND PLANNING

The proposed project is located in an area of Marina del Rey that is highly urbanized. Existing commercial structures, parking lots, boat anchorages, and a park are located in the near vicinity of the proposed project site. The proposed redevelopment of the existing commercial structures and storage areas with new commercial retail and boater-serving services is consistent with the applicable Specific Plan land use designations and development standards for project site. The proposed project will increase

---

3 California Energy Commission, 2008 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, 2010.

4 California Department of Toxic Substances Control, Envirostor Database

5 Los Angeles County Department of Regional Planning, Los Angeles County Airport Land Use Commission, Santa Monica Airport Influence Area, http://planning.lacounty.gov/assets/upl/project/aluc_airport-santa-monica.pdf.

6 Los Angeles County Department of Regional Planning, Los Angeles County Airport Land Use Commission, LAX Airport Influence Area, http://planning.lacounty.gov/assets/upl/project/aluc_airport-lax.pdf.

connectivity by encouraging public access to the site and is not located within an area subject to Hillside Management policies or within a Significant Ecological Area. Therefore, no impact is identified for this issue.

8.0.6 MINERAL RESOURCES

Neither the project site nor surrounding areas are utilized for mineral production as mapped by the County of Los Angeles.[7] The project site is located within an Oil and Gas Resource Zone; however the project site does not currently contain existing drilling sites for the recovery of oil and natural gas, nor are any drilling sites located on the project site for the recovery of oil or natural gas proposed in the future.[8] There would be no impacts to oil and natural gas resources with implementation of the proposed project Implementation of the proposed project would not result in the loss of an available known mineral resource with value to the region. Therefore, no impact is identified for this issue.

8.0.7 POPULATION AND HOUSING

The proposed project is consistent with the applicable Specific Plan land use designations and development standards for project site. No residential development is currently present within the project site and none is proposed for development under the proposed project. Installation of new infrastructure systems would not be required with implementation of the proposed project, though some improvements to the existing infrastructure systems serving the site (e.g., roadways, on-site sewer lines, water lines) may be required. Given the relatively minor size of the proposed development, the proposed project is not anticipated to induce substantial direct or indirect population growth within the community of Marina del Rey. Therefore, no impact is identified for this issue.

---

7 County of Los Angeles Draft General Plan, Chapter 6 Conservation and Open Spaces Element, Figure 6.5, Natural Resource Areas, 2008.

8 County of Los Angeles Draft General Plan, Chapter 6 Conservation and Open Spaces Element, Figure 6.5, Natural Resource Areas, 2008.

9.0 LIST OF PREPARERS

LIST OF PREPARERS

Impact Sciences, Inc., has prepared this environmental document. Consulting firms and persons directly involved in the review and preparation of this report include the following:

Impact Sciences, Inc. – EIR Preparation

Jessica Kirchner, AICP – Associate Principal

Caitlin Gilleran – Project Planner

Kathleen King – Project Planner

Ian Hillway – Publications Manager

VisionScape Imagery – Visual Simulations

Eddie Font – Principal

Joe Font – Principal

Hirsch Green Transportation Consulting, Inc. - Traffic

Ron Hirsch, P.E. – Principal

Breen Engineering, Inc. – Water/Sewer

Rowan Williams Davis & Irwin, Inc. – Wind Study

Group Delta Consultants – Geotechnical

Los Angeles County Department of Regional Planning

Samuel Dea – EIR Review

Anita Gutierrez – EIR Review

Joe Decruyenaere – EIR Review

10.0 REFERENCES

Breen Engineering, *Sewer Area Study TG 672-B7*, 2012

California Air Resources Board, *Local Government Operations Protocol for the Quantification and Reporting of Greenhouse Gas Emissions Inventories*, Version 1.1, 2010. 208.

California Code of Regulations, Title 24

California Department of Fish and Wildlife (CDFW) (January 2011). Special Animals (898 taxa). Habitat Conservation Division, Wildlife and Habitat Data Analysis Branch.

California Department of Fish and Wildlife (January 2010). Special Vascular Plants, Bryophytes, and Lichens List. Natural Heritage Division, Natural Diversity Data Base.

California Department of Fish and Wildlife (September 2010). Natural Communities List. Available at: http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf

California Department of Fish and Wildlife, Vegetation Classification and Mapping Program, List of Vegetation Alliances and Associations. September 2010. http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp

California Geological Survey, "Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California," 1997.

California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004, 2006.

California Government Code, Section 8875 et seq.

California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database, August, 2013.

California Natural Diversity Database. 2012. Biogeographic Data Branch. Department of Fish and Game. Commercial Version. August 2012.

California Public Resources Code, Sec. 2690 et seq.

County of Los Angeles, Department of Regional Planning, *Marina del Rey Land Use Plan*, 2012

Environmental & GIS Services, LLC. 2012. *Avian Resources Assessment; Proposed Parcel 44 Redevelopment, Marina del Rey, Los Angeles County, California*. Prepared for Pacific Marina Venture, LLC. July 31, 2012.

Group Delta Consultants, Inc. *Geotechnical Engineering Report Proposed Commercial and Retail Development, Marina del Rey – Parcel 44*, June 1, 2012.

Group Delta Consultants. *Addendum 1 – Geotechnical Engineering Report Update to Seismic Design Parameters Proposed Commercial and Retail Development Marina del Rey – Parcel 44*, March 11, 2014

Harvard Report on Cancer Prevention, Vol. 1, *Causes of Human Cancer, Cancer Causes and Control*, (1996) 7 (Suppl. 1)

Hamilton, Robert A. and Daniel S. Cooper. 2010. "Conservation & Management Plan for Marina del Rey, Los Angeles County, California." Prepared for County of Los Angeles, Department of Beaches and Harbors and Department of Regional Planning. March 23, 2010.

Hirsch/Green Transportation Consulting, Inc. *Traffic Impact Analysis Report Proposed Commercial Redevelopment of Parcel 44 on Admiralty Way between Bali Way and Mindanao Way in Marina del Rey, California.* October 2013.

Institute of Transportation and Engineering, *ITE Trip Generation Rates – 8th Edition,* 2008.

Intergovernmental Panel on Climate Change, "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf. 2007.

RWDI, *Wind Conditions Consultation Marina del Rey Parcel 44*, November 14, 2013

South Coast Air Quality Management District, *CEQA Air Quality Handbook*, (1993)

South Coast Air Quality Management District, *Final Program Environmental Impact Report for the 2007 Air Quality Management Plan*, (2007)

South Coast Air Quality Management District, *Final Report: Multiple Air Toxics Exposure Study in the South Coast Air Basin*, (2008)

US Department of Transportation, Federal Highway Administration, *Highway Noise Fundamentals*, (1980) 81.

US Fish and Wildlife Service (USFWS). 2012a. Federally Listed Threatened and Endangered Species that May Occur in Los Angeles County, California. http://www.fws.gov/carlsbad/SpeciesStatusList/CFWO_Species_Status_List%20.htm

USFWS. 2012b. Critical Habitat Mapper: http://crithab.fws.gov. Accessed November 2012.

USFWS. 2012. Pacific Southwest Region. Website search of species' details. Found at: http://www.fws.gov/arcata/es/birds/brnPelican/b_pelican.html. Accessed November 2012.