2ND & PCH PROJECT

INITIAL STUDY

PREPARED FOR:

The City of Long Beach

Department of Development Services

PREPARED BY:

Eyestone Environmental, LLC

November 2016

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Environmental Checklist Form

1. Project Title:	2nd & PCH
2. Lead Agency Name and Address:	City of Long Beach Department of Development Services Planning Bureau 333 West Ocean Boulevard, 5th Floor Long Beach, CA 90802
3. Contact Person and Phone Number:	Craig Chalfant, Senior Planner (562) 570-6368
4. Project Location:	6400 Pacific Coast Highway Long Beach, Los Angeles County, CA 90803 The property is bounded by 2nd Street to the north, Pacific Coast Highway to the east, a retail shopping center (Marina Shores Shopping Center) to the south, and Marina Drive to the west.
5. Project Sponsor's Name and Address:	PCH Property, LLC 6400 Pacific Coast Highway Long Beach, CA 90803
6. General Plan Designation:	Land Use District No. 7
7. Zoning:	Subarea 17 of the Southeast Area Development Improvement Plan (Planned Development District 1)

8. Description of the Project:

The Project would include approximately 95,000 square feet of retail uses, a 55,000-square-foot grocery store, a 25,000-square-foot fitness/health club, and approximately 70,000 square feet of restaurant uses, as well as 1,150 parking spaces (collectively, the Project). These improvements would replace an existing hotel (the Seaport Marina Hotel) and associated amenities and surface parking areas. The proposed uses would be provided within several

one- and two-story buildings ranging in height from 30 feet to 35 feet as defined by the Long Beach Municipal Code. Landscaped pedestrian pathways and open space areas such as a plaza and paseos also would be provided throughout the Project Site. Please refer to Attachment A, Project Description, for a detailed description of the Project.

9. Surrounding Land Uses and Setting

The Project Site is located in the southeastern portion of the City of Long Beach (City). North of the Project Site on 2nd Street is a one-story pharmacy and a one-story grocery store with associated surface parking areas. North of these uses is the Marina Pacifica Mall, which includes retail, restaurant, and entertainment uses with surface and subterranean parking. Northwest of the Project Site and immediately west of the Marina Pacifica Mall are three- to five-story multi-family residential uses within the private waterfront condominium community known as Marina Pacifica. The area northeast of the Project Site includes a fast food restaurant (at the northeast corner of Pacific Coast Highway [PCH] and 2nd Street), oil fields, and the Los Cerritos Wetlands. East of the Project Site across PCH is a service station at the southeast corner of PCH and 2nd Street and to its south is The Marketplace, a shopping center comprised of several one-story buildings. The Marketplace includes restaurants, a grocery store, a movie theater, and other retail uses with associated surface parking areas. South of The Marketplace are several one- and two-story office buildings and the Los Cerritos Wetlands, which continue east of The Marketplace. Immediately south of the Project Site is Marina Shores Shopping Center, which includes a grocery store, restaurants, and other retail uses with associated surface parking. South of Marina Shores Shopping Center is a two-story office building followed by the San Gabriel River. The area west of the Project Site, across Marina Drive, is primarily occupied by a surface parking lot associated with the publicly owned Alamitos Bay Marina. Restaurants and limited boat-related retail uses are also located west of the Project Site, adjacent to Alamitos Bay Marina. A boat launch (Davies Launch Ramp) also is located west of the Project Site near 2nd Street and Marina Drive.

10. Other public agencies whose approval may be required:

California Department of Transportation (Caltrans)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

DETERMINATION (To be completed by Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.	
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	X
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

Signature _____ Date 11/17/16

ENVIRONMENTAL IMPACTS. (Explanations for all answers are required):

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
1. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐

Potentially Significant Impact. A scenic vista is a view of a valued visual resource. Visual resources in the Project area include the Alamitos Bay Marina, which is visible along 2nd Street and Marina Drive in the vicinity of the Project Site. The Project would replace the existing two-story, approximately 165,000-square-foot Seaport Marina Hotel with approximately 95,000 square feet of retail uses, a 55,000-square-foot grocery store, a 25,000-square-foot fitness/health club, and approximately 70,000 square feet of restaurant uses. The proposed uses would be housed within several buildings ranging in height from 30 feet to 35 feet as defined by the Long Beach Municipal Code. The Project also would include approximately 1,150 parking spaces, which would be provided two main parking structures, including a second-level parking deck above some of the single-story uses. The proposed structures could be visible within scenic vistas that are available from locations within the Project Site vicinity. Therefore, the Project's potential impacts on scenic vistas will be analyzed further in an EIR.

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

Potentially Significant Impact. While there are no designated scenic highways located on or in the vicinity of the Project Site, PCH, which fronts the Project Site is eligible.[1] PCH and 2nd Street adjacent to the Project Site also are designated scenic routes in the City's General Plan Scenic Routes Element.[2] Further, the Project Site is located within a scenic corridor designated in the Scenic Routes Element.[3] The Seaport Marina Hotel, which was constructed approximately 55 years ago, may be historically significant. Therefore, the Project's impact to a potentially historic building within an eligible state scenic highway will be analyzed further in an EIR.

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[1] *California Department of Transportation, California Scenic Highway Program, Scenic Highway Routes, www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed November 1, 2016.*

[2] *City of Long Beach, Scenic Routes Element (Scenic Highways), May 9, 1975, p. 58.*

[3] *Ibid.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐

Potentially Significant Impact. As described above, the Project would involve the development of approximately 95,000 square feet of retail uses, a 55,000-square-foot grocery store, a 25,000-square-foot fitness/health club, and approximately 70,000 square feet of restaurant uses. The proposed uses would be provided within several buildings ranging in height from 30 feet to 35 feet as defined by the Long Beach Municipal Code. The Project also would include approximately 1,150 parking spaces, which would be provided in two main parking structures, including a second-level parking deck above some of the single-story uses. While the proposed buildings and parking structures are anticipated to be of similar height and scale as existing buildings within the Project vicinity, Project development would change the visual character and quality of the Project Site and its surroundings by replacing the existing two-story hotel and associated surface parking areas with new buildings, parking areas, and landscaping. Therefore, the EIR will provide further analysis of the Project's potential impacts to visual character and quality.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

Potentially Significant Impact. The Project Site is located within an urbanized area, characterized by medium to high ambient nighttime artificial light levels. Light sources within and in the Project vicinity include street lighting, vehicle headlights, illuminated signage, security lighting, and architectural lighting. The Project would result in the development of new buildings, parking structures, and associated architectural features and signage throughout the Project Site. The Project would include nighttime illumination for security and wayfinding, parking, signage, and architectural highlighting, which may be visible from some nearby off-site locations. In addition, new buildings and architectural features would introduce new surfaces which could result in new sources of glare. Therefore, the EIR will provide further analysis of the Project's potential impacts due to light and glare.

With respect to potential shading impacts, shadow effects are dependent on several factors, including local topography, the height and bulk of a project's structural elements, the sensitivity of surrounding uses, season, and duration of shadow projection. Shade-sensitive uses typically include residential uses and routinely usable outdoor spaces associated with recreational or institutional uses (i.e., schools), pedestrian-oriented outdoor spaces, nurseries, and existing solar collectors. These uses are considered sensitive because sunlight is

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

important to their function, physical comfort, or commerce. As described in Attachment A, Project Description, the Project Site is surrounded by commercial uses to the north, south, and east, and by the Alamitos Bay Marina surface parking lot directly to the west. The Project would include the development of several buildings throughout the Project Site which would range in height from approximately 30 feet to 35 feet. Therefore, development of new structures on-site would generate new shadows with varied lengths and angles depending on the time of day and season. However, due to the relatively low-rise height of the proposed structures, new shadows would generally fall onto the Project Site and adjacent roadways. Furthermore, there are no shadow-sensitive uses located directly adjacent to the Project Site. As such, the proposed buildings would have no impact on shadow-sensitive uses within the Project vicinity. Potential shading impacts associated with Project development would be less than significant, and no mitigation measures or further analysis of this topic in an EIR is required.

2. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

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

No Impact. The Project Site is located in an urbanized area of the City of Long Beach and does not include any agricultural land. In addition, the Project Site and surrounding area are not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the Farmland Mapping and Monitoring Program of the California Resources

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Agency.[4] As such, the Project would not convert farmland to a non-agricultural use. No impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

No Impact. The Project Site is not zoned for agricultural use under the Long Beach Municipal Code, and no agricultural zoning is present in the surrounding area. The Project Site and surrounding area also are not enrolled under a Williamson Act Contract.[5] Therefore, the Project would not conflict with existing zoning for agricultural uses or a Williamson Act Contract. No impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220 (g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined in Government Code Section 51104(g))?	☐	☐	☐	☒

No Impact. The Project Site is located in an urbanized area of the City and does not include any forest land or timberland. Additionally, the Project Site is currently zoned for commercial land uses, is not zoned for forest land, and is not used as forest land. Therefore, the Project would not rezone forest land or timberland as defined by the Public Resources Code. No impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

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[4] *California Department of Conservation, California Important Farmland Finder, http://maps.conservation.ca.gov/ciff/ciff.html, accessed November 1, 2016.*

[5] *California Department of Conservation, Los Angeles County Williamson Act FY 2015/2016, 2015.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d. Result in the loss of forest land or conversion of forest land to a non-forest use?	☐	☐	☐	☒

No Impact. As mentioned above, the Project Site is located in an urbanized area of the City, is not zoned for forest land, and does not include any forest or timberland. Therefore, the Project would not result in the loss or conversion of forest land. No impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact. As noted above, the Project Site is located in an urbanized area of the City and does not contain any agricultural or forest uses, nor are any agricultural or forest uses located in the Project vicinity. Thus, Project development would not convert any farmland or forest land to non-agricultural or non-forest use. No impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐

Potentially Significant Impact. The Project Site is located within the 6,700-square-mile South Coast Air Basin (Basin). Within the Basin, the South Coast Air Quality Management District (SCAQMD) is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the Basin is in non-attainment (i.e., ozone, particulate matter less than ten microns in size [PM_{10}], particulate matter less than 2.5 microns in size [$PM_{2.5}$], and lead).[6,7] The SCAQMD's 2012 Air Quality Management Plan (AQMP) contains a

[6] *Lead has a Partial Non-Attainment designation for the Los Angeles County portion of the Basin only. PM10 is in non-attainment with the state standard only.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG). SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment.[8] With regard to future growth, SCAG has prepared the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS), which provides population, housing, and employment projections for cities under its jurisdiction. The growth projections in the 2016–2040 RTP/SCS are based on growth projections in local general plans for jurisdictions in SCAG's planning area.

Construction and operation of the Project may result in an increase in stationary and mobile source air emissions. As a result, Project development could have an adverse effect on the SCAQMD's implementation of the AQMP. Therefore, the EIR will provide further analysis of the Project's consistency with the SCAQMD's AQMP.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐

Potentially Significant Impact. The Project would contribute to regional and localized air pollutant emissions from the Project Site during construction (short-term) and operation (long-term). Construction-related pollutants would be associated with sources such as construction worker vehicle trips, the operation of construction equipment, site grading and preparation activities, and the application of architectural coatings. During Project operation, air pollutants would be emitted on a daily basis from motor vehicle travel, energy consumption, and other on-site activities. Therefore, the EIR will provide further analysis of the Project's construction and operational air pollutant emissions.

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[7] *A Revised Draft 2016 AQMP was published in October 2016; however, the 2012 AQMP remains in effect at this time.*

[8] *SCAG serves as the federally designated metropolitan planning organization (MPO) for the Southern California region.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐

Potentially Significant Impact. As described above, construction and operation of the Project would result in the emission of air pollutants in the Basin, which is currently in non-attainment of both federal and state air quality standards for ozone, $PM_{2.5,}$ and lead, as well as non-attainment for state air quality standards for PM_{10}. Therefore, implementation of the Project could potentially contribute to air quality impacts, which could cause a cumulative impact when combined with other existing and future emissions sources in the area. Therefore, the EIR will provide further analysis of cumulative air pollutant emissions associated with the Project.

d. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐

Potentially Significant Impact. As discussed above, the Project would contribute to regional and localized air pollutant emissions from the Project Site during construction (short-term) and operation (long-term). Some population groups, including children, the elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases) are considered more sensitive to air pollution than others. The SCAQMD *CEQA Air Quality Handbook* provides examples of typical sensitive receptors, including long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. Sensitive receptors in the Project vicinity include multi-family residences. Therefore, the EIR will provide further analysis of the Project's potential to result in substantial adverse impacts to sensitive receptors.

e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Less Than Significant Impact. No objectionable odors are anticipated as a result of either construction or operation of the Project. The Project would be constructed using conventional building materials typical of construction projects of a similar type and size. Any odors that may be generated during construction would be localized and temporary in nature and would

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

not be sufficient to affect a substantial number of people or result in a nuisance as defined by SCAQMD Rule 402.

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. While the Project would not involve these types of uses, on-site trash receptacles used by the Project would have the potential to create odors. However, as trash receptacles would be contained, located, and maintained in a manner that promotes odor control, no substantially adverse odor impacts are anticipated. Thus, impacts with regard to odors would be less than significant, and no mitigation measures would be required. No further analysis of this issue is required.

4. BIOLOGICAL RESOURCES. Would the project:[9]

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated. The Project Site is located within an urbanized area and is currently developed with a hotel, associated surface parking areas, and landscaping. Due to the developed nature of the Project Site, species likely to occur on-site are limited to small terrestrial and avian species typically found in developed settings. While on-site vegetation is limited to ornamental, non-native shrubs and trees, some on-site mature trees could potentially be used for roosting and nesting purposes by migratory birds. In order to avoid direct impacts to migratory birds and ensure compliance with the Migratory Bird Treaty Act (MBTA) as well as California Fish and Game Code Sections 3503,

[9] *The analysis that follows is based on the Biological Resources Assessment prepared by PCR Services Corporation (now ESA PCR), dated February 2011 and included as Appendix IS-1 of this Initial Study. A 2014 Initial Study for a previous development proposal on the Project Site recommended further analysis of biological resources in an EIR. However, the attached assessment demonstrates that all potential impacts to biological resources would be less than significant (with the exception of potential impacts to migratory birds, which as discussed herein, would be reduced to a less-than-significant level through regulatory compliance). Accordingly, further analysis of biological resources in an EIR is no longer required.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

3503.5, and 3513, removal of on-site mature trees would be conducted in accordance with the mitigation measure set forth below. As such, efforts would be made to schedule the removal of mature trees between September 1 and February 14 to avoid the nesting season. If activities were to occur during the nesting season, all suitable habitats would be thoroughly surveyed for the presence of nesting birds by a qualified biologist prior to removal. If any active nests were detected, the area would be flagged, along with a minimum 300-foot buffer (buffer may range between 300 and 500 feet as determined by the monitoring biologist), and would be avoided until the nesting cycle has completed or the monitoring biologist determines that the nest has failed. With implementation of the proposed mitigation measure and associated compliance with regulatory requirements, the Project would not have a substantial adverse direct effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service and would not result in a direct significant impact with regard to this topic.

Mitigation Measure IS-1: The Applicant shall perform one or more of the following to reduce potential impacts to migratory raptor and songbird species to a less than significant level: (1) vegetation removal activities shall be scheduled outside the nesting season for raptor and songbird species (nesting season typically occurs from February 15 to August 31) to avoid potential impacts to nesting species (this will ensure that no active nests will be disturbed and that habitat removal could proceed rapidly); and/or (2) any construction activities that occur during the raptor and songbird nesting season shall require all suitable habitat to be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist no earlier than seven days prior to commencement of disturbance. If any actives nests are detected, a buffer of at least 300 feet (500 feet for raptors) or as determined by the qualified biologist shall be delineated, flagged, and avoided until the nesting cycle is complete, as determined by the qualified biologist. The results of the survey(s) shall be reported to the lead agency to document compliance with applicable state and federal laws pertaining to the protection of nesting native birds.

It is noted, however, that several waterways and open space areas which could provide habitat for sensitive species are located in the general vicinity of the Project Site. These include the Los Cerritos Channel, located north of the Project Site; the San Gabriel River, located south of the Project Site; the Los Cerritos Wetlands, located northeast and east of the Project Site; and the Alamitos Bay Marina, located west of the Project Site. While unlikely, the Project could

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

result in an indirect impact to potentially sensitive species in these surrounding areas through the introduction of invasive species, changes in lighting, noise, changes to stormwater drainage and water quality, and/or the introduction of new vehicular hazards. These possible impacts are discussed in detail below.

Invasive Species

The Project would introduce new landscaping that may include various ornamental invasive (non-native) plant species. Such species could have the potential to proliferate in native habitat areas, displace native plant species, and result in adverse impacts to potentially sensitive habitats and resident species. However, Project landscaping also would include native plant species that are compatible with the surrounding environment and could serve to support foraging or nesting of native wildlife species. Therefore, the potential for the proliferation of invasive species into native habitats would be limited. Furthermore, viable habitat within the Los Cerritos Wetlands is located a minimum of approximately 2,000 feet from the Project Site and is separated by intervening streets and urban development. Similarly, Alamitos Bay is separated from the Project Site by intervening development. Thus, potential indirect impacts to candidate, sensitive, or special-status species in the vicinity of the Project Site as a result of potential invasive species would be less than significant.

Lighting

Nighttime lighting on the Project Site could attract nocturnal migrating bird species to the Project Site, in particular songbirds due to their tendency to migrate at night, their low flight altitudes, and disorientation by artificial light. Nocturnal migrating birds are also attracted to sources of artificial light, particularly during periods of inclement weather. Thus, nocturnal migrating bird species could be vulnerable to collisions with obstructions.

While the Project would increase the amount of artificial lighting within the Project Site, all Project lighting would be directed and installed according to the City of Long Beach lighting standards to avoid excessive lighting and minimize off-site light spill. Furthermore, Project-related lighting would be similar in nature to that of surrounding development in the area in order to provide adequate visibility and safety. Proposed lighting would not include unusually bright lights or lights directed off-site. Thus, although new light sources on the Project Site would be visible, Project-related lighting would not result in substantial changes in the overall light levels in the Project area.

Although a disturbed portion of Los Cerritos Wetlands is located approximately 400 feet from the Project Site, it is separated by intervening urban development, including major roadways, existing commercial development, and associated landscaping and other vegetation.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Furthermore, based on the distance of the Project Site from viable habitat areas within the Los Cerritos Wetlands (i.e., 2,000 feet), the distance between the Project Site and Alamitos Bay, and the use of shielded and focused lighting on the Project Site, lighting from the Project is not anticipated to impact surrounding biological resources. As such, indirect impacts to biological resources associated with Project lighting would be less than significant.

Noise

Noise associated with Project grading and construction may have indirect effects on wildlife. Such noise impacts are generally a function of the noise generated by construction equipment, the location of the construction equipment, the sensitivity of nearby land uses or resources, and the timing and duration of construction activities. However, Project construction noise would be temporary and intermittent in nature. Standard construction practices also would be implemented to reduce off-site construction noise to the extent feasible. Furthermore, viable habitat within the Los Cerritos Wetlands is located a minimum of approximately 2,000 feet from the Project Site and is separated by intervening streets and urban development, which contribute to existing noise levels. Therefore, potential indirect impacts to candidate, sensitive, or special status species in the vicinity of the Project Site associated with construction noise would be less than significant.

Regarding operational noise, any new noise sources introduced by the Project would be similar to the existing type(s) of noise and associated noise levels in the Project vicinity. Further, any wildlife in the Project vicinity are already subject to urban noise and similar disturbances. Moreover, as previously mentioned, viable habitat within the Los Cerritos Wetlands is located a minimum of approximately 2,000 feet from the Project Site and is separated by intervening streets and urban development, which contribute to existing noise levels. Therefore, no significant indirect impacts are expected to occur in connection with operational Project noise.

Stormwater Drainage and Water Quality

Indirect impacts to sensitive species and habitats located downstream of the receiving water bodies, including Alamitos Bay, could occur through elevated pollutant loads from stormwater flows leaving the Project Site. Pollutants typically associated with commercial development include oil, grease and vehicle-related fluids from parking areas, and pesticides or nutrients from landscaping. However, the Project would incorporate and implement best management practices (BMPs) during Project construction and operation in compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit. Furthermore, water quality impacts to the Los Cerritos Wetlands are not anticipated as the wetlands are located up-gradient from the Project Site (thus, stormwater from the Project Site

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

flows away from the wetlands) and are separated from the Project Site by intervening streets and urban development. As such, the Project Site is not hydrologically connected to the Los Cerritos Wetlands. Overall, with compliance with regulatory requirements, including the implementation of BMPs, stormwater runoff and water quality impacts indirectly affecting candidate, sensitive or special status species or habitats would be less than significant.

Vehicular Hazards

Project-related vehicular trips along local roadways could contribute to an increase in the potential for collisions with wildlife species near natural habitat areas and could increase the occurrence of "road kills." While the Project is expected to increase the number of vehicles on local roadways, as previously described, natural habitat areas are not located adjacent to the Project Site. Specifically, viable habitat within the Los Cerritos Wetlands is located approximately 2,000 feet from the Project Site and is separated by intervening streets and urban development. Similarly, Alamitos Bay is separated from the Project Site by intervening development. Further, road kills of sensitive wildlife species in areas surrounding the Project Site are not prevalent. Thus, the anticipated increase in traffic along local roadways as a result of the Project would not substantially increase vehicular collisions with sensitive species. Therefore, potential indirect impacts related to candidate, sensitive or special status species from vehicular collisions would be less than significant.

Overall, direct and indirect impacts with respect to special status species would be less than significant, and no mitigation measures would be required. No further analysis of this issue is required.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐

Less Than Significant Impact. The Project Site is located within an urbanized area and is currently developed with a hotel, surface parking areas, and landscaping. The Project would not result in direct impacts to riparian habitat or other sensitive natural communities as none are located within the Project Site. Potential indirect impacts to candidate, sensitive, or special-status species within nearby riparian habitats, including the Los Cerritos Wetlands and Alamitos Bay are discussed above in response to Question 4.a. As discussed therein, the Project would limit the use of potential invasive species and would not generate a substantial

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

amount of off-site lighting and noise. In addition, the Project would implement BMPs including erosion controls and planters to minimize the amount of runoff and pollutants exiting the site. Thus, the Project would not result in significant impacts to riparian habitat or other sensitive natural communities. No mitigation measures would be necessary, and no further analysis of this issue is required.

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

Less Than Significant Impact. The Project Site is located within an urbanized area and is currently developed with a hotel, surface parking areas, and landscaping. There are no federally protected waters or wetlands, as defined by Section 404 of the Clean Water Act, within the Project Site. The nearest waters of the United States/California and wetlands are the Los Cerritos Wetlands and Alamitos Bay. Potential indirect impacts to candidate, sensitive, or special-status species within nearby riparian habitats, including the Los Cerritos Wetlands and Alamitos Bay are discussed above in response to Question 4.a. In particular, the Project would implement BMPs in accordance with regulatory requirements to minimize the amount of runoff and pollutants discharged into receiving waters, including Alamitos Bay. It is noted that the Los Cerritos Wetlands are located up-gradient from the Project Site, thus any potential runoff from the Project Site would not reach the wetlands. As such, potential impacts to federally protected wetlands as defined by Section 404 of the Clean Water Act would be less than significant, and no mitigation measures are required. No further analysis of this issue is required.

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

Less Than Significant Impact. As previously discussed, the Project Site is fully developed and is surrounded by urbanized development that does not typically contain native habitat areas or habitat linkages. The Project Site does not support biologically significant wildlife

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

movement or contain native wildlife nursery sites. The Project Site is, however, located within the Pacific Flyway, which is identified as a major north-south route for travel by migratory birds in the Americas, and the Los Cerritos Wetlands have been identified by the National Audubon Society as an Important Bird Area and important stopping point for migrating bird species. Thus, Project development could pose a hazard to migrating bird species as they move through the area. However, there are extensive unobstructed flight paths in the surrounding area, including the San Gabriel River Channel, Los Cerritos Wetlands, Los Cerritos Channel, and areas of low-scale urban development. The Project would consist of several new buildings up to 35 feet in height, which would be generally consistent with existing conditions and surrounding development and is not expected to impact the Pacific Flyway. Project development would not funnel migrating birds into existing or proposed structures or constrain the flight paths within the extensive open air space surrounding the Project Site. Thus, the Project would not substantially interfere with the movement or migration of any native or migratory wildlife species. In addition, based on the height of the Project structures, bird mortality from collisions with Project structures is not anticipated. Thus, Project impacts related to wildlife corridors would be less than significant, and no mitigation measures are required. No further analysis of this issue is required.

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

No Impact. As previously described, the Project Site is currently developed with a hotel, associated surface parking areas, and landscaping. The vegetation on-site includes ornamental, non-native shrubs, and landscaping trees. The removal of any street trees for Project development would occur in accordance with the City's Tree Maintenance Policy, which sets forth guidelines to administer Chapter 14.28 of the Long Beach Municipal Code. The Project also would provide landscaping and open space in accordance with the City's requirements for the Southeast Area Development and Improvement Plan (SEADIP) area. Therefore, the Project would not conflict with local policies or ordinances protecting biological resources. No impacts would occur, and no mitigation measures are necessary. Further analysis of this issue in an EIR is not required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

No Impact. As indicated above, the Project Site is located in an urbanized area and does not provide habitat for sensitive biological resources. As such, the Project Site is not subject to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Project would not conflict with the provisions of any habitat conservation plans, and no mitigation measures are required. No further analysis of this issue is required.

5. CULTURAL RESOURCES. Would the project:

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	☒	☐	☐	☐

Potentially Significant Impact. CEQA Guidelines Section 15064.5 defines a historic resource as one that is: (1) listed in, or determined to be eligible for listing in the California Register of Historical Resources; (2) included in a local register of historical resources (pursuant to Public Resources Code Section 5020.1(k)); or (3) identified as significant in an historical resources survey (meeting the criteria in Public Resources Code Section 5024.1(g)). Additionally, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered "historically significant" by the lead agency if the resource meets the criteria for listing on the California Register of Historical Resources.

As previously described, the Project Site is currently developed with the Seaport Marina Hotel, which was constructed over 55 years ago and therefore could qualify as an historic resource. As part of the Project, the Seaport Marina Hotel would be removed. Thus, further analysis of this issue in an EIR is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☒	☐	☐	☐

Potentially Significant Impact. CEQA Guidelines Section 15064.5(a)(3)(D) defines archaeological resources as any resource that "has yielded, or may be likely to yield, information important to prehistory or history." Archaeological resources are features, such as tools, utensils, carvings, fabric, building foundations, etc., that document evidence of past human endeavors and that may be historically or culturally important to a significant earlier community. As previously discussed, the Project Site is located within an urbanized area and has been subject to disturbance in the past. Thus, surficial archaeological resources that may have existed at one time have likely been previously disturbed. Nevertheless, the Project would require grading of the entire site, excavation, and other construction activities that could have the potential to disturb existing but undiscovered archaeological resources. Therefore, further analysis of this issue in an EIR is required.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

Potentially Significant Impact. Paleontological resources are the fossilized remains of organisms that have lived in a region in the geologic past and whose remains are found in the accompanying geologic strata. This type of fossil record represents the primary source of information on ancient life forms, since the majority of species that have existed on earth from this area are extinct. As described above, the Project Site is located within an urbanized area and has been subject to disturbance in the past. However, the Project would require grading of the entire site, excavation, and other construction activities that could have the potential to disturb existing but undiscovered paleontological resources. Therefore, further analysis of this issue in an EIR is required.

There are no unique geologic features within or adjacent to the Project Site. Thus, no impacts associated with destruction of a unique geologic feature would occur, and no mitigation measures are required. No further analysis of this issue is required.

d. Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Potentially Significant Impact. As previously described, the Project Site has been subject to past disturbance. In addition, no known traditional burial sites have been identified on-site. Nevertheless, the Project would require grading and excavation that could have the potential to uncover existing but undiscovered human remains. Thus, further analysis of this issue in an EIR is required.

6. GEOLOGY AND SOILS. Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

Less Than Significant Impact. Fault rupture is defined as the surface displacement that occurs along the surface of a fault during an earthquake. Based on criteria established by the California Geological Survey (CGS), faults can be classified as active, potentially active, or inactive. Active faults may be designated as Earthquake Fault Zones under the Alquist–Priolo Earthquake Fault Zoning Act, which includes standards regulating development adjacent to active faults. These zones, which extend from 200 to 500 feet on each side of the known fault, identify areas where a potential surface fault rupture could prove hazardous for buildings used for human occupancy. Development projects located within an Alquist–Priolo Earthquake Fault Zone are required to prepare special geotechnical studies to characterize hazards from any potential surface ruptures.

The Project Site is not within a currently established Alquist–Priolo Earthquake Fault Zone as identified by the CGS or within the City's General Plan Seismic Safety Element.[10,11] No active

[10] *State of California, Department of Conservation, Division of Mines and Geology, Special Studies Zones, Los Alamitos Quadrangle, July 1, 1986.*

[11] *City of Long Beach General Plan, Seismic Safety Element, Plate 2, October 1988.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the Project Site. The nearest active fault to the Project Site is the Newport–Inglewood Fault Zone, which is located approximately 0.25 mile northeast of the Project Site.[12] Therefore, the potential for surface rupture to occur on the Project Site is considered low. Impacts related to the rupture of a known earthquake fault would be less than significant, and no mitigation measures would be required. No further analysis of this issue is required.

ii. Strong seismic ground shaking?	☒	☐	☐	☐

Potentially Significant Impact. The Project Site is located in the seismically active Southern California region and could be subjected to moderate to strong ground shaking in the event of an earthquake on one of the many active Southern California faults. As previously stated, the closest active fault is the Newport-Inglewood Fault, which is located approximately 0.25 mile northeast of the Project Site. The location of the Project Site within a seismically active area in proximity to the Newport-Inglewood Fault could expose people or structures to strong seismic ground shaking. Therefore, the EIR will provide further analysis of the Project's potential impacts associated with ground shaking.

iii. Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐

Potentially Significant Impact. Liquefaction involves a sudden loss in strength of saturated, cohesionless soils that are subject to ground vibration and results in temporary transformation of the soil to a fluid mass. If the liquefying layer is near the surface, the effects are much like that of quicksand for any structure located on it. If the layer is deeper in the subsurface, it may provide a sliding surface for the material above it. Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine- to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

Based on the Seismic Hazards Maps of the State of California, the Project Site is located within a potentially liquefiable area.[13] In addition, the Project Site is located in an area with a

[12] *Ibid.*

[13] *State of California, California Geological Survey, Seismic Hazard Zones, Los Alamitos Quadrangle, March 25, 1999.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

significant liquefaction potential as mapped by the City.[14] Therefore, this issue will be analyzed further in an EIR.

iv. Landslides?	☐	☐	☒	☐

Less Than Significant Impact. The Project Site and surrounding area are characterized by a relatively flat topography and, as such, are not identified by the City within an area of steep slopes.[15] Additionally, the Project Site and surrounding area are not designated as an earthquake-induced landslide area by the CGS.[16] Furthermore, the Project does not propose substantial alteration to the existing topography. Therefore, no significant impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less Than Significant Impact. Development of the Project would require grading, limited excavation to support the building foundations, and other construction activities that have the potential to disturb existing soils and expose soils to rainfall and wind, thereby potentially resulting in soil erosion. However, construction activities would occur in accordance with erosion control requirements, including grading and dust control measures, imposed by the City pursuant to grading permit requirements. Specifically, Project construction would comply with the Long Beach Building Standards Code (Title 18 of the Long Beach Municipal Code), which requires necessary permits, plans, plan checks, and inspections to ensure that the Project would reduce erosion effects. In addition, as part of the plan check requirements, the Project would be required to have a stormwater management program, including a Storm Water Pollution Prevention Plan (SWPPP) pursuant to NPDES permit requirements. As part of the SWPPP, BMPs would be implemented during construction to reduce sedimentation and erosion levels to the maximum extent possible. Based on compliance with regulatory requirements, including the implementation of BMPs, impacts would be less than significant and no mitigation measures would be required. No further analysis of this issue is required.

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[14] *City of Long Beach General Plan, Seismic Safety Element, Plate 7, October 1988.*

[15] *City of Long Beach General Plan, Seismic Safety Element, Plate 9, October 1988.*

[16] *State of California, Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the Los Alamitos 7.5-Minute Quadrangle, Los Angeles and Orange Counties, California. 1998.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☒	☐	☐	☐

Potentially Significant Impact. As discussed above, the Project Site could be susceptible to ground shaking. In addition, as the Project Site is located within a potentially liquefiable area, the Project Site could be subject to seismically related ground failure hazards, including liquefaction. As such, this issue will be addressed in an EIR.

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

Potentially Significant Impact. Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated cycles of wetting and drying. The Project Site may contain soils that are considered to have a moderate expansion potential. Therefore, further analysis of this issue will be provided in the EIR.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

No Impact. The Project Site is located within a community served by existing sewage infrastructure. Therefore, wastewater generated by the Project would be accommodated via connections to the existing sewage infrastructure located in the Project area. As such, the Project would not require the use of septic tanks or alternative wastewater disposal systems. The Project would not result in impacts related to the ability of soils to support septic tanks or alternative wastewater disposal systems, and no mitigation measures would be required. No further analysis of this issue is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
7. GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐

Potentially Significant Impact. Gases that trap heat in the atmosphere are referred to as greenhouse gases since they have effects that are analogous to the way in which a greenhouse retains heat. Greenhouse gases are emitted by both natural processes and human activities. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature. The State of California has undertaken initiatives designed to address the effects of greenhouse gas emissions, and to establish targets and emission reduction strategies for greenhouse gas emissions in California. Activities associated with the Project, including construction and operational activities, would include associated human activity–related greenhouse gas emissions. Therefore, the EIR will provide further analysis of the Project's greenhouse gas emissions.

b. Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Potentially Significant Impact. As the Project would have the potential to emit greenhouse gas emissions, an evaluation of these emissions and associated emission reduction strategies will be undertaken in an EIR to determine whether the Project conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (e.g., Assembly Bill 32 [AB 32] and City of Long Beach Green Building Ordinance).

8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐

Potentially Significant Impact. Project construction would involve the temporary use of typical, although potentially hazardous, materials including vehicle fuels, oils, transmission fluids, paints, adhesives, cleaning solvents, surface coatings, and other acidic or alkaline

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

solutions that would require special handling, transport, and disposal. In addition, Project operation would involve the routine use and handling of potentially hazardous materials typical of those used for retail and restaurant developments including cleaning solvents for custodial maintenance of the buildings and pesticides for landscaping. Further, as part of the Project, the existing Seaport Marina Hotel, which was constructed over 50 years ago, would be demolished. Due to the age of this structure, there is a potential for asbestos-containing materials and/or lead-based paints to be present on-site. Additionally, based on past oil extraction activities within and surrounding the Project Site, there is a potential for the presence of gases such as methane in the Project vicinity. Therefore, the Project's potential impacts with regard to the routine transport, use, or disposal of potentially hazardous materials will be evaluated further in an EIR.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐

Potentially Significant Impact. Please refer to response to Question 8.a, above.

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

No Impact. The nearest school to the Project Site is Naples Elementary School, located approximately one mile to the west. Therefore, the Project Site would not emit hazardous emissions or handle hazardous materials within 0.25 mile of a school. No impacts would occur, and no further analysis of this issue is required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Potentially Significant Impact. California Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop and update annually the Cortese List, which lists hazardous waste sites and other contaminated sites. While Section 65962.5 makes reference to the preparation of a "list," many changes have occurred related to web-based information access since 1992 and information regarding the Cortese List is now compiled on the websites of the Department of Toxic Substances Control (DTSC), the State Water Resources Control Board, and CalEPA. The DTSC maintains the EnviroStor database, which includes sites on the Cortese List and also identifies potentially hazardous sites where cleanup actions or extensive investigations are planned or have occurred. The database provides a listing of federal Superfund sites, State response sites, voluntary cleanup sites, and school cleanup sites.

Due to the history of oil production in the vicinity, it is possible that the Project Site is listed on a hazardous materials site pursuant to Government Code Section 65962.5. Further analysis of this issue in an EIR is required.

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

No Impact. The Project Site is not located within an airport land use plan or within two miles of a public or public use airport. The nearest airport is the Long Beach Airport, which is located approximately 3.5 miles north-northwest of the Project Site. Therefore, no impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

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

No Impact. There are no private airstrips in the vicinity of the Project Site. Therefore, no impacts would occur and no mitigation measures would be required. No further evaluation of this issue is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Less Than Significant Impact. As provided in the City's General Plan Public Safety Element, emergency response and emergency evacuation in the City is based on the availability of through streets, multiple access routes, and bridges. During Project construction, the majority of construction activities would be confined to the Project Site itself; however, limited off-site infrastructure improvements may require some construction activities in adjacent street rights-of-way. As such, some partial lane closures adjacent to the Project Site, including on 2nd Street, PCH, and Marina Drive, may occur. However, these closures would be temporary in nature and both directions of travel on area roadways would be maintained so as not to physically impair access to and around the Project Site. Additionally, the Project would not place any permanent physical barriers on any of the surrounding streets, and access along and through streets and highways in the area would be maintained. Therefore, the Project would not cause an impediment along surrounding streets, which may be used as evacuation routes in the event of an emergency, or otherwise impair implementation of an emergency response plan or emergency evacuation plan. Impacts would be less than significant, and no mitigation measures would be required. No further analysis of this issue is required.

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

No Impact. The Project Site is surrounded by urban development and is not adjacent to any wildlands. Therefore, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. No impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

9. HYDROLOGY AND WATER QUALITY. Would the project:

a. Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Potentially Significant Impact. Project construction would require earthwork activities, including grading and limited excavation within the Project Site, which would temporarily expose soils. During precipitation events in particular, grading and soil stockpiling activities would have the potential to result in minor soil erosion, subsequent siltation, and conveyance of other pollutants into municipal storm drains. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Further, potential changes in on-site drainage patterns could result from Project implementation, and the introduction of new uses could affect the quality of storm water runoff. Therefore, further analysis of this issue in an EIR is required.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☒	☐	☐	☐

Potentially Significant Impact. Based on historical site data from the California Department of Water Resources, the groundwater level in the vicinity of the Project Site has ranged from approximately 6.5 feet to 10 feet below the ground surface. It is anticipated that the Project would result in a similar amount of impermeable surface area on-site compared to existing conditions, as the existing site is predominately impervious. Nevertheless, the potential exists for existing percolation of rainwater and irrigation water into the water table to be diminished, which could affect groundwater recharge. In addition, the proposed demolition of the existing uses and excavation activities required during construction could have the potential to encounter groundwater. Therefore, further analysis of this topic will be included in the EIR.

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

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Potentially Significant Impact. The Project Site is currently developed with the Seaport Marina Hotel and paved surfaces, with limited ornamental landscaping. No streams or rivers are present on-site. In the surrounding area, Alamitos Bay Marina is located approximately 300 feet to the west, and the channelized San Gabriel River is located approximately 0.25 mile to the southeast. The Project would require grading and the construction of new buildings that may alter the direction of runoff from the Project Site. Therefore, the Project has the potential to result in the alteration of drainage patterns that have the potential to result in erosion or siltation. This issue will be addressed further in an EIR.

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?	☒	☐	☐	☐

Potentially Significant Impact. Please refer to response to Question 9.c, above. As discussed therein, changes in drainage patterns within the Project Site may occur. Therefore, the potential for the Project to alter existing drainage patterns or increase the rate or amount of surface runoff such that on- or off-site flooding would occur will be evaluated in an EIR.

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?	☒	☐	☐	☐

Potentially Significant Impact. Please refer to responses to Questions 9.a and 9.d, above. As discussed therein, with implementation of the Project, changes in runoff patterns may occur within the Project Site. In addition, Project construction and operation have the potential to result in additional sources of polluted runoff. Therefore, the potential for the Project to contribute runoff which would exceed the capacity of existing drainage systems or provide additional sources of polluted runoff will be analyzed further in an EIR.

f. Otherwise substantially degrade water quality?	☒	☐	☐	☐

Potentially Significant Impact. Please refer to response to Question 9.a, above.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

No Impact. The Project Site is not located within a 100-year floodplain as mapped by the Federal Emergency Management Agency (FEMA).[17] The Project Site is located in FEMA's Flood Zone X, which is defined as an area of moderate flood hazard or within the limits of one percent and 0.2 percent annual chance floodplain. Similarly, according to the City of Long Beach Flood Zones Map, the Project Site is located within a 0.2 percent annual chance flood hazard zone.[18] Furthermore, the Project does not propose the development of residential uses. Therefore, the Project would not place housing within a 100-year floodplain. No impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

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

No Impact. As discussed above in response to Question 9.g, the Project Site is not located within a designated 100-year floodplain area. Thus, the Project would not place structures that would impede or redirect flood flows within a 100-year floodplain. No impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐

Less Than Significant Impact. As stated above, the Project Site is not located within a designated 100-year floodplain. Based on the City's General Plan Public Safety Element, three flood control dams lie upstream from the City, including the Sepulveda Basin, Hansen

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[17] *Federal Emergency Management Agency, Flood Insurance Rate Map, Map Number 06037C1988F, September 26, 2008.*

[18] *City of Long Beach, Federal Emergency Management Agency Flood Zones, September 26, 2008.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Basin, and Whittier Narrows Basin. As provided in Public Safety Element, due to the intervening low and flat topography and the distance of the Sepulveda Basin and the Hansen Basin more than 30 miles upstream, any flooding resulting from a dam failure at either of these locations would be expected to dissipate prior to reaching the City. In addition, while flooding could occur along both sides of the San Gabriel River, located south of the Project Site, given the topography of the surrounding area and the location of the Whittier Narrows Basin relative to the Project Site, any flooding would be minimal. Further, dams in California are continually monitored by various governmental agencies (such as the State of California Division of Safety of Dams and the U.S. Army Corps of Engineers) to guard against the threat of dam failure. Current design and construction practices and ongoing programs of review, modification, or total reconstruction of existing dams are intended to ensure that all dams are capable of withstanding the maximum considered earthquake for the site. Given the distance of the Sepulveda Basin, Hansen Basin, and Whittier Narrows Basin to the Project Site, the oversight by the Division of Safety of Dams, including regular inspections, the potential for substantial adverse impacts related to inundation at the Project Site as a result of dam failure would be less than significant. No further evaluation of this issue is required.

j. Inundation by seiche, tsunami, or mudflow?	☒	☐	☐	☐

Potentially Significant Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity.

The Project Site is located approximately 300 feet east of Alamitos Bay. As such, the Project Site is located within an area potentially affected by a tsunami or seiche as mapped in the City's General Plan Seismic Safety Element.[19] Therefore, the potential for impacts with regards to inundation by seiche or tsunami will be evaluated further in an EIR.

As previously described, the Project Site and surrounding area are characterized by a relatively flat topography and are not identified by the City within an area of steep slopes.[20]

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[19] *City of Long Beach General Plan, Seismic Safety Element, Plate 11, October 1988.*

[20] *City of Long Beach General Plan, Seismic Safety Element, Plate 9, October 1988.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Therefore, the Project Site is not positioned downslope from an area of potential mudflow, and impacts with respect to mudflows would not occur. No further analysis of this issue is required.

10. LAND USE AND PLANNING. Would the project:

a. Physically divide an established community?	☐	☐	☒	☐

Less Than Significant Impact. As previously discussed, the Project Site is located in an urbanized area and surrounded by a variety of land uses. Specifically, immediately north of 2nd Street is a one-story pharmacy and a one-story grocery store. North of these uses is Marina Pacifica Mall, which includes retail, restaurant, and entertainment uses with surface and subterranean parking. Northwest of the Project Site and immediately west of Marina Pacifica Mall are three- to five-story multi-family residential uses within the private waterfront condominium community known as Marina Pacifica. The area northeast of the Project Site includes a fast food restaurant (at the northeast corner of PCH and 2nd Street), oil fields, and the Los Cerritos Wetlands. East of the Project Site across PCH is a service station at the southeast corner of PCH and 2nd Street and to its south is The Marketplace, a shopping center comprised of several one-story buildings. The Marketplace includes restaurants, a grocery store, a movie theater, and other retail uses with associated surface parking areas. South of The Marketplace are several one- and two-story office buildings and the Los Cerritos Wetlands, which continue east of The Marketplace. Immediately south of the Project Site is Marina Shores Shopping Center, which includes a grocery store, restaurants, and other retail uses with associated surface parking. South of Marina Shores Shopping Center is a two-story office building followed by the San Gabriel River. The area west of the Project Site, across Marina Drive, is primarily occupied by a surface parking lot associated with the publicly owned Alamitos Bay Marina. Restaurants and limited boat-related retail uses are also located west of the Project Site, adjacent to the Alamitos Bay Marina. A boat launch (Davies Launch Ramp) is also located west of the Project Site near 2nd Street and Marina Drive.

The Project includes the development of retail and restaurant uses in a series of buildings and would replace the existing Seaport Marina Hotel and associated amenities and surface parking areas. The proposed uses would be consistent with other commercial developments in the surrounding area, as described above, and would be compatible in terms of building heights and massing with surrounding development. In addition, all proposed development would occur within the boundaries of the Project Site as it currently exists and would not physically alter surrounding parcels or properties. Furthermore, there are no residential uses located directly adjacent to the Project Site. Therefore, the Project would not physically divide, disrupt, or isolate an established community. Rather, implementation of the Project would result in

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

further infill of an already developed community with similar and compatible land uses. No significant impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐

Potentially Significant Impact. The Project Site is designated as Land Use District (LUD) No. 7, Mixed Use District, by the City's General Plan and is zoned as Subarea 17 within Planned Development District 1 (PD-1), Southeast Area Development and Improvement Plan (SEADIP). As set forth in the General Plan, uses intended for LUD No. 7 include employment centers, such as retail, offices, and medical facilities; higher density residences; visitor-serving facilities; personal and professional services; or recreational facilities. In addition, as described in the SEADIP, PD-1 provides for a community of residential, business, and light industrial uses integrated by an extensive system of parks, open space, and trails. The SEADIP specifically identifies commercial uses within Subarea 17 and, with the exception of the general development provisions applicable to the entire development area, does not include specific development and use standards for Subarea 17.[21] The Project Site is also located within a coastal zone and is therefore subject to the requirements of the City's Local Coastal Program. In addition to planning documents prepared and administered by the City, regional plans prepared by SCAG, SCAQMD, and the Los Angeles County Metropolitan Transportation Authority also apply to the Project. Therefore, the EIR will provide further analysis of the Project's consistency with the applicable land use plans, policies, and regulations.

[21] *The SEADIP states that Subarea 17 is fully developed in accordance with the Retail Center (CR) zone. Based on modifications to the City's Zoning Regulations, the CR zone now corresponds to the City's Community Commercial Automobile-Oriented (CCA) District. In accordance with the Long Beach Municipal Code, uses allowed in the CCA District include retail and service uses for an entire community such as convenience and comparison shopping goods and associated services.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

No Impact. The Project Site is located in an urbanized area and does not provide habitat for sensitive biological resources. As such, the Project Site is not subject to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the Project would not result in impacts associated with or conflict with the provisions of any habitat conservation plans, and no mitigation measures are required. No further analysis of this topic in an EIR is required.

11. MINERAL RESOURCES. Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐

Less Than Significant Impact. The Project Site is located within an urbanized area and has been previously disturbed by development. Although oil extraction activities historically occurred on-site, no mineral extraction operations currently occur or have occurred on the Project Site since development of the Seaport Marina Hotel in the 1960s. Therefore, the Project would not result in the loss of availability of a mineral resource or a mineral resource recovery site. No significant impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

No Impact. The Project Site is not classified by the City as an area containing significant mineral deposits nor is the Project Site located in a mineral producing area as classified by the California Geological Survey.[22] Therefore, the Project would not result in the loss of availability

[22] *State of California Department of Conservation, California Geologic Survey, Aggregate Sustainability in California, 2012.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

of a locally important mineral resource recovery site. No significant impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

12. NOISE. Would the project result in:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐

Potentially Significant Impact. The Project Site is located within an urbanized area that contains various sources of noise. The most predominate noise source in the vicinity is associated with vehicular traffic. Existing on-site noise sources primarily include vehicles, stationary mechanical equipment, and human activity. During Project construction, the use of heavy equipment (e.g., bulldozers, backhoes, cranes, loaders, etc.) would generate noise on a short-term basis. In addition, because the Project would introduce new permanent commercial uses to the Project Site, noise levels from on-site sources may also increase during operation. Furthermore, traffic attributable to the Project has the potential to increase noise levels along adjacent roadways. Therefore, further evaluation of this topic will be provided in the EIR.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐

Potentially Significant Impact. Project construction could generate groundborne noise and vibration associated with demolition, site grading, other clearing activities, the installation of building footings, and construction truck travel. As such, the Project would have the potential to generate and expose people to excessive groundborne vibration and noise levels during short-term construction activities. Therefore, further evaluation of this topic will be provided in the EIR.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐

Potentially Significant Impact. Traffic and human activity associated with the Project, as described above, have the potential to increase ambient noise levels above existing levels. Therefore, further evaluation of this topic will be provided in the EIR.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐

Potentially Significant Impact. As discussed in response to Questions 12.a and 12.b, above, Project construction activities have the potential to temporarily or periodically increase ambient noise levels above existing levels. Therefore, further evaluation of this topic will be provided in the EIR.

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

No Impact. The Project Site is not located within an airport land use plan or within two miles of a public or public use airport. The nearest airport is the Long Beach Airport, which is located approximately 3.5 miles north-northwest of the Project Site. Therefore, no impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

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

No Impact. There are no private airstrips in the vicinity of the Project Site. Therefore, no impacts would occur, and no mitigation measures would be required. No further analysis of this issue is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
13. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐

Less Than Significant Impact. The Project does not involve the development of residential uses and thus would not directly contribute to population growth. While Project construction would create temporary construction-related jobs, the work requirements of most construction projects are highly specialized so that construction workers remain at a job site only for the time in which their specific skills are needed to complete a particular phase of the construction process. Thus, Project-related construction workers would not be anticipated to relocate their household's place of residence as a consequence of working on the Project and, therefore, new permanent residents generally would not be generated during Project construction. With respect to Project operation, the proposed commercial uses would include a range of full-time and part-time commercial and retail positions that are typically filled by persons already residing in the vicinity of the workplace and who generally do not relocate their households for such employment opportunities. As such, the Project would be unlikely to create new households in the area or generate an indirect demand for additional housing. Therefore, given that the Project would not directly contribute to population growth in the Project area and as most of the employment opportunities generated by the Project would be filled by people already residing in the vicinity, potential growth impacts would not be substantial. As such, the Project would not result in a notable increase in demand for new housing, and any new demand, should it occur, would be minor in the context of forecasted growth for the City. Furthermore, as the Project is located in a highly developed area with an established network of roads and other urban infrastructure, it would not require the extension of such infrastructure in a manner that would indirectly induce substantial population growth. Therefore, impacts would be less than significant, and no mitigation measures are required. No further evaluation of this issue is required.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. The Project Site is currently occupied by a hotel and does not include any existing dwelling units. Therefore, the Project would not displace any existing housing. No impacts

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. The Project Site is currently occupied by a hotel and does not include any existing dwelling units. Therefore, development of the Project would not cause the displacement of any persons or require the construction of housing elsewhere. No impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

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

a. Fire protection?	☒	☐	☐	☐

Potentially Significant Impact. The Project involves the development of commercial uses including retail stores, restaurants, and a fitness center in a series of buildings that would replace the existing Seaport Marina Hotel, as well as its associated amenities and surface parking. While the Project Site is currently developed, the Project would result in an increase in on-site development and would introduce new land uses that are not currently found on-site. As a result, the Project would increase the employee and visitor population in the area and, accordingly, the Project Site's demand for fire protection services provided by the Long Beach Fire Department (LBFD) would increase. Therefore, the EIR will provide further analysis of this issue.

b. Police protection?	☒	☐	☐	☐

Potentially Significant Impact. The Project involves the development of commercial uses including retail stores, restaurants, and a fitness center in a series of buildings that would replace the existing Seaport Marina Hotel, as well as its associated amenities and surface parking. While the Project Site is currently developed, the Project would result in an increase in on-site development and would introduce new land uses that are not currently found on-site. As a result, the Project would increase the employee and visitor population in the area and,

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

accordingly, the Project Site's demand for police protection services provided by the Long Beach Police Department (LBPD) would increase. Therefore, the EIR will provide further analysis of this issue.

c. Schools?	☐	☐	☒	☐

Less Than Significant Impact. The Project includes the development of commercial uses including retail stores, restaurants, and a fitness center. Development of new residential land uses, which directly generate school-aged children and a demand for school services, is not proposed. Thus, implementation of the Project would not result in a direct increase in the number of students within the service area of the Long Beach Unified School District (LBUSD). In addition, the number of new students that could be indirectly generated by the Project that could attend LBUSD schools serving the Project Site is not anticipated to be substantial since, as discussed above, the Project is not expected to induce a substantial number of persons to change their residence as a result of gaining employment at the Project Site. Furthermore, pursuant to Senate Bill 50, the Applicant would be required to pay development fees to the LBUSD prior to the issuance of building permits. Pursuant to Government Code Section 65995, the payment of these fees is considered mitigation of Project-related school impacts. Therefore, impacts on schools would be less than significant, and mitigation measures would not be required. No further evaluation of this issue is required.

d. Parks?	☐	☐	☒	☐

Less Than Significant Impact. As previously described, the Project involves the development of commercial uses including retail stores, restaurants, and a fitness center. Development of new residential land uses, which typically create the greatest demand for parks and recreational facilities, is not proposed. Thus, implementation of the Project would not result in on-site residents who would utilize nearby parks and/or recreational facilities. While it is possible that some new employees associated with the Project may utilize local parks and recreational facilities, this increased demand likely would be negligible (the closest recreational uses are Marine Stadium and Jack Nichol Park located approximately 0.5 mile west and north of the Project Site, respectively). Additionally, the new employment opportunities generated by the Project are not anticipated to result a substantial number of persons relocating to the Project vicinity. Therefore, new demand for public parks and recreational facilities associated with Project development would be limited. Thus, impacts on parks and recreational facilities would be less than significant, and mitigation measures would not be required. No further evaluation of this issue is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
e. Other public facilities?	☐	☐	☒	☐

Less Than Significant Impact. Other public facilities available to future Project employees include library services, roads, transit, utility systems including water and sewer infrastructure, as well as other general public facilities.

With respect to library services, the Project involves the development of commercial uses including retail stores, restaurants, and a fitness center. As no residential uses would be developed as part of the Project, no new residents would be generated on-site. Thus, implementation of the Project would not result in a direct increase in the number of residents within the service population of the Bay Shore Branch Library, located approximately 1.1 miles northwest of the Project Site. In addition, as Project employees would be more likely to use library facilities near their homes during non-work hours and given that the Project is not anticipated to result in a substantial number of persons relocating to the Project vicinity, Project employees and any potential indirect population increase would generate minimal demand for library services. As such, demand for library services generated by Project employees would be negligible. Therefore, impacts on library facilities would be less than significant, and mitigation measures would not be required. No further evaluation of this issue is required.

During Project construction and operation, roads would continue to be utilized to access the Project Site. As discussed below in Transportation/Traffic, the potential for the Project to result in a significant increase in the number of vehicle trips on local roadways would be evaluated in an EIR. Any necessary improvements to local roadways associated with development of the Project would be identified in the EIR.

Please refer to Section 18, Utilities and Service Systems, for a discussion of impacts on the City's public utility infrastructure. No other public services would be notably impacted by the Project. Impacts would be less than significant, and no mitigation measures would be required. Further analysis of other public services in an EIR is not required.

15. RECREATION.

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

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

Less Than Significant Impact. As discussed previously, the Project involves the development of commercial uses including retail stores, restaurants, and a fitness center. New residential land uses, which typically create the greatest demand for parks and recreational services, are not proposed. Thus, implementation of the Project would not result in on-site residents who would utilize nearby neighborhood and regional parks or other recreational facilities. In addition, while it is possible that some of the Project's employees may utilize local parks and recreational facilities, this increased demand would be negligible as people are most likely to utilize facilities close to their place of residence. Furthermore, the new employment opportunities generated by the Project are not expected to result in a substantial number of persons relocating their residence. Therefore, new demand for public parks and recreational facilities associated with Project development would be limited. As such, the Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that a substantial physical deterioration of the facility would occur or be accelerated. Thus, impacts on parks and recreational facilities would be less than significant, and mitigation measures would not be required. No further evaluation of this issue is required.

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

No Impact. The Project would not include any on-site public recreational facilities or parks. Therefore, no impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
16. TRANSPORTATION/TRAFFIC. Would the project:				
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐

Potentially Significant Impact. Project development has the potential to result in an increase in daily and peak-hour traffic within the Project vicinity. In addition, Project construction has the potential to affect the transportation system through the hauling of excavated materials and debris, the transport of construction equipment, the delivery of construction materials, and travel by construction workers to and from the Project Site. Once construction is completed, the Project's employees and visitors would generate vehicle and transit trips throughout the day. The resulting increase in the use of the area's transportation facilities could exceed roadway and transit system capacities. Therefore, further analysis of this issue in an EIR is required.

b. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐

Potentially Significant Impact. The Los Angeles County Metropolitan Transportation Authority administers the Congestion Management Program (CMP), a State mandated program designed to address the impacts urban congestion has on local communities and the region as a whole. The CMP provides an analytical basis for the transportation decisions contained in the State Transportation Improvement Project. The CMP for Los Angeles County requires an analysis of any Project that could add 50 or more trips to any CMP intersection or

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

more than 150 trips to a CMP mainline freeway location in either direction during either the A.M. or P.M. weekday peak hours. Implementation of the Project would generate additional vehicle trips, which could potentially add more than 50 trips to a CMP roadway intersection or more than 150 trips to a CMP freeway segment. Therefore, further analysis of this issue in an EIR is required.

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

No Impact. As previously described, the Project Site is not located within the vicinity of a public or private airport or planning boundary of any airport land use plan. In addition, the low-rise structures proposed by the Project would not increase or change air traffic patterns or increase levels of risk with respect to air traffic. Therefore, no impact would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

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

No Impact. The roadways adjacent to the Project Site are part of the urban roadway network and contain no sharp curves or dangerous intersections. The Project does not include any major modifications to the street system or any dangerous design features. In addition, the Project would not result in incompatible uses, as the proposed uses are consistent with other commercial uses in the Project vicinity. Thus, no impacts related to increased hazards due to a design feature or incompatible use would occur, and no mitigation measures would be required. No further analysis of this topic in the EIR is required.

e. Result in inadequate emergency access?	☐	☐	☒	☐

Less Than Significant Impact. While it is expected that the majority of Project construction activities would be confined on-site, the Project may require some construction activities to occur in adjacent street rights-of-way. As such, some partial lane closures adjacent to the Project Site, including on 2nd Street, PCH, and Marina Drive, may occur. However, these closures would be temporary in nature and both directions of travel on area roadways would be maintained so as not to physically impair access to and around the Project Site. Additionally, the Project would not place any permanent physical barriers on any of the existing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

surrounding streets, and access along and through streets and highways in the area would be maintained. Therefore, the Project would not result in inadequate emergency access. Impacts would be less than significant, and no mitigation measures would be required. No further analysis of this issue is required.

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☒	☐	☐	☐

Potentially Significant Impact. The Project Site is served by a variety of transit options, including Long Beach Transit Bus Routes 121, 131, and 171. The Project involves development that would increase the demand for alternative transportation modes. In addition, during Project construction, infrastructure improvements on streets rights-of-way may require the temporary closure of single through lanes or relocation of existing bus stops. Therefore, further analysis of the potential for the Project to conflict with adopted policies, plans, or programs regarding public transit, bicycle facilities, or pedestrian facilities is required.

17. TRIBAL CULTURAL RESOURCES. Would the project:

a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☒	☐	☐	☐

Potentially Significant Impact. Approved by Governor Jerry Brown on September 25, 2014, Assembly Bill 52 (AB 52) establishes a formal consultation process for California Native American Tribes to identify potential significant impacts to Tribal Cultural Resources, as defined in Public Resources Code Section 21074, as part of CEQA. Effective July 1, 2015, AB 52 applies to projects that file a Notice of Preparation or Notice of Negative Declaration/Mitigated Negative Declaration on or after July 1, 2015. As specified in AB 52, lead agencies must provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if the tribe has submitted a written request to be notified. The tribe must respond to the lead agency within 30 days of receipt of the notification if it wishes to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the request for consultation.

As noted above, the Project would require excavation activities which may affect previously undisturbed soils. Therefore, the potential exists for the Project to significantly impact a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe. In compliance with AB 52, the City will notify all applicable tribes, and the City will participate in any requested consultations. Further analysis of this topic will be provided in the EIR.

18. UTILITIES AND SERVICE SYSTEMS. Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

Less Than Significant Impact. The City of Long Beach Water Department provides wastewater collection and treatment services for the Project Site. Wastewater generated

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

during Project operation would be collected and discharged into existing sewer mains and conveyed to the Joint Water Pollution Control Plant (JWPCP) in the City of Carson or the Long Beach Water Reclamation Plant (LBWRP). The Joint Water Pollution Control Plant provides primary and secondary treatment for approximately 260 million gallons of wastewater per day (mgd) and has a total permitted capacity of 400 mgd.[23] The Long Beach Water Reclamation Plant provides primary, secondary, and tertiary treatment for 25 million gallons of wastewater per day.[24] The wastewater treatment facilities serving the City have a combined treatment capacity of 425 mgd. Based on annual performance data reported by the Sanitation Districts of Los Angeles County for the year 2015, the JWPCP processes an average flow of approximately 258 mgd. As such, the JWPCP has an available treatment capacity of 167 mgd.

Incoming wastewater to the JWPCP and the LBWRP initially passes through screens and basins to remove coarse debris and grit. This is followed by primary treatment, which is a physical separation process where solids are allowed to either settle to the bottom of tanks or float on the surface. These solids, called sludge, are collected, treated, and recycled. The portion of water that remains, called primary effluent, is treated through secondary treatment using a natural, biological approach. Living micro-organisms are added to the primary effluent to consume organic pollutants. These micro-organisms are later harvested and removed as sludge. After secondary treatment is complete at the JWPCP, the water is disinfected and dispersed to the Pacific Ocean through networks of outfalls that extend two miles off the Palos Verdes Peninsula to a depth of 200 feet. After secondary treatment is complete at the LBWRP, the water is filtered to remove any remaining suspended materials (tertiary treatment), and the reclaimed water is reused. Any discharge of effluent from the JWPCP into the Pacific Ocean is regulated by the JWPCP NPDES Permit issued under the Clean Water Act and is required to meet the requirements set forth by Regional Water Quality Control Board (RWQCB). Accordingly, the JWPCP's effluent to the Pacific Ocean is continually monitored to ensure that it meets or exceeds prescribed standards.

The wastewater generated by the Project would be typical of commercial, retail, and restaurant uses. No industrial discharge into the wastewater system would occur. Additionally, restaurant kitchens would be equipped with grease traps as required. As the JWPCP is in

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[23] *Sanitation Districts of Los Angeles County, Joint Water Pollution Control Plant, www.lacsd.org/wastewater/wwfacilities/jwpcp/, accessed November 2, 2016.*

[24] *Sanitation Districts of Los Angeles County., Long Beach Water Reclamation Plant, www.lacsd.org/wastewater/wwfacilities/joint_outfall_system_wrp/long_beach.asp, accessed November 2, 2016.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

compliance with the State's wastewater treatment requirements, the Project would not exceed the wastewater treatment requirements of RWQCB. Therefore, impacts would be less than significant, and no mitigation measures would be required. No further evaluation of this issue is required.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Potentially Significant Impact. Water and wastewater systems consist of two components: the source of the water supply or place of sewage treatment and the conveyance systems (i.e., distribution lines and mains) that link the location of these facilities to an individual development site. With respect to water, the location, condition, and capacity of water conveyance lines will be evaluated in an EIR to determine whether adequate capacity is available to accommodate the required fire flows and domestic water demand generated by the Project.

With respect to wastewater, as described in response to Question 18.a, above, wastewater generated during Project operation would be collected and discharged into existing sewer mains and conveyed to the JWPCP or the LBWRP, which have a combined treatment capacity of 425 mgd. Wastewater from the Project currently flows through an existing 12-inch diameter sewer main located in 2nd Street. Based on the Sewer Study prepared by Incledon Consulting Group and included as Appendix IS-2 of this Initial Study, and confirmed by the peer review of that study prepared by Psomas and included as Appendix IS-3, the 12-inch sewer main is estimated to convey an average of 0.70 cubic feet per second (cfs) of wastewater with a maximum flow depth of 7.08 inches and is within the maximum acceptable flow depth of 9.0 inches (75 percent of the total pipe depth) for a 12-inch diameter sewer main.[25] Based on the proposed uses, the Project is estimated to generate approximately 92,500 gallons per day (gpd) of wastewater, which equates to a peak flow of 0.243 cubic feet per second (cfs).[26] When accounting for the existing on-site uses, which generate approximately 28,092 gpd

[25] *Incledon Consulting Group, PCH & 2nd Sewer Study, October 2013 and Psomas, 2nd & PCH Project—Long Beach, Technical Review/Peer Review/Sewer Capacity Report Review/Update Memorandum, November 9, 2016.*

[26] *Psomas, 2nd & PCH Project—Long Beach, Technical Review/Peer Review/Sewer Capacity Report Review/ Update Memorandum, November 9, 2016.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

(peak flow of 0.075 cfs) of wastewater and which would be removed as part of the Project, the Project would result in a net increase in wastewater generation of approximately 64,408 gpd. This equates to a peak flow of 0.168 cfs. When the Project's flows are added to the existing 12-inch sewer main, total flows in the sewer main would be 0.868 cfs and the sewer main would continue to operate below the standard acceptable operating limit capacity of 75 percent.[27] Therefore, the existing wastewater infrastructure would have adequate capacity to accommodate the Project's net increase in wastewater flows. As such, wastewater treatment demands generated by the Project are not expected to result in the need to construct new wastewater lines to serve the Project.

As discussed in response to Question 18.a, above, wastewater from the Project Site is conveyed via municipal sewage infrastructure to the JWPCP or LBWRP. The JWPCP has an available capacity of approximately 167 mgd. The Project's net increase in wastewater generation of approximately 64,408 gpd would represent approximately 0.04 percent of the available capacity at the JWPCP. Therefore, given the amount of wastewater expected to be generated by the Project, adequate wastewater treatment capacity would be available to serve the Project Site. As such, the Project would have a less than significant impact with respect to wastewater treatment and infrastructure. No mitigation measures would be required, and no further analysis of this topic is required.

c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Potentially Significant Impact. Please refer to responses to Questions 9.a and 9.d, above. As discussed therein, with implementation of the Project, drainage patterns within the Project Site may be altered. Therefore, the potential for the Project to contribute runoff which would exceed the capacity of existing drainage systems and thereby require the construction of new stormwater drainage facilities will be analyzed further in an EIR.

[27] *Ibid.*

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐

Potentially Significant Impact. The Long Beach Water Department supplies water to the Project Site. The Project could increase the demand for water provided by Long Beach Water Department. Given the complexity and evolving nature of water supply in Southern California, further analysis of this issue in an EIR will be provided.

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

Less Than Significant Impact. Please refer to response to Question 18.b, above. As discussed therein, based on the amount of wastewater expected to be generated by the Project, existing wastewater treatment capacity, and future wastewater treatment capacity, adequate wastewater treatment capacity would be available to serve the Project Site. As such, the Project would have a less than significant impact with respect to wastewater treatment and infrastructure. No mitigation measures would be required, and no further analysis of this topic is required.

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

Less Than Significant Impact. The Automated Refuse Collection Division within the Department of Public Works Environmental Services Bureau provides a comprehensive range of refuse disposal and waste management planning services to residents and businesses in the City. Non-hazardous municipal solid waste is disposed of in Class III landfills, while construction waste, yard trimmings, and earth-like waste are disposed of in unclassified (inert) landfills. In 2015, the most recent year for which data are available, 13 Class III landfills and one unclassified landfill with solid waste facility permits accepted waste from the City of Long

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Beach.[28] Additionally, there are two solid waste transformation facilities in Los Angeles County that convert, combust, or otherwise process solid waste for the purpose of energy recovery, the Commerce Refuse to Energy Facility and the Southeast Resource Recovery Facility, located in the City of Long Beach. Solid waste generated within the City is disposed at one of the Class III landfills open to the City, at the unclassified landfill, or processed in the transformation facilities.

For the Class III landfills open to the City, the remaining total disposal capacity is approximately 830 million tons.[29] In addition, the County's Class III landfills open to the City had a total permitted daily capacity of 84,304 tons per day (tpd) and an average daily disposal of 40,473 tpd, resulting in approximately 43,831 tpd of remaining daily disposal capacity.[30] Aggressive waste reduction and diversion programs throughout the state have helped reduce disposal levels at landfills.

Construction of the Project would involve demolition, site grading/preparation, and building construction activities. These activities would generate construction and demolition wastes (e.g., wood, concrete, asphalt, cardboard, brick, glass, plastic, and metal) that would be recycled or collected by private waste haulers contracted by the Applicant and taken for disposal at the County's inert landfills. Based on construction and debris rates established by the United States Environmental Protection Agency, it is anticipated that construction of the Project would generate a total of approximately 46,334 tons of demolition debris and approximately 879 tons of construction debris, for a combined total of approximately 47,213 tons of construction-related waste generation. It should be noted that soil export is not typically included in the calculation of construction waste to be landfilled since soil is not disposed of as waste, but rather is typically used as a cover material. Thus, soil export is not included in these totals. The amount of construction and debris waste generated by construction of the Project would represent approximately 0.08 percent of the existing remaining disposal capacity of 59.83 million tons for the unclassified landfill accepting waste from the City. Thus, the total amount of construction and demolition waste generated by the Project would represent a fraction of the remaining capacity at the unclassified landfill serving the Project Site.

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[28] *CalRecycle, Disposal Reporting System (DRS), Jurisdiction Disposal by Facility, Disposal during 2015 for Long Beach.*

[29] *Based on information from County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2014 Annual Report, December 2015 and CalRecycle.*

[30] *Ibid.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Based on solid waste generation factors provided by CalRecycle, the Project would generate approximately 8,205 lbs/day of solid waste upon completion.[31] When accounting for the existing uses to be removed, which are estimated to generate approximately 730 lbs/day of solid waste, the Project would result in a net increase of approximately 7,474 lbs/day of solid waste. The waste generation factors utilized do not account for recycling or other waste diversion measures, and as such, the estimated solid waste generated by the Project is conservative. The estimated solid waste generated by the Project would represent approximately 0.3 percent of the daily solid waste disposed of by the City.[32] Furthermore, the solid waste generated by the Project would represent approximately 0.01 percent of the remaining daily disposal capacity of the County's Class III landfills open to the City.

Based on the above, the landfills that serve the Project Site would have adequate capacity to accept the solid waste generated by Project construction and operation. Impacts would be less than significant, and no mitigation measures would be required. No further evaluation of this issue is required.

g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Less Than Significant Impact. Solid waste management in the State is primarily guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. AB 939 establishes an integrated waste management hierarchy consisting of (in order of priority): (1) source reduction; (2) recycling and composting; and (3) environmentally safe transformation and land disposal. In addition, Assembly Bill 1327 (AB 1327) provided for the development of the California Solid Waste Reuse and Recycling Access Act of 1991, which requires the adoption of an ordinance by any local agency governing the provision of adequate areas for the collection and loading of recyclable materials in development projects. Furthermore, Assembly Bill 341 (AB 341), which became effective on July 1, 2012, requires businesses and public entities that generate four cubic yards or more of waste per week and

[31] *CalRecycle, Estimated Solid Waste Generation Rates, www2.calrecycle.ca.gov/WasteCharacterization/General/Rates, accessed November 3, 2016.*

[32] *In 2015, the City of Long Beach disposed of approximately 255,095 tons of waste at Class III landfills and 197,036 tons of waste at transformation facilities, yielding an average daily disposal of 1,239 tpd. Source: CalRecycle, Disposal Reporting System (DRS), Jurisdiction Disposal by Facility, Disposal during 2015 for Long Beach.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

multi-family dwellings with five or more units to recycle. The purpose of AB 341 is to reduce greenhouse gas emissions by diverting commercial solid waste from landfills and expand opportunities for recycling in California. More recently, in October 2014, Governor Jerry Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. Specifically, beginning April 1, 2016, businesses that generate eight cubic yards of organic waste per week are required to arrange for organic waste recycling services. In addition, beginning January 1, 2017, businesses that generate four cubic yards of organic waste per week shall arrange for organic waste recycling services. Mandatory recycling of organic waste is the next step toward achieving California's recycling and greenhouse gas emission goals. Organic waste such as green materials and food materials are recyclable through composting, mulching, and anaerobic digestion which can produce renewable energy and fuel. Reducing the amount of organic materials sent to landfills and increasing the production of compost and mulch are part of the AB 32 (California Global Warming Solutions Act of 2006) Scoping Plan.

Additionally, the City of Long Beach Department of Public Works Environmental Services Bureau implements several waste reduction programs, including the Litter-Free Long Beach Campaign, which is designed to expand awareness of the impacts of litter, build community pride, and develop the support and participation of Long Beach residents, schools, and businesses.

The Project would be consistent with the applicable regulations associated with solid waste. Specifically, the Project would comply with AB 939, AB 341, AB 1826 and City goals, as applicable, by providing clearly marked, source-sorted receptacles to facilitate recycling. Since the Project would comply with federal, state, and local statutes and regulations related to solid waste, no significant impacts would occur, and no mitigation measures would be required. No further evaluation of this issue is required.

h. Other utilities and service systems?	☒	☐	☐	☐

Potentially Significant Impact. The Project would generate an increased demand for electricity and natural gas services provided by Southern California Edison and the Long Beach Gas and Oil Department, respectively. Therefore, further analysis of this issue will be provided in the EIR. In addition, while development of the Project would not be anticipated to cause the wasteful, inefficient, and unnecessary consumption of energy, further analysis of the Project's consistency with CEQA Guidelines Appendix F also will be provided in the EIR.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
19. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

Potentially Significant Impact. As indicated by the analysis above, the Project would not substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. However, the Project could result in impacts to historic resources. An EIR will be prepared to analyze and document such potentially significant impacts.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐

Potentially Significant Impact. The potential for cumulative impacts occurs when the independent impacts of the Project are combined with impacts from other development to result in impacts that are greater than the impacts of the Project alone. Located within the Project vicinity are other current and reasonably foreseeable projects whose development, in conjunction with that of the Project, may contribute to potential cumulative impacts. Impacts of the Project on both an individual and cumulative basis will be addressed in an EIR for the following subject areas: aesthetics, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality,

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

land use and planning, noise, public services (fire protection and police protection), transportation/traffic, tribal cultural resources, and utilities and service systems (water and energy).

With respect to cumulative effects on biological resources, as discussed above, the Project would not result in significant direct or indirect impacts to special status species, riparian areas, wetlands, or wildlife migration. In addition, as with the Project, any potential impacts to biological resources resulting from development of the related projects would likely be subject to mitigation as part of the environmental review process, thereby avoiding or minimizing potential impacts to biological resources. Therefore, the Project in combination with the related projects would not result in significant cumulative impacts to biological resources.

With respect to cumulative effects for the issues of agriculture and forest resources, mineral resources, population and housing, recreation, other public services (schools, parks, libraries), and other utilities (wastewater and solid waste), the Project would not combine with related projects or other cumulative growth to result in significant cumulative impacts. With respect to agriculture and forest resources and mineral resources, the Project would have essentially no impact to these resources and therefore could not combine with other projects to result in cumulative impacts. With regard to population and housing, recreation, schools, parks, libraries, wastewater, and solid waste, the Project's incremental contribution to potential cumulative impacts would not be cumulatively considerable. Specifically, as discussed in the analysis above, the Project does not involve the development of residential uses and thus would not directly contribute to population growth within the Project area. In addition, the Project would not result in a notable increase in demand for new housing, and any new demand, should it occur, would be minor in the context of forecasted growth for the City. Further, the estimated solid waste generated by the Project would represent approximately 0.3 percent of the daily solid waste disposed of by the City of Long Beach, and approximately 0.01 percent of the remaining daily disposal capacity of the Class III landfills used by the City. Thus, cumulative impacts for these subject areas would be less than significant, and no further evaluation in an EIR is required.

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

Potentially Significant Impact. As indicated by the analysis above, the Project could result in potentially significant impacts with regard to aesthetics, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, noise, public services (fire protection and police protection),

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

transportation/traffic, tribal cultural resources, and utilities and service systems (water and energy). As a result, these potential effects will be analyzed further in an EIR.

A. Project Description

Attachment A: Project Description

A. Introduction

PCH Property, LLC, the Project Applicant, proposes commercial development on a 10.77-acre site located at 6400 East Pacific Coast Highway (Project Site) in the City of Long Beach (City).[1] The Project Site is bounded by 2nd Street to the north, Pacific Coast Highway (PCH) to the east, a retail shopping center (Marina Shores Shopping Center) to the south, and Marina Drive to the west. The Project Applicant proposes approximately 95,000 square feet of retail uses, a 55,000-square-foot grocery store, a 25,000-square-foot fitness/health club, approximately 70,000 square feet of restaurant uses, and 1,150 parking spaces (collectively, the Project). These improvements would replace an existing hotel (Seaport Marina Hotel) and associated amenities and surface parking areas. The proposed uses would be provided within several one- and two-story buildings ranging in height from 30 feet to 35 feet.[2] Landscaped courtyards and open space areas also would be provided throughout the Project Site.

B. Project Location and Surrounding Uses

As illustrated in the Project location map provided in Figure A-1 on page A-2, the Project Site is located within the southeastern portion of the City. Primary regional access is provided by PCH, which runs northwest-southeast adjacent to the Project Site, and Interstate 405 (I-405 or San Diego Freeway), which runs northwest-southeast approximately one mile to the northeast of the Project Site.

As shown in Figure A-2 on page A-3, the Project Site is located in an urbanized area surrounded by a variety of land uses. Specifically, immediately north of 2nd Street is a

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[1] *Site acreage is presented as net area, defined as the subject parcel less existing street easements. The gross site area is 10.93 acres.*

[2] *The proposed buildings would have sloped roofs, with a maximum midpoint height of 35 feet. Per Long Beach Municipal Code Section 21.15.1330, the height of a building with a sloped roof is the vertical distance above grade, as defined in Section 21.15.1190, to the midpoint height of the highest sloped roof. While some architectural elements housing elevators and mechanical equipment would have higher roof heights of 40 and 56.5 feet, these features are not included in the measurement of height for commercial buildings per Long Beach Municipal Code Section 21.15.1330.E.*

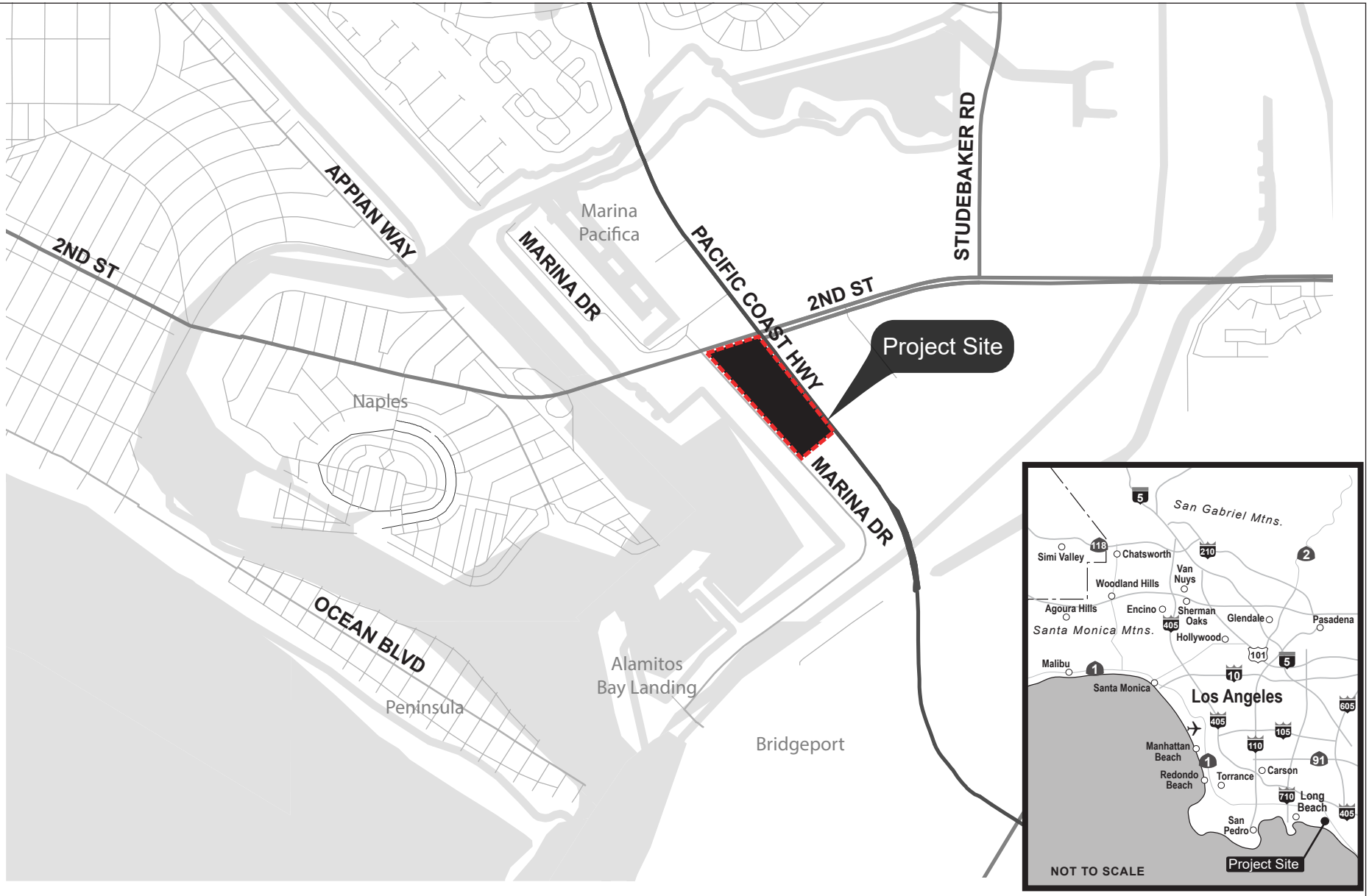

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Figure A-1
Project Location Map

Source: Los Angeles County GIS, 2015.

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Figure A-2
Aerial Photograph of the Project Vicinity

Source: Google Earth, 2016; Eyestone Environmental, 2016.

one-story pharmacy and a one-story grocery store with associated surface parking areas. North of these uses is the Marina Pacifica Mall, which includes retail, restaurant, and entertainment uses with surface and subterranean parking. Northwest of the Project Site and immediately west of the Marina Pacifica Mall are three- to five-story multi-family residential uses within the private waterfront condominium community known as Marina Pacifica. The area northeast of the Project Site includes a fast food restaurant (at the northeast corner of PCH and 2nd Street), oil fields, and the Los Cerritos Wetlands. East of the Project Site across PCH is a service station at the southeast corner of PCH and 2nd Street and to its south is The Marketplace, a shopping center comprised of several one-story buildings. The Marketplace includes restaurants, a grocery store, a movie theater, and other retail uses with associated surface parking areas. South of The Marketplace are several one- and two-story office buildings and the Los Cerritos Wetlands. The Los Cerritos Wetlands also continue east of The Marketplace. Immediately south of the Project Site is Marina Shores Shopping Center, which includes a grocery store, restaurants, and other retail uses with associated surface parking. South of Marina Shores Shopping Center is a two-story office building followed by the San Gabriel River. The area west of the Project Site, across Marina Drive, is primarily occupied by a surface parking lot associated with the publicly owned Alamitos Bay Marina. Restaurants and limited boat-related retail uses are also located west of the Project Site, adjacent to Alamitos Bay Marina. A boat launch (Davies Launch Ramp) also is located west of the Project Site near 2nd Street and Marina Drive.

C. Existing Project Site Conditions

As shown in the existing site plan provided in Figure A-3 on page A-5, the Project Site is currently occupied by the two-story, approximately 165,000-square-foot Seaport Marina Hotel and 457 surface parking spaces. Commercial uses within the hotel include Enterprise Rent-A-Car, a limousine service, a fitness studio, and a café. Access to the Project Site is provided via driveways along 2nd Street, PCH, and Marina Drive. Landscaping within the Project Site includes trees, shrubs, and grasses throughout the courtyards, near the swimming pool, and some landscaping along the building perimeters and surface parking areas. A row of palm trees also lines both PCH and Marina Drive.

D. Land Use and Zoning

The Project Site is designated as Land Use District (LUD) No. 7, Mixed Use District, by the City's General Plan. As set forth in the General Plan, uses intended for LUD No. 7 include employment centers, such as retail uses, offices, and medical facilities; higher density residences; visitor-serving facilities; personal and professional services; and recreational facilities. The Project Site also is located within a coastal zone and is therefore subject to the requirements of the City's Local Coastal Program.

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Figure A-3
Existing Site Plan

Source: Architects Orange, 2016.

The Project Site is zoned by the Long Beach Municipal Code as Subarea 17 within Planned Development District 1 (PD-1), Southeast Area Development and Improvement Plan (SEADIP). As described in the SEADIP, PD-1 provides for a community of residential, business, and light industrial uses integrated by an extensive system of parks, open space, and trails. The SEADIP specifically identifies commercial uses within Subarea 17 and, with the exception of the general development provisions applicable to the entire development area, does not include specific development and use standards for Subarea 17.[3]

E. Project Characteristics

The Project Applicant proposes to replace the existing Seaport Marina Hotel and associated amenities and surface parking areas on the Project Site with a commercial development comprising approximately 245,000 square feet of floor area, including approximately 95,000 square feet of retail uses, a 55,000-square-foot grocery store, a 25,000-square-foot fitness/health club, and 70,000 square feet of restaurant uses, including 40,000 square feet of full service dining, 25,000 square feet of fast food, and 5,000 square feet of ready-to-eat dining. These uses are summarized in Table A-1 on page A-7.

The proposed uses would be located in four buildings laid out in a village format, with three buildings fronting PCH and one building fronting Marina Drive. The buildings would consist of one and two stories each, ranging in height from 30 feet to a maximum of 35 feet.[4] A total of 1,150 parking spaces would be provided within two main parking structures, including a second-level parking deck above some of the single-story uses. Landscaped courtyards and open space areas also would be provided throughout the Project Site. The Project would have a total floor area ratio (FAR) of approximately 0.49:1. In addition, 20-foot setbacks would be provided along all adjacent streets. Conceptual site plans for the first and second levels of development are provided in Figure A-4 through Figure A-7 on pages A-8 through A-11. In addition, building elevations are shown in Figure A-8 through Figure A-11 on pages A-12 through A-15.

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[3] *The SEADIP states that Subarea 17 is fully developed in accordance with the Retail Center (CR) zone. Based on modifications to the City's Zoning Regulations, the CR zone now corresponds to the City's Community Commercial Automobile-Oriented (CCA) District. In accordance with the Long Beach Municipal Code, uses allowed in the CCA District include retail and service uses for an entire community such as convenience and comparison shopping goods and associated services.*

[4] *As previously indicated, the proposed buildings would have sloped roofs, with a maximum midpoint height of 35 feet. Per Long Beach Municipal Code Section 21.15.1330, the height of a building with a sloped roof is the vertical distance above grade, as defined in Section 21.15.1190, to the midpoint height of the highest sloped roof. While some architectural elements housing elevators and mechanical equipment would have higher roof heights of 40 and 56.5 feet, these features are not included in the measurement of height for commercial buildings per Long Beach Municipal Code Section 21.15.1330.E.*

Table A-1
Summary of Proposed Development

Land Use	Floor Area
Retail Sales	95,000 sf
Grocery Store	55,000 sf
Restaurant—Full Service	40,000 sf
Restaurant—Fast-Food	25,000 sf
Restaurant—Ready-to-Eat	5,000 sf
Fitness/Health Club	25,000 sf
Total	**245,000 sf**

sf = square feet
Source: Centercal Properties, LLC, 2016.

1. Project Design

As shown in Figure A-4 through Figure A-7 on pages A-8 through A-11, the retail and commercial uses would be located within a series of one- and two-story structures situated along PCH and Marina Drive, with landscaped setbacks along the adjacent street frontages. The PCH frontage would be characterized by extensive landscaping and a series of one-story structures (with intermittent taller architectural elements) and second-level (i.e., rooftop) parking. These buildings, which would house a variety of retail uses, would feature varied rooflines but would not exceed a height 35 feet, as defined in the Long Beach Municipal Code. Along Marina Drive, the Project would provide a landscaped setback and include a two-story structure of up to 35 feet in height, which would include retail, fast-food, and ready-to-eat restaurant uses with outdoor seating patios on the ground level and full-service restaurant uses with outdoor seating patios and terraces on the upper level, thus offering ocean views and enhancing the waterfront experience.[5] The Project would include extensive landscaping, a central plaza and paseos, amenities such as informal seating areas and water features, and an interior village streetscape to enhance the pedestrian experience. The proposed retail and restaurant uses and associated parking areas (described further below) would be connected throughout the Project Site via landscaped pedestrian walkways.

The Project would be designed in a contemporary architectural style with elements conjuring images of water and the coast. The Project also would integrate various

[5] *Full-service restaurant uses represent "Restaurant, dinner" uses per Long Beach Municipal Code Section 21.15.2320.*

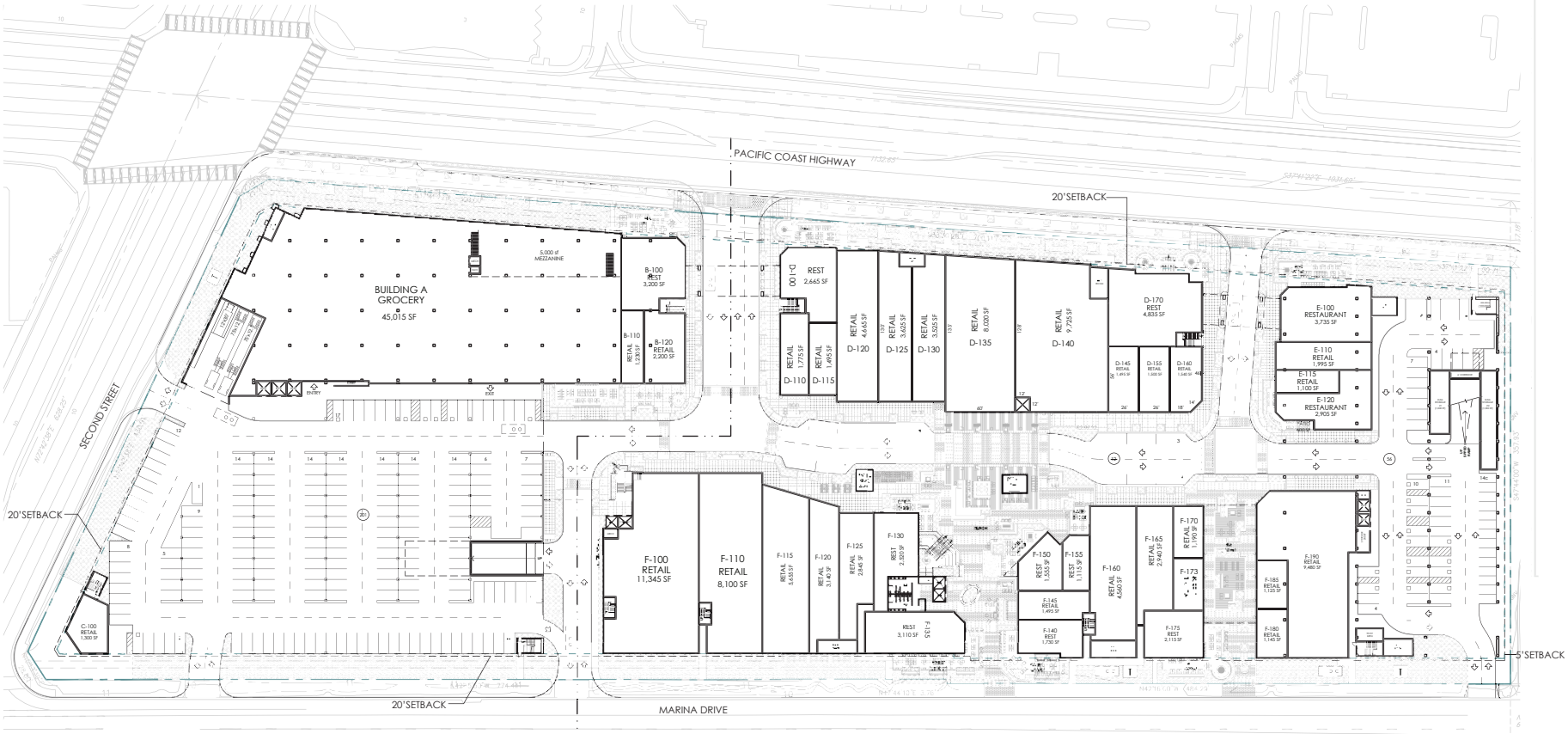

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Figure A-4
Proposed Site Plan – Ground Level

Source: Architects Orange, 2016.

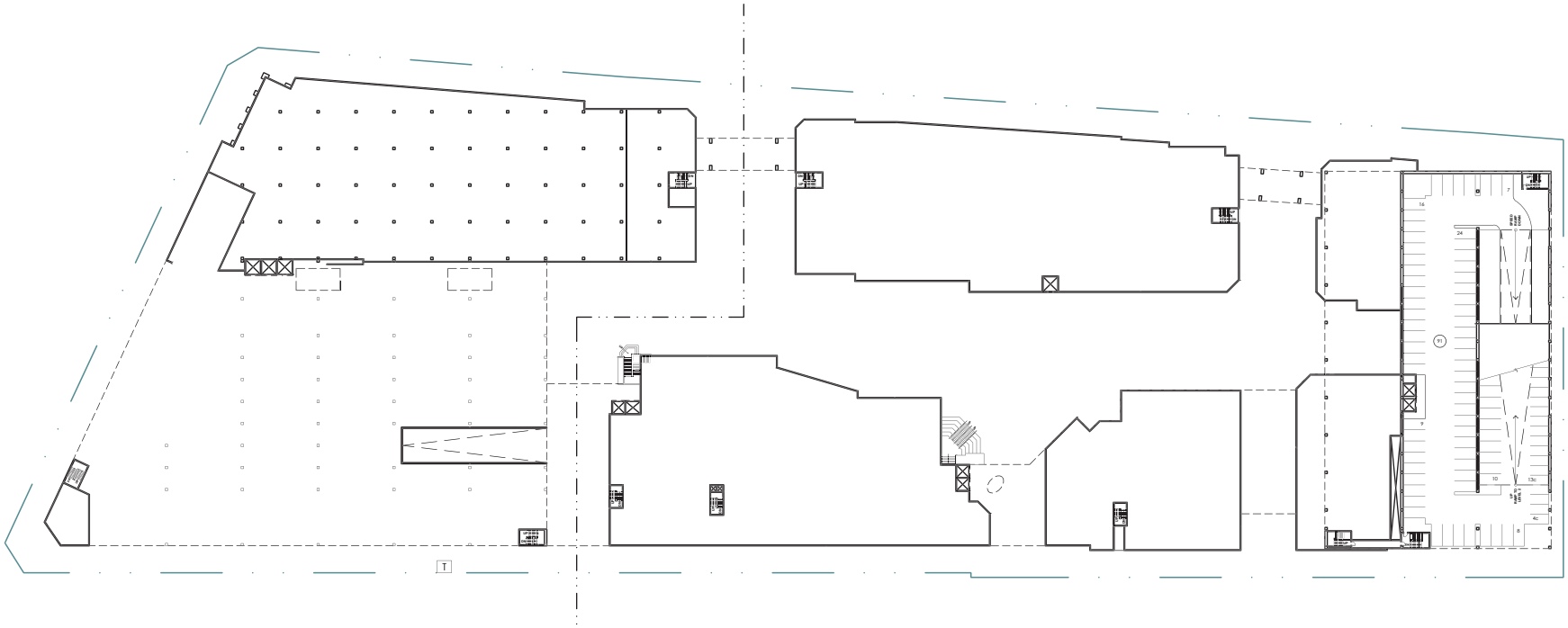

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Figure A-5
Proposed Site Plan – Mezzanine Level

Source: Architects Orange, 2016.

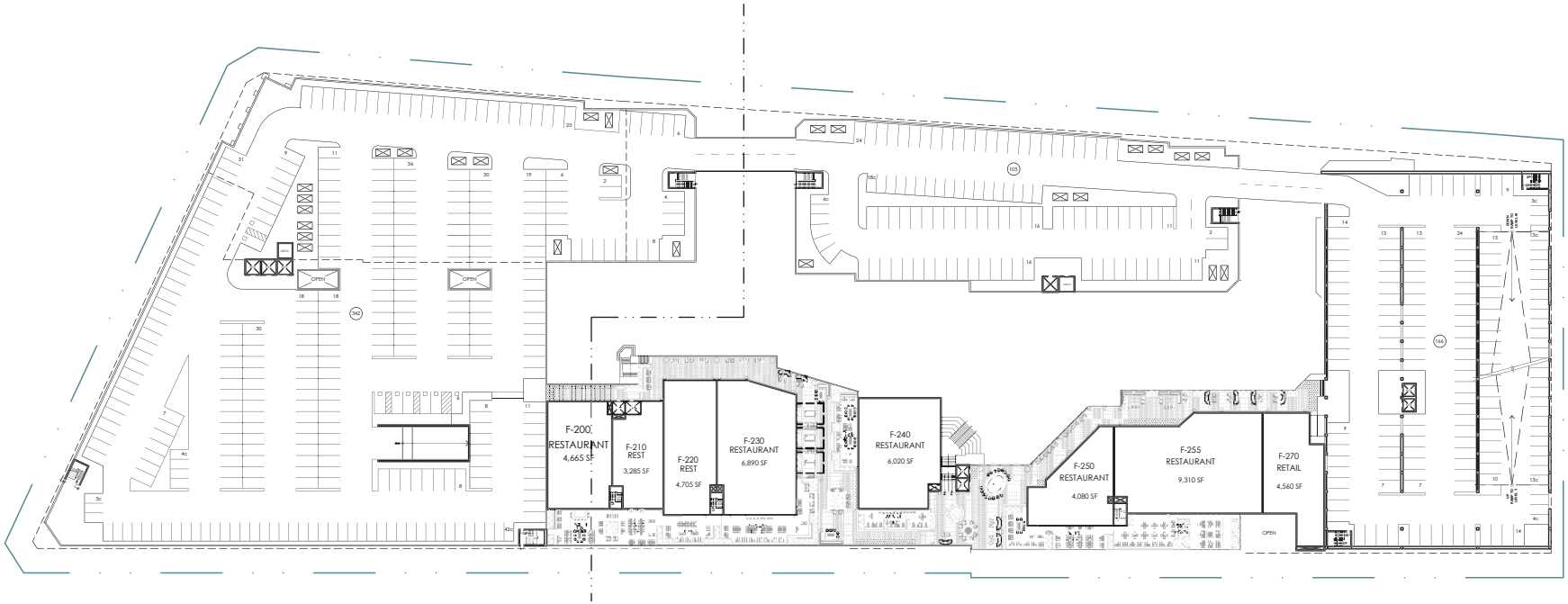

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Figure A-6
Proposed Site Plan – Level 2

Source: Architects Orange, 2016.

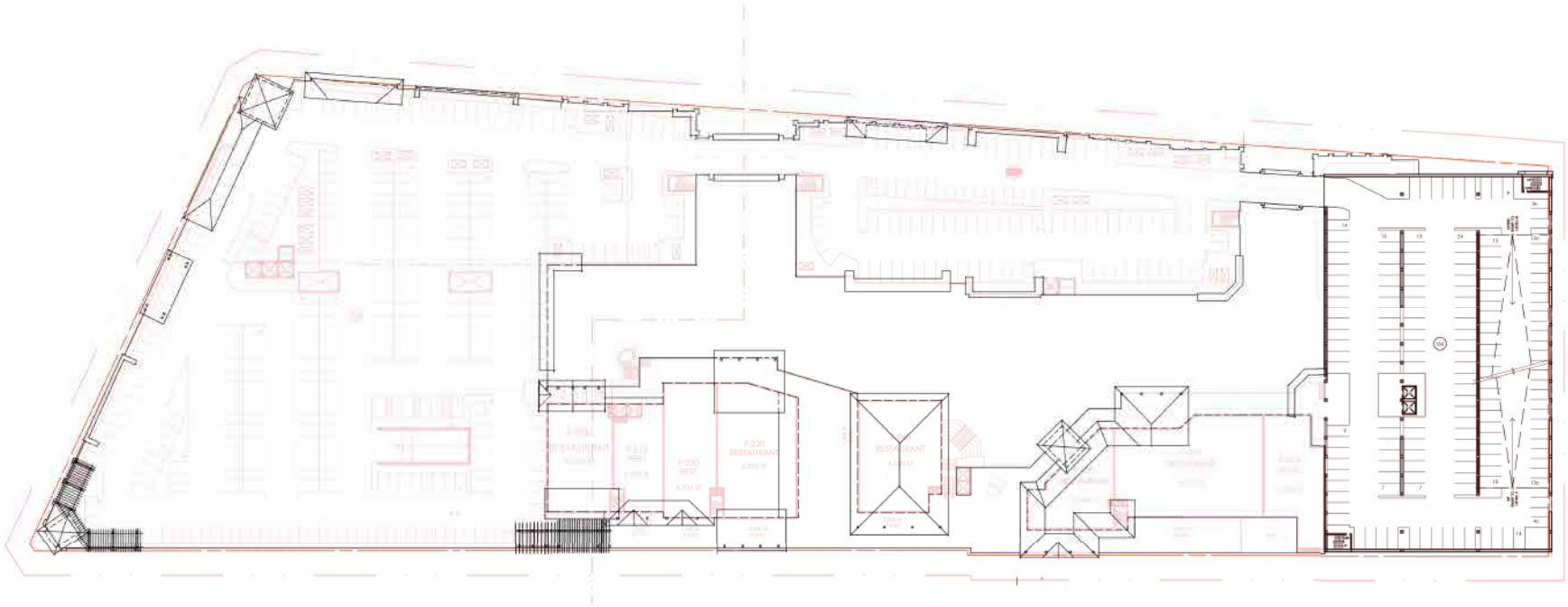

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Figure A-7
Proposed Site Plan – Roof

Source: Architects Orange, 2016.

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Figure A-8
Proposed Building Elevations – North

Source: Architects Orange, 2016.

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Figure A-9
Proposed Building Elevations – East

Source: Architects Orange, 2016.

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Figure A-10
Proposed Building Elevations – West

Source: Architects Orange, 2016.

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Figure A-11
Proposed Building Elevations – Interior Village

Source: Architects Orange, 2016.

architectural and pedestrian elements throughout the buildings to create a community destination. The new buildings would include building fenestration, a variety of surface materials and colors, and varying rooftop designs to create horizontal and vertical articulation, provide visual interest, and reduce building scales. Building materials would include wood, tile, metal panels, aluminum frames, plaster, and glass. Glass used in building façades would be non-reflective and designed to meet California Building Code Title 24 requirements. Enhanced paving materials including patterned concrete, stone, or brick would be utilized along walkways and other outdoor surface areas. Renderings of building elevations are provided in Figure A-8 through Figure A-11 on pages A-12 through A-15.

2. Access and Parking

Vehicular access to the Project Site would be provided via driveways on PCH, Marina Drive, and 2nd Street, as shown in Figure A-4 on page A-8. Specifically, two driveways located on PCH would provide access to the two-way drive aisle ("Main Street") within the site interior, connecting to parking structures at the northern and southern ends of the Project Site. Of the three right-in/right-out driveways along Marina Drive, the southern driveway would provide direct access to the southern parking structure, the northern driveway would provide direct access to the northern parking structure, and the middle driveway would provide access to the northern parking structure as well as Main Street. In addition, a driveway along 2nd Street would provide right-in/right-out access to the northern parking structure.

Pedestrian access to the Project Site would be provided via landscaped sidewalks along PCH, Marina Drive, and 2nd Street, as well as via crosswalks at the intersections of PCH and 2nd Street and Marina Drive and 2nd Street. Landscaped pedestrian pathways would be provided throughout the Project Site, including around the perimeter of the proposed buildings and parking structures and through the plaza and paseos, in addition to crosswalks across Main Street within the site interior.

Parking would be provided in parking structures located at the northern and southern ends of the Project Site, as well as a second-level parking deck located above the proposed single-story uses along PCH. More specifically, the northern parking structure would provide ground-level parking and a second-level (rooftop) parking deck. This parking deck would extend above the adjacent single-story grocery store and southerly above the other single-story buildings along PCH. The parking deck also would connect to the southern parking structure, which would include three levels plus rooftop parking with a

maximum height of 35 feet.[6] The upper levels of this structure would extend over the southernmost buildings on-site. Together, a total of 1,150 parking spaces would be provided, consisting of 219 parking spaces on the ground level of the northern parking structure, 417 spaces on the second-level parking deck, and 514 spaces within the multi-level parking deck located at the southern end of the Project Site. The relationship between the various parking locations is illustrated in Figure A-4 through Figure A-7 on pages A-8 through A-11.

Loading areas would be provided in various areas of the Project Site to serve specific buildings. In particular, a loading zone would be located adjacent to 2nd Street to serve the proposed grocery store, and smaller loading areas would be located near the northern and southern parking structures.

3. Landscaping and Open Space

As previously described, landscaped pedestrian pathways would be provided around the Project Site perimeter, and landscaped pedestrian-oriented open space areas such as the plaza and paseos would be provided within the site interior. These collective open space areas are depicted in Figure A-12 on page A-18 and would include pedestrian seating, enhanced paving, planters, and accent trees. In addition to existing trees that would remain, new trees would be provided along the Project Site's street frontages and the southern site boundary. The street front corners at 2nd Street at Marina Drive and 2nd Street at PCH would be further accented with groupings of ornamental trees and shrubs. Landscape planters and hardscape features, including shade trees, palm trees, and shrub planters, also would be distributed throughout the upper level of the Project Site and within the dining terraces. The landscaping provided along PCH, including a combination of screen trees, would serve to screen portions of the southern parking structure. In total, approximately 146,797 square feet (approximately 3.37 acres or 31.3 percent of the total Project Site area) of open space would be provided on-site, which would exceed the open space requirements of the SEADIP (i.e., approximately 140,698 square feet or 30 percent of the total Project Site area). In addition, any threshold-size on-site trees or street trees removed during construction of the Project would be replaced in accordance with the City's Tree Maintenance Policy and other applicable City requirements.

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[6] *The height of the proposed parking structure excludes mechanical equipment penthouses in accordance with Long Beach Municipal Code Section 21.15.1330.*

LEVEL 1(+0') OPEN SPACE

LEVEL 2(+22') OPEN SPACE

Zone Legend
- Open Space
- Building Area
- Driveway/Parking Area

N

eyestone ENVIRONMENTAL

Figure A-12
Proposed Open Space

Source: Architects Orange, 2016.

4. Lighting and Signage

The Project would include exterior lighting on buildings for security and wayfinding purposes, as well as entryway lighting within the parking structures, and along driveways and roadways for safety. In addition, low-level lighting to accent architectural, signage, and landscaping elements would be incorporated throughout the Project Site. In accordance with City guidelines, on-site lighting would be shielded or directed toward areas to be lit to limit spill-over onto off-site uses.

Project signage would include monument signs, area identification signs, tenant identification wall signs, directional signage, and wall signs for advertising purposes within the interior of the Project Site as well as on the buildings' street front façades and window signs on retail storefronts. Signage may be freestanding, projected, raised, and externally illuminated and/or consist of channel letters.[7] All Project signage would be visually integrated with the proposed development and would feature colors and lighting that are complementary to the architectural design of the proposed buildings.

5. Sustainability Features

The Project would incorporate features to support and promote environmental sustainability. "Green" principles have been incorporated in the Project to comply with the City of Long Beach Green Building Ordinance (Ordinance No. ORD-09-0013) and the sustainability intent of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) program. These include energy conservation, water conservation, and waste reduction features.

F. Project Construction and Scheduling

Project construction would commence with demolition of the existing hotel and associated amenities and surface parking areas, followed by grading and limited excavation for the placement of building footings. Building foundations would then be laid, followed by building construction, paving/concrete installation, and landscape installation. Project construction is anticipated to occur over approximately 16 months, with completion anticipated in 2018. Project grading would require an estimated 7,582 cubic yards of soil removal. An estimated 6,688 cubic yards of this soil would be reused on-site for a net export volume of 894 cubic yards.[8] As part of the Project, a Construction Traffic Management Plan would be implemented during construction to minimize potential conflicts

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[7] *Channel letter signs are individually illuminated letters and graphics.*
[8] *Final earthwork numbers may change based on soil conditions.*

between construction activity and through traffic. The Construction Traffic Management Plan would be subject to City review and approval.

G. Necessary Approvals

The City of Long Beach has the principal responsibility for approving the Project. Approvals required for Project development may include, but are not be limited to, the following:

- Site Plan Review;
- Coastal Development Permit;[9] and
- Other discretionary and ministerial permits and approvals that may be deemed necessary, including but not limited to temporary street closure permits, grading permits, excavation permits, a haul route permit, foundation permits, and building permits.

[9] *Pursuant to Long Beach Municipal Code Section 21.25.902, "The coastal zone boundaries are indicated on the official zoning map." The City's Coastal Zone Map shows that the Project Site falls within the "City Approved Jurisdiction," which gives the Planning Commission initial review authority and the City Council jurisdiction over any appeal.*

Appendices

Appendix IS-1

Biological Resources Assessment

Memorandum

TO: Jeff Winklepleck, Planner, City of Long Beach Department of Development Services
DATE: February 11, 2011
CC: David Crook, Principal Planner, PCR Services Corporation
FROM: Crysta Dickson, Senior Biologist II, PCR Services Corporation
RE: **RESULTS OF A CEQA-LEVEL BIOLOGICAL RESOURCES ASSESSMENT CONDUCTED ON THE SECOND AND PCH PROJECT SITE, CITY OF LONG BEACH, LOS ANGELES COUNTY, CALIFORNIA**

This memo presents the findings of a biological resources assessment, conducted by **PCR Services Corporation (PCR)** on the Second Street and Pacific Coast Highway (hereafter "PCH") project site (project site) located in the City of Long Beach, Los Angeles County, California. The purpose of this biological resources assessment is to evaluate existing conditions and impacts of the proposed project in accordance with the California Environmental Quality Act (CEQA) and the applicable regulatory framework. The submittal of this memo is intended to satisfy the biological resource information needs of the CEQA compliance process.

PROJECT SITE LOCATION

The project site is located in the City of Long Beach, Los Angeles County, California, as shown in Figure 1, *Regional Map*, attached. Specifically, the project site is located at the southwestern corner of the intersection of Second Street and PCH. The project site can be found within an un-sectioned portion of the U. S. Geological Survey (USGS) 7.5-minute Los Alamitos topographic quadrangle map, as shown in Figure 2, *Vicinity Map*, attached.

SCOPE OF STUDY

The scope of this assessment encompasses the comprehensive documentation of existing biological resources within the project site. This document also addresses project-related impacts associated with the proposed project, as well as recommendations regarding measures to alleviate any resulting potentially significant adverse impacts to a level below significant. This documentation is consistent with accepted scientific, technical, and professional standards pursuant to CEQA, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and U.S. Army Corps of Engineers (ACOE) protocols and standards, where appropriate. While general biological resources are discussed in a comprehensive manner, the focus of this assessment is on those resources considered to be sensitive.

METHODOLOGY

This assessment updates a Biological Resources Assessment completed in 2006 by ESA.[1] The documentation of existing resources included a peer review of the previous 2006 biological resources assessment conducted by ESA, as well as the findings of a current literature review, which included sensitive resources account database searches of the CDFG Natural Diversity Database

[1] ESA. August 2006. Draft Environmental Impact Report. Long Beach Seaport Marina.

(CNDDB), California Native Plant Society (CNPS) Online Inventory, and Federal Register listings, protocols, and species data provided by the USFWS and CDFG for all pertinent information regarding the locations of known observations of sensitive species and habitats in the vicinity of the project site.

On November 2, 2010, PCR biologist Crysta Dickson conducted a site assessment to determine the existing biological resources within the project site. The investigation included documenting existing vegetation, land uses, and the current use of the project site by wildlife species. The general survey and vegetation mapping were facilitated by the use of a current color aerial photograph (1"=200' scale). All wildlife species observed during the field surveys by sight, call, tracks, nests, scat (fecal droppings), remains, or other sign were recorded. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary.

EXISTING CONDITIONS

The project site is currently developed, supporting a hotel, limousine service, and night club. The eastern portions of the project site primarily support parking lots, while the western portion of the project site supports the hotel, limousine service, and night club structures. The project site supports no native vegetation. Only areas around the perimeter of the project site support ornamental plantings, such as turf grass and low growing shrub species. In addition, the eastern, southern, and western perimeters of the project site are lined with Mexican fan palms (*Washingtonia robusta*) (Figure 3, *Project Site Photographs*, attached). To the immediate northwest, south, and southeast, the project site is surrounded by commercial and residential development.

In addition, the project site does not support "waters of the U.S./State," as regulated under the jurisdiction of the ACOE, CDFG, or Regional Water Quality Control Board (RWQCB). Further, the project site does not support coastal wetlands or Environmentally Sensitive Habitat Areas (ESHA) as regulated by the California Coastal Commission (CCC), under the California Coastal Act, §30121 and §13577(b); and §30107.5 Code of Regulations, respectively.

Wildlife species observed within the project site included black phoebe (*Sayornis nigricans*), house finch (*Carpodacus mexicanus*), rock dove (*Columba livia*), American crow (*Corvus brachyrhynchos*), and European starling (*Sturnus vulgaris*). In addition, one California gull (*Larus californicus*) was observed flying over the project site during PCR's site assessment.

Surrounding land uses include commercial and residential development to the immediate northwest, south, and southeast of the project site, and the San Gabriel River, Los Cerritos Channel, Alamitos Bay Marina, and Los Cerritos Wetlands (Wetlands) (Figure 4, *Aerial Photograph with Surrounding Land Uses*, attached). The Los Cerritos Wetlands is located approximately 400 feet to the northeast

of the project site and the Alamitos Bay Marina and Bay are approximately 800 feet to the west of the project site. However, due to the developed nature of the project site and the project site's location within an otherwise fully developed area, the biological value that the project site provides is minimal and it is not expected to support a high diversity of plant and wildlife species.

Several sensitive plant and wildlife species were reported in the USFWS[2], CNDDB[3] and CNPS[4] databases from the vicinity. Due to the lack of suitable habitat within the project site, no sensitive plant species are expected to occur on-site. However, the Los Cerritos Wetlands occurs within the vicinity of the project site, and is known to support a diversity of marine or marine-dependent plant and wildlife species. Approximately 106 species of birds have been observed within the Los Cerritos Wetlands.[5] Three sensitive bird species are known to occur in the wetlands, including the State endangered Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), State fully protected California brown pelican (*Pelicanus occidentalis californicus*), and Federal and State endangered least tern (*Sterna antillarum browni*). The project site does not support suitable nesting or foraging habitat for these species; however, due to the project site's proximity to the Los Cerritos Wetlands, these species (most specifically the California brown pelican and least tern) have a low to moderate potential to fly over the project site while traveling to foraging waters in the Pacific Ocean and Alamitos Bay Marina. More likely, it is expected that these species would utilize the San Gabriel River and Los Cerritos Channel as the preferred travel route. It should be noted that because both nesting and foraging habitat for the Belding's savannah sparrow is contained within the Los Cerritos Wetlands, this species is likely to fly through the project site only during migration, as compared to the California brown pelican and least tern which travel out towards the Pacific Ocean to forage along the coast, and therefore have a higher potential to fly through the project site. Detailed discussions of each of these three bird species is provided below.

[2] U.S. Fish and Wildlife Service. Department of the Interior. October 2009. USFWS Occurrence Database.

[3] State of California. The Resources Agency. Department of Fish and Game. Natural Heritage Division. Natural Diversity Data Base. CNDDB. October 3, 2009. RareFind: Database Record Search for Information on Threatened, Endangered, Rare, or Otherwise Sensitive Species and Communities for the Los Alamitos, Long Beach, and Seal Beach Quadrangles. Sacramento.

[4] California Native Plant Society. 2005. *Inventory of Rare and Endangered Plants (online edition, v7-10a 1-19-10).* California Native Plant Society. Sacramento, CA. Accessed on Monday January 25, 2010 from http://www.cnps.org/inventory for the Los Alamitos, Long Beach, and Seal Beach Quadrangles.

[5] The Los Cerritos Wetlands Project. 2010. Birds of the Los Cerritos Wetlands. Wetland Species – Environmental Science and Policy Program. http://www.intoloscerritoswetlands.org/wetland_birds.php. Website accessed November 4, 2010.

Belding's Savannah Sparrow

Belding's savannah sparrow inhabits grassland, saline emergent wetland, and wet meadow habitats along the coast. This species breeds in saline emergent wetlands and requires dense ground cover during breeding season, as this species nests in a hollow on the ground, usually concealed by overhanging vegetation. This species scratches and gleans on the ground and picks food directly from low plants consisting mostly of grass, seeds, and small invertebrates.[6]

Although this species has been observed within the vicinity of the project site within the nearby Los Cerritos Wetlands,[7] the Belding's savannah sparrow is not expected to utilize the project site itself for foraging or nesting given the developed nature of the project site and lack of suitable habitat on-site, nor is the proposed project expected to adversely affect foraging or nesting behaviors of this species.

California Brown Pelican

The California brown pelican is found in estuarine, marine subtidal, and marine pelagic waters along the coast. This species usually rests on water or inaccessible rocks, either offshore or on land, but also uses mudflats, sandy beaches, wharfs, and jetties. This species does not roost overnight on water, but concentrates at a few traditional roosts on the mainland or islands. The California brown pelican builds small mounded nests of sticks and other debris on the slopes of undisturbed islands that are rocky or covered with low brush. This species forages almost entirely by diving for fish, particularly in the early morning or late afternoon, or when the tide is rising.[8]

The California brown pelican has been observed in the vicinity of the project site within the nearby Los Cerritos Wetlands.[9] Although this species is not expected to utilize the project site itself for foraging or nesting, there is low to moderate potential for implementation of the proposed project to affect this species' foraging behaviors by creating an obstacle which may somewhat inhibit their

[6] California Department of Fish and Game. 2010a. Savannah Sparrow. California Wildlife Habitat Relationships System. California Interagency Wildlife Task Group. http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Website accessed December 1, 2010.
[7] The Los Cerritos Wetlands Project 2010
[8] California Department of Fish and Game. 2010b. Brown Pelican. California Wildlife Habitat Relationships System. California Interagency Wildlife Task Group. http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Website accessed December 1, 2010.
[9] The Los Cerritos Wetlands Project 2010

direct access to the Pacific Ocean. However, this species will likely utilize preferred routes via the San Gabriel River, Los Cerritos Channel, and Alamitos Bay Marina movement corridors for access to offshore foraging areas. Potential indirect impact to this species is discussed in the Project Related Impacts section below.

Least Tern

Breeding colonies of the least tern inhabit marine and estuarine shores. Adults primarily roost on the ground. This species nests on barren to sparsely vegetated sites near water, usually on gravelly or sandy substrate, and will abandon nesting areas readily if disturbed. After breeding, family groups of least terns frequent lacustrine waters near the coast. This species feeds in shallow estuarine waters where small fish are abundant, particularly near the shore in the open ocean where lagoons are found nearby, or at mouths of bays.[10]

The least tern has been observed in the vicinity of the project site within the nearby Los Cerritos Wetlands.[11] Although this species is not expected to utilize the project site itself for foraging or nesting, there is low to moderate potential for implementation of the proposed project to affect this species' foraging behaviors by creating an obstacle which may somewhat inhibit their direct access to the Pacific Ocean. However, this species will likely utilize preferred routes via the San Gabriel River, Los Cerritos Channel, and Alamitos Bay Marina movement corridors for access to offshore foraging areas. Potential indirect impact to this species is discussed in the Project Related Impacts section below.

PROPOSED PROJECT

The proposed project will redevelop the existing site with a mix of residential, retail, restaurant, hotel, and entertainment uses with five multi-level structures, generally ranging in height from two to six stories, with one residential tower reaching a maximum of 12 stories (approximately 136 feet).

[10] California Department of Fish and Game. 2010c. Least Tern. California Wildlife Habitat Relationships System. California Interagency Wildlife Task Group. http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Website accessed December 1, 2010.
[11] The Los Cerritos Wetlands Project 2010

Project Design Features

Various design features have been incorporated as part of the proposed project that will serve to minimize or avoid adverse impacts to biological resources. These project design features include the following:

- Building materials to be utilized for the proposed structures, particularly the 12-story residential tower, would include colored and textured glass, which have lower reflectivity and will serve to break up otherwise large areas of clear glass with higher reflectivity. Additionally, the proposed 12-story residential tower would be characterized by curved vertical surfaces on the exterior, rather than large continuous flat surfaces. The absence of highly reflective glass, differentiation in structural massing through varied setbacks and building heights, integration of flat and curved surfaces, as well as use of a combination of wood, textured glass, and matte metal finishes would reduce the potential for the risk of bird collisions, which is discussed in further detail in the Project Related Impacts section below.
- The proposed project would provide landscaping on-site that is compatible with the surrounding environment, particularly on the ground and podium levels of the project, which would provide visual relief and also serve to reduce the reflectivity of building materials.
- Outdoor project lighting would be directed and shielded away from natural open space areas (i.e., Los Cerritos Wetlands) to avoid excessive light generation to minimize off-site light spill, which can result in adverse effects on sensitive wildlife species; specifically, bright beams of light can disorient birds flying at night and result in collisions. Street lighting will be shielded downward, and lighting associated with the project's structures will be muted by colored and textured glass and shielded by drapery, to minimize the effects of the lighting at night. Although the proposed project would intensify development on-site which may result in lighting incrementally increasing from the currently existing conditions, with the implementation these project design features to minimize off-site light spill, the lighting effects will not be substantial.
- With regard to water quality, and associated indirect impacts to downstream water bodies and related habitats and wildlife, a number of water quality features (or Best Management Practices [BMPs]) would be implemented as part of the proposed project. Such features include, but are not limited to, erosion controls, sediment controls, tracking controls, non-storm water management, materials & waste management, good housekeeping practices during construction

activities, as well as site design, source control, and treatment control BMPs. By minimizing the generation of stormwater pollutants, as well as the off-site transport of such pollutants to receiving waters (e.g., Alamitos Bay), potential indirect impacts to biological resources would be minimized or avoided.

PROJECT RELATED IMPACTS

The following discussion analyzes the potential impacts to biological resources that may occur as a result of implementation of the proposed project. The determination of impacts in this analysis is based on both the features of the proposed project and the biological values of the habitat and/or sensitivity of plant and wildlife species.

The environmental impacts relative to biological resources were assessed using impact significance threshold criteria which mirror the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Determining whether a project may have a significant effect or impact plays a critical role in the CEQA process.

According to CEQA, Section 15064.7, Thresholds of Significance, each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in determining the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental standard, the non-compliance of which will normally lead to a finding of significance by the agency. In the development of significance thresholds for impacts to biological resources, CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form.

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including: candidate, sensitive, or special status species; riparian habitat or other sensitive natural communities; federally-protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and, adopted Habitat Conservation Plans (HCPs). This is done in the form of a checklist of questions to be answered during the Initial Study leading to the preparation of the appropriate environmental documentation for a project (i.e., Negative Declaration, Mitigated Negative Declaration, or EIR). Because these questions are derived from standards in other laws, regulations, and other commonly used thresholds, it is reasonable to use these standards as a basis for defining significance thresholds in an EIR. The City of Long Beach has adopted the significance thresholds checklist within Appendix G of the CEQA Guidelines. Therefore, for the purpose of this analysis, the following checklist of questions was used for assessing potential impacts to biological resources:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Less Than Significant Impact

Direct Impacts

Although several sensitive plant and wildlife species were documented as occurring within the vicinity, the project site is currently developed and vegetated areas are limited to ornamental plantings primarily located along the perimeter of the project site. The project site supports no native vegetation. Therefore, no sensitive plant or wildlife species are expected to occur on-site, with the exception of a low to moderate potential of two sensitive bird species to fly through the project site: the California brown pelican and least tern.

Although no direct impacts will occur to sensitive wildlife species, there is a low to moderate potential for indirect impacts to occur (i.e., given the potential for the California brown pelican and least tern to fly over the project site) as a result of the proposed project by creating an obstacle which may somewhat inhibit their direct access to the Pacific Ocean. However, it should be noted that these species will likely utilize preferred routes via the San Gabriel River, Los Cerritos Channel, and Alamitos Bay Marina movement corridors for access to offshore foraging areas. Nonetheless, indirect impacts are analyzed.

Typically, indirect impacts are considered to be those that involve the effects of increases in ambient levels of unnatural sensory stimuli (e.g., light, noise), unnatural predators (e.g., domestic pet predation, increased attraction of urban wildlife and other non-native animals), competitors (e.g., proliferation of invasive/exotic plants, non-native wildlife), water quality degradation, vehicular collisions, or physical obstructions. Indirect impacts may be associated with the construction and/or eventual habitation and/or operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as “edge effects” and can impact the species population (e.g., resulting in changes in the behavioral patterns of wildlife, reduced wildlife diversity and abundance) and/or result in habitat modifications. Potential for such indirect impacts are discussed below.

Indirect Impacts

(i) Lighting

Although the proposed project would intensify development on-site, with a proportionate increase in artificial lighting, such lighting would be designed and installed according to the City of Long Beach's lighting standards, and as such all lighting would be directed and shielded away from natural open space areas off-site (i.e., the Los Cerritos Wetlands) to avoid excessive lighting and minimize off-site light spill. Project-related lighting would be typical of other development in the area and is not expected to create a hazard to birds due to unusually bright or concentrated lighting. Furthermore, the Los Cerritos Wetlands are located a minimum of 400 feet from the project site with intervening urban development, including major roadways, commercial development, and associated landscaping between the project site and the Wetlands. Given the distance of the project site from viable habitat areas within the Wetlands (i.e., over 2,000 feet) and given requirements for shielding of project lighting, including muting by colored and textured glass and shielding by drapery to minimize off-site light spill, the indirect impacts of lighting effects will not be substantial. Additionally, should California brown pelican and least tern fly over the project site to foraging grounds, lighting is not expected to be an attractant that would cause mortality from collision with the structures due to the implementation of the project's lighting design features. Therefore, indirect impacts from project-related lighting to California brown pelican and least tern are not expected to be significant.

(ii) Noise

Sources of urban noise associated with the project (e.g., construction activities, outdoor dining areas, daily traffic) could create a nuisance to nearby sensitive wildlife resources depending on the increase in noise and its proximity to such resources. For the proposed project, operational noise impacts would be minimal when compared to existing noise generated on-site and in the vicinity by commercial development and traffic along Second Street and PCH. Specifically, operational noise along Second Street between PCH and Shopkeeper Road (i.e., the closest roadway segment to the project site that is adjacent to the Los Cerritos Wetlands) would increase by a maximum of 0.7 dBA on weekdays and 1.0 dBA on weekends, which is well below the 3.0-dBA noise increase significance threshold. The incremental increase in on-site stationary noise and off-site mobile source noise associated with the proposed project would be imperceptible in the context of the existing noise environment in the project area. Therefore, given the distance from the project site

and the imperceptible increase in noise associated with the proposed project in the context of the existing noise environment, indirect impacts to sensitive wildlife species from noise are considered less than significant.

(iii) Predation

Unnatural predation by domestic pets on sensitive wildlife species can occur when residential development occurs adjacent to, or in close proximity to, natural habitat areas. While the proposed project would include residential uses, which would increase the number of on-site domestic pets, leash laws, tenant restrictions and educational brochures, which specify rules for "no outdoor cats," would preclude significant impacts associated with domestic pet predation on sensitive wildlife species.

(iv) Invasive Species

Various invasive and/or non-native plant species that are used as ornamental landscaping in development projects have the potential to proliferate in native habitat areas, thereby displacing native plant species and adversely affecting potentially sensitive habitats and resident species. As such, these invasive species can result in potentially significant adverse impacts to sensitive species and habitats if allowed to spread into native habitats. Because there are no native habitats on-site or immediately adjacent to the project site, indirect impacts to habitat for sensitive species from invasive plants, including habitat areas within the Los Cerritos Wetlands, are considered less than significant.

(v) Stormwater Drainage and Water Quality

Adverse indirect impacts to sensitive species and habitats in downstream receiving water bodies could be caused by elevated pollutant loads in stormwater flows leaving the project site. Such pollutants, which are typically associated with urban development, include oil, grease, and vehicle-related fluids from parking areas, pesticides or nutrients from landscaping, pet wastes, and detergents and other household materials. However, a number of BMPs have been incorporated into the project design to protect water quality, including but not limited to erosion controls, sediment controls, tracking controls, non-storm water management, materials & waste management, good housekeeping practices during construction activities, as well as site design, source control, and

treatment control BMPs. Specifically, BMPs that would reduce pollutant loads to Alamitos Bay would include the following:

- **Animal Waste Collection.** Collection of animal wastes to reduce the levels of bacteria and organic matter released to surface waters.
- **Exposure Reduction.** Partial or total physical enclosure of stockpiled or stored material, loading and unloading areas, and processing operations and the capture of and filtration of drainage from these areas to remove metals, soils and grease, and other chemicals.
- **Recycling/Waste Disposal.** Community hazardous waste and waste oil recycling centers to encourage careful and correct disposal of potentially hazardous chemicals and materials.
- **Parking Lot and Street Cleaning.** Regular parking lot and street cleaning will be conducted by either property owners or the City as appropriate and will help reduce accumulation of pollutants deposited on paved surfaces.
- **Infiltration (Exfiltration) Devices.** This includes devices such as infiltration trenches, dry wells, and catch basins that can remove pollutants through adsorption onto soil particles, and biological and chemical conversion in the soil.
- **Oil and Grease Traps.** This includes devices such as oil-water separators, oil and grease trap catch basins, simple skimmers, and control structures to separate oils and grease and other sediments from storm water.
- **Sand Filters.** Sand filters achieve reduction of urban pollutants by passing storm water through beds of sand, allowing particles to settle out in the pre-treatment devices and by straining out particles in the filter.
- **Filter Strips.** This involves placement of close-growing vegetation (e.g., turfgrass) to trap sediments between pollutant source areas and the receiving water.
- **Grass Swales.** Grass-lined drainage swales remove pollutants from surface flow by the filtering action of the grass, sediment deposition, and through infiltration into the soil.
- **Regular/Routine Maintenance.** Regular maintenance and cleaning of all pollution control devices within the public right-of-way to ensure that those devices are kept clean and unobstructed and are functioning correctly.

These BMPs would be required as conditions under the project's stormwater permits for construction and long-term operation of proposed uses. These state-of-the-art water quality BMPs, which would be implemented, as appropriate, during construction and throughout operation of the proposed project, would minimize pollutant loads flowing from the site into receiving waters (i.e., Alamitos Bay) during storm events. It should be noted that few, if any, of these water quality features currently exist on the project site; therefore, although the proposed project would increase urban development and associated activities on-site, the water quality effects of the project would be minimal. With implementation of these BMPs, potential indirect impacts to candidate, sensitive, or special status species or their habitats are considered less than significant.

Regarding potential water quality impacts on the Los Cerritos Wetlands, the Wetlands are separated from the project site by intervening streets and urban development, and are located up-gradient from the project site. As such, the project site is not hydrologically connected to the Wetlands. Since stormwater flows leaving the project site flow to the southwest away from the Wetlands, no indirect impacts on water quality within the Wetlands would occur with implementation of the proposed project.

(vi) Vehicular Hazards

Vehicles traveling along local roadways can incidentally collide with wildlife species near natural habitat areas potentially increasing the incidence of "road kills," including potential collisions with sensitive wildlife species. While the project would increase the number of vehicles on local roadways slightly, incremental increases in traffic along Second Street and PCH with implementation of the proposed project would not meaningfully increase vehicular collisions with sensitive species. As such, indirect impacts related to sensitive wildlife species mortality from vehicular collisions would be less than significant.

(vii) Physical Hazards (Bird Collisions)

Human-built structures have been recognized as a hazard to birds for more than a century.[12,13] However, the accelerated rate of urban development in recent years has seen the proliferation of

[12] Cooke, W.W. 1888. Report on Bird Migration in the Mississippi Valley in the Years 1884 and 1885. U.S. Department of Agriculture, Div. Econ. Ornithol. Bulletin No. 2. 313 pp.
[13] Kumlien, L. 1888. Observation on Bird Migration in Milwaukee. Auk 5(3): 325-328.

radio and television towers, office buildings, power lines, cooling towers, emission stacks, and residential housing, all of which represent an increasing threat to flying birds.[14] Specifically, a high incidence of mortality was recorded in long-distance migrants.[15] Major factors contributing to the hazardous nature of human-built structures are: (1) the presence of artificial lights at night (as discussed above); and (2) the presence of reflective glass windows, which are potentially hazardous both day and night.[16]

In regards to collisions with glass, growing evidence supports the interpretation that, except for habitat destruction, collisions with clear and reflective sheet glass cause the deaths of more birds than any other human-related avian mortality factor.[17,18,19,20,21,22] As such, it is estimated that over 34 million birds are killed by window collisions each year in the U.S.[23] Birds generally act as if sheet glass and plastic in the form of windows and noise barriers are invisible to them. Lethal casualties result from head trauma after birds leave a perch from as little as one meter away in an attempt to reach habitat that is seen through, or reflected in, clear and tinted panes.[24,25,26,27,28,29]

[14] Ogden, L. and J. Evans. 1996. Collision Course: The Hazards of Lighted Structures and Windows to Migrating Birds. Published by World Wildlife Fund Canada and the Fatal Light Awareness Program. September. 46 pages.

[15] O'Connell, T.J. 2001. Avian Window Strike Mortality at a Suburban Office Park. The Raven 72(2): 142-149.
[16] Ogden and Evans 1996
[17] Klem Jr., D. 1989. Bird-Window Collisions. Wilson Bulletin 101:606–620.
[18] Klem Jr., D. 1990. Collisions between Birds and Windows: Mortality and Prevention. Journal of Field Ornithology 61:120–128.
[19] Klem Jr., D. 2006. Glass: A Deadly Conservation Issue for Birds. Bird Observer 34:73–81.
[20] Erickson, W.P., G.D. Johnson, M.D. Stickland, D.P. Young Jr., K.J. Sernka, and R.E. Good. 2001. Avian Collisions with Wind Turbines: A Summary of Existing Studies and Comparisons to Other Sources of Avian Collisions Mortality in the United States. National Wind Coordinating Committee, Washington, D.C., USA.
[21] Manville II, A.M. 2005. Bird Strike and Electrocutions at Power Lines, Communication Towers, and Wind Turbines: State of the Art and State of the Science - Next Steps Toward Mitigation. Pages 1051– 1064 in Bird Conservation Implementation in the Americas: Proceedings 3rd International Partners in Flight Conference 2002 (C. J. Ralph and T. D. Rich, Editors). USDA, Forest Service, General Technical Report PSW-GTR-191. Pacific Southwest Research Station, Albany, California, USA.
[22] Manville II, A.M. 2008. Towers, Turbines, Power Lines, and Buildings-Steps Being Taken by the U.S. Fish and Wildlife Service to Avoid or Minimize Take of Migratory Birds at these Structures. Proceedings 4th International Partners in Flight Conference 2008, McAllen, Texas, USA. USDA, Forest Service Technical Report. In Press.
[23] Klem Jr., D, C.J. Farmer, N. Delacretaz, Y. Gelb, and P. Saenger. 2009. Architectural and Landscape Risk Factors Associated with Bird–Glass Collisions in an Urban Environment. The Wilson Journal of Ornithology 121(1):126–134.
[24] Klem Jr., D. 1990. Bird Injuries, Cause of Death, and Recuperation from Collisions with Windows. Journal of Field Ornithology 61:115–119.
[25] Klem Jr., D. 2006. Glass: A Deadly Conservation Issue for Birds. Bird Observer 34:73–81.
[26] Klem Jr., D. 2009a. Preventing Bird–Window Collisions. The Wilson Journal of Ornithology 121(2):314–321.

Higher strike rates were documented for glass surfaces that reflected densely vegetated areas than those glass surfaces opposite less-vegetated areas.[30] Birds that are not killed on impact may be stunned and predated by scavengers (e.g., crows). In addition, birds can interpret their reflection as a rival and repeatedly attacks a pane attempting to defend its territory from itself.[31] There is no window size, building structure, time of day, season of year, or set of weather conditions during which birds elude the fatal hazards of glass in urban, suburban, or rural environments.[32] Many species that collide frequently are known to be in long-term decline and some species are already designated officially as threatened or species of concern.[33,34]

As previously mentioned, the project design features will utilize building materials such as colored and textured glass, which have lower reflectivity and will serve to break up otherwise large areas of clear glass with higher reflectivity. Additionally, the proposed 12-story residential tower would be characterized by curved vertical surfaces on the exterior, rather than large continuous flat surfaces. The absence of highly reflective glass, differentiation in structural massing through varied setbacks and building heights, integration of flat and curved surfaces, as well as use of a combination of wood, textured glass, and matte metal finishes would reduce the potential for the risk of bird collisions.

With the incorporation of these project design features, should California brown pelican and least tern fly over the project site to foraging grounds, it is not expected that these species would be attracted to the structures in such a way that collisions would occur. Therefore, indirect impacts resulting from California brown pelican and least tern collisions with project-related structures are not expected to be significant.

In conclusion, the proposed project would have a less than significant impact on sensitive wildlife species.

[27] Klem Jr., D. 2009b. Avian Mortality at Windows: The Second Largest Human Source of Bird Mortality on Earth. Proceedings of the Fourth International Partners in Flight Conference: Tundra to Tropics. 244–251
[28] Klem Jr., D, D.C. Keck, K.L. Marty, A.J. Miller Ball, E.E. Niciu, and C.T. Platt. 2004. Effects of Window Angling, Feeder Placement, and Scavengers on Avian Mortality at Plate Glass. Wilson Bulletin 116:69–73.
[29] Veltri, C.J. and D. Klem Jr. 2005. Comparison of Fatal Bird Injuries from Collisions with Towers and Windows. Journal of Field Ornithology 76:127– 133.
[30] Gelb, Y. and N. Delacretaz. 2006. Avian Window Strike Mortality at an Urban Office Building. The Kingbird 2006 September; 56 (3)
[31] Klem 2006
[32] Klem 1989
[33] Ogden and Evans 1996
[34] Gelb and Delacretaz 2006

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Less Than Significant Impact

Direct Impacts

The project site does not support any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the USFWS or CDFG. Although located within the coastal zone, which is regulated by the CCC, the project site does not support any areas which meet the definition of ESHA.

The California Coastal Act, §30107.5 defines an ESHA as, "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities or development." Due to the lack of riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the USFWS or CDFG on the project site, no impacts are expected.

Indirect Impacts

Due to the project site's proximity to the Los Cerritos Wetlands (the only riparian or sensitive natural community in the immediate area), indirect impacts to habitat areas within the Wetlands may occur due to project operation, specifically, effects associated with project-related invasive landscaping species. However, based on existing background conditions and, as discussed above, the limited nature of invasive species effects given the distance of viable habitat areas within the Los Cerritos Wetlands from the project site, these indirect impacts would not be substantial. In addition, the location of the project site is down-gradient from the Los Cerritos Wetlands and would avoid hydrology or water quality-related impacts. As such, the proposed project would not have a substantial indirect adverse impact on riparian habitat or other sensitive natural community identified in City or regional plans, policies, or regulations by the CDFG or USFWS.

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

Less Than Significant Impact

Direct Impacts

The project site does not support federally protected wetlands as defined by Section 404 of the Clean Water Act. In addition, the project site does not support any other areas as regulated under the jurisdiction of the ACOE, CDFG, RWQCB; or coastal wetlands as regulated by the CCC under the California Coastal Act (§30121 and §13577(b) Code of Regulations). The California Coastal Act defines the term "wetland" as "lands within the coastal zone which may be covered periodically or permanently with shallow water, including saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." Due to the lack of federally protected wetlands as defined by Section 404 of the Clean Water Act or coastal wetlands as regulated by the CCC under the California Coastal Act on the project site, no impacts are expected.

Indirect Impacts

Due to the project site's proximity to the Los Cerritos Wetlands (the only riparian or sensitive natural community in the immediate area), indirect impacts to habitat areas within the Wetlands may occur due to project operation, specifically, effects associated with project-related invasive landscaping species. However, based on existing background conditions and, as discussed above, the limited nature of invasive species effects given the distance of viable habitat areas within the Los Cerritos Wetlands from the project site, these indirect impacts would not be substantial. In addition, the location of the project site is down-gradient from the Los Cerritos Wetlands and would avoid hydrology or water quality-related impacts. As such, the proposed project would not have a substantial indirect adverse impact on federally protected wetlands.

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

Less Than Significant Impact With Mitigation Incorporated

Wildlife Movement

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, inhospitable environments, human disturbance, etc. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat.

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and, (3) movements related to home range activities (e.g., foraging for food or water, defending territories, searching for mates, breeding areas, or cover).

A number of terms have been used in various wildlife movement studies, such as "wildlife corridor", "travel route", and "wildlife crossing" to refer to areas in which wildlife move from one area to another. It is important to note that, within a large open space area in which there are few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors as defined above may not yet exist. Given an open space area that is both large enough to maintain viable populations of species and provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these "local" routes while searching for food, water, shelter, and mates, and will not need to cross into other large open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized mammals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles such as roads and highways, remaining landscape features or travel routes that connect the larger open space areas can "become" corridors as long as they provide adequate space, cover, food, and water, and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

Movement on a local scale, particularly relating to wildlife populations which occupy habitat within the Los Cerritos Wetlands and the surrounding vicinity (e.g., San Gabriel River, Los Cerritos Channel, and Alamitos Bay Marina) such as insects, marine invertebrates, fish, amphibians, reptiles, birds, and small mammals, these species may find their resource requirements without moving far from, or outside of, the wetland area or other suitable riparian habitats in the immediate vicinity. Daily movement by these animals in search of food, water, shelter, and mates is likely concentrated on the vegetated floodplain terraces and upland habitat islands within the Wetland due to the presence of surrounding urban development, and average dispersal distances of many of the wildlife species that occur within the area may be entirely contained within these wetland and riparian areas, particularly for those species with small ranges that do not travel far.

Although the project site is in close proximity to the San Gabriel River, Los Cerritos Channel, Alamitos Bay Marina, and Los Cerritos Wetlands, all of which are areas known to support a diversity of marine and marine-dependent wildlife species, the project site is a fully-developed commercial lot that contains an existing hotel, several paved surface parking lots, and ornamental landscaping with no native vegetation occurring on-site.

Nonetheless, there is potential for local wildlife movement between the mainland to the open-water areas of the Pacific Ocean, particularly for avian species which forage along the coast. Although bird species may fly over the project site, high levels of movement over the project site is not

expected. Rather, wildlife movement through the area is expected to continue via the unobstructed flight paths of the currently existing system of connections between the San Gabriel River, Los Cerritos Channel, Alamitos Bay Marina, and Los Cerritos Wetlands, which offer an expansive area that provides the natural resources necessary to support a variety of wildlife (e.g., seasonal water sources, vegetative cover on the floodplain terraces, riparian habitat, and relatively flat topography). These areas contain fewer obstacles and anthropogenic deterrents (e.g., man-made noise, lighting) that would generally hinder wildlife movement such as those found on the project site.

Due to its coastal location, however, the project site is located within the Pacific Flyway, a major north-south route for travel by migratory birds in the Americas. Additionally, the adjacent Los Cerritos Wetlands has been identified by the National Audubon Society as an Important Bird Area (IBA)[35] and an important stopping point for many migrating bird species as they move through the region. As such, the building of a structure up to 12 stories in height within the vicinity of the Pacific Flyway and Los Cerritos Wetlands can be considered as an increased threat to migrating bird species as they move through the area.

As previously mentioned, human-built structures can be hazardous to birds, particularly in regard to artificial night lighting and the reflectivity of glass windows.[36] Lighting of structures at night attracts many species of nocturnal migrating birds.[37] A large proportion of migrating birds affected by human-built structures are songbirds, apparently because of their propensity to migrate at night, their low flight altitudes, and their tendency to be disoriented by artificial light, making them vulnerable to collision with obstructions.[38] Birds migrating at night are strongly attracted to sources of artificial light, particularly during periods of inclement weather.[39,40] Approaching the lights of tall buildings and structures, they can become vulnerable to collisions with the structures. If collision is avoided, birds are still at risk of death or injury by being "trapped" by an artificial light source since, once inside a beam of light, birds are often reluctant to fly out of the lighted area into the dark,[41] and can continue to "flap" around in the beam of light until they drop to the ground with exhaustion.[42] A

[35] National Audubon Society. 2008. Mapping California Important Bird Areas.
[36] Ogden and Evans 1996
[37] Ogden and Evans 1996
[38] Ogden and Evans 1996
[39] Verheijen, F.J. 1958. The mechanisms of the trapping effect of artificial light sources upon animals. Netherlands Journal of Zoology 13: 1-107.
[40] Verheijen, F.J. 1985. Photopollution: Artificial light optic spatial control systems fail to cope with. Incidents, causations, remedies. Experimental Biology 44: 1-18.
[41] Graber, R.R. 1968. Nocturnal migration in Illinois – different points of view. Wilson Bulletin. 80: 36-71.
[42] Weir, R.D. 1976. Annotated bibliography of bird kills at man-made obstacles: a review of the state of the art and solutions. Department of Fisheries and the Environment. Canadian Wildlife Service, Ontario Region.

secondary threat resulting from their aggregation at lighted structures is their increased vulnerability to predation.[43] In addition, highly reflective glass increases the potential for window collisions. Birds are unable to detect clear glass, or glass surfaces that reflect densely vegetated areas appear to be habitat for the birds, resulting in birds colliding with the obstruction. Thus, the development of a 12-story structure would increase the likelihood of bird collisions and may adversely impact migrating birds moving through the area.

Incorporation of the project's design features would reduce the likelihood of potential for bird collisions. Specifically, highly reflective glass would not be used and the curvilinear design of project structures and associated glass panes would break up reflective surfaces. Also, a variety of glass types and textures would be employed for visual differentiation. In addition, project-related lighting would be located, directed, and shielded away from natural open space areas to minimize adverse effects, and would also avoid or reduce light "trapping" or other potentially harmful light-related effects on migrating or resident bird species in the area.

In conclusion, the proposed project could incrementally increase bird mortality from collisions with project structures. However, any incremental mortality increase is expected to be small in the context of the existing urbanized area, particularly in light of project design features that would reduce potential for such incidents. With the incorporation of project design features to minimize bird collisions with structures, any incremental increase in bird mortality is not expected to be substantial. Therefore, impacts to wildlife movement would be less than significant.

Migratory Bird Treaty Act

Due to the presence of ornamental vegetation on-site, the project site has the potential to support songbird and raptor nests. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Sections 3503, 3503.5 and 3513. The removal of vegetation during the breeding season is considered a potentially significant impact of the proposed project. Mitigation provided below would reduce this impact to a less than significant level.

[43] Stoddard, H.L. and R.A. Norris. 1967. Bird casualties at a Leon County, Florida TV tower: an eleven-year study. Tall Timbers Research Station Bulletin No. 8, June.

It should also be noted, that although the project site has the potential to support nesting songbird and raptor nests, the project site is not expected to support rookeries. A rookery is a collection of nests where large colonies of birds or marine mammals gather to breed and nest. In many cases, rookery sites for certain species are protected under various Federal and State listing regulations. Due to the lack of suitable habitat, the project site does not have the potential to support marine rookeries. Although species known to breed and nest in rookeries [e.g., the great blue heron (*Ardea Herodias*)] may roost within the vicinity, these species are not expected to utilize the project site as a rookery due to the level of human disturbances.

Mitigation Measure

> **BIO-1:** The Applicant shall be responsible for implementing mitigation to reduce potential impacts to migratory raptor and songbird species to below a level of significance by one or more of the following methods: (1) vegetation removal activities shall be scheduled outside the nesting season for raptor and songbird species (nesting season typically occurs from February 15 to August 31) to avoid potential impacts to nesting species (this will ensure that no active nests will be disturbed and that habitat removal could proceed rapidly); and/or (2) any construction activities that occur during the raptor and songbird nesting season shall require that all suitable habitat be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the qualified biologist to minimize impacts.

In conclusion, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Project impacts would therefore be less than significant with mitigation incorporated.

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

Less Than Significant Impact

The City of Long Beach Municipal Code, Title 14, Streets and Sidewalks, Chapter 14.28: Trees and Shrubs is intended to preserve street trees, regulate the maintenance and removal of such trees, and to establish the varieties, minimum size, methods, and locations for the planting of street trees. The Director of Public Works has authority to issue permits for the planting, trimming, or removing of street trees within the public street right-of-way. As noted above under existing conditions, a

number of Mexican fan palm trees line Marina Drive along the southwest edge of the project site, which may be subject to the City's tree ordinance. In the event trees within the public right-of-way would be removed as part of the proposed project, the project would require issuance of a permit from the Director of Public Works. With issuance of a street tree removal permit from the Director of Public Works, conflicts with City street tree regulations would be avoided and impacts would be less than significant.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

No Impact

The project site is not located in an area that is included in any federal, state, local, or regional Habitat or Nature Community Conservation Plan (NCCP). Therefore, project implementation will not conflict with provisions of an adopted HCP, NCCP, or other approved local, regional or state habitat conservation plan.

It should be noted that the City of Long Beach General Plan includes a Local Coastal Program (LCP) in accordance with the provisions set forth under the California Coastal Act. The project site has not been identified as an ESHA or coastal wetland under the LCP. In addition, the project site does not support biological resources which meet the California Coastal Act definition of an ESHA or coastal wetland. Further, implementation of the proposed project will not occur immediately adjacent to areas designated as ESHA's or coastal wetlands under the LCP, therefore eliminating any potential direct and indirect impacts to these areas.

IMPACTS AFTER MITIGATION

Incorporation of project design features and implementation of mitigation measures will mitigate all potentially significant adverse impacts to a less than significant level.

PCR

N

0 10 20 Miles

Regional Map

Second+PCH

Source: ESRI, 2010; PCR Services Corporation, 2010.

FIGURE

1

PCR

N

0 2,000 4,000 Feet

Vicinity Map

Second+PCH

Source: ESRI, 2010; PCR Services Corporation, 2010.

FIGURE

2

Photograph 1: Representative photograph of existing structures and vegetation.

Photograph 2: Representative photograph of existing structures and vegetation.

Photograph 3: Representative photograph of Second and PCH intersection. Photo taken from the northeast corner of the site looking northeast towards the Los Cerritos Wetlands.

Photograph 4: Representative photograph of Alamitos Bay Marina. Photo taken from southwest corner of the site looking northwest.

PCR

Site Photographs

Second+PCH

Source: PCR Services Corporation, 2010.

FIGURE

3

N

0 400 800 Feet

Aerial Photograph With Surrounding Uses

Second+PCH

Source: ESRI, 2010; PCR Services Corporation, 2010.

FIGURE

4

P C R

Attachment A

Summary of Field Observations of Los Cerritos Wetlands by PCR Biologists

(Site visits conducted November 2, 2010 and March 8, 2011)

- The southwestern portion of the Los Cerritos Wetlands, proximate to the 2nd Street/PCH intersection is disturbed by past and current oil extraction activities and associated vehicles, equipment, and infrastructure.

- This portion of the wetlands is characterized by isolated ponds in shallow depressions throughout the area, with substantial bird activity in this area and areas to the north and east (observed species consist of native birds typical of coastal estuaries, including song sparrow, house finch, black phoebe, Anna's hummingbird, American coot, great egret, great blue heron, and mallard).

- Numerous dirt roads bisect the property in various directions throughout the area, and pipelines, wells, structures, and other oil field-related equipment are found within this portion of the Los Cerritos Wetlands.

- Areas of coastal marsh habitat, including mulefat scrub and cattail stands, which represent native vegetation communities, are scattered throughout the southwestern portion of the Los Cerritos Wetlands; however, a substantial ruderal plant (non-native weedy species) component in this portion of the wetlands is intermixed with native vegetation, as well as oil field-related facilities and infrastructure.

Appendix IS-2

Sewer Study

PCH & 2ND

SEWER STUDY

6400 East Pacific Coast Highway
Long Beach, CA 90803

October 7, 2013

Prepared By:

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Civil Engineering • Surveying • Planning
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3555 Harbor Gateway South, Suite E, Costa Mesa, CA 92626

Purpose

This sewer study has been prepared by Incledon Consulting Group to quantify, determine and show that the existing 12-inch diameter sewer line serving the project site has the capacity to provide service to the proposed PCH & 2nd development. The proposed development will consist of 216,000 sf of retail and 29,000 sf of restaurant space.

Flow Monitoring Analysis

National Plant Services (NPS) performed the sewer flow analysis on the 12-inch diameter sewer line serving the proposed development at the manhole on 2nd Street. The monitoring was performed from April 6 through April 13, 2010. The maximum flow observed during this period was 0.70 cfs with a maximum depth of 7.08 inches. The pipe downstream of the observed manhole has a slope of S=0.0015.[1]

Based on Manning's Equation for pipe flow and using the USDA excel calculator[2], the actual Manning's coefficient of friction is approximately 0.0168.

Q = (1.486/n) A * R^(2/3) * S^(1/2)

Q = flow
R = A/P
A = cross sectional area
P = wetted perimeter
S = slope of pipe = 0.0015
n = Manning's roughness coefficient = 0.0168

Proposed Flow Analysis

Per Table 1 of this study, the new development would generate and additional peak flow of 0.045 cfs. The proposed total flow in the existing 12" diameter sewer line would be 0.70 cfs + 0.045 cfs = 0.745 cfs.

Based on Manning's Equation for pipe flow and using the USDA excel calculator[2], the proposed depth of flow in the 12-inch diameter sewer line will be approximately 7.4 inches.

Conclusion

The proposed development would increase the flow by 0.045 cfs, from 0.70 cfs to 0.745 cfs. The maximum flow depth will be increased from approximately 7.08 inches to 7.4 inches.
The total maximum depth is below the 75-percent maximum flow height of 9 inches for a 12-inch diameter pipeline.

---

[1] Tsalyuk, Yefin. Sewer Study – Proposed Residential Development 2nd Street & Pacific Coast Highway, April 2010.
[2] Accessed October 2, 2013 at ftp://ftp-fc.sc.egov.usda.gov/WI/engcad/Spreadsheets/MANNINGS-N.xls.

Table 1 - Estimated Wastewater Generation

Land Use	Amount of Development	Sewer Generation Factor[a] (gpd per unit)	Average Flow		Peak Flow[b]	
			gpd	cfs[c]	gpd	cfs[c]
Proposed Land Uses						
Retail	216,000 sf	50 / 1,000 sf	10,800	0.017	18,360	0.028
Restaurant	29,000 sf	30 / seat [d]	34,800	0.054	59,160	0.092
Total			**45,600**	**0.071**	**77,520**	**0.120**
Existing Land Uses[e]						
Hotel	170 rooms	120 / room	20,400	0.032	34,680	0.054
Restaurant	2,800	30 / seat [d]	3,360	0.005	5,712	0.009
Nightclub	5,600 sf	720 / 1,000 sf	4,032	0.006	6,854	0.011
Office	2,500 sf	120 / 1,000 sf	300	0.000	510	0.001
Total			**28,092**	**0.043**	**47,756**	**0.075**
Net Total			**17,508**	**0.028**	**29,764**	**0.045**

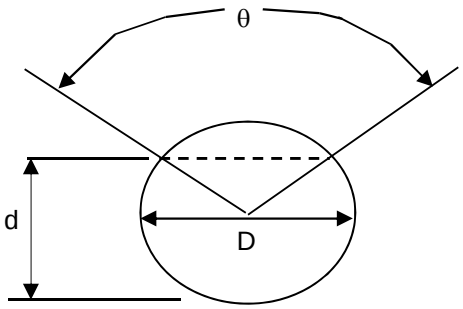
NOTES:
a. City of Los Angeles Bureau of Sanitation. "Sewer Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories." Effective April 6, 2012.
b. Estimated to be 1.7 times the average daily wastewater generation.
c. 1 cfs = 646,316.883 gpd.
d. Restaurant space is assumed to include 1 seat per 25 square feet.
e. Tsalyuk, Yefin. Sewer Study – Proposed Residential Development 2nd Street & Pacific Coast Highway, April 2010.

MANNING'S EQUATION FOR PIPE FLOW

Project:	PCH & 2nd	Location:	
By:	AC	Date:	2013.10.07
Chk. By:		Date:	

mdo version 12.8.00

Clear Data Entry Cells



INPUT

D=	12	inches
d=	7.08	inches
n=	0.0168	mannings coeff
θ=	159.3	degrees
S=	0.0015	slope in/in

Mannings Formula

$Q=(1.486/n)AR_h^{2/3}S^{1/2}$

R=A/P

A=cross sectional area

P=wetted perimeter

S=slope of channel

n=Manning's roughness coefficient

$V=(1.49/n)R_h^{2/3}S^{1/2}$

Q=V x A

Area,ft^2	Wetted Perimeter, ft	Hydraulic Radius, ft	Solution to Mannings Equation: velocity ft/s	flow, cfs
0.48	1.75	0.28	1.45	0.70

Manning's n-values	
PVC	0.01
PE (<9"dia)	0.015
PE (>12"dia)	0.02
PE(9-12"dia)	0.017
CMP	0.025
ADS N12	0.012
HCMP	0.023
Conc	0.013

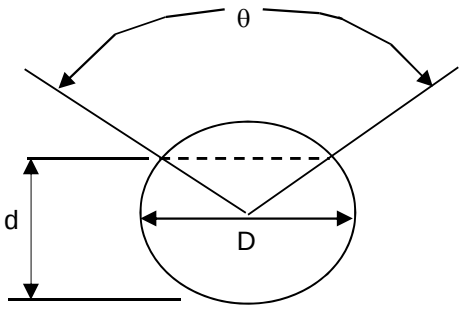
Created by: Mike O'Shea

MANNING'S EQUATION FOR PIPE FLOW

Project:	PCH & 2nd	Location:	
By:	AC	Date:	2013.10.07
Chk. By:		Date:	

mdo version 12.8.00

Clear Data Entry Cells



INPUT

D=	12	inches
d=	7.4	inches
n=	0.0168	mannings coeff
θ=	153.0	degrees
S=	0.0015	slope in/in

Mannings Formula

$Q=(1.486/n)AR_h^{2/3}S^{1/2}$

R=A/P

A=cross sectional area

P=wetted perimeter

S=slope of channel

n=Manning's roughness coefficient

$V=(1.49/n)R_h^{2/3}S^{1/2}$

Q=V x A

Area,ft^2	Wetted Perimeter, ft	Hydraulic Radius, ft	Solution to Mannings Equation: velocity ft/s	flow, cfs
0.51	1.81	0.28	1.47	0.75

Manning's n-values	
PVC	0.01
PE (<9"dia)	0.015
PE (>12"dia)	0.02
PE(9-12"dia)	0.017
CMP	0.025
ADS N12	0.012
HCMP	0.023
Conc	0.013

Created by: Mike O'Shea

Appendix IS-3

Sewer Study Peer Review

PSOMAS

Balancing the Natural and Built Environment

November 9, 2016 Psomas Project No. 2CEN110300

Steve Shaul
Senior Director, Development
CENTERCAL PROPERTIES, LLC
1600 E. Franklin Avenue
El Segundo, CA 90245
310.563.6900
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RE: 2nd & PCH Project – Long Beach
Technical Review / Peer Review
Sewer Capacity Report Review / Update Memorandum

Dear Steve

We have reviewed the follow document:

Sanitary Sewer
We have reviewed the Incledon PCH & 2nd Sewer Study dated October 7, 2013 and offer the following comments:

1. Using our new project data, we have confirmed that the proposed depth of flow in the mainline sewer will be at a D/d ration of 0.68. This is still below the recommended maximum D/d of 0.75. See Table on page 2.

2nd & PCH Project
11/7/2016

Land Use	Proposed Project Gross Floor Area (sf)	gpd/ksf	gpd	Average Flow cfs	Peak cfs
Grocery	55,000	50	2,750	0.004	0.007
Retail Sales	95,000	50	4,750	0.007	0.013
Restaurant, Dinner	40,000	1,000	40,000	0.062	0.105
Restaurant, Ready-to-Eat	5,000	1,000	5,000	0.008	0.013
Restaurant, Fast-Food	25,000	1,000	25,000	0.039	0.066
Fitness, Health Club	25,000	600	15,000	0.023	0.039
Total Floor Area (Maximum)	245,000		92,500	0.143	0.243
				minus Existing to be demo'd	0.075
				Net additional flow	0.168
				Existing Flow from Flow Monitoring	0.700
				New Total Flow	0.868
				D/d	0.68

Existing to be demo'd and D/d from Incledon PCH & 2nd Sewer Study dated October 7, 2013 (using Manning's equation with slope of 0.0015 and n value of 0.168).

Sincerely,
PSOMAS

Bruce W. Kirby, PE
Vice President