DRAFT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

ALAMITOS BEACH CONCESSION REBUILD PROJECT

CITY OF LONG BEACH

City of Long Beach
Development Services, Planning Bureau
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Project No. CLB1702

LSA

September 2017

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LIST OF ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
ACCM	asbestos-containing construction materials
ACM	asbestos-containing materials
af	acre-feet
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
bgs	below ground surface
BMP	Best Management Practices
CA BOND Exp. Plan	Hazardous Substance Cleanup Bond Act Funds Site-Specific Expenditure Plan
CAAQS	California Ambient Air Quality Standards
Cal-DHS	California Department of Homeland Security
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Department of Occupational Safety and Health Administration
California Register	California Register of Historical Resources
CalRecycle	California Department of Resources Recycling and Recovery
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Code
CCA	California Coastal Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
City	City of Long Beach
cm	centimeter(s)
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent

Coastal Commission	California Coastal Commission
Corps	California Outdoor Recreation Plan
CoSMoS	Coastal Storm Modeling System
County	County of Los Angeles
CSULB	California State University Long Beach
CUP	Conditional Use Permit
CUP Ex	Conditional Use Permit Exemption
dB	Decibel(s)
dBA	A-weighted decibel(s)
DOC	California Department of Conservation
DTSC	Department of Toxic Substances Control
EDR	Environmental Database Report
EDR HIST AUTO	Environmental Database Report Exclusive Historic Gas Stations
EMS	Emergency Medical Services
ENVIROSTOR	EnviroStor Database
EPA	United States Environmental Protection Agency
ESCP	Erosion and Sediment Control Plan
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
ft	foot/feet
GCC	global climate change
GHG	greenhouse gases
gpd	gallons per day
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
HIST CORTESE	Hazardous Waste and Substance Sites List
HVAC	heating, ventilation, and air conditioning
I-710	Interstate 710
in/sec	inch/inches per second
IS/MND	Initial Study/Mitigated Negative Declaration
JWPCP	Joint Water Pollution Control Plant
LACM	Natural History Museum of Los Angeles County
LACSD	Sanitation Districts of Los Angeles County
LBFD	Long Beach Fire Department
LBP	lead-based paint
LBPD	Long Beach Police Department

LBPL	Long Beach Public Library
LBPRM	Long Beach Parks, Recreation, and Marine Department
LBUSD	Long Beach Unified School District
LBWD	Long Beach Water Department
LCP	Local Coastal Program
L_{dn}	day-night average noise level
LED	light-emitting diode
L_{eq}	equivalent continuous sound level
LID	Low Impact Development
LID Plan	Low Impact Development Plan
L_{max}	maximum instantaneous noise level
LOS	level of service
LUD	Land Use District
LUE	General Plan Land Use Element
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
mgd	million gallons per day
mgy	million gallons per year
MLD	Most Likely Descendant
MRZs	Mineral Resource Zones
MWD	Metropolitan Water District of Southern California
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NCCP	Natural Communities Conservation Plan
NDS	National Data and Surveying Services
NESHAPS	National Emission Standard for Hazardous Air Pollutants
NonGen/NLR	Resource Conservation and Recovery Act Generators/No Longer Reporting
NPDES	National Pollution Discharge Elimination System
NO_2	nitrogen dioxide
O&M	Operating & Maintenance Plan
O_3	ozone
OPR	California Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PA	public announcement

PCB	polychlorinated biphenyls
PCH	Pacific Coast Highway
PFC	perfluorocarbons
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
POTWs	publicly owned treatment works
ppm	parts per million
PPV	peak-particle velocity
PRC	Public Resources Code
proposed project	Alamitos Beach Concession Rebuild Project
RACMS	regulated asbestos-containing materials
RECs	Recognized Environmental Concerns
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SERRF	Southeast Resource Recovery Facility
sf	square feet
SF_6	sulfur hexafluoride
SLIC	Spills, Leaks, Investigations, and Cleanups
SMARA	Surface Mining and Reclamation Act
SR-1	State Route 1
SSMP	Sewer System Management Plan
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Storm Water Pollution Prevention Program
SWRCB	State Water Resources Control Board
TSCA	Toxic Substances Control Act
Unified Program	Long Beach Certified Unified Program Agency
USFWS	United States Fish and Wildlife Services
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
WDRs	Waste Discharge Requirements
WRP	Water Reclamation Plant

1.0 INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) and the *State CEQA Guidelines*, this Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the proposed Alamitos Beach Concession Rebuild Project (proposed project) in the Alamitos Beach area in the City of Long Beach. Consistent with *State CEQA Guidelines* Section 15063, this Initial Study includes a description of the proposed project, an identification of the environmental setting, an evaluation of the potential environmental impacts, and findings from the environmental analysis.

This IS/MND provides a preliminary evaluation of the potential environmental impacts that may result from development of the proposed project. The City is the Lead Agency under CEQA and is responsible for adoption of the IS/MND and approval of the project. However, because the project site is located entirely within the Coastal Zone and is under the land use and planning jurisdiction of both the City and the California Coastal Commission (Coastal Commission), the Coastal Commission is responsible for issuing a Coastal Development Permit (CDP) for the proposed project.

1.1 CONTACT PERSON

Any questions or comments regarding the preparation of this IS/MND, its assumptions, or its conclusions should be referred to:

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2.0 PROJECT DESCRIPTION

2.1 REGIONAL AND LOCAL SETTING

The project site is located in the Alamitos Beach area of the City of Long Beach (City), which is located in the County of Los Angeles (County), California. As shown on Figure 2.1, Regional Project Location, regional access to the project site is provided by California State Route 1 (SR-1 or Pacific Coast Highway [PCH]) to the north and Interstate 710 (I-710) to the west of the project site. Local access to the site is provided by Ocean Boulevard and Beach Access Road. In addition, there is a beach bicycle and pedestrian path adjacent to the south side of the project site that provides access to the site.

The project site consists of a portion of Assessor's Parcel Number 7265-021-901, which itself is situated at the western end of Alamitos Beach and is adjacent to the waterfront area near the City's downtown.

2.2 SURROUNDING LAND USES

The project site is bounded by commercial, office, and high-rise residential uses to the north; sandy beach areas associated with Alamitos Beach to the east and south; the Marina Green to the south; and Beach Access Road and East Shoreline Boulevard to the west. Commercial, residential, and office uses of varying densities are present to the north, Alamitos Beach is present to the east, Alamitos Beach and the Long Beach Marina are present to the south, and Rainbow Lagoon Park and the Long Beach Convention Center are present to the west. Figure 2.2, Surrounding Land Uses, shows the details of the existing surrounding land uses.

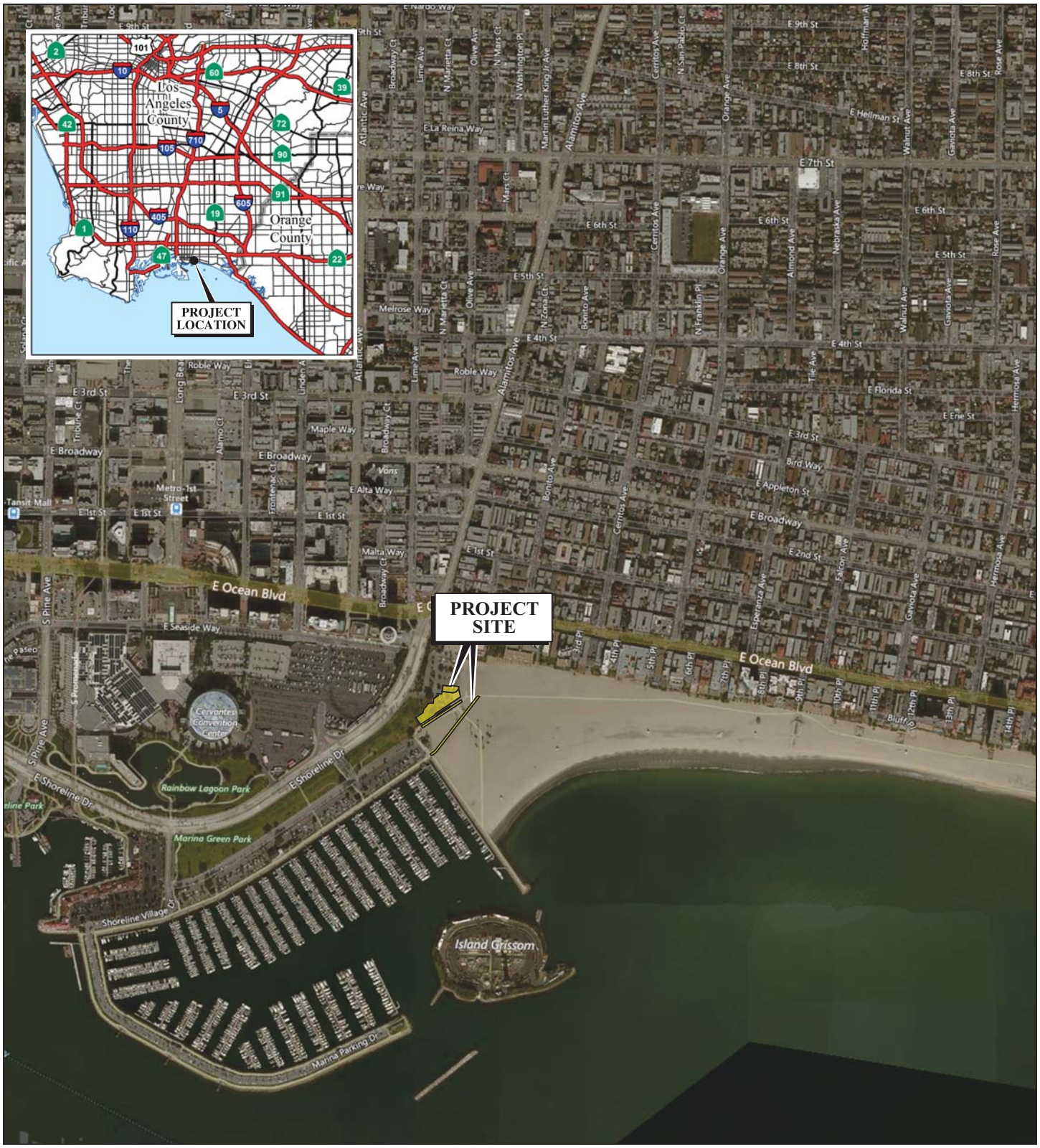
Areas immediately adjacent to the project site include a sandy beach area, volleyball courts, a rinse station, and existing pedestrian and bicycle pathways south of the site; sandy beach east of the site; the existing surface parking lot associated with the current concession stand to the north of the project site; and the Marina Green to the east of the site.

2.3 EXISTING SITE CONDITIONS AND LAND USE DESIGNATIONS

The 1.22-acre project site (Assessor's Parcel No. 7265-021-901) is currently developed with the existing Alamitos Café, which is located on the north end of the Marina Green. The existing one-story concession building is 2,234 square feet (sf) in size. A small outdoor patio and an automated teller machine (ATM) are present directly south of the building and are intended for use by patrons of the concession stand and visitors to the beach. An existing monument sign marks the southeastern corner of the site.

Pedestrian and bicycle access to the project site is provided by existing bicycle and pedestrian pathways south of the site, both of which traverse Alamitos Beach in an east-west fashion. Vehicular access to the site is provided via Beach Access Road and an on-site surface parking lot directly north of the existing concession stand. An electric vehicle (EV) charging station is located within the on-site parking lot, near the entrance to the concession stand. Bicycle racks are also present on the project site and are located in between the on-site parking lot and the existing concession stand.

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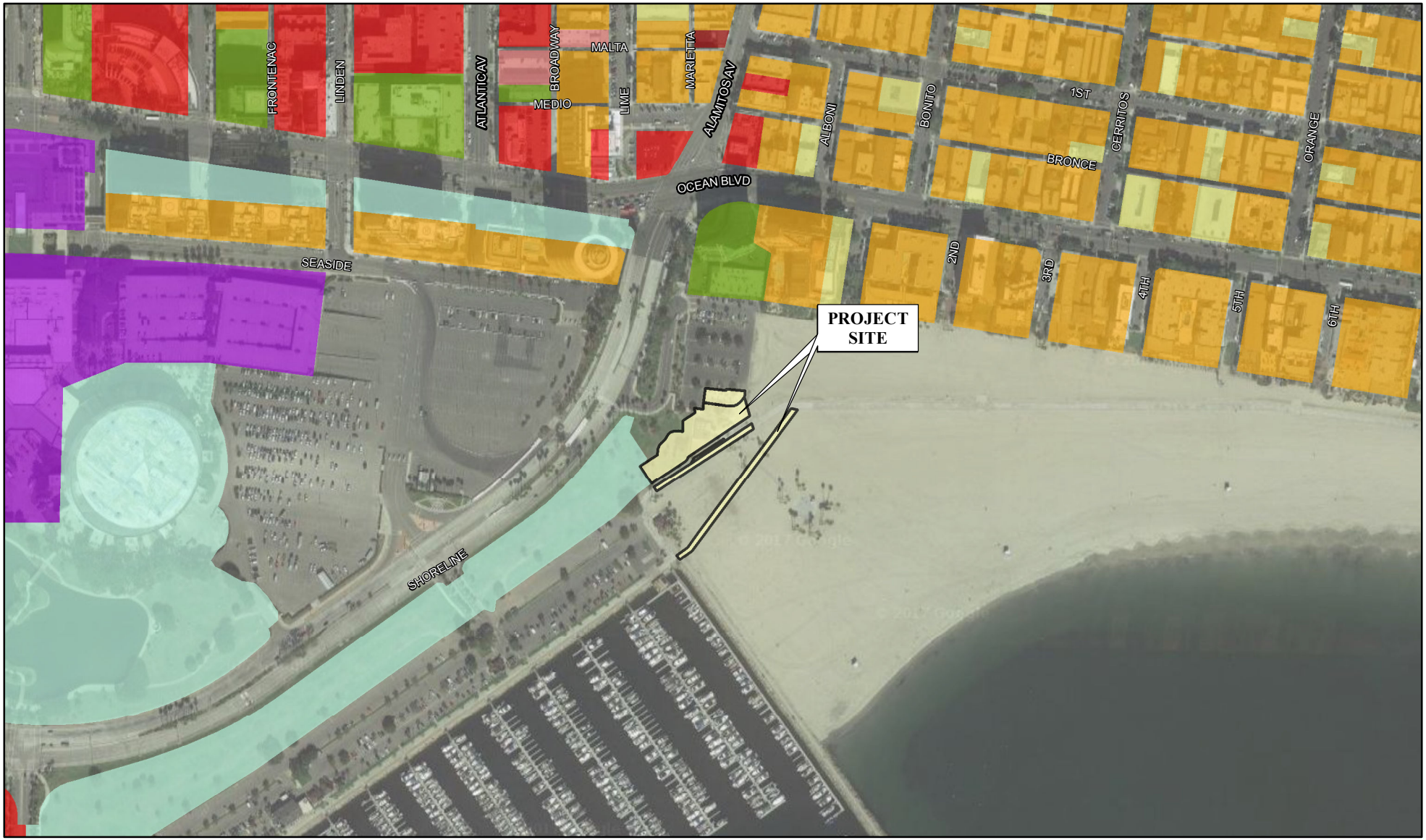
FIGURE 2.1

SOURCE: Bing Maps

Alamitos Beach Concession Stand
Regional Project Location

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LEGEND

- Single Family Residential
- Multi-Family Residential
- General Office
- Commercial and Services
- Government Facilities
- Hospitality/Commercial
- Mixed Use
- Park
- Project Site

0 200 400
FEET

SOURCE: Google Maps (2016)

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FIGURE 2.2

Alamitos Beach Concession Stand

Existing Surrounding Land Uses

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The project site is relatively flat, with a large majority of the site consisting of pavement associated with the on-site parking lot and paved outdoor areas serving the existing concession stand building. Ornamental vegetation (mature trees and shrubs) are scattered throughout the on-site parking lot and around the existing concession stand building. Figure 2.3, Existing Project Site, details the existing site.

2.4 PROPOSED PROJECT

2.4.1 Development Proposal

The proposed project includes the redevelopment of the existing concession stand and café on the project site with three buildings (described further in the following paragraphs), an outdoor recreational area, and improvements to the southern portion of the existing on-site surface parking lot. The project would be aligned with the existing pedestrian and bicycle paths east of the site, creating a promenade area in front of the site, facing the beach.

The proposed project would also add a landscaped median between the existing pedestrian and bicycle pathway and an additional dedicated bicycle lane further south of the pedestrian path on the beach. The proposed project would relocate five of the existing volleyball courts south of the site to accommodate the additional bicycle lane; however, relocation of the existing palm trees currently present south of the site would not be required. The addition of a bicycle lane as proposed as part of the project would reposition a sharp curve in the existing alignment, which currently poses a problem for pedestrian safety.

Ornamental landscaping, a flagpole, and a relocated monument sign would define the entrance to the proposed project. The proposed project would also replace the existing hardscape plaza and picnic tables on the north end of Building A with a vehicular drop-off zone. Palm trees in the existing hardscape plaza may be relocated to the proposed play space area and to the northern end of Buildings B and C.

The following discussion provides further detail regarding each of the project components. Refer to Table 2.A, Proposed Project Components, for a breakdown of the existing and proposed building components, as well as Figures 2.4a and 2.4b, Existing Site Conditions, for an illustration of the current conditions. Figure 2.5, Conceptual Site Plan, depicts the plan of the proposed improvements, and Figures 2.6a through 2.6c, Conceptual Renderings, depict the renderings of the proposed improvements.

2.4.1.1 Building Development

Building A. As illustrated on Figures 2.7a and 2.7b, Building Elevations, Building A consists of the concession stand/café building and would be 4,315 sf in size and a maximum of 27 feet (ft) in height. The concession stand/café building would consist of a semi-enclosed ground level topped by an open outdoor roof deck. The first floor would feature a modern restaurant and café, a kitchen, and restroom facilities. It would also include indoor seating that would spill out into a larger ground level deck containing outdoor seating areas. The open rooftop deck would feature outdoor seating, providing visitors with a comfortable vantage point of the Pacific Ocean and the Long Beach Marina.

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LEGEND

- Pedestrian Path
- Bike Path
- Bike Network

N

0 250 500

FEET

SOURCE: Bing Maps

FIGURE 2.3

Alamitos Beach Concession Stand

Existing Project Site

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Photo 1 - Concession Stand



Photo 2 - Parking Lot/Hardscape Plaza



Photo 3 - View South from Marina Green



Photo 4 - View South from Beach Access Road

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FIGURE 2.4a

Alamitos Beach Concession Stand
Existing Site Conditions

SOURCE: City of Long Beach Site Plan Package

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Photo 5 - View East from Bicycle/Pedestrian Path



Photo 6 - View West from Bicycle/Pedestrian Path



Photo 7 - View South from Bicycle/Pedestrian Path



Photo 8 - Shoreline Marina

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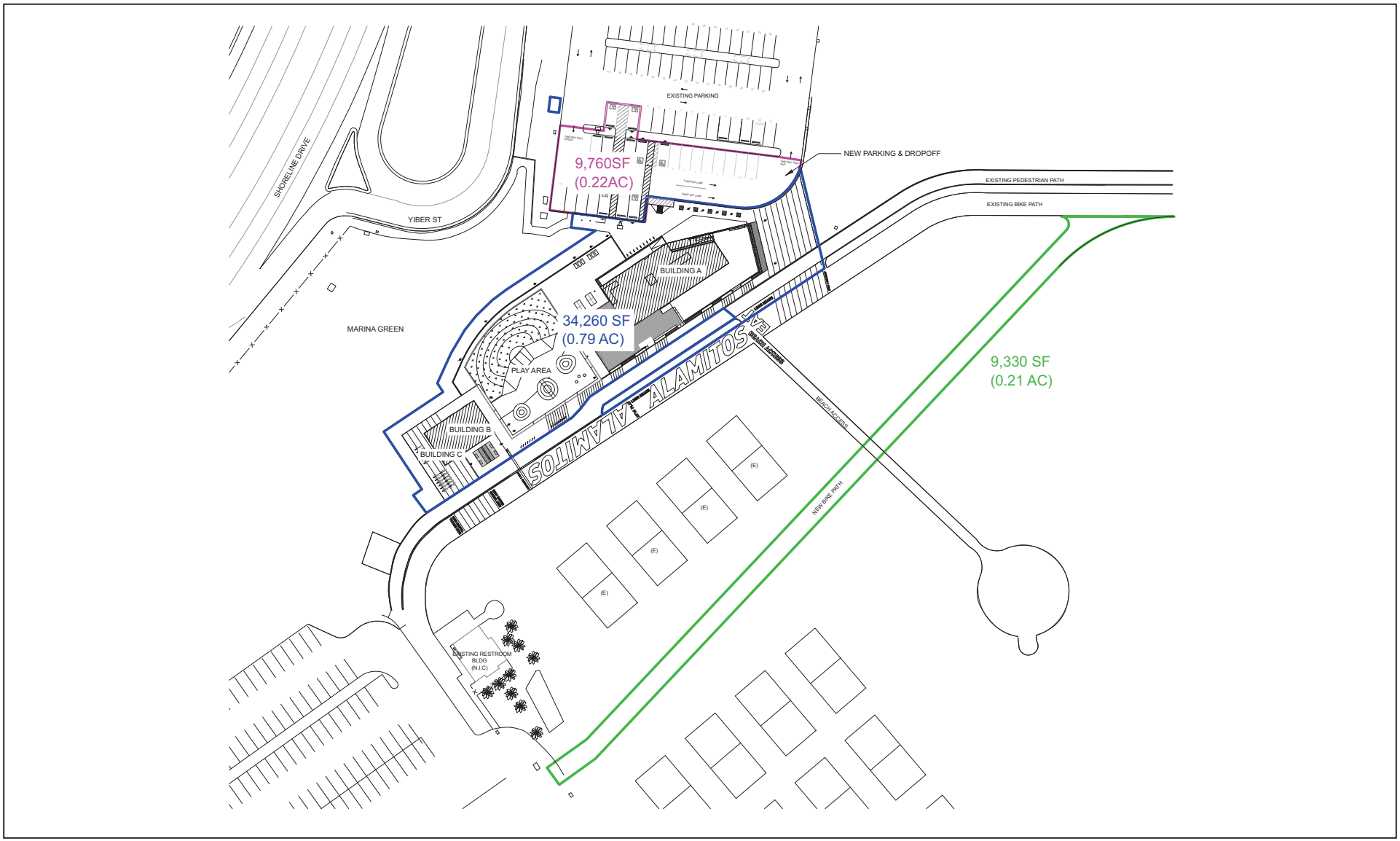
FIGURE 2.4b

Alamitos Beach Concession Stand
Existing Site Conditions

SOURCE: City of Long Beach Site Plan Package

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FIGURE 2.5

LEGEND

- Parking Lot Improvements
- Concession Stand & Play Area Improvements
- Bike Path Lane Addition

N

0 50 1000

FEET

SOURCE: City of Long Beach

Alamitos Beach Concession Stand

Conceptual Site Plan

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Aerial View

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FIGURE 2.6a

Alamitos Beach Concession Stand
Conceptual Renderings

SOURCE: City of Long Beach

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Perspective - Cafe Promenade



Perspective - Cafe Roof Deck

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FIGURE 2.6b

Alamitos Beach Concession Stand

Conceptual Renderings

SOURCE: City of Long Beach

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Perspective - Plaza View



Perspective - Concession Deck

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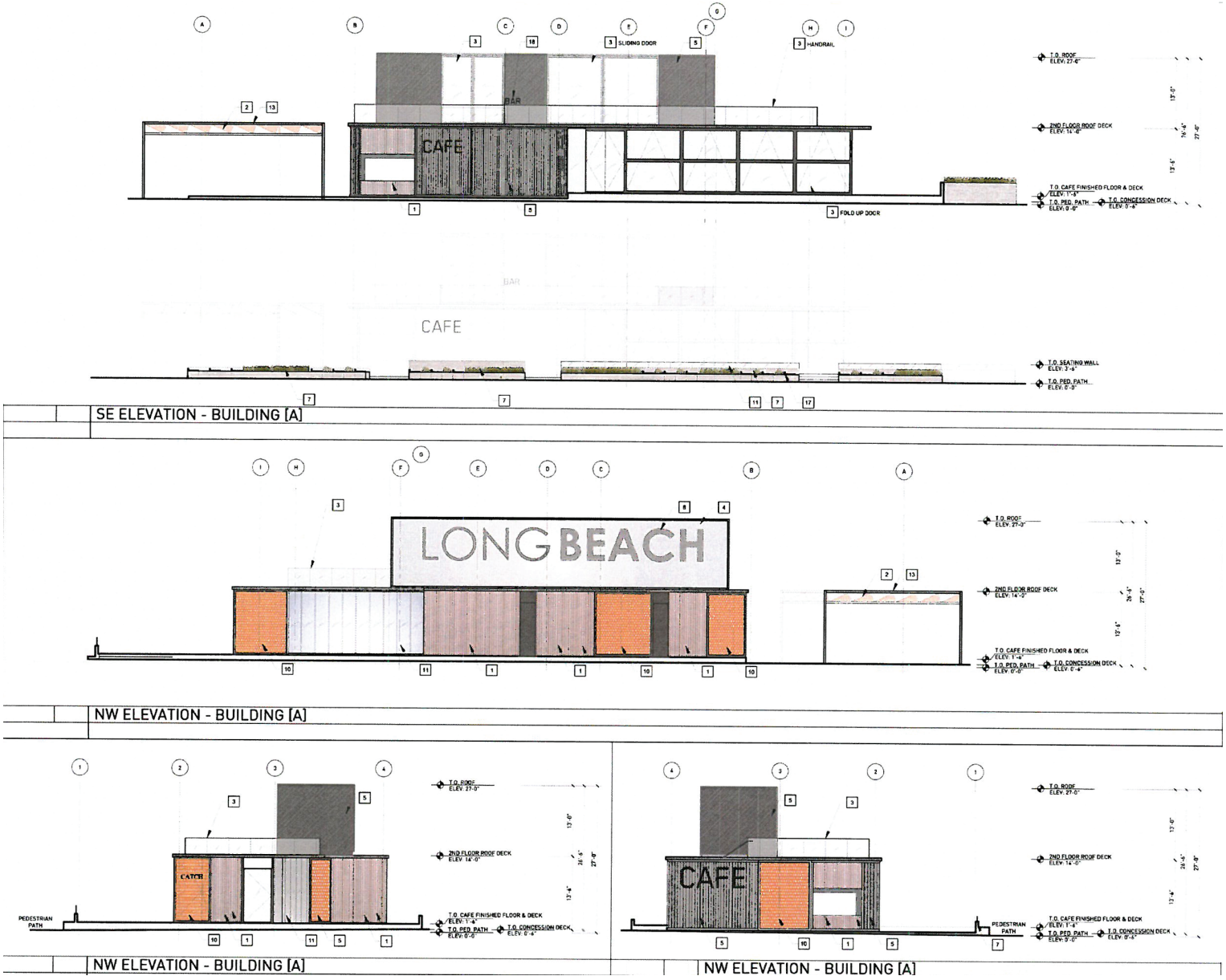
FIGURE 2.6c

Alamitos Beach Concession Stand
Conceptual Renderings

SOURCE: City of Long Beach

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FIGURE 2.7a

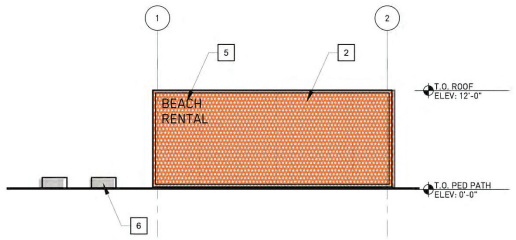
Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

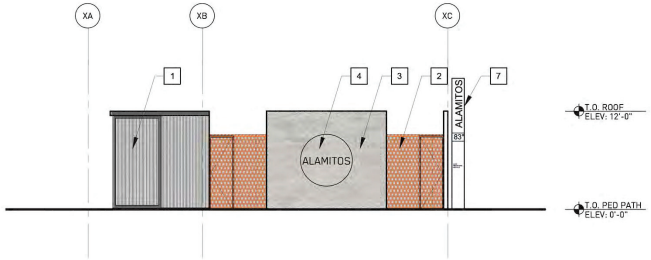
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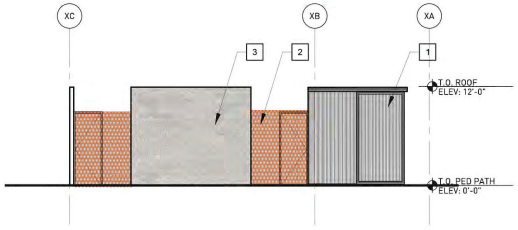


D10 | A2.10 | SW ELEVATION - BUILDING [B] & [C]

SCALE: 1/8"=1'-0" | Ref: A1.12 -



SW ELEVATION - BUILDING [B] & [C]



A10 | A2.10 | NW ELEVATION - BUILDING [B] & [C]

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FIGURE 2.7b

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

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Table 2.A: Proposed Project Components

Building	Stories	Height (ft)	Square Footage
Existing Building			
Building A (Concession Stand)	1	14	2,234
		Total SF	*2,234*
Proposed Buildings			
Building A (Concession Stand)	2	27	3,380 1st Floor + 935 2nd Floor = 4,315
Building B (Restroom/Storage)	1	12	817
Building C (Recreational Equipment Rental)	1	12	430
		Total SF	*5,562*
		Net New SF	**3,328**

Note: Square footage for Proposed Building A does not include unenclosed open space for the following areas: Floor 1 Café Dining Deck (1,965 sf); Floor 1 Concession Dining Deck (1,907 sf); and Floor 2 Roof Dining Deck (1,463 sf).
ft = foot/feet
sf = square feet

The rooftop deck would include mechanical equipment that would be visually screened and an enclosed space for a data room, and a service bar. The service bar would feature a cooler, sinks, multiple taps, and storage space. Due to the proposed sale of alcoholic beverages, the service bar would require a Conditional Use Permit (CUP). In addition, table service to be provided to bar patrons would require a CUP Exemption (CUPEx).

The proposed concession stand/café building would be a low rectilinear building that would incorporate architectural features reminiscent of shipping container structures. The building would include metal panels that would slide open, revealing the building's interior spaces and interior cedar siding. The southeastern side of the building would feature tall glass doors connecting ground-floor interior seating with exterior uses on the ground-level deck, which itself would be above the existing pedestrian path in front of the café and 18 inches above the existing pedestrian path in front of the restaurant. The roof deck would feature acid-etched glass guardrails designed to be visible and safe for birds in flight. The project would also have sliding doors on the southwestern end of the site to provide access to a games counter that would house board games and amenities for games in the grassy area east of the site, available for checkout by the public.

Building B. Building B would be 817 sf and would be 12 ft in height. Plans for the building include restroom and storage facilities to serve patrons of the project and visitors to the beach. It would likely be locked for security purposes during the evening hours.

Building C. Building C would be 430 sf and would be 12 ft in height. This building would include recreational equipment for rent by visitors to the beach and park. The project also includes the installation of pedestrian furniture and a rinse station directly east of Buildings B and C.

2.4.1.2 Building Design

Building materials consisting of profiled metal panels (similar to shipping containers) would make up the building exterior. As the panels slide open, they would reveal a softer inner material (e.g., cedar siding) to give the building a softer appearance. Refer to Figures 2.7a and 2.7b for the elevations of Buildings A through C.

2.4.1.3 Open Space and Recreation

In addition to Buildings A through C, the project also features the installation of a play space and recreational area on the southern portion of the site. The proposed play space would include concrete seating with integrated skateboard guards, a grassy mound, a scramble wall with recycled poly-lumber cladding, a slide, and a small pedestrian pathway. The outdoor recreational area would also include outdoor games, including a cornhole station and ping pong tables. An outdoor shade structure would be installed within this area to provide relief to visitors from weather conditions.

2.4.1.4 Landscaping

Landscaping included as part of the project would primarily consist of palms near the site entrance and on the eastern portion of the site, drought-tolerant plants along the eastern perimeter of the site, and grassy areas in the open space area proposed between Building A and Buildings B and C. All landscaping included as part of the project would be irrigated via an automatic drip irrigation system to be installed with a programmable weather-smart controller and would be drought-tolerant to achieve maximum water efficiency. Existing grassy areas north of Buildings A, B, and C would be preserved as open space.

2.4.1.5 Parking

Based on the City of Long Beach parking requirements (10 spaces per 1,000 sf of indoor dining area and 5 spaces per 1,000 sf of outdoor dining area), the proposed project would be required to provide a total of 40 parking spaces. The proposed project would improve and expand the existing on-site parking lot (which includes 146 spaces) to 155 on-site parking spaces (replacement of 3 parking space and 6 new parking spaces) and would include a new drop off area. The proposed project would also relocate the existing EV station closer to the drop-off area of the site parking lot, and regrade existing ADA parking stalls. Improvements included as part of the project are limited to the southern portion of the site, as illustrated in Figure 2.5, Conceptual Site Plan.

In addition to vehicular parking, the proposed project would incorporate 25 bicycle spaces on the northeastern and southeastern portions of the site.

2.4.1.6 Lighting

The proposed project would include on-site lighting consisting of pedestrian scaled lighting (approximately 12 to 16 inches in height); down lights, step lights, and linear perimeter light on the buildings and site furniture; and backlit walls on the buildings. Lighting will be hooded, shielded, or cut-off to focus the light downward and prevent light spillage onto adjacent properties.

2.4.1.7 Sustainability Features

The proposed project would be consistent with California's Title 24 energy code and the California Green Buildings Standards codes. As such, the proposed project would incorporate the following sustainability features:

- Low-flow toilets
- Low-flow showerheads
- Low-flow kitchen faucets
- Tankless water heaters
- Light-emitting diode (LED) recessed can lighting
- LED exterior coach lighting
- LED surface mount fixtures
- LED pendant lighting
- Preplumbing/prewiring the restaurant for a condensing water heater (to be installed at a future date)
- Relocation of an EV station

2.5 GENERAL PLAN AND ZONING

2.5.1 General Plan

The project site is designated as Land Use District (LUD) No. 11, Open Space and Park District, on the City's General Plan Land Use Map. Although parks and open space uses are the primary allowable uses within LUD No. 11, commercial and commercial recreation uses are also allowed as long as they are intended to preserve natural areas, promote the mental and physical health of the community, and improve the park patron's overall experience. The proposed project meets these General Plan intentions as the project would serve visitors and patrons' of the surrounding park and beach areas.

The City is currently in the process of updating its General Plan Land Use Element. As part of this process, the City would replace traditional land use designations in the City with PlaceTypes, which will provide a more flexible planning approach. The City would allow for mixed land uses within most of the proposed PlaceTypes in an effort to encourage agglomerate uses, promote walkability, and reduce sprawl and vehicle miles traveled (VMTs). According to the Draft Land Use Element, the project site would be located within the Waterfront PlaceType, which allows for marine-related commercial uses, a shipyard, yacht and sailing clubs, boat rentals, restaurants, public beaches, and infrastructure that serves small craft boats. The proposed project would implement the redevelopment of the project site with an improved concession stand facility, additional facilities for the public to rent recreational equipment, and public restrooms. Therefore, the project would be consistent with allowable uses under the proposed Waterfront PlaceType.

2.5.2 Zoning

The proposed site is currently zoned Park (P) on the City's Zoning Map. According to Chapter 21.35, Park District, of the City's Municipal Code, restaurants,[1] restaurant concessions, and rental uses for recreational equipment are permitted accessory uses in the Park District. The following zoning regulations are applicable to new development within the Park District: (1) a maximum building height of 30 ft, (2) the provision of adequate trash receptacles to accommodate refuse generated on the project site, (3) the installation of freestanding monument signs displaying the park's name, (4) the screening of maintenance and mechanical equipment from public view, and (5) a cohesive building design such that the buildings are cohesive with the surrounding environment.

As described further in Section 4.10, Land Use and Planning, the proposed project would be consistent with all applicable zoning regulations and permitted uses (including the proposed concession stand/café, rental equipment facility, and an outdoor play area) established for the Park District. Therefore, the proposed project would not require or necessitate a Zone Change, a Zoning Variance, or a General Plan Amendment.

2.6 COASTAL ZONE

The project site is situated in the California Coastal Zone, and as such, is regulated by the provisions of the California Coastal Act (CCA). As illustrated by Figure 2.8, Coastal Zone, the northern portion of the project site is located in the Appealable Area of the Coastal Zone and the southern portion of the site is located in an area under the State's permit jurisdiction. As such, the, project approval would require issuance of a Coastal Development Permit (CDP) from the California Coastal Commission**.**

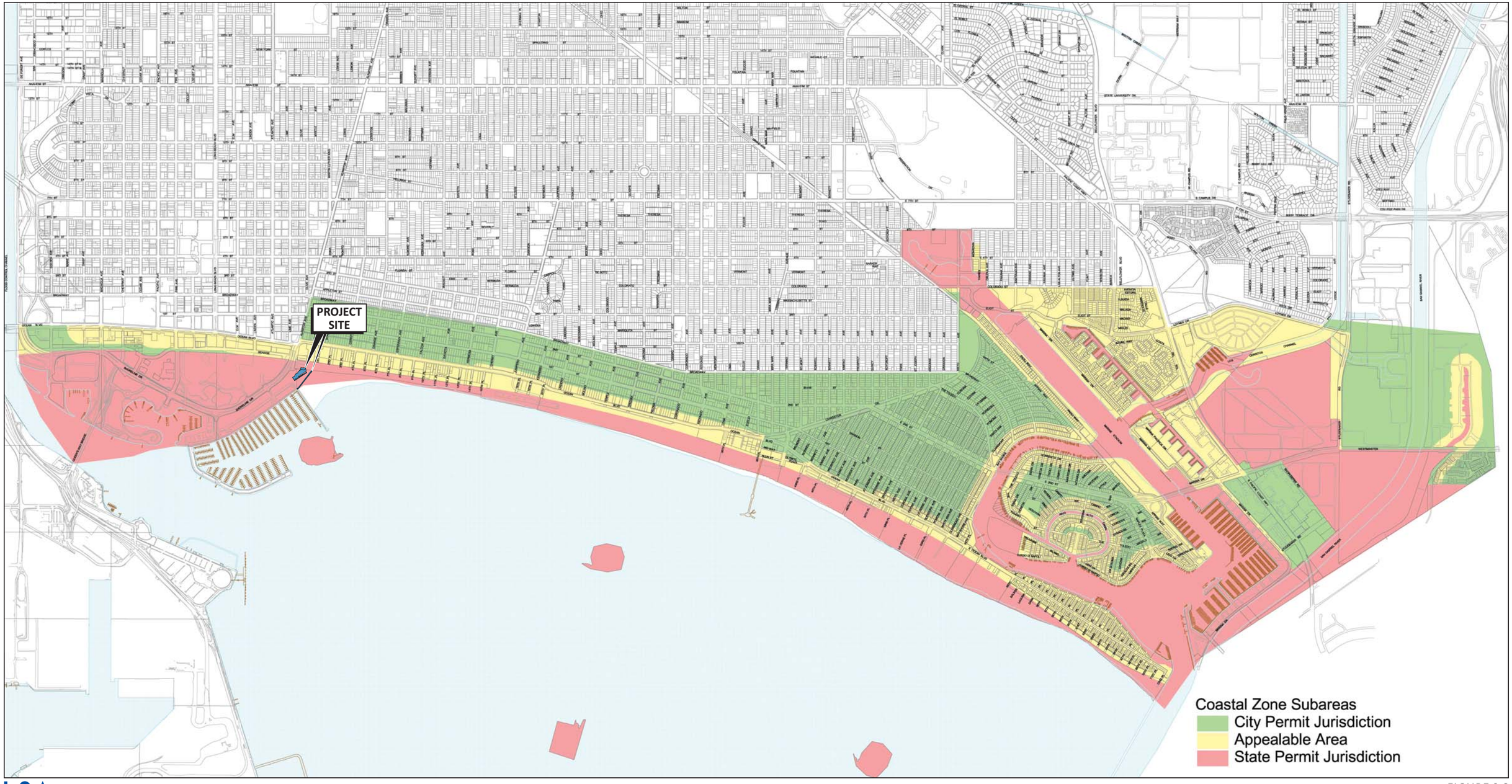
2.6.1 Infrastructure Improvements

2.6.1.1 On-site and Off-site Infrastructure

The project site contains existing sewer, electrical, and telephone services in support of the existing concession stand building. Services will need to be extended to the point of connections at the new building. While services for water and gas are not currently provided to the existing concession building, services will be pulled from existing water and gas mains located in the parking lot southwest of the project site (adjacent to the existing restroom facilities). With food services being proposed, a grease interceptor may be required prior to waste entering the sanitary sewer system.

Best Management Practices (BMPs) are included in the project to treat and infiltrate stormwater runoff. Depressed landscape areas (vegetated swales) for natural infiltration of stormwater are proposed along the perimeter of the project site in the vicinity of the proposed play area, restroom, and storage building. The vegetated swale would convey flows in a southwesterly direction to an infiltration basin located by the sidewalk, west of the proposed buildings. In addition, depressed sand infiltration basins would be located in the median of the parking lot. Building downspouts would also be provided to drain stormwater to sand areas for infiltration. In addition, the existing

[1] Restaurants are conditionally permitted uses in the Park District.



LSA

FIGURE 2.8

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SOURCE: City of Long Beach

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Alamitos Beach Concession Stand

Coastal Zone

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sand areas on both sides of the existing bicycle path and within the parking lot will be used for natural infiltration of stormwater runoff.

2.7 IMPLEMENTATION/PHASING

Project construction would begin with removal of the existing buildings and hardscape plaza. Thereafter, project site preparation, grading, site utility installation, construction, and paving would occur. The construction trips that would be generated on a daily basis throughout each phase of construction would be based on construction workers and delivery of construction materials. Based on preliminary construction operation estimates and preliminary grading plans, a balanced site of 1,500 cubic yards of cut and 1,500 cubic yards of fill is anticipated.

Project construction is anticipated to take approximately 14 months and is expected to begin in July 2018. All construction equipment, including construction worker vehicles, would be staged on the project site for the duration of the construction period. In addition, the proposed project construction schedule would comply with Long Beach Municipal Code, Section 8.80, which limits construction activities to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturdays.

2.8 DISCRETIONARY ACTIONS

In accordance with Sections 15050 and 15367 of the *State CEQA Guidelines*, the City is the designated Lead Agency for the proposed project and has principal authority and jurisdiction for CEQA actions. Responsible agencies are those agencies that have jurisdiction or authority over one or more aspects associated with the development of a proposed project and/or mitigation. Trustee Agencies are State agencies that have jurisdiction by law over natural resources affected by the proposed project.

Development of the proposed project would require preparation of this IS/MND, adoption of the IS/MND, Site Plan Review approval, a Conditional Use Permit (Food and Beverage Concession), and a Coastal Development Permit (CDP). See Table 2.B, Discretionary Permits and Approvals, below, for a list of discretionary and permit approvals required for project implementation.

Table 2.B: Discretionary Permits and Approvals

Action	Agency
Adoption of the Initial Study/Mitigated Negative Declaration	City of Long Beach Planning Commission
Site Plan Review and Approval	City of Long Beach Planning Commission
Conditional Use Permit (Food and Beverage Concession)	City of Long Beach Planning Commission
Issuance of a Coastal Development Permit	California Coastal Commission
Notice of Intent (NOI) to comply with the National Pollution Discharge Elimination System (NPDES) General Permit/Storm Water Pollution Prevention Program (SWPPP)	State Water Resources Control Board

2.9 OTHER MINISTERIAL CITY ACTIONS

The City of Long Beach or other appropriate agencies would issue ministerial permits/approvals to allow site preparation, curb cuts (if necessary), connections to the utility infrastructure, and other project features subject to ministerial permits.

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

DETERMINATION. On the basis of this initial evaluation:

1. I find that the project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☐

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

3. I find the proposed project **may have a significant effect** on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

4. 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. ☐

5. 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. ☐

Project Planner

9/8/17
Date

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4.0 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).
5. Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration (Section 15063 (c)(3)(D)). In this case, a brief discussion should identity the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead Agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and Lead Agencies are free to use different formats; however, Lead Agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significant.

4.1 AESTHETICS

Would the project:

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

Impact Analysis:

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

Less than Significant Impact. A scenic vista is the view of an area that is visually or aesthetically pleasing from a certain vantage point. It is usually viewed from some distance away. Aesthetic components of a scenic vista include (1) scenic quality, (2) sensitivity level, and (3) view access. A scenic vista can be impacted in two ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or "vista" of the scenic resource. Important factors in determining whether a proposed project would block scenic vistas include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors.

The City of Long Beach General Plan Scenic Routes Element (1975) identifies scenic routes in the City in an effort to preserve views of scenic vistas in the City. Scenic vistas afforded to the City include views of the Pacific Ocean and the Port of Long Beach to the south, distant views of the San Gabriel and San Bernardino Mountains to the north, and distant views of the Santa Ana Mountains to the east. Locally designated scenic routes near the project site include Ocean Boulevard to the north and East Shoreline Drive/Alamitos Avenue to the west.

The City's Draft General Plan Urban Design Element (February 2017), when adopted, would replace the currently adopted Scenic Routes Element, identifies existing scenic vistas in the City. Examples of these scenic vistas include the following: views along Alamitos Avenue south to Villa Riviera; El Dorado Park; 3rd Street to the Port of Long Beach cranes; Ocean Boulevard; Bluff Park to the Pacific Ocean and Belmont Pier; Queensway Bay and Shoreline Park to the Queen Mary and cruise ships; the Downtown; the marinas; and Los Coyotes Diagonal to the distant San Gabriel Mountains. Although the Draft Urban Design Element identifies several examples of existing scenic vistas in the City, these scenic vistas are not officially designated by the City nor has the Draft Urban Design Element been officially adopted by the City.

The project site is adjacent to the Pacific Ocean at the western end of the Alamitos Beach area. Views of the project site from the surrounding areas currently consist of the existing concession stand, outdoor amenities, and parking. Scenic vistas visible from the project site include views of the Pacific Ocean and the Port of Long Beach.

The proposed project includes the redevelopment of the existing concession stand building on the project site. The tallest building height (Building A) will increase from one to two stories in height and would be 27 feet (ft) at its zenith. The number of buildings at the project site will also increase from one to three; however, these two additional buildings would be one-story in height, which would be considerably lower in height than existing development along Ocean Boulevard and in the Downtown area north of the site. As illustrated on Figure 4.1.1., Existing and Proposed Project Conditions in Relation to the Surrounding Area, new development proposed as part of the project would not be of a sufficient height such that it would potentially obstruct existing views of the Pacific Ocean and the Port of Long Beach from the project site. The proposed development would also be setback on the beach and lower in height and elevation than adjacent development to the north along Ocean Boulevard. Therefore, the height, location, and building configuration on the project site would result in less than significant impacts with respect to the obstruction of scenic views of the Pacific Ocean.

In addition, the development of the project site would improve the existing site by replacing the concession stand building, which is in need of repair and maintenance (refer to Figures 2.4a through 2.4d, Existing Site Conditions, in Chapter 2.0, Project Description) with a new concession stand building and associated facilities to be developed in a modern architecture design (refer to Figures 2.6.a through 2.6d, Conceptual Renderings, in Chapter 2.0, Project Description). Therefore, the proposed project would not result in a substantial adverse effect on a scenic vista, and no mitigation is required.

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

No Impact. The California Department of Transportation (Caltrans) Landscape Architecture Program administers the Scenic Highway Program, contained in the Streets and Highway Code, Sections 260-263. Scenic Highways are classified as either Officially Listed or Eligible. There are no State-designated scenic routes in the City. However, State Route 1 (SR-1) (i.e., Pacific Coast Highway [PCH]), which traverses the southern portion of the City from northwest to southeast, is currently designated as an Eligible State Scenic Highway.[1] It should also be noted that the City's Draft General Plan Urban Design Element (2017b) (which is intended to eventually replace the existing Scenic Routes Element) and the City's existing Scenic Routes Element (1975b) identify Ocean Boulevard as a scenic route. Although the City's General Plan Scenic Routes Element and proposed Urban Design Element designate Ocean Boulevard as a scenic roadway within the project vicinity for which view protection should be considered, there are no State-designated scenic highways in the City. As discussed further under Response 4.1(a),

[1] California Department of Transportation, Scenic Highways. Website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm (accessed March 19, 2015).



Existing Condition, Northwest View



Existing Condition, South View



Project Rendering, South View

LSA

FIGURE 4.1.1

Alamitos Beach Concession Stand

Existing and Proposed Project Conditions
in Relation to the Surrounding Area

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development proposed as part of the project would not be of a substantial height and or density such that it would potentially damage views of scenic resources along Ocean Boulevard (which itself is located at a higher elevation than the project site), nor would the project develop the site with new uses not currently present on the project site. Therefore, implementation of the proposed project would not impact scenic resources within a State scenic highway.

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

Less than Significant with Mitigation Incorporated.

Visual Character and Quality of the Site. The project site is located within a developed area of Alamitos Beach within the City of Long Beach. In its existing condition, the project site consists of the Alamitos Beach concession stand, a portion of a bicycle trail directly south of the concession stand, and a portion of the existing parking lot serving the existing concession stand. In its current state, the concession stand building is deteriorating and lacks notable architectural features and a prominent design (refer to Figure 4.1.2, Photographs of Existing Concession Stand). Existing landscaping consists of scattered trees and ornamental vegetation throughout the parking lot and around the concession stand.

Vehicular access to the project site is provided off of Beach Access Road, and pedestrian access to the site is provided via existing sidewalks north and east of the site. Pedestrians and bicyclists are also able to access the site via an existing pedestrian/bicycle pathway traversing the southern portion of the site along the beach.

Scenic views of the Pacific Ocean, Queensway Bay, and the Port of Long Beach are visible from most areas on the project site. Refer to Figures 2.4a and 2.4b for photos of the existing site conditions and views from the project site.

According to the *Biological Resources Assessment for the Alamitos Concession Stand Project* (LSA, July 2017; provided in Appendix B), existing vegetation on the project site is minimal and is generally limited to ornamental landscaping. The majority of this vegetation is nonnative, and includes ornamental trees and Mexican fan palms, (*Washingtonia robusta*). Please refer to Section 4.4, Biological Resources, for further discussion regarding on-site vegetation.

***Construction*.** Construction of the proposed project would involve demolition and on-site grading activities that would potentially be visible to travelers along East Shoreline Drive and visitors to Alamitos Beach. Construction activities would be short-term and all construction vehicles would be staged on, or immediately adjacent to the project site, throughout the duration of the construction period. Temporary construction fencing would be placed along the perimeter of the site to screen construction activities on the street level and from beach users in the project area. It is recognized that construction fencing could serve as a potential target for graffiti if not appropriately monitored. Mitigation Measure AES-1 would require that temporary barriers and walkways are maintained in a visually attractive manner throughout the construction period. Mitigation requiring the maintenance of the project site fencing would ensure that impacts associated with unwanted debris and graffiti would be less than significant.

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Northeast view.



Southeast view.



Southwest view.



Roof.

LSA

FIGURE 4.1.2

Alamitos Beach Concession Stand
Photographs of Existing Concession Stand

SOURCE: Hazardous Building Materials Inspection Report

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Furthermore, visual impacts during construction would be temporary in nature and would cease upon project completion. Therefore, construction impacts related to the degradation of the existing visual character of the project site would be less than significant with implementation of Mitigation Measure AES-1.

Mitigation Measure:

AES-1 **Maintenance of Construction Barriers.** Prior to issuance of any construction permits, the City of Long Beach (City) Development Services Director, or designee, shall verify that construction plans include the following note: During construction, the Construction Contractor shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that any such temporary barriers and walkways are maintained in a visually attractive manner. In the event that unauthorized materials or markings are discovered on any temporary construction barrier or temporary pedestrian walkway, the Construction Contractor shall remove such items within 48 hours.

Operation. The proposed project would redevelop the project site with a new two-story concession stand, a restroom building, a recreational equipment rental building, a play area, and parking lot improvements that would be similar to the existing character of the site. The proposed project would improve the overall visual quality and character of the site by modernizing the new concession stand building with architectural features that would mimic the aesthetics of a shipping container structure. The concession stand would also feature sliding doors and metal panels, allowing the building to open and activate the surrounding space. Additionally, existing landscaping would be upgraded to include new drought-tolerant plants along the eastern perimeter of the site, as well as grassy areas in the proposed open space area. Therefore, the proposed project would result in less than significant impacts related to the degradation of the existing visual character of the site, and no mitigation is required.

Visual Character and Quality of the Surrounding Area. The project site is located in a developed area of Alamitos Beach. The surrounding area is characterized by residential, commercial, office, and mixed-uses associated with the City's Downtown area to the north; sandy beach associated with Alamitos Beach to the east; the Pacific Ocean and Marina Green Park to the south; and East Shoreline Drive and civic uses to the west. The project site is bound on the north by an existing surface parking lot, on the east by Alamitos Beach, on the south by the Marina Green Park, and on the west by East Shoreline Drive.

Alamitos Beach is located in the neighborhood identified as "Bixby Park and Ocean Boulevard" in the City's existing General Plan Land Use Element (LUE) (adopted 1989; revised in 1997). According to the LUE, the Bixby Park neighborhood is characterized primarily by multifamily and single-family residential uses, including the landmark Villa Riviera, and commercial businesses. The City's General Plan LUE also identifies the area along Ocean Boulevard (which includes the project site) as an area targeted for high-density development.

Implementation of the proposed project would improve and restore the existing trail on the project site to ensure the trail continues in a contiguous fashion. The proposed project improvements would be consistent with the visual character of the site in the context of the surrounding area. As such, the proposed project would not fundamentally alter the surrounding land use character. Therefore, the proposed project would not degrade the character or quality of the project area, nor would the proposed project contribute to an overall degradation of the visual character or quality of the surrounding area. Project impacts would be less than significant, and no mitigation is required.

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

Less than Significant Impact. The impact of nighttime lighting depends upon the type of use affected, the proximity to the affected use, the intensity of specific lighting, and the background or ambient level of the combined nighttime lighting. Nighttime ambient light levels may vary considerably depending on the age, condition, and abundance of point-of-light sources present in a particular view. The use of exterior lighting for security and aesthetic illumination of architectural features may contribute to ambient nighttime lighting conditions.

Spill light occurs when lighting standards, such as streetlights, parking lot lighting, exterior building lighting, and landscape lighting are not properly aimed or shielded to direct light to the desired location and light escapes and partially illuminates a surrounding location. The spillover of light onto adjacent properties has the potential to interfere with certain activities, including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. Light-sensitive uses include residential, some commercial and institutional uses, and, in some situations, natural areas. Changes in nighttime lighting may become significant if a proposed project substantially increases ambient lighting conditions beyond its property line and project lighting routinely spills over into adjacent light-sensitive land use areas.

Reflective light (glare) is caused by sunlight or artificial light reflecting from finished surfaces (e.g., window glass) or other reflective materials. Glass and other materials can have many different reflectance characteristics. Buildings constructed of highly reflective material from which the sun reflects at a low angle commonly cause adverse glare. Reflective light is common in urban areas. Glare generally does not result in the illumination of off-site locations but results in a visible source of light viewable from a distance.

***Construction*.** Construction activities would primarily occur during the daylight hours and within the City's approved construction hours.[1] Any construction-related illumination would be used for safety and security purposes (in compliance with Long Beach Municipal Code light intensity requirements) and would occur only for the duration required for the temporary construction processes. With adherence to Long Beach Municipal Code regulations, construction lighting would not substantially impact sensitive uses, substantially alter the character of off-site areas surrounding the site, or interfere with the performance of an off-site activity. Therefore,

[1] City of Long Beach Municipal Code, Section 8.80. Approved construction hours: 7:00 a.m. to 7:00 p.m. Monday through Friday and from 9:00 a.m. to 6:00 p.m. on Saturdays.

construction of the proposed project would not create a new source of substantial light that would adversely affect day or nighttime views in the area, and light impacts associated with construction would be less than significant.

***Operation*.** Nighttime illumination impacts are evaluated in terms of the project's net change in ambient lighting conditions and proximity to light-sensitive land uses. Light-sensitive uses surrounding the project site include residential use to the north. Other sources of light present in the vicinity of the project site consist of street lighting and vehicular headlights on nearby roadways, building façade and interior lighting, and pole-mounted lighting within the surface parking lot to the north of the site.

The proposed project would result in the redevelopment of the existing concession stand on the project site. Although the existing concession stand and associated facilities on the project site currently generate nighttime lighting, lighting proposed as part of the project (i.e., parking lot lighting, low-level bollard lighting, and wall lighting) would consist of new sources of light that could generate additional light on the project site. New light sources included as part of the project will be hooded or shielded to focus the light downward and prevent light spillage onto adjacent properties, consistent with lighting requirements outlined in the City's Municipal Code. Moreover, the lighting levels generated as a result of the project will be relatively similar to current lighting conditions at the project site. Moreover, the proposed project would operate from sunrise to sunset, and would not require significant nighttime lighting.

The exterior building materials would not include a significant amount of highly reflective materials (e.g., windows or glass with mirror-like tints) and would, therefore, not create impacts related to glare. Although the project would feature glass materials and windows to maximize views of the Pacific Ocean, such materials would be used in quantities typical of development projects, and as such, would not result in adverse impacts associated with light and glare.

Overall, lighting provided as part of the proposed project would be consistent with the type and intensity of existing lighting on the project site and in the project vicinity. The final lighting for the proposed project would be subject to review and approval as part of the site plan review process. Therefore, project-related impacts with respect to light and glare would be less than significant, and no mitigation is required.

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4.2 AGRICULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use?	☐	☐	☐	☒

Impact Analysis:

(a) Would the project 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 nonagricultural use?

No Impact. The proposed project involves the redevelopment of a concession stand and related facilities, including a restroom and a recreational equipment rental building. The project site is in an urbanized coastal area, which has not been and is not currently used for agricultural uses, and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. As a result, the proposed project will not impact designated farmlands, and no mitigation is required.

(b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. As stated previously, the proposed project involves the redevelopment of a currently developed property in an urbanized coastal area. The site is currently zoned as Park on the City's Zoning Map, and is not zoned for agricultural uses. Moreover, the site is not used for agricultural purposes nor are there Williamson Act contracts in effect for the site. As a result,

the proposed project will not conflict with existing zoning for agricultural uses or Williamson Act contracts, and no mitigation is required.

(c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. As stated previously, the project site is zoned as Park on the City's Municipal Code. The proposed project involves the redevelopment of a currently developed property in an urbanized coastal area. The project site and the surrounding areas are not designated or zoned as forest land or timberland, or for timberland production. As a result, the proposed project would not result in impacts on timberland resources, and no mitigation is required.

(d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is in a developed urban setting adjacent to the Pacific Ocean. There are no forest or timberland resources on or in the vicinity of the project site. Therefore, the proposed project would not result in impacts related to the loss of forest land or the conversion of forest land to nonforest uses, and no mitigation is required.

(e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use?

No Impact. The project site is currently developed as a concession stand, and there are no agricultural uses or designated farmlands on or in the vicinity of the project site. The proposed project would not result in the conversion of farmland on or off the project site to nonagricultural use because there are no agricultural uses on or in the immediate vicinity of the project site. As a result, the proposed project will not result in impacts related to the conversion of agricultural land to nonagricultural uses, and no mitigation is required.

4.3 AIR QUALITY

(Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) *Would the project:*		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
(b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
(c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
(d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
(e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion:

The following section is based on air quality modeling and analysis conducted by LSA (August 2017). The air quality modeling worksheets are provided in Appendix A.

Impact Analysis:

(a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The project site is located within the City of Long Beach, which is part of the South Coast Air Basin (Basin). The Basin includes all of Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality within the Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD and the Southern California Association of Governments (SCAG) adopted the *2016 Air Quality Management Plan* (2016 AQMP) in March 2017.

The main purpose of an Air Quality Management Plan (AQMP) is to describe air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area. A nonattainment area is considered to have air quality worse than the National Ambient Air Quality Standards (NAAQS) and/or California Ambient Air Quality Standards (CAAQS). The Basin is in nonattainment for the federal and State standards for ozone (O_3), and particulate matter

less than 2.5 microns in diameter ($PM_{2.5}$). In addition, the Basin is in nonattainment for the State particulate matter less than 10 microns in diameter (PM_{10}) standard, and attainment/ maintenance for the federal PM_{10}, carbon monoxide (CO), and nitrogen dioxide (NO_2) standards.

Consistency with the 2016 AQMP for the Basin would be achieved if a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and State air quality standards. Per the SCAQMD *CEQA Air Quality Handbook* (April 1993), there are two main indicators of a project's consistency with the applicable AQMP: (1) whether the project would increase the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the 2016 AQMP; and (2) whether the project would exceed the 2016 AQMP's assumptions for 2030 or yearly increments based on the year of project build out and phasing. For the proposed project to be consistent with the AQMP, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality. Additionally, if feasible mitigation measures are implemented and are shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP.

The City's General Plan is consistent with the 2016 AQMP. Because the proposed project does not require a General Plan Amendment and is consistent with the intent of the General Plan's land use designation for the project site, the proposed project would not conflict with the 2016 AQMP. Furthermore, as discussed in Responses 4.3(b) through 4.3(e), the proposed project's emissions would be below emissions thresholds established in SCAQMD's *Air Quality Significance Threshold* (March 2015) and would not be expected to result in significant air quality impacts. Therefore, the proposed project would not conflict with the AQMP and would not conflict with or obstruct implementation of the AQMP. No mitigation is required.

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

Less than Significant Impact. The *State CEQA Guidelines* indicate that a significant impact would occur if the project would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in SCAQMD's *CEQA Air Quality Handbook* (1993). The criteria include emission thresholds, compliance with State and national air quality standards, and conformity with the existing State Implementation Plan or consistency with the current AQMP. A summary of the specific criteria contained in SCAQMD's Air Quality Significance Threshold is presented in Table 4.3.A below, SCAQMD Significance Thresholds.

Projects in the Basin with emissions that exceed any of the mass daily emission thresholds above are considered significant by the SCAQMD.

Table 4.3.A: SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
ROCs	75 lbs/day	55 lbs/day
CO	550 lbs/day	550 lbs/day
NO_X	100 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day

Source: SCAQMD *Air Quality Significance Thresholds* (March 2015).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particular matter less than 2.5 microns in size
PM_{10} = particular matter less than 10 microns in size
ROCs = reactive organic compounds
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides

Construction Emissions. Air quality impacts could occur during demolition and construction of the proposed project due to soil disturbance and equipment exhaust. Major sources of emissions during site preparation, demolition, site paving and building construction include (1) exhaust emissions from construction vehicles, (2) equipment and fugitive dust generated by vehicles and equipment traveling over exposed surfaces, and (3) sand disturbances from compacting and cement paving. The following summarizes construction emissions and associated impacts of the proposed project.

Construction of the proposed project would include the following tasks: demolition, site preparation, building construction, cement paving, and landscaping. The project phasing would generally start with the demolition of the existing building, construction of Building A (concession stand), and continue with the improvements/construction of Building B (Restroom/Storage) and Building C (Recreational Equipment Rental). It is anticipated that construction activities would take approximately up to 14 months to construct and renovate. Peak daily and annual emissions were analyzed using California Emission Estimator Model (CalEEMod Version 2016.3.1). Project-specific information provided by the City was used where available, including building details, construction schedule, materials and earthwork requirements. It is anticipated that the following equipment will be utilized: backhoe loader, excavator, bulldozer, air compressor, dump truck, concrete mixer trucks, and hydraulic concrete pumps. Default CalEEMod inputs were used for the remaining construction activities.

Fugitive dust emissions would be substantially reduced by compliance with SCAQMD Rules 402 and 403. Compliance with these rules, including measures such as on-site watering at least two times daily, was accounted for in the project emission estimates.

Table 4.3.B, Peak Daily Construction Emissions (lbs/day), presents the peak daily construction emissions based on the CalEEMod emission estimates. This table shows that construction equipment/vehicle emissions during construction periods would not exceed any of the SCAQMD daily emissions thresholds. Therefore, the air quality impacts would be less than significant. No mitigation is required.

Table 4.3.B: Peak Daily Construction Emissions (lbs/day)

Peak Construction Emissions	ROG	NO_X	CO	SO_2	PM_{10} (total)	$PM_{2.5}$ (total)
Demolition	2.6	24.6	15.8	<0.1	1.6	1.4
Site Preparation	1.9	20.8	8.5	<0.1	3.7	2.2
Grading	1.5	17.1	7.2	<0.1	3.1	1.9
Building Construction	2.6	17.6	14.0	<0.1	1.1	1.0
Paving	1.0	9.7	9.6	<0.1	0.7	0.5
Architectural Coating	2.8	1.8	1.8	<0.1	0.1	0.1
Highest Peak Daily Emissions	**2.6**	**24.6**	**15.8**	<0.1	**3.7**	**2.2**
SCAQMD Construction Emissions Threshold	**75.0**	**100.0**	**550.0**	**150.0**	**150.0**	**55.0**
Exceed Significance?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (August 2017).
CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxide
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
PM_{10} = particulate matter less than 10 microns in diameter
ROG = reactive organic gases
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide

Operational Emissions. Long-term air emission impacts are associated with any change in permanent use of the project site by on-site stationary and off-site mobile sources that substantially increase emissions. Stationary-source emissions include emissions associated with electricity consumption and natural gas usage. Mobile-source emissions usually result from vehicle trips associated with a project.

The proposed project is a concession stand rebuild project intended to serve existing beach residents and patrons and would, therefore, not generate significant new daily trips to the project site. The project would include a new rooftop dining area that could serve to draw new visitors and, therefore, net daily trips to the project site are anticipated to increase by 216 trips per day. Table 4.3.C lists the anticipated peak daily operational emissions associated with the proposed project.

The small quantities of area source and energy emissions derived from off-site electricity production and water conveyance systems are shown for the complete proposed project without attempting to factor in reductions that would be associated with the existing café emissions. All lighting included as part of the project would be upgraded with light-emitting

Table 4.3.C: Peak Daily Operational Emissions (lbs/day)

Category	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	0.12	<0.01	<0.01	<0.01	<0.01	<0.01
Energy Sources	0.04	0.34	0.29	<0.01	0.03	0.03
Mobile Sources	0.27	0.36	2.95	<0.01	0.83	0.23
Total Project Emissions	**0.42**	**0.71**	**3.24**	**<0.01**	**0.86**	**0.25**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc. (August 2017).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides

diode (LED) lighting to reduce the project's energy demand. On-site water system improvements would also be implemented. Table 4.3.C shows that the peak daily emissions from the complete project would not exceed any operational emissions thresholds established by SCAQMD. Therefore, the proposed project would not cause any operational air quality impacts, and no mitigation is required.

(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)?

Less than Significant Impact. The South Coast Air Basin is in nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is in nonattainment for the State PM_{10} standard, and in attainment/maintenance for the federal PM_{10}, CO, and NO_2 standards. However, as discussed in Response 4.3(b) above, no exceedance of SCAQMD criteria pollutant emission thresholds would be anticipated for either construction or operation of the proposed project. The projected emissions of criteria pollutants as a result of the proposed project are expected to be below the emissions thresholds established for the region. Cumulative emissions are part of the emission inventory included in the AQMP for the project area. Therefore, there would be no cumulatively considerable net increase of the criteria pollutants that are in nonattainment status in the Basin. No mitigation is required.

(d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. As described in Response 4.3(b), the proposed project would not significantly increase long-term emissions within the project area. Construction of the proposed project may expose sensitive receptors along the pedestrian and bicycle pathways and at Alamitos Beach to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following the SCAQMD's standard construction practices (Rules 402 and 403). Rule 402 requires

implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Some of the applicable dust suppression techniques from Rule 403 are summarized as follows:

- Water active sites at least twice daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).

- All trucks hauling demolished material, dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 ft of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).

No mitigation would be required to reduce the project's construction emissions to below the SCAQMD's significance thresholds. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during construction, and potential short-term impacts are considered less than significant. No mitigation is required.

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

Less Than Significant Impact. SCAQMD's *CEQA Air Quality Handbook* (1993) identifies various secondary significance criteria related to odorous air contaminants. Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills, or heavy manufacturing uses. Pursuant to SCAQMD Rule 402, these sources shall include a quantitative assessment of potential odors and meteorological conditions. The Construction Contractor does not propose any such uses or activities that would result in potentially significant odor impacts. Some objectionable odors may emanate from the operation of diesel-powered construction equipment during construction of the proposed project. However, these odors would be limited to the construction period and would disperse quickly; therefore, these odors would not be considered a significant impact.

Potential operational airborne odors could result from cooking activities associated with the concession stand. These odors would be similar to those already occurring at the existing concession stand and would be confined to the immediate vicinity of Building A. The other potential source of odors would be the trash receptacles at the buildings. However, the receptacles would have lids and would be emptied on a regular basis, before potentially substantial odors would have a chance to develop. Therefore, there would be no significant adverse air quality impact with respect to objectionable odors that could affect a substantial number of people. No significant impacts related to objectionable odors would result from the proposed project, and no mitigation is required.

4.4 BIOLOGICAL RESOURCES

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☒	☐
(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 CDFW 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?	☐	☐	☒	☐
(d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
(f)	Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan?	☐	☐	☐	☒

Discussion:

The following section is based on the *Biological Resources Assessment for the Alamitos Bay Concessions Stand Project* (Biological Resources Assessment) conducted by LSA Associates, Inc. (LSA) (July 31, 2017) (Appendix B).

Impact Analysis:

(a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in

local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?

Less than Significant Impact. The project site is in an urbanized coastal area immediately adjacent to a beach and the Pacific Ocean. As part of the Biological Resources Assessment (July 2017) prepared for the project, a site-specific habitat survey and a literature search were conducted to determine the presence/absence of any candidate, sensitive, and/or special-status species on the project site. Results of the site survey and literature are described further below.

According to the Biological Resources Assessment, vegetation on the project site consists primarily of nonnative ruderal and ornamental landscaping ornamental trees and Mexican fan palms (*Washingtonia robusta*). Due to the disturbed nature of vegetation, soil, and sand on the site, and the site's geographical isolation from native habitat, it was determined that there is little potential for special-status plant species to occur on the project site.

Wildlife observed on the project site include nonnative rock pigeon (*Columba livia*), and native Western gull (*Larus occidentalis*), California gull (*Larus californicus*), and American crow (*Corvus brachyrhynchos*).

Special-status species identified through the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) as having been observed within 3 miles of the proposed project site include Western tidal-flat tiger beetle (*Cicindela gabbii*), Western beach tiger beetle (*Cicindela latesignata latesignata*), Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), California least tern (*Sternula antillarum browni*), bank swallow (*Riparia riparia*), and big free-tailed bat (*Nyctinomops macrotis*). While the Western tidal-flat tiger beetle and Western beach tiger beetle could potentially occur in some of the adjacent open space habitat, they are not expected to occur within the project limits due to the high level of recreational use of the beach. Additionally, bird and bat species identified in the CNDDB may be found foraging near the site; however, habitat is not suitable for nesting or maternity roosting.

Based on the findings from the site visit and the database search, it was determined that the proposed project would result in less than significant impacts to sensitive or special-status species, and no mitigation would be required.

(b) Would the project 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 CDFW or USFWS?

No Impact. The project site is currently developed and located in an urbanized coastal area. Ornamental vegetation, including mature trees and shrubs, are scattered throughout the on-site parking lot and around the existing concession stand building. According to the National Wetlands Inventory managed by the United States Fish and Wildlife Service (USFWS), the

project site does not contain riparian habitat.[1] Additionally, the project site does not contain other sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS. Therefore, implementation of the proposed project will likely have no impact on any riparian habitat or other sensitive natural community, and no mitigation is required.

(c) Would the project 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. As stated previously, the project site is in an urbanized coastal area that has already been developed. The project site does not contain any federally protected wetlands as defined by Section 404 of the Clean Water Act. Although the USFWS National Wetlands Inventory partially maps the site as an Estuarine and Marine Wetland, a review of aerial photographs as part of the literature review conducted for the Biological Resources Assessment found no evidence of tidal waters approaching the site. The water appears to be at least 500 ft from the site, and is, therefore, considered outside of the zone of tidal influence. Therefore, project implementation would result in less than significant impacts with respect to wetlands as defined by Section 404 of the Clean Water Act. No mitigation is required.

(d) Would the project 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. The project site is a previously developed property adjacent to the Pacific Ocean in an urbanized coastal area. Within the vicinity of the project site, there are no large areas of natural habitat that would facilitate wildlife movement or serve as a wildlife corridor. However, because of the presence of several mature ornamental trees on the project site, implementation of the proposed project may interfere with native resident wildlife species potentially occurring on the site. Additionally, the Migratory Bird Treaty Act (MBTA) and Fish and Game Code 3503 protect most native bird species from destruction or harm. This protection extends to individuals, as well as any part, nest, or eggs of any bird listed as migratory. Most native North American bird species are on the MBTA list. The MBTA applies to the project site given the number and likelihood of nesting migratory birds in the coastal zone.

Project implementation would result in construction activities on the site that could result in impacts to nesting birds on the site (if present), and could also result in impacts associated with the relocation of existing trees from the current location in the hardscape plaza to the proposed play space area and to the northern end of Buildings B and C. The nesting season accepted by the California Coastal Commission (Coastal Commission) extends from January through September. Therefore, if project construction occurs between January and September, a

[1] United States Fish and Wildlife Service (USFWS). National Wetlands Inventory. Website: https://www.fws.gov/wetlands/data/mapper.html (accessed April 19, 2017).

qualified biologist shall conduct a nesting bird survey no more than 3 days prior to ground- and/or vegetation-disturbing activities to confirm the absence of nesting birds. As documented in Mitigation Measure Bio-1, avoidance of impacts can be accomplished through a variety of means, including establishing suitable buffers around any active nests. Therefore, the proposed project would result in less than significant impacts to migratory birds on the project site with implementation of Mitigation Measure BIO-1.

Mitigation Measure:

BIO-1 **Migratory Bird Treaty Act.** Tree and vegetation removal shall be restricted to outside the likely active nesting season (January 15 through September 1) for those bird species present or potentially occurring within the project area. That time period is inclusive of most other birds' nesting periods, thus maximizing avoidance of impacts to any nesting birds. If construction is proposed between January 15 and September 1, a qualified biologist familiar with local avian species and the requirements of the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code shall conduct a preconstruction survey for nesting birds no more than 3 days prior to construction. The survey shall include the entire area that will be disturbed. The results of the survey shall be recorded in a memorandum and submitted to the City of Long Beach (City) Parks, Recreation, and Marine Director, or designee, within 48 hours. If the survey is positive, and the nesting species are subject to the MBTA or the California Fish and Game Code, the memorandum shall be submitted to the California Department of Fish and Wildlife (CDFW) to determine appropriate action. If nesting birds are present, a qualified biologist shall be retained to monitor the site during initial vegetation clearing and grading, as well as during other activities that would have the potential to disrupt nesting behavior. The monitor shall be empowered by the City to halt construction work in the vicinity of the nesting birds if the monitor believes the nest is at risk of failure or the birds are excessively disturbed.

(e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. The City of Long Beach (City) Municipal Code (Ordinance C-7642) regulates the care and removal of trees on public property and is intended to preserve and protect the community's urban forest and to promote the health and safety of City trees. The City's Municipal Code requires that a municipal permit from the City of Long Beach Director of Public Works be obtained prior to the removal of trees on City-owned property. The City's Tree Maintenance Policy also requires a 1:1 replacement ratio and a payment of a fee that is equivalent to a City-approved 15-gallon tree.

Although the proposed project would include the provision of ornamental trees throughout the project site, there are no trees currently present on the project site that would be completely

removed as part of the project. The palm trees near the site entrance and on the eastern portion of the site may be relocated during construction. The project site is owned by the City. The project proposes to relocate some of the existing trees in the landscaped planter at the northern entrance to the site and existing palms near the eastern side of the site. The remainder of the on-site trees would remain in place throughout project implementation. Should the removal of any on-site trees be required to accommodate project implementation, the removal of those trees would be mitigated in compliance with the tree replacement requirements in the City's Municipal Code (as required by Compliance Measure BIO-1). Therefore, compliance with the City's tree removal requirements would ensure that the proposed project would not conflict with any local policies or ordinances protecting biological resources, and no mitigation is required.

Mitigation Measures: No mitigation is required. However, the following compliance measure is a standard condition based on local regulations that serve to reduce impacts related to biological resources. This compliance measure is applicable to the proposed project and shall be incorporated to ensure that the project has minimal impacts to biological resources.

Compliance Measure:

BIO-1 **Local Tree Removal Ordinances.** Prior to the start of any demolition or construction activities, the City of Long Beach (City) Parks, Recreation, and Marine Director, or designee, shall obtain a tree removal permit from the City's Director of Public Works in the event any trees are required to be removed as part of the project. A City-approved Construction Plan shall be submitted with the permit to remove tree(s). The City-approved Plan shall show that the existing City (parkway) tree has a direct impact on the design and function of the proposed project. The City shall incur all removal costs, including site cleanup, make any necessary repair of hardscape damage, and replace the tree. The removed tree shall be replaced with an approved 15-gallon tree and payment of a fee that is equivalent to a City-approved 15-gallon tree.

(f) Would the project 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. There are no adopted Habitat Conservation Plans (HCP), Natural Communities Conservation Plans (NCCP), or other similar plans within the City. Therefore, the project would not conflict with any plan related to the protection of biological resources. No mitigation is required.

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4.5 CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
(d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion:

The following discussion and analysis presented in this section is based on the *Cultural Resources Technical Memorandum for the Alamitos Beach Concession Project, City of Long Beach, Los Angeles California* (Cultural Resources Memorandum) (LSA; July 31, 2017) and the *Paleontological Analysis of the Alamitos Beach Concession Stand Project, City of Long Beach, Los Angeles County, California* (Paleontological Analysis) (July 12, 2017; LSA) (both documents are provided in Appendix C).

Impact Analysis:

(a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No Impact. Potential historic resources in the City are evaluated under one or more of three established sets of criteria of significance, corresponding to federal, State, and local designation programs. To be eligible for inclusion in the National Register of Historic Places (National Register) or the California Register of Historical Resources (California Register) or for listing as a landmark or landmark district of the City, a property must satisfy one or more of the appropriate registration criteria. In addition, the property must retain sufficient integrity to convey the reasons for its significance. According to the Los Angeles County Department of Regional Planning[1] and the City's General Plan Historic Preservation Element (2010), there are no historic landmarks and/or properties on the project site. As a result, the project will not cause a substantial change in the significance of a historical resource as defined in Section 15064.5, and no mitigation is required.

[1] Los Angeles County. Department of Regional Planning, Historic Resources of Los Angeles County. Website: http://lacounty.maps.arcgis.com/apps/MapTour/index.html? appid=3fa4e6f92a9a42288a603c 515a2c1163 (accessed April 25, 2017).

(b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact. According to the Cultural Resources Memorandum prepared for the proposed project, the water line of the Pacific Ocean previously ran along the northern end of the current project site, and the southern end of the project site was situated where waves broke in the ocean. Construction of Shoreline Drive between 1963 and 1972, and construction of the jetty forming the eastern side of the marina between 1972 and 1980, in-filled the area where the project site is currently located. From 1980 to the present, natural sand accumulation slowly widened the beach to its current width, nearly 1,500 ft south of Ocean Boulevard.

According to the City's General Plan Seismic Safety Element (1988) and the Cultural Resources Memorandum prepared for the project, soils on the project site are predominantly man-made fill and sand. Because the project site was originally located along the beach at and below the water level and because substrate on the site is composed of sand that was bulldozed into place and sand that naturally accumulated due to the placement of jetties, it is unlikely that the project site contains cultural resources. Furthermore, soils on the project site have been disturbed previously from development of the existing concession stand building, and any unknown archaeological resources would have likely been unearthed at the time of previous activities on the project site. For these reasons, new ground-disturbing activities associated with project construction activities are unlikely to disturb any previously unknown archeological resources. Potential impacts to archaeological resources would be less than significant, and no mitigation is required.

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

Less than Significant Impact. As part of the Paleontological Analysis (July 12, 2017) prepared for the proposed project, LSA examined geologic maps of the project site and reviewed relevant geological and paleontological literature to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from similar geologic units elsewhere in the region. A search for known fossil localities was also conducted through the Natural History Museum of Los Angeles County (LACM) in order to determine the status and extent of previously recorded paleontological resources within and surrounding the project site.

Results of the literature review indicate that the project site is located at the northern end of the Peninsular Ranges Geomorphic Province, a 900-mile-long northwest-southeast-trending structural block that extends from the Transverse Ranges in the north to the tip of Baja California in the south and includes the Los Angeles Basin.

Geologic mapping of the project area indicates that the project site contains Artificial Fill. The *Geotechnical Report for the Alamitos Beach Concession Buildings 780 East Shoreline Drive, Long Beach, California* (Geotechnical Report) (AESCO; May 30, 2017) prepared for the proposed project identified silts and silty sands, consistent with Artificial Fill on the project site. Artificial

Fill consists of sediments that have been removed from one location and transported to another location. The transportation distance can vary from a few feet to many miles, and composition is dependent on the source and purpose. While Artificial Fill may contain fossils, these fossils have been removed from their original location and thus are out of the stratigraphic context. As such, they are not considered important for scientific study, and accordingly, Artificial Fill has no paleontological sensitivity.

According to the locality search conducted by the LACM, there are no known fossil localities on the project site. The locality search also confirmed that the project site is underlain by Artificial Fill. The closest vertebrae locality (LACM 6896) is located northwest of the site at the intersection of Magnolia Avenue/West Ocean Boulevard. This locality produced specimens of fossil whale (*Cetaca*) at a depth of less than 100 ft below the surface. Along the beach to the east of the project site, between the shoreline and the Bluff Park parking lot, is locality LACM 7739, which, at a depth of 25 ft, produced a variety of fossil marine vertebrates (e.g., bony fish, sharks, and rays), as well as invertebrate fossils (e.g., snails, clams, tusk shells, barnacles, crabs, and sea urchins). Just to the west of this locality across from Bixby Park, south of East Ocean Boulevard, is vertebrate fossil locality LACM 1005. This locality produced fossils of mammoth (*Mammuthus columbi*) and ground sloth (*Nothrotheriops shastensis*) at a depth of about 60 ft.

Based on the fossil locality search conducted by the LACM, the shallowest depth at which fossils were recovered near the project site was 25 ft below the surface. Ground-disturbing activities for the project are expected to extend to approximately 5 ft. Therefore, potential impacts to paleontological resources would be less than significant based on the lack of paleontological sensitivity of the Artificial Fill and the anticipated shallow excavation depth. No mitigation is required.

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

Less than Significant Impact. There are no known human remains interred on the project site. It is unlikely that any human remains are buried on the project site given that the site is located in a sandy beach area consisting primarily of sand/Artificial Fill. While the potential to encounter human remains on the project site is low, buried and undiscovered human remains may be present below the ground surface. Disturbing human remains could violate the State's Health and Safety Code, as well as destroy the resource. In the unlikely event that human remains are encountered during ground-disturbing activities, the proper authorities would be notified, and standard procedures for the respectful handling of the human remains activities would be adhered to in compliance with State Health and Safety Code Section 7050.5 and Public Resources Code (PRC) Section 5097.98, which require that no further disturbance occur in the event of a discovery or recognition of any human remains on site and that the County Coroner be notified immediately. If the remains are determined to be of Native American descent, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD) and potentially inspect the site of the discovery. Upon completion of the assessment, consulting archaeologists would prepare a report documenting the methods and results regarding the treatment of the remains.

Therefore, compliance with Section 7050.5 of the Health and Safety Code and Section 5097.98 of the PRC (Compliance Measure CUL-1) would ensure that potential impacts related to unknown human remains would be less than significant, and no mitigation is required.

Mitigation Measures: No mitigation is required. However, the following compliance measure is a standard condition based on state regulations that serve to reduce impacts related to the discovery of unknown human remains. This compliance measure is applicable to the proposed project and shall be incorporated to ensure that the project has minimal impacts to cultural resources.

Compliance Measure:

CUL-1 **Human Remains.** In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner shall be notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City of Long Beach shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of Long Beach Development Services Department, or designee, shall verify that all grading plans include notes specifying the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98.

4.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
(ii) Strong seismic ground shaking?	☐	☒	☐	☐
(iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
(iv) Landslides?	☐	☐	☐	☒
(b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Discussion:

The following discussion and analysis presented in this section is based on the *Geotechnical Report for the Alamitos Beach Concession Buildings 780 East Shoreline Drive, Long Beach, California* (Geotechnical Report) (AESCO; May 30, 2017) (provided in Appendix D).

Impact Analysis:

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

Less than Significant Impact. The City, like the rest of Southern California, is located in a seismically active area. According to the City's General Plan Seismic Safety Element (1988), the most prominent fault zone in the City is the Newport-Inglewood Fault Zone, which transverses the City from the northwest to the southeast. According to the Geotechnical Report (May 2017), the nearest significant active fault to the project site is the Newport-Inglewood Fault, located approximately 1.5 mile from the site. However, the project site is not located within the boundaries of an active "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act, and there are no known active faults crossing the site.[1] Therefore, impacts related to the rupture of a known earthquake fault as depicted on the most recent Alquist-Priolo Earthquake Fault Zoning Map are anticipated to be less than significant, and no mitigation is required.

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

Less than Significant Impact with Mitigation Incorporated. Although the project site is not located within a designated Alquist-Priolo Earthquake Fault Zone, the region has previously experienced seismic activity associated with the Newport-Inglewood Fault system, which traverses the southern portion of City at a northwest to southeast angle. In the event a major earthquake was to occur, the result could range from moderate to severe ground shaking. As with most areas in the Southern California region, damage to development and infrastructure associated with the surrounding areas could be expected as a result of ground shaking.

Ground shaking generated by fault movement is considered a potentially significant impact that could affect the proposed project. Mitigation Measure GEO-1 requires the City to comply with the recommendations in the Geotechnical Report (May 2017), the most current California Building Code (CBC), and the City Building Code, which stipulates appropriate seismic design provisions that shall be implemented with project design and construction. With the implementation of Mitigation Measure GEO-1, potential project impacts related to seismic ground shaking would be reduced to a less than significant level.

Mitigation Measure:

GEO-1 **Incorporation of and Compliance with the Recommendations in the Geotechnical Study.** All grading operations and construction shall be conducted in conformance with the recommendations included in the *Geotechnical Report for the Alamitos Beach Concession Buildings, 780 East Shoreline Drive Long Beach, California* (May 30, 2017), prepared by AESCO. Recommendations found in the geotechnical document address topics including but not limited to:

- Earthwork, including site preparations, soil replacement, compaction standards, and fill placement;

[1] California Department of Conservation (DOC). CGS Information Warehouse: Regulatory Maps. Website: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/LONG_BEACH_EZRIM.pdf (accessed April 24, 2017).

- Liquefaction;
- Foundations, including foundation design parameters, reinforced foundation systems, and the overexcavation of shallow soils;
- Seismic design parameters;
- Concrete flatwork, including slabs, pavement, walkways, and design of these features;
- Soil corrosion; and
- Utility trenches.

Additional site grading, foundation, and utility plans shall be reviewed by the project Geotechnical Consultant prior to construction to check for conformance with the recommendations of this report. The project Geotechnical Consultant shall be present during site grading and foundation construction to observe and document proper implementation of the geotechnical recommendations. The City shall require the project Geotechnical Consultant to conduct observations and field testing during the following construction activities:

- Excavation and backfill for footings and subgrade for slabs on grade;
- Placement of fill and backfill;
- Backfilling of utility trenches;
- Concrete placement of slabs, foundation, and pavement; and
- Installation of foundation and slab reinforcement.

Grading plan review shall also be conducted by the City of Long Beach Engineer, or designee, prior to the start of grading to verify that requirements developed during the preparation of Geotechnical Report (AESCO) have been appropriately incorporated into the project plans. Design, grading, and construction shall be performed in accordance with the requirements of the City Building Code and the California Building Code applicable at the time of grading, as well as the recommendations of the project Geotechnical Consultant as summarized in the final Geotechnical Report subject to review by the City Engineer, or designee, prior to the start of grading activities. The final Geotechnical Report shall present the results of observation and testing done during grading activities.

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

Less than Significant Impact with Mitigation Incorporated. Liquefaction most commonly occurs when three conditions are present simultaneously: (1) high groundwater; (2) relatively loose, cohesionless (sandy) soil; and (3) earthquake-generated seismic waves. The presence of these

conditions has the potential to result in a loss of shear strength and ground settlement, causing the soil to behave as a fluid for a short period of time.

According to the City's General Plan Seismic Safety Element (1988) and the California Department of Conservation (DOC) Regulatory Maps,[1] the project site is located within an area in which the liquefaction potential is considered significant. In addition, the liquefaction analysis prepared for the project as part of the Geotechnical Report (May 2017) determined that the potential for liquefaction on the site is moderate. Liquefaction can potentially cause foundation-bearing failure due to ground softening and near failure in bearing. Based on the depth of the groundwater, requirements for the removal of unsuitable soils (i.e., the upper 5 ft of soil), the potential for loss of bearing would be minimal. Therefore, with the inclusion of the recommendations and requirements outlined in Mitigation Measure GEO-1, potentially significant impacts related to liquefaction would be reduced to a less than significant level.

Lateral Spreading. The lateral displacement of surficial blocks of sediment can occur as a result of liquefaction in a subsurface layer. The most pervasive forms of lateral spreading typically involve sites located near a "free-face" (e.g., large slopes and channels); however, lateral spreading can occur on sites with gently sloping (1 percent or more) ground (e.g., the subject site). As detailed in the Geotechnical Report for the proposed project, the potential for lateral spreading is considered moderate. Therefore, the project would be required to comply with the recommendations outlined in the Geotechnical Report (Mitigation Measure GEO-1), which specify requirements for the removal of unsuitable soils and outline foundation requirements to reduce impacts related to lateral spreading to a less than significant level.

Dynamic Settlement, Dry Sand Settlement, and Differential Settlement. Settlement due to seismic shaking can occur as a result of both liquefaction of saturated sediments or rearrangement of dry sand particles. The analysis in the Geotechnical Report showed that the amount of seismically-induced settlement is estimated to be 5.48 inches and differential settlement is estimated to be between 2.74 and 3.62 inches. Mitigation Measure GEO-1 requires the overexcavation and recompaction of the upper 5 ft of on-site soils. The removal of unsuitable soil and specific design parameters would reduce impacts related to settlement to a less than significant level. Therefore, with the inclusion of Mitigation Measure GEO-1, potential impacts related to settlement would be less than significant.

Seismically Induced Landsliding. Due to a lack of slopes within or nearby the property, seismically induced landsliding is not anticipated to pose a danger to the site. No mitigation is required.

Mitigation Measures:

Refer to Mitigation Measure GEO-1, above.

[1] DOC. CGS Information Warehouse: Regulatory Maps. Website: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/LONG_BEACH_EZRIM.pdf (accessed April 24, 2017).

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

No Impact. Landslides are most common where slopes are steep, soils are weak, and groundwater is present. The project site is not located within a potential landslide hazard area as indicated on the DOC's Landslide Zone Map.[1] In addition, the project site is relatively flat, and there are no substantial hillsides or unstable slopes immediately adjacent to the site boundary. The proposed project would not require any significant grading activities, and no new slopes would be created as a result of project construction or implementation. Therefore, there is no potential for landslide hazards at the project site, and no mitigation is required.

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

Less than Significant Impact. During construction of the proposed project, soil would be exposed and there would be increased potential for soil erosion and siltation compared to existing conditions. During storm events, erosion and siltation could occur at an accelerated rate. The increased erosion potential could result in short-term water quality impacts as discussed in Section 4.9, Hydrology and Water Quality. As discussed in Compliance Measure WQ-1, the proposed project would comply with the Construction General Permit which requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of construction best management practices (BMPs) to reduce impacts to water quality during construction, including impacts associated with soil erosion and siltation. With incorporation of construction BMPs as required by Compliance Measure WQ-1, impacts related to erosion during construction would be reduced to a less than significant level.

As discussed in further detail in Section 4.9, the proposed project would increase impervious surface area on the project site by approximately 0.43 acre, which would expand the volume of runoff during a storm. Due to the increased storm runoff, the project also has the potential to increase the potential for erosion. The proposed project would be required to comply with Compliance Measure WQ-3, which requires preparation of a Low Impact Development Plan (LID Plan) in accordance with the City's MS4 Permit and Chapter 18.74 of the City's Municipal Code. Preparation of a LID Plan would outline BMPs that would be implemented to reduce stormwater runoff and erosion. Therefore, with incorporation of Compliance Measures WQ-1 and WQ-3, impacts related to erosion and loss of topsoil would be reduced to a less than significant level.

Mitigation Measures:

The project would result in less than significant impacts with respect to substantial soil erosion and/or the loss of topsoil; however, the project would comply with Compliance Measures WQ-1 and WQ-3 outlined in Section 4.9, Hydrology and Water Quality, of this IS/MND.

[1] DOC. CGS Information Warehouse: Landslides. Website: http://maps.conservation.ca.gov /cgs/ informationwarehouse/ (accessed April 24, 2017).

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

Less than Significant Impact with Mitigation Incorporated. Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking. Because the project site is in a relatively flat area, landslides or other forms of natural slope instability do not represent a significant hazard to the project or the surrounding area.

Structures founded on or above potentially liquefiable soils may experience bearing capacity failures due to the temporary loss of foundation support or vertical settlements (both total and differential) and/or undergo lateral spreading. Loss of bearing and ground settlement are due to potentially liquefiable soils on the project site; however, with the inclusion of Mitigation Measure GEO-1, potential impacts would be reduced to a less than significant level.

Subsidence is the sinking of the land surface due to oil, gas, and water production, which results in the loss of pore pressure as the weight of the overburden compacts the underlying sediments. Subsidence began to occur in the City in the 1940s due to activities related to petroleum production from the Wilmington Oil Field. As a result, water injection was recommended in 1958 to repressurize the oil field and the affected area. Therefore, the potential for subsidence on the project site is anticipated to be low. As a result, subsidence-related impacts are considered less than significant, and no mitigation is required.

Therefore, with implementation of Mitigation Measure GEO-1, potential impacts related to unstable soils or geologic units that would become unstable as a result of the project, resulting in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

Mitigation Measures:

Refer to Mitigation Measure GEO-1, above.

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

Less than Significant Impact with Mitigation Incorporated. Expansive soils are characterized by their ability to undergo substantial volume changes (shrink or swell) due to variations in moisture content as a result of precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors. The City's General Plan Seismic Safety Element (1988) identifies four predominant soil profiles within the City, referred to as Profiles A through D. The project site is located in Profile A, which is predominantly comprised of man-made fill areas consisting of hydraulic fills, assorted man-made fills, and soils of questionable origin. Due to the unknown origin of on-site soils, on-site soils have the potential to be expansive. However, as required by Mitigation Measure GEO-1, the proposed project would be required to comply

with the CBC in effect at the time of project implementation, which would reduce potentially significant impacts associated with potentially expansive soils to a less than significant level.

(e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project will not use septic tanks or alternative methods for disposal of wastewater into subsurface soils. The proposed project would connect to existing public wastewater infrastructure. Therefore, the project would not result in any impacts related to septic tanks or alternative wastewater disposal methods. No mitigation is required.

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4.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
(b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion:

The following section is based on greenhouse gas (GHG) modeling and analysis conducted by LSA (August 2017) and the *Alamitos Beach Concession Stand Project Sea Level Rise Assessment* (SLR Assessment) (Everest International Consultants Inc., July 2017). The air quality modeling worksheets are provided in Appendix A, and the SLR Assessment is provided in Appendix E.

Technical Background:

Global climate change (GCC) describes alterations in weather features (e.g., temperature, wind patterns, precipitation, and storms) that occur across the Earth as a whole. Global temperatures are modulated by naturally occurring components in the atmosphere (e.g., water vapor, carbon dioxide, methane, and nitrous dioxide) that capture heat radiated from the Earth's surface, which in turn warms the atmosphere. This natural phenomenon is known as the "greenhouse effect." That being acknowledged, excessive human-generated GHG[1] emissions can and are altering the global climate. The principal GHGs of concern contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is the largest naturally occurring GHG; however, it is not identified as an anthropogenic constituent of concern.

State CEQA Guidelines Section 15064.4 states:

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the Lead Agency consistent with the provisions in section 15064. A Lead Agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A Lead Agency shall have discretion to determine, in the context of a particular project, whether to:
>
> > (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The Lead Agency has discretion to select the model it considers most appropriate provided it

supports its decision with substantial evidence. The Lead Agency should explain the limitations of the particular model or methodology selected for use; or

(2) Rely on a qualitative analysis or performance based standards.

(b) A Lead Agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

(2) Whether the project emissions exceed a threshold of significance that the Lead Agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Revisions to Appendix G of the *State CEQA Guidelines* suggest that the project be evaluated for the following impacts:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

However, despite this, the CEQA statutes, the California Office of Planning and Research (OPR) guidelines, and the draft proposed changes to the *State CEQA Guidelines* do not currently prescribe specific quantitative thresholds of significance or a particular methodology for conducting an impact analysis related to GHG effects on the global climate. Rather, as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency.

In the absence of any adopted threshold, the significance of the proposed project's GHG emissions is evaluated with *State CEQA Guidelines* Section 15064.4(b)(2) by considering whether the proposed project complies with applicable regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Based on guidance in the California Air Pollution Control Officers Association (CAPCOA) report *CEQA and Climate Change*, dated January 2008, the City is using a screening threshold of 900 metric tons of GHGs per year to determine when further GHG analysis is required for non-office commercial projects.

The City General Plan has also adopted a broad spectrum of policies related to climate change, as shown in the Air Quality Element. This element was adopted in 1996 and sets forth the goals, objectives, and policies that guide the City on the implementation of its air quality improvement programs and strategies. The following goals and policies are applicable to the proposed project.

Goal 7: Reduce emissions through reduced energy consumption.

Policy 7.1: Energy Conservation. Reduce energy conservation through conservation improvements and requirements.

Action 7.1.4: Encourage the incorporation of energy conservation features in the design of all new construction

Action 7.1.7: Support efforts to reduce GHG emissions that diminish the stratospheric ozone layer.

In addition to the City's General Plan Air Quality Element, the City adopted the Sustainable City Action Plan in February 2010. As discussed further in Response 4.7(b), this Action Plan is intended to guide operational, policy, and financial decisions to create a more sustainable City. The plan identifies a wide range of goals and implementation actions to conserve energy and water, reduce solid waste, address global warming, tailor urban design, protect natural habitats, improve patron choices, improve pedestrian and bicyclist options, and reduce risks to human health. Specific goals related to GHGs include increasing the use of renewable energy in the City, as well as reducing the City's overall electric load by 10 percent. Other goals include creating pedestrian-friendly neighborhoods.

Individual GHGs have varying global warming potentials and atmospheric lifetimes. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's emission of GHGs. CO_2e is a consistent methodology for comparing GHG emissions because it normalizes various GHGs to the same metric. GHG emissions are typically measured in terms of metric tons of "CO_2 equivalents" (CO_2e). Therefore, for the purpose of this technical analysis, the concept of CO_2e is used to describe how much global climate change a given type and amount of GHG may cause, using the functionally equivalent amount or concentration of CO_2 as the reference. The GHG emissions estimates were calculated using CalEEMod Version 2016.3.1.

Impact Analysis:

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

Less than Significant Impact. Construction and operation of the proposed project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's construction (as opposed to its operation).

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** GHGs would be emitted through the operation of construction equipment and from worker and supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).
- **Electricity and Water Use:** Minor electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. Existing lights on the site would be replaced with LED lights. California's water conveyance system is energy-intensive. Approximately one-fifth of the electricity and one-third of the nonpower plant natural gas consumed in the State are associated with water delivery, treatment, and use.[1]
- **Solid Waste Disposal:** Solid waste (e.g., green waste, trash from receptacles, and construction waste) generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2. However, landfill methane (CH_4) can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

Construction GHG Emissions. GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment and vehicle exhaust. The calculation presented below includes construction emissions in terms of CO_2 and annual CO_2e GHG emissions from increased energy consumption, water usage, and solid waste disposal.

GHG emissions generated by the proposed project would predominantly consist of CO_2. In comparison to criteria air pollutants such as O_3 and PM_{10}, CO_2 emissions persist in the atmosphere for a substantially longer period of time.

[1] California Air Resources Control Board (ARB). 2010. Economic Sectors Portal. Website: www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm (accessed May 2017).

Construction activities produce combustion emissions from various sources such as site preparation, demolition, building construction, cement paving, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. Table 4.7.A, Project Construction Greenhouse Gas Emissions, presents the annual construction emissions based on the CalEEMod emission estimates. Results indicate that construction would generate approximately 226 metric tons of CO_2e per year. Per SCAQMD guidance, due to the long-term nature of the GHGs in the atmosphere, instead of determining significance of construction emissions alone, the total construction emissions are amortized over 30 years (an estimate of the life of the project) and included in the operations analysis. To amortize the emissions over the life of the project, SCAQMD recommends calculating the total GHG emissions for the construction activities, and dividing those totals by a 30-year project life. As such, construction emissions were amortized over a 30-year period.

Table 4.7.A: Project Construction Greenhouse Gas Emissions

Emissions	Pollutant Emissions (MT/yr)			
	CO_2	CH_4	N_2O	CO_2e
Demolition	24	<0.01	<0.00	24
Site Preparation	1.7	<0.01	<0.00	1.7
Grading	2.8	<0.1	<0.00	2.8
Building Construction	188	0.04	<0.00	190
Paving	7.3	<0.01	<0.00	7.4
Architectural Coating	1.3	<0.01	<0.00	1.3
Total Project Emissions	**225**	**0.05**	**0.00**	**226**
Amortized Emissions	24	--	--	**7.5**

Source: Compiled by LSA (August 2017).
Note: Numbers in table may not appear to add up correctly due to rounding of numbers.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide

Amortized over 30 years, the total construction emissions would generate approximately 7.5 metric tons of CO_2e per year.

Operational GHG Emissions. The concession stand is not expected to result in increased mobile source emissions from existing conditions as the proposed project is a primarily a concession stand rebuild project intended to serve existing beach residents and patrons; however, the project includes a new rooftop dining area that could attract new visitors. Table 4.7.B, Long-Term Operational Greenhouse Gas Emissions, lists the anticipated operational GHG emissions.

Table 4.7.B: Long-Term Operational Greenhouse Gas Emissions

Category	Pollutant Emissions (MT/yr)					
	Bio- CO_2	NBio- CO_2	Total CO_2	CH_4	N_2O	CO_2e
Construction emissions amortized over 30 years	0	8	8	<0.01	0	8
Operational Emissions						
Area Sources	0	0	0	0	0	0
Energy Sources	0	148	148	0	0	149
Mobile Sources	0	137	137	0	0	138
Waste Sources	13	0	13	1	0	32
Water Sources	1	7	8	0	0	10
Total Project Emissions	**14**	**300**	**314**	**1**	**0**	**336**
					City Screening Threshold	**900**
					Significant?	**No**

Source: LSA Associates, Inc. (August 2017).
Bio-CO_2 = biologically generated CO_2
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated CO_2

The area, energy, waste, and water source emissions shown are for the complete proposed new café without attempting to factor in the existing café emissions. Operational emissions in terms of CO_2 (both biologically and nonbiologically generated), CH_4, N_2O, and annual CO_2e emissions from increased energy consumption, water usage, and solid waste disposal would be considered to have a less than significant impact. All lighting included as part of the project would be upgraded with light-emitting diode (LED) lighting to reduce the project's energy demand. On-site water system improvements would also be implemented. Table 4.7.B shows that GHG emissions from the complete project including amortized construction emissions would be below the screening criteria of 900 metric tons. Therefore, no significant impacts related to operational GHG emissions would result from the proposed project, and no mitigation is required.

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

Less than Significant Impact. The Sustainable City Action Plan was adopted by the City in February 2010.[1] This Action Plan is intended to guide operational, policy, and financial decisions to create a more sustainable City. The plan identifies a wide range of goals and implementation actions to conserve energy and water, reduce solid waste, address global warming, tailor urban design, protect natural habitats, improve patron choices, improve pedestrian and bicyclist options, and reduce risks to human health. Specific goals related to GHG include increasing the use of renewable energy in Long Beach and reducing the City's overall electric load by

[1] City of Long Beach. 2010. *City of Long Beach Sustainably City Action Plan*. February.

10 percent. Other goals include creating pedestrian-friendly neighborhoods. All pedestrian sidewalk and bicycle path lightings would be upgraded with LED lighting to reduce the project's energy demand. Low-flow water system would also be implemented. With the improvements to the concession stand, and the pedestrian and bicycle path, the proposed project would be consistent with the goals and initiatives of the Sustainable City Action Plan. Therefore, no significant impacts related to GHGs would result from the proposed project, and no mitigation is required.

***Global Climate Change*.** The SLR Assessment prepared for the proposed project was conducted using the *California Coastal Commission Sea Level Rise Policy Guidance, Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits* (August 12, 2015). In accordance with this guidance document, SLR impacts were analyzed utilizing the Coastal Storm Modeling System (CoSMoS) for existing conditions (2016 was the closest year for which data were available) and the horizon years of 2030, 2050, and 2100. The 2016 year represents current conditions with no SLR. The years 2030, 2050, and 2100 illustrate SLR impacts with a 25-centimeter (cm), 75 cm, and 175 cm rise in sea level, respectively.

Overall, the results of the SLR analysis indicated that the project site would not be subjected to coastal hazards associated with tidal flooding now or in the future under all SLR projections (25 cm, 75 cm, and 175 cm) and through all timeframes (2016, 2030, 2050, and 2100). However, the relocated bicycle path included as part of the project is projected to be subjected to tidal flooding in the year 2100 with 175 cm of SLR. Similarly, the project site would not be subjected to coastal hazards associated with coastal (wave) storms now or in the future under all SLR projections, with the exception of the relocated bicycle path, which also is projected to be subject to coastal storm flooding in the year 2100 scenario.

In addition to the SLR and coastal storm analysis, coastal erosion impacts resulting from direct beach inundation and increased wave erosion associated with more frequent and intense wave action, were also analyzed for the proposed project using CoSMoS. The result of this analysis indicated that SLR-induced coastal erosion would not impact the project site now or under any modeled future scenarios with SLR. Furthermore, the results did not identify any SLR-induced beach erosion in the vicinity of the project site, although such erosion is observed on downcoast beaches located east and southeast of the project site.

Coastal hazards associated with tsunamis were also analyzed as part of the SLR Assessment for the proposed project. As part of this analysis, tsunami inundation maps for the California coastline prepared by the California Emergency Management Agency, the California Geological Survey, and the University of Southern California were reviewed. The results of the tsunami inundation modeling indicate that the entire coast of Long Beach would be inundated in the event of a significant tsunami off of the coast. Results specific to the proposed project indicate that due to its location on the coast of Alamitos Beach, the project site would also be vulnerable to tsunami inundation under existing and future conditions (i.e., with and without SLR). Refer to Section 4.9, Hydrology and Water Quality, for further discussion related to the proposed project's impacts with respect to tsunamis.

Overall, the proposed project is not anticipated to be subject to potential flooding impacts with respect to SLR in the existing, 2030, 2050, and 2100 scenarios, with the exception of the relocated bicycle path, which could potentially be inundated in 2100. The proposed relocated bicycle path is intended to improve existing safety conditions for pedestrians and bicyclists traveling near the project site along Alamitos Beach. Furthermore, the bicycle path does not include any structures and/or housing that would subject residents or workers to flooding impacts. As such, the relocated bicycle path would not necessitate a shoreline protective device of any kind to minimize impacts with respect to SLR. Therefore, adverse impacts with respect to SLR are not anticipated to occur, and no mitigation would be required.

4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☐	☒	☐
(b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
(d)	Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
(f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
(g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
(h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion:

The following section is based on the H*azardous Building Materials Inspection Report for the Alamitos Beach Concessions Building, Long Beach, California* (Hazardous Building Materials

Inspection Report) conducted by Pacific Environmental Company (April 28, 2017) and the Environmental Database Report (EDR) conducted on June 29, 2017. The Hazardous Building Materials Inspection Report is provided in Appendix F.

Impact Analysis:

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

Less than Significant Impact. Hazardous materials are chemicals that could potentially cause harm during an accidental release or mishap, and are defined as being toxic, corrosive, flammable, reactive, and an irritant or strong sensitizer.[1] Hazardous substances include all chemicals regulated under the United States Department of Transportation "hazardous materials" regulations and the United States Environmental Protection Agency (EPA) "hazardous waste" regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the routine transport, use, or disposal of hazardous materials is affected by the type of substance, the quantity used or managed, and the nature of the activities and operations.

***Construction*.** Construction of the proposed project would involve the use of limited amounts of potentially hazardous materials typical of construction activities, including but not limited to, solvents, paints, fuels, oils, and transmission fluids. The amount of hazardous materials during construction would be limited and would be contained, stored, and handled in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the EPA, and the Occupational Safety and Health Administration (OSHA). Therefore, project impacts with respect to the release of hazardous materials causing a significant hazard to the public, surrounding land uses, or environment would be less than significant, and no mitigation is required.

***Operation*.** The proposed project includes the redevelopment of the concession stand facility with ancillary uses on the project site in the Alamitos Beach area of the City. Hazardous materials associated with the long-term operation of the project would involve the use of common hazardous maintenance and landscape materials associated with concession stand/café and recreational uses (i.e., fertilizers, pesticides, and herbicides, cleaning solutions, etc.) that could be potentially hazardous if handled improperly or ingested. However, these products are not considered acutely hazardous and are not generally considered unsafe. All storage, handling, and disposal of hazardous materials during project operation would comply with applicable standards and regulations. Any associated risk would be adequately reduced to a less than significant level through compliance with these standards and regulations. Further,

[1] A "sensitizer" is a chemical that can cause a substantial proportion of people or animals to develop an allergic reaction in normal tissue after repeated exposure to a chemical (U.S. Department of Labor, 2017. Appendix A TO Sections 1910.1200—Health Hazard Criteria, Section A.4, Respiratory or Skin Sensitization. Website: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_ id= 10 100 [accessed June 27, 2017]).

project operations would not store, transport, generate, or dispose of large quantities of hazardous substances. Therefore, there would be no operational impacts associated with the routine transport, use, or disposal of hazardous materials, and no mitigation is required.

The Long Beach Certified Unified Program Agency (Unified Program) is the administering agency for the chemical inventory and business emergency plan regulations for the City. The Unified Program combines both the Long Beach Fire Department (LBFD) and the Health Department into one primary agency responsible for hazardous materials management in the City. The Long Beach Certified Unified Program Agency makes information regarding the appropriate handling, storage, and disposal of all hazardous chemical waste generated in the City publicly available to all residents of the City. Because these resources are available to anyone in the City, it is reasonable to conclude that workers on the site would use such programs to properly dispose of hazardous waste. Therefore, impacts associated with the disposal of hazardous materials and/or the potential release of hazardous materials that could occur with the implementation of the proposed project are considered less than significant, and no mitigation is required.

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

Less than Significant Impact with Mitigation Incorporated.

***Construction*.** Project construction would include the removal of the existing buildings and hardscape plaza, project site preparation, grading, construction, and paving. Due to the age of the existing structures on the site and the developed nature of the area surrounding the project site to the north, northeast, and west, project construction has the potential to result in the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As a result, both an EDR Database Search and a Hazardous Building Materials Inspection Report (April 2017) were prepared for the proposed project.

The purpose of the EDR Database search was to evaluate the project site for potential Recognized Environmental Concerns (RECs) that may be present and/or off-site conditions that may impact the project site. The EDR Database search prepared for the proposed project identified one Spills, Leaks, Investigations, and Cleanups (SLIC) release site, seven EnviroStor Database (ENVIROSTOR), one Resource Conservation and Recovery Act Generators/No Longer Reporting (NonGen/NLR) site, one Hazardous Substance Cleanup Bond Act funds site-specific expenditure plan (CA BOND EXP.Plan) site, 13 Leaking Underground Storage Tank (LUST) sites, five Hazardous Waste and Substance Sites List (HIST CORTESE) (a few HIST CORTESE sites are also listed on the LUST listing), five EDR Exclusive Historic Gas Stations (EDR Hist Auto) and three EDR Exclusive Historic Dry Cleaners EDR Hist Cleaner) located within the 1-mile database search radius. The sites that are considered as recognized environmental concerns (RECs) are discussed in Table 4.8.A, Recognized Environmental Concerns within the Proximity of the Project Site, below.

Table 4.8.A: Recognized Environmental Concerns within the Proximity of the Project Site

No.	Address and Distance from Subject Site	Database	Status and Determination
1.	76 Products Station #2999 805 Ocean Blvd. (0.1 mile north of the project limits)	LUST HIST CORTESE	**Potential RECs Affecting the Project Site.** HIST CORTESE and two LUST listings are reported at this facility. Additional information obtained from the Geotracker database indicated that the cases were closed on May 19, 1997, and March 30, 2010. However, because this facility has been used as a gas station and a hazardous release was reported at the facility, residual contamination may remain in the soil/soil vapor and/or groundwater. While soil contamination would be localized to the site, groundwater contamination could affect the properties downgradient of the site. Therefore, the potential residual contamination is considered an REC.
2.	Tillett W E 800 East Ocean Blvd. (0.07 mile north of the project limits)	EDR US Hist Cleaners	**Unlikely to Pose a Concern at the Project Site.** The facility is listed as a historic cleaner. No violations and releases of hazardous substances were found and reported for this facility. However, because this facility was historically used as a dry cleaner, some residual PCB contamination may be present in the soil/soil vapor. However, any soil contamination would be specific to this property and would not affect the proposed project site. Therefore, this property is not considered an REC that would adversely impact soil conditions on the project site.
3.	Weston S Laundry 635 W Seaside Blvd. (0.1 mile northwest of the project limits)	EDR US Hist Cleaners	**Unlikely to Pose a Concern at the Project Site.** The facility is listed as a historic cleaner. No violations and releases of hazardous substances were found and reported for this facility. However, because this facility was historically used as a dry cleaner, some residual PCB contamination may be present in the soil/soil vapor. However, any soil contamination would be specific to this property and would not affect the proposed project site. Therefore, this property is not considered an REC that would adversely impact soil conditions on the project site.
4.	Villa Valet Shop 820 E Ocean Blvd. (0.1 mile north-northeast of the project limits)	EDR US Hist Cleaners	**Unlikely to Pose a Concern at the Project Site.** The facility is listed as a historic cleaner. No violations and releases of hazardous substances were found and reported for this facility. However, because this facility was historically used as a dry cleaner, some residual PCB contamination may be present in the soil/soil vapor. However, any soil contamination would be specific to this property and would not affect the proposed project site. Therefore, this property is not considered an REC that would adversely impact soil conditions on the project site.

EDR = Environmental Database Report
LUST = leaking underground storage tank
PCE = polychlorinated biphenyls
REC = recognized environmental concern

As described in Table 4.8.A, while the historic cleaners are unlikely to pose a concern at the project site, the gas station site has the potential to affect the project site due to the possibility of residual groundwater contamination. Because the project site is located downgradient of the gas station facility, potential contaminants originating from the gas station facility could potentially reach groundwater at the project site. As described further in Response 4.9(a), the project would adhere to provisions outlined in Compliance Measure WQ-2, which requires that groundwater dewatering activities (if determined to be necessary) be conducted in accordance with the requirements of the Los Angeles Regional Water Quality Control Board's (RWQCB) Groundwater Discharge Permit. This order requires testing and treatment of groundwater encountered during dewatering prior to its release into surface waters to ensure that effluent limitations for constituents are not exceeded. Therefore, implementation of Compliance Measure WQ-2 would reduce potential impacts to a less than significant level, and no mitigation is required.

The current status of the majority of these facilities is "Completed and Case Closed" or the facilities were determined to be greater than 1 mile from the project limits. Therefore, the majority of these facilities are unlikely to pose a concern during construction of the proposed project and are not considered RECs potentially affecting construction of the proposed project.

The Hazardous Building Materials Inspection Report included a site inspection on April 24, 2017, which aimed to identify asbestos-containing materials (ACMs), lead-based paint (LBP), and universal wastes on the project site.

Asbestos. The use of asbestos in many building products was banned by the EPA by the late 1970s. In 1989, the EPA issued a ruling prohibiting the manufacturing, importation, processing, and distribution of most asbestos-containing products. This rule, known as the Ban and Phase-Out Rule, would have effectively banned the use of nearly 95 percent of all asbestos products used in the United States. However, the United States Fifth Circuit Court of Appeals vacated and remanded most of the Ban and Phase-Out Rule in October 1991. Due to this court decision, many asbestos-containing product categories not previously banned (prior to 1989) may still be in use today. Among these common material types found in buildings are floor tile and roofing materials. ACMs represent a concern when they are subject to damage that results in the release of fibers. Friable ACMs, which can be crumbled by hand pressure and are, therefore, susceptible to damage, are of particular concern. Nonfriable ACM is a potential concern if it is damaged by maintenance work, demolition, or other activities.

The asbestos survey for the proposed project was performed by identifying suspect ACMs, (defined by the EPA and OSHA as any material containing more than 1 percent asbestos), and by performing sampling in accordance with applicable regulations. Bulk samples were collected and logged onto chain of custody sheets and forwarded to a laboratory for further testing. The bulk samples were analyzed in accordance with the National Emission Standard for Hazardous Air Pollutants (NESHAPS), EPA, OSHA, and SCAQMD standards for classifying asbestos, which are categorized into the following three categories:

- **Regulated ACMs (RACMs):** include all friable asbestos materials. Class 1 non-friable ACMs that have become friable or will become friable, and Class 2 non-friable materials that have a high probability of becoming friable when crumbled, pulverized, or reduced to powder by forces expected to act on the materials in the course of construction activities (e.g., demolition).
- **Class 1 Non-friable ACMs:** includes asbestos-containing packing, gaskets, resilient floor covering, and asphalt roofing products that when dry can be crumbled, pulverized, or reduced to powder by hand pressure.
- **Class 2 Non-friable ACMs:** includes all non-friable materials, excluding Class 1 materials that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

In addition, the California Department of Occupational Health and Safety (Cal/OSHA) defines asbestos-containing construction material (ACCM) as material that contains greater than 0.10 percent asbestos. Material found to contain less than 1 percent asbestos (trace asbestos) does not fulfill the EPA or SCAQMD definition of ACM and therefore, does not require disposal as such. However, Cal/OSHA requires that construction workers wear personal protective equipment, utilize special equipment, and are trained regarding ACCMs for all projects where ACCMs with less than 1 percent asbestos are identified. Based on these criteria, the results of the ACCMs sampled were separated into those containing greater than 1 percent asbestos, less than 1 percent asbestos, and those where no asbestos was detected.

A total of 17 bulk samples were collected for the assessment. Results of the analysis indicated that roof mastics were classified as Category 1 Non-Friable ACMs; however, no other materials that were sampled were determined to contain asbestos. Due to the presence of ACMs in roof mastics on the project site, the project would be required to comply with Mitigation Measure HAZ-1, which outlines the procedures for properly removing and disposing ACMs in accordance with State and federal law. With implementation of Mitigation Measure HAZ-1, potential impacts related to ACMs would be less than significant.

Lead-Based Paint. Lead is a toxic metal that was used for many years in household products. Lead may cause a range of health defects, from behavioral problems and learning disabilities to seizures and death. Lead-based paint (LBP) was used extensively in buildings constructed prior to 1950. In 1978, LBP was banned by the federal government.

Deteriorated paint is defined by Title 17 of the California Code of Regulations (CCR), as a surface coating that is cracking, chalking, flaking, shipping, peeling, non-intact, failed, or otherwise separating from a component. Demolition of a component containing LBP requires waste characterization and appropriate disposal. Intact LBP is accepted by most landfills and recycling facilities; however, contractors are required to segregate and characterize waste streams prior to disposal.

Potential hazards to workers could occur during the removal of handling of LBP coatings during demolition. Dust containing hazardous concentrations of lead may be generated during the scraping or cutting of materials containing LBP. Touching of these materials could produce lead oxide fumes. Several agencies have published a "regulatory action level" to classify LBP. The EPA requires action for LBP found at 5,000 parts per million (ppm), whereas OSHA, Cal/OHSA, and Los Angeles County require action for LBP found at 600 ppm.

The LBP survey conducted for the proposed project included a visual inspection to identify and sample defective painted surfaces within the exterior and exterior of the subject property. Results of the survey found LBP on the exterior wall paint (stucco) at a concentration of less than 47 ppm. Therefore, no applications of defective LBP requiring treatment were identified on the project site, and no mitigation is required.

Universal Wastes. The EPA establishes regulations for designated "universal wastes," which include batteries, pesticides, mercury-containing equipment, and bulbs (lamps, and polychlorinated biphenyls [PCBs]).

Mercury vapor contained in fluorescent lamps is released into the air when a fluorescent lamp is broken. A portion of the mercury will remain with the glass and white powder (phosphorus), which results in an initial high concentration of mercury vapor. This initially high concentration rapidly decreases as fresh air circulates into the building. Recent studies do not indicate that mercury exposure resulting from the occasional cleanup of broken fluorescent lamps results in adverse health effects. Mercury can also be found in several consumer and commercial products (e.g., thermometers). When a mercury-containing product breaks and mercury is subsequently spilled, the exposed mercury evaporates and becomes a colorless, odorless, toxic vapor.

Standard equipment suspected of potentially containing PCBs includes industrial-capacity transformers, fluorescent light ballasts, and oil-cooled machinery. Federal regulations apply to items containing 50 to 499 ppm PCBs. Chemical classified as PCBs were widely used in the United States throughout the 1950s and 1960s. Transformers containing more than 500 ppm PCBs, between 50 and 500 ppm PCBs, and less than 50 ppm PCBs are considered PCBs, PCB-contaminated, and non-PCB, respectively.

Results of the survey for universal wastes identified seven fixtures with fluorescent light tubes. As required by Mitigation Measure HAZ-2, these should be recycled or disposed of in accordance with the California DTSC guidelines. The survey did not identify any mercury-containing thermostat switches nor were batteries, pesticides, or other indications of hazardous waste identified on the project site. Therefore, with implementation of Mitigation Measure HAZ-2, potential impacts associated with universal wastes would be less than significant.

In addition, in the unlikely event that unknown hazardous materials are discovered on site during project construction, the project contractor would be required to comply with a Contingency Plan developed and approved prior to the commencement of grading activities. As

stated in Mitigation Measure HAZ-3, in the event that construction workers encounter underground tanks, gases, odors, uncontained spills, or other unidentified substances, the Contingency Plan will require the contractor to stop work, cordon off the affected area, and notify the LBFD. The LBFD responder shall determine the next steps regarding possible site evacuation, sampling, and disposal of the substance consistent with local, State, and federal regulations. In addition, Caltrans, the California Highway Patrol, and local police and fire departments are trained in emergency response procedures for safely responding to accidental spills of hazardous substances on public roads, further reducing potential impacts to a less than significant level. With implementation of Mitigation Measure HAZ-3, potential risks associated with encountering unknown hazardous wastes during construction would be reduced to a less than significant level.

With implementation of Mitigation Measures HAZ-1 through HAZ-3, construction of the proposed project would not create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions regarding the release of hazardous materials into the environment.

Mitigation Measures. The following mitigation measures are required to reduce construction impacts related to hazards/hazardous materials during construction:

HAZ-1 **Abatement of ACMs and Universal Wastes.** Wherever evidence of asbestos-containing materials (ACMs) and fluorescent light tubes are present in areas proposed for demolition, all such materials shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 Code of Federal Regulations [CFR], Subchapter R, Toxic Substances Control Act [TSCA], Part 763). During demolition, air monitoring shall be completed by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations (e.g., South Coast Air Quality Management District [SCAQMD]) and to provide safety to workers and the adjacent community. The City shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the Chief of the Long Beach Fire Department (LBFD), or designee, showing that abatement of any ACMs identified in these structures has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agencies, including, but not limited to those promulgated by the Occupational Safety and Health Administration (OSHA), the United States Environmental Protection Agency (EPA), the California Occupational Safety and Health Administration (Cal/OSHA), the California Environmental Protection Agency (Cal/EPA), the California Department of Homeland Security (Cal-DHS), the Department of Toxic Substances Control (DTSC), and the SCAQMD (40 CFR, Subchapter R, TSCA, Parts 716 and 763). An Operating & Maintenance Plan (O&M) shall be prepared for any ACM to remain in place, if any, and shall be reviewed and approved by the LBFD.

HAZ-2 **Disposal or Recycling of Fluorescent Light Tubes.** Wherever evidence fluorescent light tubes are present in areas proposed for demolition, all such materials shall be removed and properly recycled or taken to a household hazardous waste disposal facility, a universal waste handler (e.g., storage facility or broker) or an authorized recycling facility (Title 22, Division 4.5, Chapter 23, Section 66273.8), in accordance with regulations established by the DTSC. The City shall provide documentation to the Chief of the LBFD, or designee, showing that all fluorescent light tubes identified in these structures have been disposed of or recycled in full compliance with all applicable regulations established by the DTSC and the California Department of Resources Recycling and Recovery (CalRecycle).

HAZ-3 **Contingency Plan.** Prior to commencement of grading activities, the City of Long Beach (City) Fire Department (LBFD), or designee, shall review and approve a contingency plan that addresses the procedures to be followed should on-site unknown hazards or hazardous substances be encountered during demolition and construction activities. The plan shall indicate that if construction workers encounter underground tanks, gases, odors, uncontained spills, or other unidentified substances, the contractor shall stop work, cordon off the affected area, and notify the LBFD. The LBFD responder shall determine the next steps regarding possible site evacuation, sampling, and disposal of the substance consistent with local, State, and federal regulations.

Operation. The proposed project would include the operation of a concession stand building, related facilities, landscape improvements, and the relocation of an existing bicycle path. Project operation is anticipated to involve limited use of hazardous materials typical of restaurant/café and recreational uses, such as cleaning solvents, pesticides, and other landscaping materials. All storage, handling, and disposal of hazardous materials during project construction and operation would be in compliance with applicable standards and regulations. Further, project operations would not store, transport, generate, or dispose of large quantities of hazardous substances. Therefore, operation the proposed project would not result in a significant hazard to the public or the environment through a reasonably foreseeable upset or accident condition related to the release of hazardous materials, and no mitigation is required.

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

Less than Significant Impact. The proposed project would result in the redevelopment of a concession stand building in the Alamitos Beach Area and would not produce hazardous emissions or handle acutely hazardous materials, substances, or waste. The nearest existing schools (i.e., Stevenson Elementary School, St. Anthony High School, a portion of the California State University Long Beach (CSULB) campus, and Franklin Classical Middle School) are located approximately 1 mile north of the project site. As previously stated, the proposed project is not anticipated to release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste in significant quantities. Construction activities associated with the proposed project would use a limited amount of hazardous and flammable substances/oils

during equipment operation and would be in compliance with existing government regulations. Project operation would not require the use, storage, disposal, or transport of large volumes of hazardous materials that could cause serious environmental damage in the event of an accident, and there are no schools within 0.25 mile of the project site. Therefore, the proposed project would not result in the emission of hazardous materials or acutely hazardous substances within one-quarter mile of an existing or proposed school, and no mitigation is required.

(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 67962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. According to the DTSC EnviroStor database, the project site is not located on a federal superfund site, State response site, voluntary cleanup site, school cleanup site, corrective action site, or tiered permit site.[1] Therefore, the proposed project would not result in an impact related to a known hazardous materials site pursuant to Government Code Section 65965.5 and would not create a significant hazard to the public or the environment. No mitigation is required.

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

No Impact. The project site is approximately 6 miles southwest of Long Beach Municipal Airport, which is the nearest airport to the project site. The tallest building on the project site would be a concession stand building, which is proposed to be two-stories or 27 ft at its zenith. The heights of the concession stand and supplementary buildings and other project features on the site would not be sufficient to require modifications to the existing air traffic patterns at the airport and, therefore, would not affect aviation traffic levels or otherwise result in substantial aviation-related safety risks. The proposed project would not result in safety hazards for people living or working in the area different than would occur under existing conditions. Although the project would result in development of a larger concession stand complex, the risk of safety hazards associated with the Long Beach Municipal Airport would not be substantively different in this part of the City with or without the project, which is located more than 2 miles from the nearest public airport. No impacts would occur, and no mitigation 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. The proposed project is not located within 2 miles of a private airstrip. The nearest private airport, the Goodyear Blimp Base Airport, is located approximately 11 miles northwest of the site in the City of Gardena. As such, project implementation would not result in potential safety hazards associated with airport traffic for people visiting the project site. Therefore, no

[1] California Department of Toxic Substances Control. EnviroStor Database. Website: http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=19970011 (accessed April 26, 2017).

hazardous impacts related to the site's proximity to a private airport facility would occur, and no mitigation is required.

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

Less than Significant Impact. The City's Emergency Operations Plan (August 2015) outlines the City's emergency response organization and policies. This plan also identifies ways in which the City and its residents can minimize risk and prevent loss from natural hazard events. Emergency events addressed in this plan include those associated with earthquakes, flooding, windstorm, tsunamis, public health events, technological and human-caused events, and drought.

During short-term construction activities, the proposed project is not anticipated to result in any substantial traffic queuing on nearby streets, and all construction equipment would be staged within the surface parking lot directly north of the project site. Additionally, all large construction vehicles entering and exiting the site would be guided by the use of personnel to avoid vehicle queuing.

The proposed project does not include any changes to public or private roadways that would physically impair or otherwise conflict with the City's Emergency Operations Plan or another adopted emergency response plan or emergency evacuation plan. Further, the proposed project would not obstruct or alter any transportation routes that could be used as evacuation routes during emergency events. Access to and from the project site for emergency vehicles would be reviewed and approved by the LBFD as part of the project approval process to ensure the proposed project is compliant with all applicable codes and ordinances for emergency vehicle access. Impacts related to interference with an emergency response plan are considered less than significant, and no mitigation is required.

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

No Impact. Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed camp fires, cigarettes, sparks from automobiles, and other ignition sources. The project site is located in an urbanized coastal area where wildfire is not considered a likely risk to people or structures. In addition, the project site and the surrounding areas do not include brush- and grass-covered areas typically found in areas susceptible to wildfires. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death from wildland fires, and no mitigation is required.

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4.9 HYDROLOGY AND WATER QUALITY *Would the project:*		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
(b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
(c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.	☐	☐	☒	☐
(d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
(e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
(f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
(g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
(h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
(i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
(j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Discussion:

The following section is based on the *Design Development Hydrology Report & Low Impact Development Plan* (LID Plan; Michael Baker International, July 28, 2017). The LID Plan is provided in Appendix H.

Impact Analysis:

(a) Would the project violate any water quality standards or waste discharge requirements?

Less than Significant Impact. Pollutants of concern during project construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and transport of sediment downstream compared to existing conditions. During a storm event, soil erosion could occur at an accelerated rate. In addition, construction-related pollutants such as chemicals, liquid and petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste could be spilled, leaked, or transported via stormwater runoff into adjacent drainages and into downstream receiving waters. Any of these pollutants has the potential to be transported via stormwater runoff into receiving waters (i.e., the Pacific Ocean).

Construction activities associated with the proposed project would disturb approximately 1.30 acre of soil. Projects that disturb greater than 1 acre of soil are required to comply with the State Water Resources Control Board's (SWRCB) Construction General Permit. However, the project would disturb between 1 acre and 5 acres and could be eligible for a Small Construction Rainfall Erosivity Waiver, which would exempt the project from coverage under the Construction General Permit. To obtain a waiver, the project would need to demonstrate that there would be no adverse water quality impacts because construction activities would only occur when there is a low erosivity potential (i.e., the rainfall erosivity value in the Revised Universal Soil Loss Equation [R factor] for the project is less than 5). Based on a construction start date of July 1, 2018, and a construction end date of September 11, 2019, the R factor for the project would be 36.88. Therefore, the project would not qualify for a Construction General Permit waiver and would be required to comply with the SWRCB's Construction General Permit. However, if during final design, the size of the project site and/or area of project improvements are refined to reduce disturbed soil area to less than 1 acre, the project would be exempt from coverage under the Construction General Permit.

The Construction General Permit requires preparation of a Storm Water Prevention Plan (SWPPP) and implementation of Construction Best Management Practices (BMPs). Additionally, the project would be required to prepare an Erosion and Sediment Control Plan (ESCP) which includes elements of a SWPPP in compliance with the City of Long Beach MS4 Permit. According to the City of Long Beach MS4 Permit, SWPPPs prepared in accordance with the requirements of the Construction General Permit can be accepted as ESCPs. Therefore, in compliance with the Construction General Permit and the City of Long Beach MS4 Permit, a SWPPP would be prepared and construction BMPs implemented during construction activities, as specified in

Compliance Measure WQ-1. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

According to the Geotechnical Report (AESCO; May 2017) prepared for the project, groundwater is present at a depth of less than 10 ft below ground surface (bgs). During boring conducted for the project, groundwater was encountered at a depth of 8 ft bgs at the shallowest point on the site. However, depth to groundwater may fluctuate depending on rainfall and possible groundwater recharge or pumping activity in the site vicinity. Excavation activities would extend to a minimum of 5 ft below grade. Due to the shallow depth of groundwater on the project site, and the potential for groundwater level fluctuations, there is a potential for groundwater to be encountered during project construction and groundwater dewatering may be required. Dewatered groundwater may contain elevated levels of total dissolved solids or other constituents that could be introduced to receiving waters (i.e., the Pacific Ocean). As specified in Compliance Measure WQ-2, any groundwater dewatering during excavation would be conducted in accordance with the requirements of the Los Angeles RWQCB Groundwater Discharge Permit. This order requires testing and treatment, as necessary, of groundwater encountered during dewatering prior to its release into surface waters to ensure that effluent limitations for constituents are not exceeded.

The project includes construction of a new concession stand, restroom, storage building, play area, bicycle path, and reconfiguration of the parking area. Pollutants of concern during operation of the proposed project could include suspended solids/sediment, nutrients, pesticides, trash and debris, oil and grease, and metals. The proposed project would result in an increase of impervious acreage of approximately 18,630 square feet (sf) (0.43 acre) on the project site following project implementation. An increase in impervious surface area would expand the volume of runoff during a storm, which would increase the amount of pollutants discharged into downstream receiving waters. In addition, there is a potential for increased erosion due to increased runoff that could increase solids/sediment in stormwater runoff. Visitors to the site and patrons of the proposed concession stand would be a potential source of trash and debris. Landscaping included as part of the project would capture and aid with treatment of stormwater runoff from the increased impervious surface areas, but could also be a potential source of nutrients and pesticides. Any additional vehicles utilizing the expanded parking area could be a source of oil, grease, and metals.

The City is subject to the requirements of the *Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges from the City of Long Beach* (City of Long Beach MS4 Permit), Order No. R4-2014-0024, NPDES No. CAS004003. Pursuant to the requirements of City of Long Beach MS4 Permit, the proposed project qualifies as a "New Development Project or Redevelopment Project." New Development Projects that disturb greater than 1 acre and increase impervious surface area by more than 10,000 sf (approximately 0.23 acre) and Redevelopment Projects that create, add, or replace 5,000 sf (approximately 0.115 acre) are required to implement post-construction controls to mitigate stormwater pollution and prepare a Low Impact Development Plan or equivalent, in compliance with the *City of Long Beach Low*

Impact Development (LID) Best Management Practices (BMP) Design Manual (February 2013; revised December 2013), as outlined in the City of Long Beach Municipal Code Chapter 18.74, Low Impact Development Standards. In compliance with these requirements a Design Development Hydrology Report & Low Impact Development Plan (LID Plan; Michael Baker International, July 28, 2017) was prepared for the proposed project that details the LID BMPs that would be implemented to treat stormwater runoff and reduce impacts to water quality during operation. Proposed BMPs include depressed landscape areas (vegetated swales) for natural infiltration of stormwater along the perimeter of the project site in the vicinity of the proposed play area, restroom, and storage building. The vegetated swale would convey flows in a southwesterly direction to an infiltration basin located by the sidewalk, west of the proposed buildings. In addition, depressed sand infiltration basins would be located in the median of the parking lot. Building downspouts would be provided to drain stormwater to sand areas for infiltration. In addition, the existing sand areas on both sides of the existing bicycle path will be used for natural infiltration of stormwater runoff. The proposed BMPs would capture, infiltrate, and treat stormwater runoff to remove pollutants of concern. In addition, the existing sand areas on both sides of the existing bicycle path and within the parking lot will be used for natural infiltration of stormwater runoff. As specified in Compliance Measure WQ-3, a Final LID Plan will be prepared prior to issuance of grading permits.

For the reasons outlined above, implementation of Compliance Measures WQ-1, WQ-2, and WQ-3 (which require implementation of construction and post-construction BMPs and testing and treatment of dewatered groundwater) would reduce impacts related to Waste Discharge Requirements, water quality standards, and degradation of water quality to a less than significant level, and no mitigation is required.

Mitigation Measures: No mitigation is required. However, the following compliance measures are standard conditions based on local, State, and federal regulations or laws that serve to reduce impacts related to hydrology and water quality. These Compliance Measures are applicable to the proposed project and shall be incorporated to ensure that the project has minimal impacts to receiving waters.

Compliance Measures:

WQ-1 **Construction General Permit.** Prior to issuance of a grading permit, the City of Long Beach (City) Development Services Director, or designee, shall obtain coverage under the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System [NPDES] No. CAS000002) (Construction General Permit) if the disturbed soil area during construction exceeds 1 acre. This shall include submission of Permit Registration Documents, including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB). The Construction Contractor shall ensure that a Storm Water Pollution Prevention Plan (SWPPP) is prepared and implemented for the project in compliance with the requirements of the Construction General Permit. The SWPPP

shall identify construction Best Management Practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities. The SWPPP shall serve as the project Erosion and Sediment Control Plan (ESCP), in compliance with the City of Long Beach MS4 Permit (Order No. R4-2014-0024, NPDES No. CAS004003). If it is determined during final design that the disturbed soil area would be less than 1 acre, the project would be exempt from coverage under the Construction General Permit and the project would be exempt from coverage under the Construction General Permit and the above requirements would not be applicable.

WQ-2: **Groundwater Discharge Permit.** During groundwater dewatering activities, the Construction Contractor shall comply with the requirements of the Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0095, Permit No. CAG994004) (Groundwater Discharge Permit), or subsequent permit. The Construction Contractor shall comply with all applicable provisions in the permit, including water sampling, analysis, and reporting of dewatering-related discharges. The City Development Services Director, or designee, shall submit a Notice of Intent for coverage under the permit to the Los Angeles Regional Water Quality Control Board (RWQCB) at least 60 days prior to the start of dewatering. Upon completion of groundwater dewatering activities, the City of Long Beach shall submit a Notice of Termination to the Los Angeles RWQCB.

WQ-3: **Final Low Impact Development Plan.** In compliance with the City of Long Beach MS4 Permit and as specified in Chapter 18.74, Low Impact Development Standards, of the City of Long Beach Municipal Code, the City Development Services Director, or designee, shall ensure that a Final Low Impact Development (LID) Plan, or equivalent, is prepared for the project prior to issuance of a grading permit. The LID Plan shall be prepared consistent with the requirements of the *City of Long Beach Low Impact Development (LID) Best Management Practices (BMP) Design Manual* (February 2013; revised December 2013) and shall include BMPs to be incorporated into the project to target pollutants of concern in runoff from the project site.

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

Less than Significant Impact. The City is highly urbanized with infrastructure in place to accommodate future development projects. Approximately 60 percent of the City's existing water supply consists of groundwater extracted from the local Central Basin of the Los Angeles groundwater basin, with the remaining 40 percent consisting of imported water purchased from the Metropolitan Water District of Southern California.

As discussed in Response 4.9(a) above, due to the shallow depth of groundwater (less than 10 ft bgs), fluctuating groundwater levels, and anticipated depth of excavation (5 ft bgs), groundwater dewatering cannot be ruled out during excavation activities. However, groundwater dewatering activities would be temporary in nature and would cease following completion of construction. It is not anticipated that the volume of groundwater extracted during dewatering activities would be substantial in comparison to the overall volume of the groundwater basin. In addition, grading and construction activities would compact soil, which can decrease infiltration during construction. However, the size of the construction area would be minimal compared to the overall size of the groundwater basin; therefore, there would not be a substantial change in infiltration or groundwater recharge compared to the existing condition.

Operation of the proposed project would not require groundwater extraction. Following project implementation, there would be an increase in impervious surface area of 0.43 acre on the project site. An increase in impervious surface area decreases infiltration, which can decrease the amount of water that is able to recharge the aquifer/groundwater. However, depressed landscaping and sand areas are proposed as part of the project, which would capture and infiltrate stormwater runoff and aid with groundwater recharge to offset any decreased infiltration from the increased impervious surface areas. Furthermore, development of the proposed project would not significantly lower the groundwater table because the proposed project would not significantly increase water demand from the Long Beach Water Department (LBWD) on the site due to the site's existing and proposed use as a concession stand. Although the LBWD does rely partially on groundwater, the LBWD is also responsible for managing groundwater resources and has prepared the 2015 Urban Water Management Plan to prevent overdraft from use of groundwater for water supply. Therefore, project impacts related to depletion of groundwater supplies and interference with groundwater recharge would be less than significant, and no mitigation is required.

(c) Would the project 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?

Less than Significant Impact. During construction activities, excavated soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and the transport of sediment downstream compared with existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. As discussed in Response 4.9(a) above and specified in Compliance Measures WQ-1 and WQ-2, the Construction General Permit and City of Long Beach MS4 Permit require preparation of a SWPPP and/or ESCP and implementation of construction BMPs to reduce impacts to water quality during construction, including those impacts associated with soil erosion, and siltation.

According to the LID Plan prepared for the project, the proposed project would increase the impervious surface area on the project site by 0.43 acre compared to existing conditions, which would increase runoff peak flow by 0.38 cubic feet per second (cfs), 0.35 cfs, and 0.66 cfs during

25-year, 50-year, and 100-year storm events, respectively. However, the depressed landscaping and sand areas would capture and infiltrate stormwater runoff and would attenuate any increase in flow. In the proposed condition, the impervious surface areas would not be prone to erosion or siltation. The depressed landscaped and sand areas would capture and infiltrate stormwater and minimize on-site erosion and siltation that could reach downstream receiving waters. As specified in Compliance Measure WQ-4, a final hydrology report, or equivalent (such as a Final LID Plan), would be prepared for the proposed project to ensure that the on-site storm drain facilities, including depressed landscaped and sand areas, are appropriately sized to reduce stormwater runoff. Therefore, because the project would not substantially change the stormwater runoff from the project site, the proposed project would not contribute to downstream erosion or siltation. Finally, there are no streams or rivers on the project site; therefore, the proposed project would not alter the course of a stream or river. As such, project impacts related to on-site or off-site erosion or siltation would be less than significant with implementation of Compliance Measure WQ-4, and no mitigation is required.

Mitigation Measures: No mitigation is required. However, the following Regulatory Compliance Measure is a standard conditions based on local, State, and federal regulations or laws that serve to reduce impacts related to hydrology and water quality. These Regulatory Compliance Measures are applicable to the proposed project and shall be incorporated to ensure that the Project has minimal impacts to receiving waters.

Compliance Measure:

WQ-4 **Final Hydrology Report.** Prior to issuance of grading permits, the City Development Services Director, or designee, shall ensure that a final hydrology report, or equivalent, is prepared and approved by the City. The hydrology report shall demonstrate, based on hydrologic calculations, that the project's on-site storm conveyance and retention facilities, including landscaped areas, are designed in accordance with the requirement of the Los Angeles County Department of Public Works Hydrology and Hydraulic Design Manual.

(d) Would the project 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?

Less than Significant Impact. During construction, soil would be disturbed and compacted and drainage patterns would be temporarily altered, which can increase the volume and velocity of stormwater runoff and increase the potential for localized flooding compared to existing conditions. As previously discussed in Response 4.9(a) and specified in Compliance Measure WQ-1, the Construction General Permit and City of Long Beach MS4 Permit require preparation of a SWPPP and/or ESCP and implementation of Construction BMPs to control and direct surface runoff on-site. By controlling and directing surface runoff on-site, the BMPs would direct additional runoff into the Pacific Ocean, which has additional capacity. Because additional runoff

during construction would be channeled into the Pacific Ocean, construction activities would not result in on- or off-site flooding.

The proposed project would increase impervious surfaces on the site by 0.43 acre, which would increase runoff peak flow by 0.38 cfs, 0.35 cfs, and 0.66 cfs during 25-year, 50-year, and 100-year storm events, respectively. However, depressed landscaping and sand areas included as part of the proposed project would capture stormwater runoff and attenuate any increase in flow. As specified by Compliance Measure WQ-4, the City would be required to prepare a final hydrology report to ensure that storm drain facilities serving the project site, including depressed landscaped and sand areas, are appropriately sized to reduce stormwater runoff and ensure that on-site flooding would not occur. Because stormwater flows would be attenuated by the depressed landscaping and sand areas, the project would not result in off-site flooding. Finally, the project would not alter the course of a stream or river. Therefore, with implementation of Compliance Measure WQ-4, potential hazards related to on- or off-site flooding resulting from the alteration of existing drainage patterns on the site would be less than significant.

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

Less than Significant Impact. As discussed in Response 4.9(a) and 4.9(d) above, earthwork activities would compact soil, which can increase stormwater runoff during construction, drainage patterns would be temporarily altered during grading and other construction activities, and construction-related pollutants such as liquid and petroleum products and concrete-related waste could be spilled, leaked, or transported via storm runoff into adjacent drainages and into downstream receiving waters. The proposed project would be required to comply with requirements set forth by the Construction General Permit and the City of Long Beach MS4 Permit, which requires preparation of an SWPPP and/or ESCP and implementation of construction BMPs to control stormwater runoff and discharge of pollutants.

As discussed under Response 4.9(a) above, groundwater dewatering may be required during construction. Dewatered groundwater may contain elevated levels of total dissolved solids or other constituents that could be introduced to receiving waters. As specified in Compliance Measure WQ-2, groundwater dewatering during construction would be conducted in accordance with the requirements of the Los Angeles RWQCB's Dewatering Permit, which requires testing and treatment, as necessary, of groundwater encountered during dewatering prior to its release.

As discussed in Response 4.9(a) above, pollutants of concern during operation of the proposed project could include suspended solids/sediment, nutrients, pathogens (bacteria and virus), pesticides, trash and debris, oil and grease, and metals. As required by Compliance Measure WQ-3, a final LID Plan, or equivalent, would be prepared for the project that details the LID BMPs that would be implemented to treat stormwater runoff and reduce impacts to water

quality during operation. Proposed BMPs include depressed landscape and sand areas which would capture, infiltrate, and treat stormwater.

As discussed under Responses 4.9(c) and 4.9(d), the proposed project would increase the impervious surface area on the project site by 0.43 acre compared to existing conditions, which would increase runoff peak flow by 0.38 cfs, 0.35 cfs, and 0.66 cfs during 25-year, 50-year, and 100-year storm events, respectively. However, depressed landscaping and sand would capture and infiltrate stormwater runoff to attenuate any increase in flow. As specified in Compliance Measure WQ-4, a final hydrology report would be prepared for the proposed project to ensure that the on-site storm drain facilities, including the depressed landscaped and sand areas, are appropriately sized to reduce stormwater runoff leaving the project site.

For the reasons discussed above, with adherence to Compliance Measures WQ-1 through WQ-4, project impacts associated with the introduction of substantial sources of polluted runoff or additional runoff would be less than significant. No mitigation is required.

(f) Would the project otherwise substantially degrade water quality?

Less than Significant Impact. Refer to Response 4.9(a), above.

(g) Would the project 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. According to the Federal Emergency Management Act (FEMA) Flood Insurance Rate Map Act (FIRM) No. 06037C1970F (September 26, 2008) and the *City of Long Beach Federal Emergency Management Agency (FEMA) Flood Zones* map, the project site is located within Special Flood Hazard Area Zone VE and within Other Flood Area Zone X. Refer to Figure 4.9.1, Floodplain. Zone VE designation encompasses areas subject to inundation by the 1 percent annual chance flood (100-year flood) within coastal flood zones with velocity hazard (wave action). Other Flood Area Zone X designation encompasses areas with a 0.2 percent annual chance of flood (500-year). The project proposes to replace the existing concession and café building currently present on the site with a new concession stand and café. Other facilities would include a separate restroom and a recreational equipment storage building. The project does not include the construction of housing or inhabitable structures on the project site. Therefore, the proposed project would not place housing within a 100-year flood hazard area, and no impact would occur.

(h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less than Significant Impact. As discussed previously under Response 4.9(g), the project site is located within Special Flood Hazard Area Zone VE and Other Flood Area Zone X. Building A would not be constructed within a 100-year flood hazard area. Building A would be constructed in a 500-year flood hazard area (Other Flood Area Zone X), where the existing building is located.

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LSA

LEGEND

Project Site

FEMA FIRM and Flood Hazard Area

X: 0.2% Annual Chance Flood Hazard

X: Area with Minimal Flood Hazard

VE: 1% Annual Chance Flood Hazard

N

0 50 100

FEET

SOURCE: Google Maps (2016); FEMA (2016)

I:\CLB1702\GIS\Floodplain.mxd (8/2/2017)

FIGURE 4.9.1

Alamitos Beach Concession Stand

Floodplain

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However, Buildings B and C, a portion of the play area, the bicycle path, and parking lot would be constructed in a 100-year flood zone (Special Flood Hazard Area (Zone VE) that would be subject to tidal flooding during a 100-year storm event. The bicycle path, play area, and parking lot would not include structures that would be large enough to impede or redirect flood flows. However, as shown in Figure 4.9.1, Buildings B and C would be located in the upper limits of the tide during a 100-year storm event. Due to the location of the buildings within the upper limits of the tidal zone and due to the strength of the tides, the buildings would not be anticipated to redirect or impede the flood flows. Therefore, the impacts associated with the placement of structures within a 100-year flood hazard area that could impede and/or redirect flood flows would be less than significant, and no mitigation is required.

(i) Would the project 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. A levee is a type of dam that runs along the banks of a river or canal that provides flood protection. A levee system failure could create severe flooding and high water velocities. The Los Angeles River is located approximately 1.25 miles west of the project site and the San Gabriel River is located approximately 5 miles east of the project site.

According to the United States Army Corps of Engineers (Corps) levee inundation maps for the Los Angeles River and San Gabriel River, the project site is not located within an area protected by levees. Therefore, the project site would not be at risk from inundation due to failure of a levee.

Dam failure is defined as the structural collapse of a dam that releases the water stored in a reservoir behind the dam. A dam failure is usually the result of the age of the structure, inadequate spillway capacity, or structural damage caused by an earthquake or flood. The Sepulveda Dam, Hansen Dam, and Whittier Narrows Dam lie more than 20 miles upstream from the Pacific Ocean. According to the Safety Element of the City of Long Beach General Plan, due to the infrequent periods of high precipitation and high river flow, the probability of flooding as a result of dam failure is considered very low. According to the inundation maps for these dams, the project site is not located in an area that would be subject to flooding in the event of failure of one of the dams. In addition, due to the intervening low and flat ground, and the distance between the Sepulveda Dam and Hansen Dam and the City, flood waters resulting from failure of either of these dams would be expected to dissipate before reaching the City. Therefore, it is not anticipated that the project site would be inundated if one of these dams were to fail. Further, according to the Safety Element, in the event of failure of the Whittier Narrows Dam while full, flooding could occur along both sides of the San Gabriel River where it passes through Long Beach and would be the most severe on the east side of the river. Due to the distance from the project site to the San Gabriel River, the project site would not be inundated in the unlikely event that the Whitter Narrows Dam failed. For these reasons, the project site would not be at risk from inundation due to failure of a dam.

As discussed above in Responses 4.9(g) and 4.9(h), the project site is subject to flooding during a 10-year storm event. However, the project would serve existing customers and any increase in

patronage would be minimal. The project would replace the existing concession stand and café, which are already exposed to risk of flooding during a storm event. In addition, the project would not increase the risk or extent of flooding during a storm event, or exacerbate such conditions. Therefore, impacts related to exposure of additional people or structures to a significant risk of loss, injury, or death involving flooding would be less than significant. No mitigation is required.

(j) Would the project be exposed to inundation by seiche, tsunami, or mudflow?

Less than Significant Impact. Seiching is a phenomenon that occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities (e.g., reservoirs and lakes). Such waves can cause retention structures to fail and flood downstream properties. There are no enclosed water retention facilities in close proximity to the project site. The risk associated with possible seiche waves is, therefore, not considered to be a potentially significant impact of the project, and no mitigation is necessary.

Tsunamis are generated ocean wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic islands. According to the Tsunami Inundation Map for Emergency Planning for the Long Beach Quadrangle (March 1, 2009), the project site is located within in area subject to potential risks associated with a tsunami. Although there could be an increase in visitors to the site following project implementation, the project is replacing an existing use and would not create a new risk. Additionally, the project would not increase the risk of a tsunami occurring, or exacerbate such conditions. Furthermore, the City has implemented the 2015 Natural Hazards Mitigation Plan for the purpose of protecting the lives, property, and facilities of citizens, employees, businesses, industry, infrastructure, and the environment from natural hazards. The County of Los Angeles has also developed regional catastrophic preparedness planning and regional evacuation routes. Therefore, because the proposed project is not introducing a new risk to tsunami exposure, and with the implementation of the Natural Hazards Mitigation Plan, emergency preparedness plans, and the County of Los Angeles regional catastrophic plans, potential hazards from inundation from a tsunami are considered less than significant, and no mitigation is required.

Mudslides and slumps are described as a shallower type of slope failure usually affecting the upper soil mantle or weathered bedrock underlying natural slopes and triggered by surface or shallow subsurface saturation. The project site is relatively flat, and no existing landslides are present on the property. In addition, no hillsides are immediately adjacent to the project site. The risk associated with possible mudflows and mudslides is, therefore, not considered a potential constraint or a potentially significant impact of the project, and no mitigation is necessary.

4.10 LAND USE PLANNING

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Physically divide an established community?	☐	☐	☐	☒
(b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
(c)	Conflict with any applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP)?	☐	☐	☐	☒

Impact Analysis:

(a) Would the project physically divide an established community?

No Impact. The project site (Assessor's Parcel Number (7265-021-901) consists of an approximately 1.22-acre portion of a larger approximately 32-acre parcel. The project site is bound by a parking lot to the north, Alamitos Beach to the east and south, the Marina Green to the south, and East Shoreline Drive to the west.

The project includes demolition of the existing Alamitos Beach concession stand and construction and operation of the new concession stand and café on the same site. The project also includes the development of restroom facilities, a recreational equipment rental and storage building, and the installation of pedestrian furniture. The project would maintain vehicular access to the site via the ingress/egress point off of East Shoreline Drive following project implementation. Therefore, the proposed project would not result in changes or modifications to any adjacent land uses and would not physically divide an established community, and no mitigation is required.

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

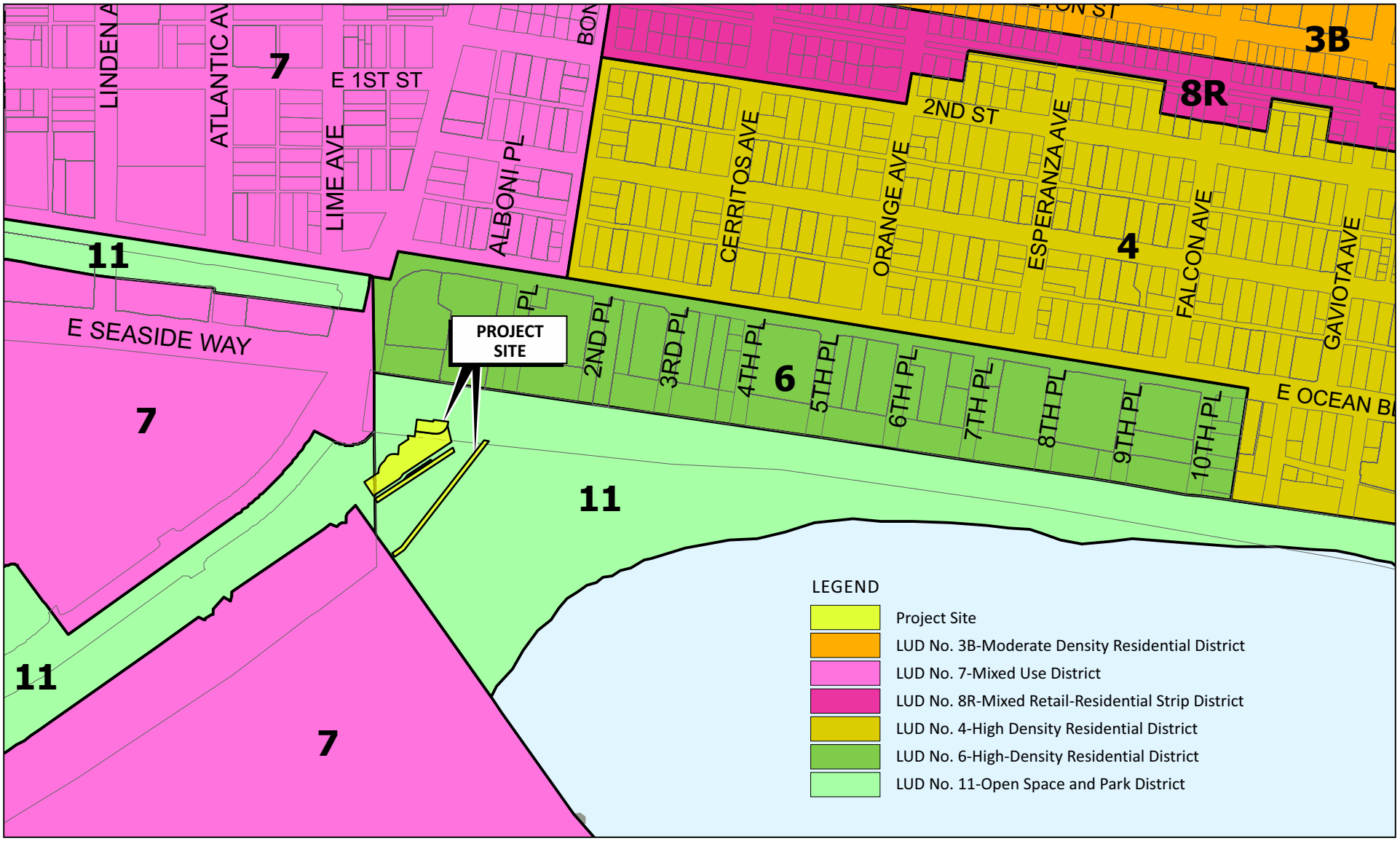
Less than Significant Impact. The project site is located within the Coastal Zone of the City of Long Beach. The main documents guiding development and regulating land uses in the Coastal Zone of the City are the City's General Plan, Zoning Ordinance, Local Coastal Program, and the California Coastal Act (CCA).

***General Plan*.** The City's General Plan is the principal land use document guiding development within the City. The City's General Plan is a comprehensive plan that establishes goals, objectives, and policies intended to guide growth and development in the City. The City's General Plan also serves as a blueprint for development throughout the community and is the vehicle through which the community needs, desires, and aspirations are balanced. The City's General Plan is the fundamental tool for influencing the quality of life in the City.

At the heart of the General Plan is the Land Use Element (LUE) (adopted in 1989 and revised in April 1997). The LUE establishes land use districts and develops a long-term land use vision for these land use districts throughout the City. The LUE also includes goals and policies for each land use district and implements them through implementation strategies. Although there is a LUE update in progress (described further below), the following discussion is applicable to the project until any changes to the LUE are formally adopted by the City.

As illustrated by Figure 4.10.1, General Plan Land Uses, the majority of the project site is designated as Land Use District No. 11, Open Space and Park District. Although parks and open space uses are the primary allowable uses within LUD No. 11, commercial and commercial recreation uses are also allowed so long as they are intended to preserve natural areas, promote the mental and physical health of the community, and improve the park patron's overall experience. The proposed project would comply with the Open Space and Park District land use designation due to multiple features characteristic of recreation uses, including the play space area, recreation area with outdoors games, and recreational equipment rentals. Therefore, no land use conflict would occur with the existing General Plan, and no mitigation is required.

***Proposed General Plan Update*.** The City is currently in the process of updating and replacing the existing Land Use Element with an entirely new LUE that would guide future development in the City through the year 2040. The proposed Land Use Element would introduce the concept of "PlaceTypes," which would replace the traditional land uses designations and zoning classifications in the existing LUE. The updated LUE would establish 14 primary PlaceTypes that would divide the City into distinct neighborhoods, thus allowing for greater flexibility and a mix of compatible land uses within these areas. Each PlaceType would be defined by unique land use, form, and character-defining goals, policies, and implementation strategies tailored specifically to the particular application of that PlaceType within the City. The proposed 14 PlaceTypes are as follows: (1) Open Space, (2) Founding and Contemporary Neighborhood, (3) Multi-Family Residential—Low, (4) Multi-Family Residential—Moderate, (5) Neighborhood-Serving Centers and Corridors—Low, (6) Neighborhood-Serving Centers and Corridors—Moderate, (7) Transit-Oriented Development-Low, (8) Transit-Oriented Development-Moderate, (9) Community Commercial, (10) Industrial, (11) Neo-Industrial, (12) Regional-Serving Facility, (13) Downtown, and (14) Waterfront. In total, the updated LUE proposes changes to approximately 13 percent of the land area (or the equivalent of 4,180 acres) in the City. The establishment of PlaceTypes in place of standard parcel-by-parcel land use designations would allow for greater flexibility in development types to create distinct residential neighborhoods, employment centers, and open space areas.



LSA

FIGURE 4.10.1

NO SCALE

SOURCE: Development Services & Dep. of Technology Services

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Alamitos Beach Concession Stand

General Plan Land Uses

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The Draft LUE designates the project site as a Waterfront. This PlaceTypes primarily allows for the development of high- to moderate-density housing, open space and recreational uses, offices, retail, restaurant, and entertainment uses in the Alamitos Beach area. The proposed project would not introduce the development of any structures or new land uses on the project site. Project improvements would be limited to the redevelopment of the Alamitos Beach concession stand, the installation of a play area with associated recreational amenities, the installation of public restroom and showering facilities to serve beach users, development of a recreational rental facility, and the relocation of the existing bicycle path. Therefore, the proposed project would be consistent with the proposed Waterfront PlaceType and applicable goals, policies, and implementation strategies regulating land use on the project site under the proposed 2040 General Plan LUE. Therefore, no land use conflict would occur with the proposed General Plan Land Use Element, and no mitigation is required.

***Local Coastal Program*.** The project site is located within the State's Coastal Zone, and is, therefore, regulated under the requirements of the CCA. Due to the site's location within the City's Coastal Zone, the City is the responsible agency for land use and planning on the project site while the Coastal Commission is responsible for issuing a Coastal Development Permit (CDP) for new development proposed on the site.

The CCA requires that all cities located within the Coastal Zone adopt a Local Coastal Program (LCP), which is used by cities to regulate local land uses and development in a manner that is consistent with goals of the CCA. Specifically, LCPs identify the location, types, densities, and other land use policies for future development within the Coastal Zone. In accordance with State law, development within the Coastal Zone in Long Beach is guided by the City's LCP, which was approved by the Coastal Commission in 1980 and subsequently revised in 1994. Because the City's LCP has been certified by the Coastal Commission, the primary responsibility for issuing CDPs is transferred from the Coastal Commission to the City for all nonshore/nonwater projects in the Coastal Zone. However, the Coastal Commission retains permanent coastal permit authority over development proposed on tidelands, submerged lands, and public trust lands. As illustrated by Figure 2.8, Coastal Zone, the project site is located in an area under the State's permit jurisdiction. Consequently, project approval would require issuance of a CDP from the Coastal Commission. Projects proposed within the Coastal Zone are required to obtain a CDP prior to commencement.

The City-certified LCP includes the project site and surrounding area. The project site is located within the Downtown Shoreline subarea of City's Coastal Zone. The City's LCP recommends the implementation of only beach-dependent recreational uses, restroom/concession facilities, bicycle paths, pedestrian walkways, landscaped areas, children's play modules, parking, and food and beverage-dispensing establishments within this area of Alamitos Beach. Additionally, the City's LCP prioritizes recreation and visitor-serving uses in the project area. The proposed project would redevelop the existing concession building on the project site and would also construct new restroom facilities, a building for water-related recreation rentals, and a children's play area. Uses included as part of the project would be consistent with allowable uses in the City's LCP and would be recreational and visitor-serving in nature. Therefore, the proposed project would be consistent with goals and policies in the City's LCP regulating land

use and development in the project area. For the reasons outlined above, no land use conflict with the City's LCP would occur as a result of project implementation, and no mitigation is required.

***California Coastal Act*.** As previously stated, the project site is situated in the California Coastal Zone, and as such, is regulated by the provisions of the CCA. As illustrated by Figure 2.8, Coastal Zone, the project site is located in area under the State's permit jurisdiction. Consequently, project approval would require issuance of a CDP from the Coastal Commission. Table 4.10.A, Consistency with California Coastal Act Policies, below, outlines the proposed project's consistency with applicable policies in the CCA.

Table 4.10.A: Consistency with California Coastal Act Policies

California Coastal Act Policies	Discussion/Analysis of the Proposed Project
Section 30210: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs, and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.	**Consistent.** The proposed project provides for enhanced public safety needs through the redevelopment of the project site with the new concession stand/café use and the reconfiguration of the existing bicycle lane to allow for a new bicycle path south of the site. The addition of the bicycle lane is intended to reduce safety conflicts associated with pedestrians and bicyclists on the existing bicycle path. The project would also include a building on the site where visitors to Alamitos Beach could rent recreational equipment to be used at the beach, and would also include an outdoor play area. Therefore, the proposed project would provide increased recreational opportunities for all people, consistent with Section 30210 of the CCA.
Section 30211: Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.	**Consistent.** The proposed project would not interfere with the public's right of access to the sea or beach. The proposed project would replace and upgrade existing concession stand facilities and would enhance the existing access to the coast through the installation of new modern facilities and the provision of six new parking spaces. The proposed project would maintain existing coastal access for the public, and new facilities would serve visitors and enhance the existing public recreational opportunities. Therefore, the proposed project would be consistent with Section 30211 of the CCA.

Table 4.10.A: Consistency with California Coastal Act Policies

California Coastal Act Policies	Discussion/Analysis of the Proposed Project
Section 30212.5: Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.	**Consistent.** As discussed further below, parking for the proposed project would continue to be provided by the existing parking lot on the project site and the surface parking lot south of the site. However, the proposed project would reconfigure the portion of the existing parking lot nearest to the concession stand building to allow for five additional parking spaces. Following project implementation, the project site would accommodate a total of 152 parking spaces. For reference, 40 parking spaces are required under the City's Municipal Code. Furthermore, facilities associated with the proposed project would replace an existing use that has not induced substantial overcrowding or overuse of on-site facilities or the Alamitos Beach area. Therefore, the proposed project would be consistent with Section 301212.5 of the CCA.
Section 30213: Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. The commission shall not: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.	**Consistent.** Coastal recreation uses in the vicinity of the project site would remain available to the public following project implementation. The overall goal of the project is to provide expanded low-cost visitor and recreational facilities at Alamitos Beach. The proposed project would be accessible to the public and would include an outdoor play area for use by the public at no charge, as well as a facility for visitors to rent recreational equipment for use at the beach, and an expanded restroom facility. The project would also include the proposed concession stand/café building to provide visitors to the beach with low-cost food and drink options. These project components are consistent with the operational characteristics of the existing concession stand building, but are intended to improve its functionality and amenities provided to visitors to the beach. No substantial changes related to public recreation are anticipated after project implementation. Therefore, the proposed project would be consistent with Section 30213 of the CCA.
Section 30220: Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.	**Consistent.** The proposed concession stand/café building and associated facilities are not coastal-dependent; however, the existing concession stand has been located in the Coastal Zone for over 40 years. The concession stand building has been, and would continue to remain, open to the public. Additional facilities provided by the project would be open to the public and would serve to improve recreational uses

Table 4.10.A: Consistency with California Coastal Act Policies

California Coastal Act Policies	Discussion/Analysis of the Proposed Project
	on the beach. In addition, the location of the project at the beach encourages public access and use of coastal resources. Therefore, the proposed project would be consistent with Section 30220 of the CCA.
Section 30221: Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.	**Consistent.** The proposed project would increase opportunities for public recreational activities in the Alamitos Beach area. As previously stated, the proposed project would include a facility with recreational equipment available for rent by visitors to the beach and would provide an outdoor play area. Additionally, the project would add an additional bicycle lane south of the existing pedestrian/bicycle path on the site. The addition of this bicycle lane would serve to promote recreational activities in the area and eliminate existing safety conflicts associated with the current pedestrian/bicycle path. The proposed project is intended to serve visitors to the beach and ocean and ensures that this oceanfront land will be protected and utilized for recreational uses. Therefore, the proposed project would be consistent with Section 30221 of the CCA.
Section 30231: The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.	**Consistent.** The proposed project intends to replace and modernize the existing concession stand facility with an updated concession/café and visitor-serving recreation uses. The project site would remain in a developed condition, as it is in its current condition, and is not anticipated to adversely affect the biological productivity and quality of coastal waters. Additionally, as described further in Section 4.9, Hydrology and Water Quality, the proposed project would be required to implement Compliance Measures WQ-1 through WQ-4 to reduce potential impacts related to water quality. Therefore, the proposed project would be consistent with Section 30231 of the CCA.
Section 30232: Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.	**Consistent.** Accidental spillage of hazardous substances during construction is controlled through implementation of appropriate regulatory measures to ensure against any impacts resulting from accidental spills. Additionally, the project would be required to implement Mitigation Measure HAZ-3, which requires the preparation of a Contingency Plan

Table 4.10.A: Consistency with California Coastal Act Policies

California Coastal Act Policies	Discussion/Analysis of the Proposed Project
	to outline procedures to be followed should unknown hazards and hazardous materials be encountered during project construction. Furthermore, the project will be required to implement Mitigation Measures HAZ-1 and HAZ-2 to reduce impacts related to the release of ACMS, LBP, PCBs and mold during demolition activities. With implementation of Mitigation Measures HAZ-1 through HAZ-3, impacts related to the release of hazardous substances would be less than significant. During operational activities, spillage of solvents and fuels on the site could occur; however, the uses on the site are not changing and the chemicals needed for building and landscaping maintenance are not changing following project implementation. Prevention and clean up would comply with all applicable health and safety regulations. Therefore, the proposed project would be consistent with Section 30232 of the CCA.
Section 30233: The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.	**Consistent.** The proposed project does not include dredging or diking of open coastal waters, wetlands, estuaries, or lakes. Therefore, Section 30233 is not applicable to the proposed project .
Section 30235: Revetments, breakwaters, groins, harbor channels, sea wall, cliff retaining walls, and other construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline and sand supply.	**Consistent.** The proposed project does not include any revetments, breakwaters, groins, walls, or other construction that would alter natural shoreline processes. Therefore, Section 30235 is not applicable to the proposed project.
Section 30240: Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be	**Consistent.** There are no environmentally sensitive habitat areas on or adjacent to the proposed project. The project site is currently developed with the existing concession stand facility. There are no native landscaping, waters, or wetland habitat that would be adversely impacted as a result of project implementation. Therefore, the proposed project

Table 4.10.A: Consistency with California Coastal Act Policies

California Coastal Act Policies	Discussion/Analysis of the Proposed Project
sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.	would be consistent with Section 30240 of the CCA.
Section 30244: Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.	**Consistent.** No known archaeological resources would be impacted by project implementation, and the project site is not considered to be sensitive for archaeological resources. Additionally, there are no known paleontological resources on the project site that would be affected by project construction and implementation and the project site is not underlain by paleontologically sensitive soils. Therefore, the proposed project would be consistent with Section 30250 of the CCA.
Section 30251: The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coast areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas and where feasible to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.	**Consistent.** The proposed project improvements are intended to maximize views of the Pacific Ocean and coastal area. Specially, the concession stand would include a façade with doors that would slide open to maximize views of the Pacific Ocean, and would also include glass exterior walls on the second-story rooftop structure. Additionally, the proposed facilities have been designed to modernize the concession stand facility, while promoting visits to the project site and the greater Alamitos Beach area. The proposed project has also been designed to include building materials, such as glass, to the extent feasible, to maintain views of the coast from the project site. Furthermore, all buildings included as part of the project would be under the required height limit for development within the Park district. For the reasons outlined above, the project would serve to enhance the visual quality of the project site by constructing an improved concession stand/café building and supporting recreational facilities. All facilities would feature enhanced architectural features as compared to existing on-site facilities, and would include upgraded landscaping. No existing landforms would be altered by project implementation. Preservation of the scenic coastal character, as proposed by the project, would be consistent with the objectives of the California Coastline Preservation and Recreation Plan. Therefore, the proposed project would be consistent with Section 30251 of the CCA.

Table 4.10.A: Consistency with California Coastal Act Policies

California Coastal Act Policies	Discussion/Analysis of the Proposed Project
Section 30253: New development shall: (1) minimize risks to life and property in areas of high geologic, flood, and fire hazard; (2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area, or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs; (3) be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development; (4) minimize energy consumption and vehicle miles traveled; and (5) where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational users.	**Consistent.** The proposed project would provide for the implementation of proposed improvements in a manner that would minimize risks to life and property through the implementation of site-specific recommendations and specifications prepared by professional engineers and others. Specifically, the proposed project would implement Compliance Measures WQ-1 through WQ-4 to reduce potential impacts related to hydrology and water quality, and would implement Mitigation Measures HAZ-1 through HAZ-3 to minimize potential impacts related to hazards and hazardous materials. The project would also be required to comply with Mitigation Measure GEO-1 to minimize impacts associated with unstable soils and to ensure the structural integrity of the facilities included as part of the project. While no mitigation is required to reduce project-related impacts with respect to air quality and GHGs, the proposed project would comply with Title 24 and would incorporate a number of energy-efficiency measures. Furthermore, the proposed project would reduce VMTs, as the project is primarily intended to serve existing beach users and residents in the area. As such, the project is not anticipated to significantly increase traffic demand and VMTs. Therefore, the project would be consistent with applicable regulations and thresholds with respect to air quality, including those established by the State Air Resources Control Board and the South Coast Air Quality Management District. As previously discussed, the proposed project would retain existing coastal access and would provide new visitor-serving uses and low-cost recreational opportunities on the site. The proposed project would revitalize the existing site which is a popular visitor destination point for local recreational users. Therefore, the proposed project would be consistent with Section 30253 of the CCA.

Table 4.10.A: Consistency with California Coastal Act Policies

California Coastal Act Policies	Discussion/Analysis of the Proposed Project
Section 30255: Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal dependent developments shall not be sited in a wetland. When appropriate, coastal related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.	**Consistent.** The proposed project would develop the site with new recreational uses and an improved concession stand/café facility, which are intended to serve visitors to the coast. The project does not include any improvements on a designated wetland, and no coastal-dependent developments would be impacted by the proposed project. Therefore, the proposed project would be consistent with Section 30255 of the CCA.

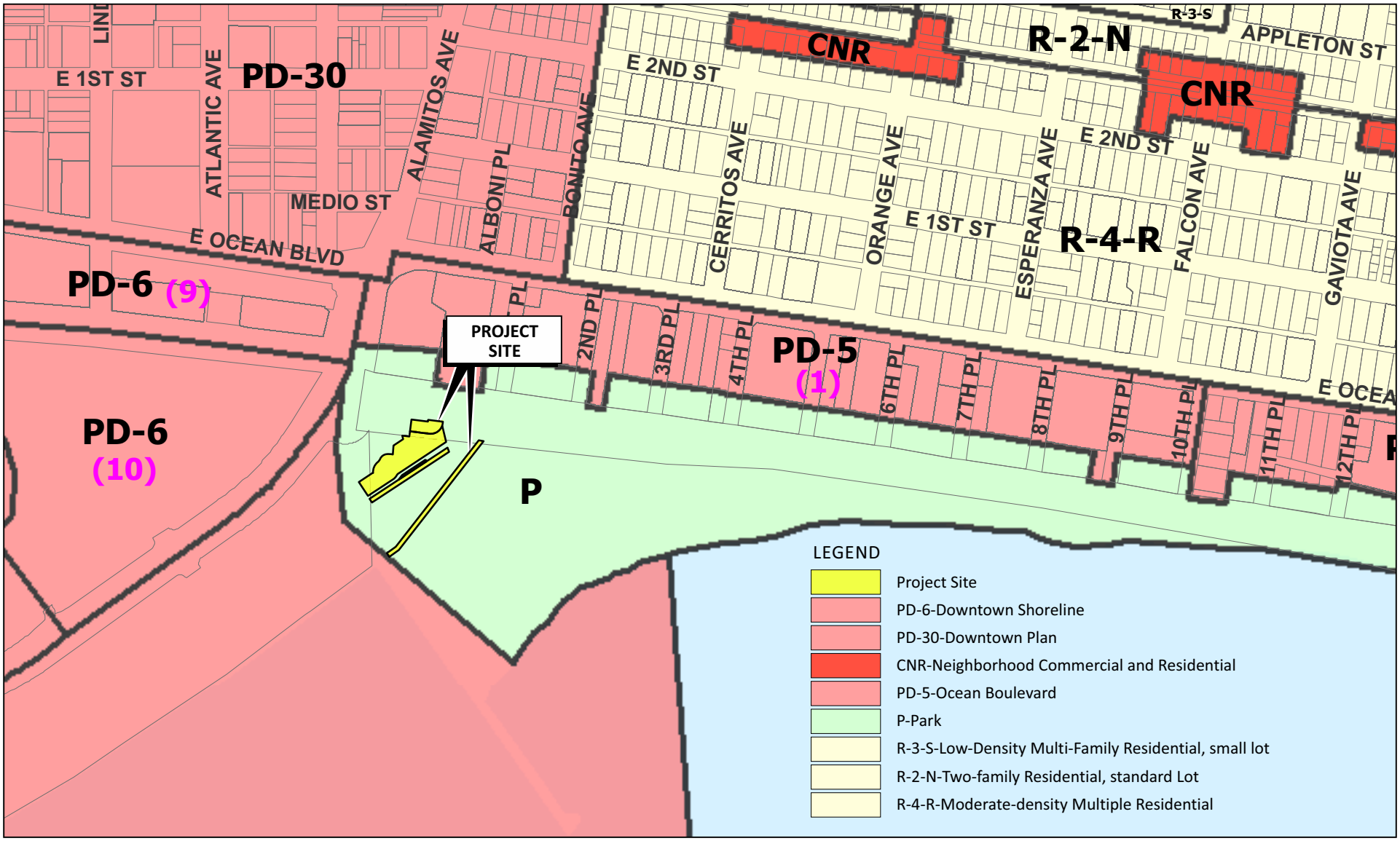
ACMs = asbestos-containing materials
CCA = California Coastal Act
City = City of Long Beach
GHGs = greenhouse gases
LBP = lead-based paint
PCB = polychlorinated biphenyl
VMTs = vehicle miles traveled

***Zoning Code*.** The City's Zoning Code is the primary implementation tool for the LUE and goals and policies contained therein. The City's Zoning Map indicates the general location and extent of future development in the City. The City's Zoning Ordinance, which includes the Zoning Map, describes and elaborates on the Zoning Map and contains more specific information related to permitted land uses, building intensities, and development standards.

As illustrated by Figure 4.10.2, the project site is zoned Park (P) on the City's Zoning Map. According to Chapter 21.35, Park District, of the City's Municipal Code, restaurants,[1] restaurant concessions, and rental uses for recreational equipment are permitted accessory uses in the Park District. The following zoning regulations are applicable to new development within the Park District: (1) a maximum building height of 30 ft, (2) the provision of adequate trash receptacles to accommodate refuse generated on the project site, (3) the installation of freestanding monument signs displaying the park's name, the screening of maintenance and mechanical equipment from public view, (4) and the cohesive building design such that the buildings are cohesive with the surrounding environment.

The proposed project would comply with applicable provisions in the Park zoning district, as the project proposes to redevelop the site with an improved concession stand/café building with recreation uses and an outdoor play area. The tallest building on the site would be the café building, which would be a maximum of 27 ft in height (3 ft less than the maximum height requirement for the Park District). Additionally, the park would include a monument sign near the project entrance (east of plaza) and would design the buildings on the project to be consistent with the overall character of existing surrounding development and to also maximize

[1] Restaurants are conditionally permitted uses in the Park District.



LSA

FIGURE 4.10.2

NO SCALE

SOURCE: Development Services & Dep. of Technology Services

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Alamitos Beach Concession Stand

Zoning Map

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views of the Pacific Ocean. Additionally, the project would request a Conditional Use Permit (CUP) due to the proposed sale of alcoholic beverages in the main café building and would require a CUP Exemption (CUPEx) to allow for table service provided to restaurant patrons of the concession stand/café building. Therefore, the project would be consistent with the City's Zoning Code.

Parking Requirements. In order to analyze the proposed project's consistency with the City's Parking Requirements, LSA collaborated with National Data and Surveying Services (NDS) to assess the current and projected parking demands at the surface parking lot located on and directly north of the site and the surface parking lot located directly south of the site adjacent to the Marina Green. National Data and Surveying Services collected parking accumulation data within the two parking lots closest to the project site on Saturday, June 24 and on Tuesday, June 27, 2017 (Appendix H). These parking data reflect summer conditions when parking is in greatest demand. The Alamitos Beach Parking Lot (north of the project site) contains 146 parking spaces, of which 8 are reserved for vehicles displaying handicap parking placards and 2 are reserved for electric vehicles. The Marina Parking Lot (south of the project site) contains a 92-space parking lot available to the general public (i.e., vehicles do not require a boat owner parking permit). Of these 92 parking spaces, 4 are reserved for vehicles displaying handicap parking placards. In total, there are 238 parking spaces available in the two lots.

On Tuesday, peak parking demand occurred in the early evening with 122 of the 238 parking spaces occupied. On Saturday, peak parking demand was sustained from late afternoon into early evening with 159 of the 238 parking spaces occupied. During the period of highest observed parking demand (identified as a Saturday during the summer), 79 parking spaces remained available. The site plan, dated March 1, 2017, indicates that the proposed project would require 40 parking spaces. Empirical data described above indicate that sufficient parking spaces are available to accommodate this parking demand, even during the highest demand periods.

Summary. The proposed project would be consistent with all applicable land use regulations. Therefore, the proposed project would not require or necessitate a Zone Change, a Zoning Variance, or a General Plan Amendment. No mitigation is required.

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

No Impact. The project site and the surrounding areas are not subject to any HCP or NCCP. Therefore, the proposed project would not conflict with any HCP or NCCP relating to land use planning. No mitigation is required.

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4.11 MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
(b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Impact Analysis:

(a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

No Impact. In 1975, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA) which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State of California Mining and Geology Board as being "regionally significant." Such designations require that a Lead Agency's land use decisions involving designated areas are to be made in accordance with its mineral resource management policies and that it consider the importance of the mineral resource to the region or the State as a whole, not just to the Lead Agency's jurisdiction.

The project site has been classified by the California Department of Mines and Geology (CDMG) as MRZ-3, indicating that the project site is in an area containing mineral deposits for which the significance cannot be determined using available data. While the project site is

located in MRZ-3, there are no known mineral resources on the project site, nor is the project site designated or zoned for the extraction of mineral deposits.

According to the City's General Plan Conservation Element (1973), the primary mineral resources within the City have historically been oil and natural gas. However, over the last century, oil and natural gas extractions have been diminished as the resources have become increasingly depleted. Although extraction operations continue, they are on a reduced scale compared to past levels. Additionally, according to Plate 3, Soil Profiles, of the City's General Plan Seismic Safety Element (1988) and the Geotechnical Report (AESCO; May 2017), soils on the project site predominantly consist of Artificial Fill and soils of unknown origins, which are not considered mineral resources of value.

The proposed project site does not contain oil extraction operations and has no other known mineral resources. Therefore, because no known mineral resources are present on the project site, the project would not result in the loss of a known commercially valuable mineral resource that would be of value to the region and the residents of the State. Therefore, the proposed project would not result in impacts related to the loss of availability of a known mineral resource that would be of value to the region and residents of the State, and no mitigation is required.

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

No Impact. As discussed in Response 4.11(a), no known valuable mineral resources exist on or near the project site, and no mineral resource extraction activities occur on the site. In addition, the project site is not located within an area known to contain locally important mineral resources. Therefore, no impacts related to the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan would occur as a result of project implementation, and no mitigation is required.

4.12 NOISE

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
(b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
(c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
(d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
(f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:

The following section is based on noise modeling and analysis conducted by LSA (June 2017) for the proposed project. The discussion and analysis provided in this section describes the potential short-term construction noise and vibration impacts associated with the proposed project, as well as long-term operational noise impacts.

The following provides an overview of the characteristics of sound and the regulatory framework that applies to noise and vibration impacts to sensitive receptors in the vicinity of the project site.

Characteristics of Sound. Sound is increasing to such disagreeable levels in the environment that it can threaten quality of life. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone's range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment and is measured by the amplitude

of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

Measurement of Sound. Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units (e.g., inches or pounds) decibels are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 decibels (dB) is 10 times more intense than 1 dB, 20 dB is 100 times more intense than 1 dB, and 30 dB is 1,000 times more intense than 1 dB. Thirty decibels (30 dB) represents 1,000 times as much acoustic energy as 1 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source (e.g., highway traffic or railroad operations) the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source (noise in a relatively flat environment with absorptive vegetation) decreases 4.5 dB for each doubling of distance.

There are many metrics used to rate potential noise impacts. First, the determination of the source type is made, stationary or non-stationary. For the purposes of noise analyses, non-stationary sources include roadway traffic as well as train and aircraft operations which are often governed by criteria presented in the jurisdiction's Noise Element of the General Plan. For all stationary sources, which also includes mobile noise sources located within specific property boundaries, the appropriate noise criteria are often contained in the local jurisdiction's Municipal Code.

The base metric for assessing noise level impacts is the equivalent continuous sound level (L_{eq}) which calculates the total sound energy of time-varying noise over a sample period. For stationary sources that operate intermittently within an hour, percentile noise levels are used for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same. Should a source operate for a period of less than one minute or creates impact noise the

maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period, is utilized. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak operating conditions and addresses the annoying aspects of intermittent noise as well as the appropriate percentile noise level criteria.

To assess non-stationary noise sources, the predominant rating scales for human communities in the State of California are the Community Noise Equivalent Level (CNEL) and the day-night average noise level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours), and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The City uses the CNEL noise scale for long-term traffic noise impact assessment.

Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Physiological Effects of Noise. Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear (the threshold of pain). A sound level of 160–165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less developed area.

Applicable Noise and Vibration Standards. The City of Long Beach regulates construction noise based on the criteria presented in the Municipal Code Noise Ordinance. Section 8.80.202 of the City Municipal Code provides the following applicable regulations related to construction noise:

A. Weekdays and Federal Holidays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of seven p.m. and seven a.m. the

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

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

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

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

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

Additionally, Section 8.80.200G of the City's Municipal Code provides the following direction regarding vibration impacts:

> "Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at one hundred fifty feet (150') (forty-six (46) meters) from the source if on a public space or public right-of-way. For the purposes of this subsection, "vibration perception threshold" means the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such directed means as, but not limited to, sensation by touch or visual observation of moving objects."

Sections 8.80.150 through 8.80.170 of the City's Municipal Code provide exterior and interior noise standards which are presented in Tables 4.12.A, Exterior Noise Limits, L_n (dBA), and 4.12.B, Interior Sound Levels L_n (dBA), respectively, for various land uses. For exterior noise limits, the L_{50} criterion, which represents all sources operating for a period of 30 minutes to an hour as well as the L_{25}, L_8, L_2, and L_{max} criteria are presented. For interior noise impact assessment, the L_8, L_2, and L_{max} criteria are utilized. In the event that alleged offensive noise contains a steady audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting or contains music or speech conveying informational content, the standard limits set forth in the tables below shall be reduced by 5 decibels.

Table 4.12.A: Exterior Noise Limits, L_N (dBA)

Receiving Land Use	Time Period	L_{50}	L_{25}	L_8	L_2	L_{max}
Residential (District One)	Night: 10:00 PM–7:00 AM	45	50	55	60	65
	Day: 7:00 AM–10:00 PM	50	55	60	65	70
Commercial (District Two)	Night: 10:00 PM–7:00 AM	55	60	65	70	75
	Day: 7:00 AM–10:00 PM	60	65	70	75	80
Industrial (District Three)	Anytime[1]	65	70	75	80	85
Industrial (District Four)	Anytime[1]	70	75	80	85	90

Source: City of Long Beach Municipal Code.
[1] For use at boundaries rather than for noise control within industrial districts.
dBA = A-weighted decibels
L_{max} = maximum sound level
L_N = percentile noise exceedance level
L_{50} = noise level representing the median noise level; half the time, the noise level exceeds this level, and half the time, it is less than this level
L_{25} = the noise level exceeded 25 percent of the time during a stated period
L_8 = the noise level exceeded 8 percent of the time during a stated period
L_2 = the noise level exceeded 2 percent of the time during a stated period

Table 4.12.B: Interior Sound Levels, L_N (dBA)

Receiving Land Use	Time Interval	L_8	L_2	L_{max}
Residential	10:00 PM–7:00 AM	35	40	45
	7:00 AM–10:00 PM	45	50	55
School	7:00 AM–10:00 PM (while school is in session)	45	50	55
Hospital and other noise-sensitive zones	Anytime	40	45	50

Source: City of Long Beach Municipal Code.
dBA = A-weighted decibels
L_{max} = maximum sound level
L_N = percentile noise exceedance level
L_8 = the noise level exceeded 8 percent of the time during a stated period
L_2 = the noise level exceeded 2 percent of the time during a stated period

Thresholds of Significance

A project would normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and the goals of the community in which the project is located. The applicable noise standards governing the project site are the criteria in the City's Noise Ordinance. Typically, compliance with the City's Municipal Code is used to determine when a project results in a significant impact.

Sensitive Land Uses in the Project Vicinity

The project site is located directly north and west of Alamitos Beach and northeast of Marina Green Park. The nearest sensitive receptors include the beach and park areas located within 50 ft of the project site as well as the high-rise multifamily residences located approximately 310 ft north of the project site.

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

Less Than Significant Impact with Mitigation Incorporated.

Construction Noise Impacts. Short-term noise impacts would occur during demolition and construction of the proposed project. Construction-related, short-term noise levels would be higher than existing ambient noise levels in the study area, but would cease once project construction is completed.

Two types of short-term noise impacts could occur during project construction. First, construction crew commutes and the transport of construction equipment and materials to the project site would incrementally increase noise levels on roads accessing the project site. Shoreline Drive and Ocean Boulevard would be used to access the project site. Although there would be a relatively high single-event noise exposure potential from truck pass-bys, 84 dBA L_{max} at 50 ft as shown in Table 4.12.C, Typical Maximum Construction Equipment Noise Levels (L_{max}), the effect on longer-term (hourly or daily) ambient noise levels would be small when compared to existing hourly and daily traffic volumes on Shoreline Drive and Ocean Boulevard. Since construction-related vehicle trips would not approach hourly and daily traffic volumes mentioned above, traffic noise would not increase by 3 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term construction-related worker commutes and equipment transport noise impacts would be less than significant.

The second type of short-term noise impact is related to noise generated during project construction. Construction is conducted in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics and the character of the noise generated on site. Therefore, the noise levels will vary as construction progresses. Despite the variety in the types and sizes of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 4.12.C lists the maximum noise levels for noise impact assessments for typical construction equipment based on a distance of 50 ft between the equipment and a noise receptor.

Typical maximum noise levels range up to 85 dBA L_{max} at 50 ft during the noisiest construction phases. Site preparation, which includes excavation and grading, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes graders, excavators, bulldozers, backhoes and front loaders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed project is expected to require on-site use of front-end loaders, bulldozers, and graders. Noise associated with the use of construction equipment is estimated to be between 80 and 85 dBA L_{max} at a distance of 50 ft from the active construction area during

Table 4.12.C: Typical Maximum Construction Equipment Noise Levels (L_{max})

Type of Equipment	Acoustical Usage Factor	Suggested Maximum Sound Levels for Analysis (dBA L_{max} at 50 ft)
Air Compressor	40	80
Backhoe	40	80
Cement Mixer	50	80
Concrete/Industrial Saw	20	90
Crane	16	85
Dozer	40	85
Excavator	40	85
Forklift	40	85
Generator	50	82
Grader	40	85
Front-End Loader	40	80
Paver	50	85
Roller	20	85
Rubber Tire Dozer	40	85
Scraper	40	85
Tractor	40	84
Truck	40	84
Welder	40	73

Source: Federal Highway Administration. 2006. *Roadway Construction Noise Model.*
dBA = A-weighted decibel
ft = foot/feet
L_{max} = maximum noise level

grading. As shown in Table 4.12.C, the maximum noise level generated by each bulldozer is assumed to be approximately 85 dBA L_{max} at 50 ft from the bulldozer. Each front-end loader would generate approximately 80 dBA L_{max} at 50 ft. The maximum noise level generated by each grader is approximately 85 dBA L_{max} at 50 ft from the grader. Each doubling of the sound source with equal strength increases the noise level by 3 dBA. Each piece of construction equipment operates as an individual point source. For example, two of the same pieces of construction equipment operating at the same location and generating a noise level of 85 dBA L_{max} at a distance of 50 ft would result in a noise level of 88 dBA L_{max} (85 dBA + 85 dBA = 88 dBA). Therefore, the worst-case composite noise level at a distance of 50 ft from the active construction area would be 89 dBA L_{max} (85 dBA +80 dBA + 85 dBA = 89 dBA).

The closest areas to the proposed project site are the Alamitos Beach and the Marina Green Park, which are located within 50 ft of the project site; however, these uses are considered active areas and not traditionally noise-sensitive. The nearest noise-sensitive receptors in the vicinity of the project site are the high-rise multifamily residences located approximately 310 ft north of the project site boundary.

In general, doubling the distance would decrease noise levels by 6 dBA while halving the distance would increase noise levels by 6 dBA. The residential uses located approximately 310 ft

from the project site may be subject to short-term construction exterior noise levels that may reach up to 73 dBA L_{max}. With windows and doors closed, interior noise levels at the closest residential uses would reach up to 49 dBA L_{max} (exterior noise level of 73 dBA minus the building construction reduction of 24 dBA). With windows and doors opened, interior noise levels at these residential uses would reach up to 61 dBA L_{max} (73 dBA – 12 dBA = 61 dBA).

Compliance with the City's Noise Ordinance would ensure that construction noise would limit the disturbance to the beach and park users, as well as to the residential users during the times they are most likely to be home or during hours when ambient noise levels are likely to be lower (i.e., at night). Although construction noise would be higher than the ambient noise in the project vicinity, construction noise would cease to occur once project construction is complete. Mitigation Measure NOI-1 would limit construction hours and require the implementation of noise-reducing measures during construction. Therefore, with implementation of mitigation, construction activity noise impacts would be less than significant.

Operational Impacts. Potential long-term noise impacts associated with project operations would include human activity, such as talking at the outdoor seating area of the concession stand, landscape maintenance activities, play space activities, heating, ventilation, and air conditioning (HVAC) equipment operations, a speaker to call out food orders, and occasional live music on the rooftop of the concession stand.

Noise levels generated from human activity from the outdoor eating area and landscaping maintenance activities would be similar to existing noise levels or incrementally higher and would not be considered substantial. Therefore, the noise levels generated from human activity and landscaping maintenance activities would be less than significant.

Below is a detailed discussion on noise impacts generated from traffic noise, the play space, HVAC equipment, speaker used for food orders, and rooftop speakers.

***Traffic Noise*.** The proposed project would not generate a significant number of new daily traffic trips to the project site because it consists of the rebuilding of an existing concession stand intended to serve existing beach residents and patrons. The threshold for noise normally perceptible by the human ear in an outdoor environment is 3 dBA. As a rule of thumb, it takes a doubling of noise-generating sources, in this case vehicles, to result in an increase of 3 dBA. Operations associated with the proposed project are not anticipated to lead to a substantial increase or doubling in the number of vehicles at the project site. Therefore, the long-term noise levels associated with increased traffic are not anticipated to be significant as a result of the proposed project, and would have a less than significant impact.

***Play Space Noise*.** Noise levels generated from play space noise are regulated by Section 8.80.130 of the City Municipal Code, which prohibits people from generating loud and unnecessary or unusual noise that disturbs the peace and quiet of any neighborhood or which causes any discomfort or annoyance to any reasonable person of normal sensitivity residing in the area. Excessive noise levels generated from the proposed play space would

be handled by the Long Beach Police Department on a case-by-case basis. In addition, activities that would occur at the proposed play space would be similar to the activities of the existing and surrounding beach and park areas and associated noise levels are, therefore, considered less than significant.

***HVAC Noise*.** Rooftop HVAC units, included as part of the proposed project, typically would generate noise levels that range from 75 to 82 dBA L_{eq} at 3 ft based on reference noise measurements (Trane 2002). This noise level would equate to 41 dBA L_{max} at 350 ft, the distance from the proposed concession stand to the multifamily residences. This noise level assumes no noise attenuation from enclosures or the roof line.

Additionally, the American Society of Heating, Refrigeration and Air Conditioning Engineers Code of Recommended Practices and the City's Municipal Code Section 8.80.200(N) include standards restricting HVAC units from exceeding noise levels of 55 dBA at any point on a neighboring property line, and 50 dBA outside the neighboring living area window nearest the equipment location. Mitigation Measure NOI-2 would require that during final design of the proposed project, the operator/tenant of the proposed project shall obtain from an acoustical consultant, a memorandum confirming that the HVAC equipment would comply with the Municipal Code standards. With the implementation of Mitigation Measure NOI-2, noise levels generated by the HVAC equipment would be less than significant.

***Public Announcement Speaker and Live Music*.** The proposed project includes a public announcement (PA) speaker to call out food orders from the concession stand. The potential noise impacts from operation of the Public Announcement (PA) speaker are heavily dependent on the volume setting and directionality of the speaker. .

The maximum noise level requirements in this section take into account the City's Noise Ordinance which specifies "if the subject noise includes music or speech conveying information, the applicable noise standard is reduced by 5 dBA". Noise levels generated from the PA system would be required to limit maximum noise levels to 87 dBA L_{max} and 82 dBA L_{max} at a distance of 25 ft in order to remain in compliance with the City's exterior daytime and nighttime L_{max} noise standards, respectively, at a distance of 350 ft at the nearest residence. Mitigation Measure NOI-3 would require that prior to the opening on the concession stand, the owner/operator obtain a memorandum from an acoustical consultant to determine, through noise monitoring, that compliance with the Municipal Code for both daytime and nighttime hours is being achieved. If it is discovered that noise level impacts exceed the City's exterior noise level requirements, additional mitigation would be recommended by an acoustical engineer, which may include, but not be limited to, speaker noise level restriction and additional noise barriers. With the implementation of Mitigation Measure NOI-3, noise levels generated by the PA speaker would be less than significant.

In addition to the PA speaker, the project proposes to have live music events on the concession stand rooftop. Noise levels generated from the sound system used for live music would also be required to limit hourly noise levels to 67 dBA L_{eq} and 62 dBA L_{eq} at a distance of 25 ft in order to remain in compliance with the City's exterior daytime and nighttime L_{eq}

standards, respectively, at a distance of 350 ft at the nearest residence. Based on the current plans for the project, a plexi-glass roof-top perimeter barrier is proposed to be constructed which has the potential to greatly reduce noise levels if the speaker height remains below the top of barrier. Mitigation Measure NOI-4 requires that due to the varying noise levels that may be generated by on-site events and due to the number of instruments being used, types of music, and, most importantly, speaker volume, it is recommended that during the first three events that utilize amplified speakers and that are representative of a typical event, noise monitoring be completed such that compliance with the City's Noise Ordinance be determined. If it is discovered that noise level impacts exceed the City's exterior noise level requirements, additional mitigation would be recommended by an acoustical engineer, which may include, but would not be limited to, speaker noise level restriction and additional noise barriers.

Mitigation Measure:

The following measures would reduce short-term, construction-related noise impacts resulting from the proposed project to a less than significant level.

NOI-1 **Construction Noise.** Prior to issuance of building permits, the City of Long Beach (City), or its designee, (or its contractor), shall verify that grading and construction plans include the following requirements to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved:

- Construction activities occurring as part of the project shall be subject to the limitations and requirements of the City Municipal Code, which states that construction activities shall occur only between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and federal holidays, and from 9:00 a.m. to 6:00 p.m. on Saturdays. No outdoor noise-generating construction activity is allowed on Sundays.
- During all project area excavation and on-site grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project area.
- Construction staging areas shall be located as far away from sensitive receptors as possible during all phases of construction.

Mitigation Measures:

The following measures would reduce long-term, operational noise impacts resulting from the proposed project to a less than significant level.

NOI-2 **HVAC Noise.** Prior to issuance of an occupancy permit, the City Director of Development Services, or designee, shall verify that the operator/tenant of the proposed project has obtained from an acoustical consultant, a memorandum confirming that the heating, ventilation, and air conditioning (HVAC) equipment would comply with the Municipal Code standards.

NOI-3 **PA Speaker Noise.** Prior to issuance of an occupancy permit, the City Director of Development Services, or designee, shall verify that an acoustical engineer has verified that operation of the Public Announcement (PA) speaker is in compliance with the City's exterior maximum noise standards at the surrounding sensitive land uses. Measures capable of reducing the noise levels include, but are not limited to:

- Reducing the source levels;
- Directing the speakers away from adjacent noise-sensitive land uses; and
- Using highly directional speakers.

NOI-4 **Speaker System Noise.** Prior to issuance of an occupancy permit, the City Director of Development Services, or designee, shall verify that an acoustical engineer has verified that operation of the live music speaker system is in compliance with the City's exterior maximum noise standards at the surrounding sensitive land uses. Due to the varying noise levels that may be generated by on-site events and due to the number of instruments being used, types of music, and most importantly, speaker volume, it is recommended that during the first three events that utilize amplified speakers and that are representative of a typical event, noise monitoring be completed such that compliance with the City's Noise Ordinance can be determined. If it is discovered that noise level impacts exceed the City's exterior noise level requirements, additional mitigation would be recommended by an acoustical engineer that may include, but would not be limited to, speaker noise level restriction and additional noise barriers.

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

Less Than Significant Impact with Mitigation Incorporated.

Temporary Impacts. Vibration generated by construction equipment can result in varying degrees of ground vibration, depending on the equipment. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings near an active construction area may experience these vibrations, which range from imperceptible, low rumbling sounds to perceptible vibrations to, in extreme cases, noticeable vibration levels. Typically, construction-related vibration does not reach vibration levels that would result in damage to nearby structures.

The Caltrans *Transportation and Construction Vibration Guidance Manual* (September 2013) shows that the vibration damage threshold for continuous/frequent intermittent sources is 0.10 peak-particle velocity (PPV) (inches per second [in/sec]) for fragile buildings, 0.25 PPV (in/sec) for historic and some old buildings, 0.3 PPV (in/sec) for older residential structures, and 0.5 PPV for new residential structures. The manual shows the vibration annoyance potential criteria to be barely perceptible at 0.01 PPV (in/sec), distinctly perceptible at 0.04 PPV (in/sec), and strongly perceptible at 0.10 PPV (in/sec) for continuous/frequent intermittent sources. These thresholds were used to evaluate the potential for short-term, construction-related, ground-borne vibration impacts during construction of the proposed project.

Bulldozers and trucks used for construction of the proposed project would generate the highest ground-borne vibration levels. Based on the Caltrans *Transportation and Construction Vibration Guidance Manual*, a large bulldozer and loaded trucks would generate vibration levels of 0.089 PPV (in/sec) and 0.076 PPV (in/sec), respectively, when measured at 25 ft. Other construction equipment and activities would generate vibration levels much lower than those of bulldozers and loaded trucks and would, therefore, result in lower vibration levels. Based on the worst-case condition, the closest building from the project boundary (the high-rise multifamily residential building located approximately 310 ft to the north of the project site), would experience vibration levels of up to 0.006 PPV (in/sec). This vibration level would be barely perceptible and well below the damage threshold for new and older residential buildings.

People using the sandy beach located approximately 50 ft from the project boundary would experience vibration levels of up to 0.04 PPV (in/sec). This vibration level could be distinctly perceptible and could result in annoyance from people using the beach and park when users are in close proximity to the active construction area. There are no building structures in this area. Short-term construction impacts related to ground-borne vibration or ground-borne noise would be temporary in nature and would cease upon construction. Mitigation Measure NOI-5 would require the Construction Contractor to post information associated with potential vibration impacts during construction. Therefore, with implementation of mitigation, construction activity vibration impacts would be less than significant with mitigation.

Mitigation Measure:

The following measure would reduce short-term, temporary vibration impacts resulting from the proposed project to a less than significant level.

NOI-5 **Construction Vibration.** Prior to the commencement of any construction activities, the City Director of Development Services, or designee, shall verify that the operator/tenant of the proposed project has agreed to post signs at the project site notifying surrounding receptors that vibration from construction activities may be perceptible within 50 feet.

Operational Impacts. Due to the proposed nature of the concession stand project, operation of the proposed project would not generate ground-borne noise or vibration. Therefore, no ground-borne noise and ground-borne vibration impacts would occur, and no mitigation is required.

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

Less Than Significant Impact with Mitigation Incorporated. As previously stated, the proposed project would generate a nominal increase in traffic noise because the increase in trips would be minimal as the proposed project is the rebuilding of an existing concession stand which already serves existing beach residents and patrons.

Potential long-term permanent noise impacts associated with project operations would include human activity, such as talking at the outdoor seating areas and on the roof deck, play space noise, HVAC noise, and landscaping maintenance activities. Noise generated from human activities and landscaping maintenance activities would be similar to the existing condition or incrementally higher and considered less than significant.

As discussed above in Response 4.12(a), operational noise from the PA/sound system or the HVAC system could result in exceedances of the exterior and interior noise standards at nearby sensitive receptors. However, with implementation of Mitigation Measures NOI-2 and NOI-3, interior and exterior noise levels generated by the PA/sound system and the HVAC system would be less than significant.

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

Less Than Significant With Mitigation Incorporated. Refer to Response 4.12(a) above. Compliance with construction hours specified in the City's Municipal Code and required in Mitigation Measure NOI-1 would ensure that potential short-term increases in ambient noise levels due to construction activities would be reduced to a less than significant level.

(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 within an airport land use plan. The closest airport to the project site is the Long Beach Municipal Airport, which is located approximately 4 miles

northeast from the project site. Furthermore, the proposed project would be located outside of the 65 dBA impact zone associated with the Long Beach Municipal Airport. Therefore, people working at or visiting the concession stand would not be exposed to excessive noise levels generated by the airport, and no impacts would occur.

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

No Impact. The proposed project is not located in the vicinity of a private airstrip and the proposed project would be located outside of the 65 dBA impact zone associated with the Long Beach Municipal Airport. Therefore, people working at or visiting the concession stand would not be exposed to excessive noise levels generated by private airstrips and no impacts would occur.

4.13 POPULATION AND HOUSING

Would the project:

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

Impact Analysis:

(a) Would the project 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)?

No Impact. The proposed project would redevelop the project site with an improved concession stand/café and recreational/open spaces uses. The proposed project does not include the construction of any new residences and is intended for use by the existing population. Furthermore, the proposed project would not generate a substantial number of new jobs. Therefore, the project would not result in growth-inducing impacts, and no mitigation is required.

(b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would redevelop the project site with an improved concession stand/café and recreational/open spaces uses. There is no housing currently present on the project site. Consequently, housing displacement would not occur as a result of project implementation. Therefore, the proposed project would not result in an impact to the displacement of housing, and no mitigation is required.

(c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would redevelop the project site with an improved concession stand/café and recreational/open spaces uses. There are currently no structures or housing units located on the project site. Therefore, no people would be displaced as a result of project implementation and no mitigation is required.

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4.14 PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project result in substantial adverse physical impacts associated with the provision of or 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:				
(i) Fire Protection?	☐	☐	☒	☐
(ii) Police Protection?	☐	☐	☒	☐
(iii) Schools?	☐	☐	☐	☒
(iv) Parks?	☐	☐	☒	☐
(v) Other public facilities?	☐	☐	☒	☐

Impact Analysis:

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

Less Than Significant Impact. Fire protection services would be provided to the proposed project by the Long Beach Fire Department (LBFD). The LBFD provides fire protection, emergency medical and rescue services, hazardous inspection and response, and public education activities to the City's approximately 469,000 residents. Currently, the LBFD has a total of 23 stations in the City.[1] The closest fire stations to the project site are Fire Station No. 1, located at 100 Magnolia Avenue (approximately 1.5 miles northwest of the site), and Fire Station No. 2, located at 1645 E. 3rd Street (approximately 1.5 miles northeast of the site). Currently, LBFD has 527 full-time equivalent uniformed and civilian personnel budgeted.[2]

The LBFD is divided into four primary bureaus: Operations, Fire Prevention, Support Services, and Administration. The Fire Prevention Bureau is responsible for preventing fires, fire code enforcement, plan check, investigations and arson prosecution, records management, and community services and education. The Support Service Bureau consists of the Emergency Medical Services (EMS) Division and Training Division, and also oversees information technology, communications, fire fleet, and apparatus management. The Operations Bureau is responsible for managing the following: daily field operations in Districts 1, 2, and 3, including fire

1 Long Beach Fire Department (LBFD). Station Locations. Website: http://www.longbeach.gov/fire/station-locations/ (accessed April 17, 2017).

2 LBFD. Welcome. Website: http://www.longbeach.gov/fire/ (accessed June 14, 2017).

suppression, personnel management, and fire/non-fire response activities; Special Operations, which consists of Airport, Port, Fireboats, Urban Search and Rescue, Hazardous Materials, Strike Team/Mutual Aid, and Terrorism/Weapons of Mass Destruction Operations; and the Marine Safety and Lifeguard Division, which is responsible for ensuring the safe and lawful use of beaches, oceanfront property, waterways, and marinas in the City. Lastly, the Administration Bureau is responsible for the fiscal management of the LBFD.

According to the City's 2016 Adopted Budget, in Fiscal Year 2015, the LBFD responded to over 58,000 calls for service. Approximately 85 percent were related to medical emergencies, which totaled approximately 47,400 emergency responses. The LBFD's current response time goal is no more than 6 minutes, 20 seconds, or less, 90 percent of the time for firefighting and emergency services. However, the actual response rate within the response time goal was projected to be 86 percent. As such, the LBFD is not currently meeting its current response time goals. As discussed in Section 4.16, Transportation/Traffic, the proposed project would not result in a substantial increase in traffic congestion or significant impacts at local intersections that would delay emergency vehicles.

Although the project site is located within a Critical Fire Zone[1] according to the Fire Hazards Area Map in the City's General Plan Public Safety Element (1975), the site is not located within a Special Fire Protection Area or Fire Hazard Severity Zone on the Statewide Cal Fire Map for the Los Angeles Region.[2] Furthermore, the site is located adjacent to Alamitos Beach and the shoreline and is not adjacent to vegetation that could produce wildfires.

Emergency access to the project site would be provided by Beach Access Road via East Shoreline Drive. In addition, the proposed project would comply with all Fire Code requirements and the proposed site plan would require approval by the LBFD prior to project implementation. The proposed project would not impair emergency response vehicles, increase times response times, and would not substantially increase calls for service. As such, the response profile for the area would not be significantly impacted in terms of service delivery, staffing requirements, facilities, and equipment following project implementation.

Although the proposed project would replace and expand the existing concession stand, the project is intended to serve existing visitors to the Alamitos Beach area and would not significantly increase visitors to the site. Consequently, LBFD would be able to maintain current levels of service provided to the project site following project implementation. Therefore, the proposed project would result in less than significant impacts to fire protection services and would not necessitate new fire protection facilities. No mitigation is required.

(a) (ii) Would the project result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of

1 Critical Fire Zones are defined in the Public Safety Element of the City's General Plan as areas with high-rise development, shopping centers, hospitals, dense hazard concentrations (tenements), public assembly uses, hazardous industrial activities, storage warehouses, and inaccessible properties.

2 California Department of Forestry and Fire Protection. Website: http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/los_angeles/Los_Angeles.pdf (accessed May 2, 2017).

which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

Less Than Significant Impact. Police protection and law enforcement services are provided to the City by the Long Beach Police Department (LBPD). The LBPD is currently divided into four primary patrol bureaus — the East, West, North, and South Divisions.[1] Although the East Patrol Division's substation serves as the headquarters for the LBPD, the project site is serviced by the South Division located at 400 W. Broadway, approximately 1.2 miles west of the site.

According to the City's 2016 Adopted Budget, in Fiscal Year 2015, officer responses to calls for service was projected to be approximately 600,000, which is higher than in previous years. The LBPD attributes this increase in calls for service to their community outreach efforts that encourage citizens to report suspicious activities more frequently. In addition, the LBPD responded to Priority 1 calls (related to life-threatening emergencies) with an average response time of 4.9 minutes. The LBFD's current response time goal is no more than 5.0 minutes. As such, the LBPD is currently meeting its current response time goals.

Although the proposed project includes replacement and expansion of the existing concession stand on the project site, the project is intended to serve existing visitors to the Alamitos Beach area. Consequently, the project would not significantly increase visitors on the site that would result in an increased demand for police services. Additionally, given the size of the proposed project and the nature of the proposed uses, the proposed project would result in less than significant impacts related to policing demand or necessitate the need for new police facilities. No mitigation is required.

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

No Impact. The City is served by the Long Beach Unified School District (LBUSD). Approximately 75,000 students from preschool to high school are currently enrolled in one of LBUSD's 84 public schools. The LBUSD currently operates schools located within the City of Long Beach, as well as schools located in the Cities of Lakewood, Signal Hill, and Avalon (on Catalina Island). More than 12,000 full-time and part-time employees work at the school district, making it the largest employer in Long Beach.[2]

The proposed project does not include any residential uses or business uses that would increase population growth, generate an increased demand for school facilities, or require the construction of school facilities. Therefore, the project would not result in increases for or other

1 Long Beach Police Department (LBPD). Patrol Bureau. Website: http://www.longbeach.gov/police/about-the-lbpd/bureaus/patrol-bureau/patrol-bureau/ (accessed April 17, 2017).

2 Long Beach Unified School District (LBUSD). About. Website: http://www.lbusd.k12.ca.us/District/ (accessed June 22, 2017).

effects on public school services in this part of the City of Long Beach, and no mitigation is required.

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

Less than Significant Impact. The Long Beach Parks, Recreation, and Marine Department (LBPRM) oversees the operation and maintenance of public recreational facilities within the City, including parks, community centers, marinas, golf courses, and swimming pools. LBPRM is comprised of five bureaus: Animal Care Services, Business Operations, Community Recreation Services, Marine, and Maintenance Operations. The Marina Green, an 11-acre park that runs parallel to East Shoreline Drive, is immediately adjacent to the existing concession stand.

According to the City's Draft General Plan Urban Design Element (2017), the City has over 100 parks and more than 2,750 acres of recreational space. A portion of the proposed project is located on the northern end of the Marina Green. The portion of the project that would be developed on the Marina Green would be a recreational play area and would serve to offset the loss of passive open space provided by the Marina Green. Therefore, the proposed project would result in less than significant adverse impacts related to park facilities and would not necessitate the need for new park facilities. No mitigation is required.

(a) (v) Would the project result in substantial adverse physical impacts associated with the provision of or 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 other public facilities?

Less than Significant Impact. The Long Beach Public Library (LBPL) system is comprised of the Main Library and 11 branches, which collectively house over 800,000 volumes.[1] The Main Library was constructed in 1977 and is located at 101 Pacific Avenue, approximately 1 mile from the project site. Amenities include a Family Learning Center, an auditorium, community meeting spaces, and public-use computers. Due to its proximity, the Main Library would be the primary facility that would service the project site.

The proposed project would not develop the site with any residential uses and as such, would not result in population growth that would generate an increased demand for public facilities such as libraries. While it is possible that visitors to the project site may be drawn to local library facilities when in the area, the impact will not significantly affect LBPL system performance, and would not require the expansion of libraries within the City. Therefore, the proposed project would have a less than significant impact on other public facilities (e.g., libraries, City staff), and no mitigation is required.

[1] Long Beach Public Library (LBPL). Facts and Figures. Website: http://www.lbpl.org/info/about/facts_and_figures.asp (accessed February 1, 2017).

4.15 RECREATION

Would the project:

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

Impact Analysis:

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

Less Than Significant Impact. The proposed project involves the redevelopment of the existing Alamitos Beach concession stand. The purpose of the proposed project is to expand and improve the existing concession stand, provide a new building for the rental of recreational equipment, and provide restroom facilities for use by visitors to the site and the Alamitos Beach area. As stated in Section 4.14, Public Services, the Marina Green is an 11-acre park that runs parallel to East Shoreline Drive, located immediately adjacent to the existing concession stand. A portion of the proposed project would be located on the northern end of the Marina Green, which would include a recreational play area and would serve to offset the loss of passive open space by the remainder of the project.

Although the project may result in the increased use of the concession stand/café and play area as compared to existing conditions, the project would improve the overall character and quality of recreational facilities on the site and surrounding area. Additionally, it is not anticipated that the increase in visitors would result in substantial or accelerated physical deterioration of the park facilities. Furthermore, the proposed project would not develop the site with residential or business uses that would increase population or employment growth that could result in the accelerated use of existing recreational facilities within the project vicinity. Therefore, the proposed project would result in less than significant impacts related to the increased use and subsequent deterioration of recreational facilities, and no mitigation 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?

Less Than Significant Impact. Development of the proposed project could result in potentially significant physical impacts to the environment. However, there is no identifiable physical

impact to the environment that is unique to recreation resources. Rather, potential impacts relate to separate environmental topics that are discussed throughout this IS/MND. For example, the proposed project could result in impacts associated with construction air quality and GHG emissions, which are addressed in separate topical discussions. All potentially significant impacts to the environment can be mitigated to a less than significant level, as described throughout this document. The proposed project is itself a concession stand/café and includes a recreational play area as a primary project component. The proposed project would not require the construction or expansion of other recreational facilities that may have adverse physical effects, and no mitigation is required.

4.16 TRANSPORTATION/TRAFFIC

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with an applicable plan, ordnance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
(b)	Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads and highways?	☐	☐	☒	☐
(c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
(d)	Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
(e)	Result in inadequate emergency access?	☐	☐	☒	☐
(f)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

Discussion:

This section analyzes the circulation impacts that may result due to development of the proposed project. The analysis contained in this section is based on the net new trip generation of the project and the established thresholds for analysis.

Impact Analysis:

(a) Would the project conflict with an applicable plan, ordnance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of

the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. The proposed project involves the redevelopment of a concession stand building. The primary patrons of the concession stand are existing visitors to the Alamitos Beach area. Similarly, the patrons of the proposed equipment rental facility would be the existing visitors to the Alamitos Beach area because the proposed equipment rental facility replaces an equipment rental at the existing concession stand. As such, the proposed project is not anticipated to generate new trips for the sole purpose of accessing the concession stand, equipment rental, and associated play area. However, the project includes a rooftop dining area that could serve to draw new visitors to Alamitos Beach exclusively to visit the rooftop dining area. The trip generation potential of the rooftop dining area was calculated using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, Ninth Edition (2012). As illustrated in Table 4.16.A, Project Trip Generation, below, the rooftop dining area has the potential to generate 216 new trips per day of which 2 new trips would occur during the a.m. peak hour and 18 new trips would occur in the p.m. peak hour.

The City considers Level of Service (LOS) D as the upper limit of satisfactory operations for total intersection operation. Mitigation is required for any signalized intersection where a project's traffic causes an increase in volume to capacity ratio of 0.02 or greater when the intersection is operating at LOS E or F in the baseline condition. Traffic generated by the proposed project is equivalent to approximately 1 percent of the capacity of a travel lane, which has a maximum potential to increase the volume to capacity ratio of an intersection by 0.01. The maximum impact possible from the proposed project is lower than the City's threshold of significance. Therefore, the proposed project would result in a less than significant impact related to conflicts with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. No mitigation is required.

Table 4.16.A: Project Trip Generation

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates (land use code)[1]									
Quality Restaurant (931)		TSF	89.95	0.54	0.27	0.81	5.02	2.47	7.49
Trip Generation									
Rooftop Building plus Dining Deck	2.398	TSF	216	1	1	2	12	6	18
Total Trip Generation			**216**	**1**	**1**	**2**	**12**	**6**	**18**

[1] Trip rates referenced from the ITE *Trip Generation Manual,* Ninth Edition (2012).
ADT = average daily trips
ITE = Institute of Transportation Engineers
TSF = thousand square feet

(b) Would the project 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 and highways?

Less Than Significant Impact. The Los Angeles County Metropolitan Transportation Authority (Metro) adopted the Congestion Management Program (CMP) in 2010. This CMP provides guidelines for analyzing a project's impact to CMP-monitored facilities. The CMP states that the study area is determined by identifying all CMP arterial monitoring intersections where the project will add 50 or more trips during either the a.m. or p.m. peak hours. As previously stated, the proposed project would generate 2 new trips in the a.m. peak hour and 18 new trips in the p.m. peak hour. The project does not meet the established threshold for analyzing CMP facilities. Therefore, the proposed project would result in a less than significant impact related to conflict with an applicable CMP. No mitigation is required.

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

No Impact. The project site is approximately 6 miles southwest of Long Beach Municipal Airport, which is the nearest airport to the project site. The heights of the concession stand (27 ft at its zenith) and supplementary buildings, light standards, and other project features on the site would not be of sufficient height to modify the existing air traffic patterns at the airport. Therefore, the proposed project would not affect aviation traffic levels or otherwise result in substantial aviation-related safety risks. No mitigation is required.

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

Less Than Significant Impact. The proposed project would not result in hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). The proposed additional bicycle lane would reposition an existing sharp curve in the alignment of the existing bicycle path, which would serve to decrease hazardous safety conditions associated with the existing bicycle path. Therefore, the proposed project would result in a less than significant impact related to hazards associated with a design feature, and no mitigation is required.

(e) Would the project result in inadequate emergency access?

Less Than Significant Impact. Emergency access to the project site would be provided by Beach Access Road via Ocean Boulevard. Access to/from the site must be designed to City standards and would be subject to review by the LBFD and the LBPD for compliance with fire and emergency access standards and requirements. Therefore, approval of the project plans would ensure that the proposed project's impact related to emergency access would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. As stated previously, non-motorized access to the project site from the beach is currently provided via the existing pedestrian and bicycle path located directly south of the project site. Pedestrian and bicycle access to/from the project site would be available via public sidewalks and walkways along the beaches and adjacent to the project site. Bicycle access to/from the project site is also available via the adjacent local streets. Long Beach Transit currently operates bus routes on Ocean Boulevard and Alamitos Avenue in the vicinity of the project site. A Metro Blue Line station is located approximately 0.6 mile from the site.

The proposed project also takes into account all modes of transportation. For example, the project would improve the existing bicycle path located south of the site to reduce existing safety hazards associated with the bicycle path and pedestrian path. As a part of the proposed project, a bicycle lane would be added and would reposition a sharp curve in the existing alignment, which currently poses a problem for pedestrian safety. Additionally, the site would continue to be accessible to pedestrians visiting the Alamitos Beach area. Mass transit would not be affected by project implementation. Therefore, the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise degrade the performance or safety of such facilities. Impacts are considered less than significant, and no mitigation would be required.

4.17 TRIBAL CULTURAL RESOURCES

Would the project:

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

Discussion:

This section analyzes the tribal cultural resources impacts that may result due to development of the proposed project. The analysis contained in this section is based on letters received from Native American representatives in response to Assembly Bill 52 (AB 52) consultation efforts. These responses are provided in Appendix I of this MND.

Impact Analysis:

(a) Would the project be 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

(b) Would the project be 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.

The following responses address the thresholds in 4.18(a) and 4.18(b) Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires that Lead Agencies evaluate a project's potential to impact "tribal cultural resources." Such resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources." AB 52 also gives Lead Agencies the discretion to

determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource."

Also per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects.

The City sent letters for the purposes of AB 52 consultation to the following representatives on June 14, 2017:

- Andrew Salas-Gabrieleno Band of Mission Indians-Kizh Nation
- John Tommy Rosas-Tongva Ancestral Tribal Nation
- Rosemary Morillo-Soboba Band of Luiseno Indians
- Anthony Morales-Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Robert Dorame-Gabrieleno Tongva Indians of California Tribal Council
- Linda Candelaria-Gabrieleno-Tongva Tribe
- Sandone Goad-Gabrieleno/Tonga Nation

In an email dated July 14, 2017, Mr. Salas requested consultation. The City responded to Mr. Salas via email on July 17, 2017, asking to schedule a conference call for consultation. The City subsequently consulted with Mr. Salas on July 26, 2017, regarding the proposed project. During this consultation, the City informed Mr. Salas of the project details and Mr. Salas opined that the project would not impact tribal cultural resources. Mr. Salas restated his assertion that the project would not impact tribal cultural resources in an email to City staff on July 26, 2017.

As previously discussed, the property does not meet any of the California Register criteria and the existing buildings on the project site do not qualify as "historical resources" as defined by CEQA. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the *State CEQA Guidelines* or PRC 5020.1(k). Furthermore, the project site is not considered sensitive for archaeological and/or paleontological resources. Therefore, on this basis and as a result of the City's consultation with the Gabrieleno Band of Mission Indians, the City has concluded that the proposed project would result in less than significant impacts to unknown burial tribal cultural resources, and no mitigation would be required.

4.18 UTILITIES/SERVICE SYSTEMS

Would the project:

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

Impact Analysis:

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

Less Than Significant Impact. The proposed project is not a wastewater treatment facility and is not subject to the wastewater treatment requirements of the Los Angeles RWQCB. Local governments and water districts are responsible for complying with federal regulations, both for wastewater plant operation and the collection systems (e.g., sanitary sewers) that convey wastewater to the wastewater treatment facility. Proper operation and maintenance is critical for sewage collection and treatment because impacts from these processes can degrade water resources and affect human health. For these reasons, publicly owned treatment works (POTWs) receive Waste Discharge Requirements (WDRs) to ensure that such wastewater facilities operate in compliance with the water quality regulations set forth by the State. WDRs, issued by the State, establish effluent limits on the kinds and quantities of pollutants that

POTWs can discharge. These permits also contain pollutant monitoring, record-keeping, and reporting requirements. Each POTW that intends to discharge into the nation's waters must obtain a WDR prior to initiating its discharge.

Implementation of the proposed project involves the redevelopment and expansion of the existing concession stand (which includes a restaurant and café) and restrooms. These uses will result in the generation of wastewater. The City of Long Beach is located within the service territory of the Sanitation Districts of Los Angeles County (LACSD). The majority of the City's wastewater is delivered to the Joint Water Pollution Control Plant (JWPCP), and the remaining portion is delivered to the Long Beach Water Reclamation Plant (WRP). The JWPCP has a total permitted capacity of 400 million gallons per day (mgd) of wastewater and treats up to 260 mgd[1]; the WRP currently treats up to 25 mgd.[2] Because JWPCP and WRP are considered POTWs, operational discharge flows treated at these plants would be required to comply with applicable WDRs issued by the Los Angeles RWQCB. Compliance with conditions or permit requirements established by the City as well as WDRs outlined by the Los Angeles RWQCB would ensure that wastewater discharges from the project site and treated by the wastewater treatment facility system would not exceed applicable Los Angeles RWQCB wastewater treatment requirements. In addition, the proposed project is anticipated to generate 3,918 gallons per day (gpd) of wastewater, which is less than 0.01 percent of the available daily treatment capacity at both JWPCP and WRP, respectively.

Although the project facilities will be expanded from the existing use, overall wastewater generation will be similar to current conditions. Therefore, the increased wastewater flows from the proposed project can be accommodated within the existing design capacity of JWPCP and Long Beach WRP and would not result in the facilities exceeding wastewater treatment requirements. Therefore, impacts related to wastewater treatment requirements would be less than significant, and no mitigation is required.

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

Less Than Significant Impact.

Water. Delivery of domestic water service in the City is provided by the Long Beach Water Department (LBWD). The City's two primary sources of water supply are groundwater and imported water. Nearly half of the City's water supply is met due to groundwater wells located throughout and owned by the City. The Long Beach Groundwater Treatment Plant has the capacity to treat up to 62.5 million gpd of groundwater.[3] The other half of the City's water is

1 Sanitation Districts of Los Angeles County (LACSD). Joint Water Pollution Control Plant. Website: http://www.lacsd.org/wastewater /wwfacilities/ jwpcp/ (accessed April 17, 2017).

2 LACSD. Long Beach Water Reclamation Plant. Website: http://www.lacsd.org/wastewater/wwfacilities/joint_outfall_system_wrp/long_beach.asp (accessed April 17, 2017).

3 Long Beach Water Department (LBWD). Groundwater Treatment Plant. Website: http://www.lbwater.org/groundwater-treatment-plant (accessed April 26, 2017).

comprised of treated surface water purchased from the Metropolitan Water District of Southern California (MWD). This surface water originates from the Colorado River Aqueduct and the Northern California Bay-Delta region.[1] Additionally, reclaimed water is treated at the Long Beach WRP and is used for the irrigation of schools, golf courses, parks, and greenbelts. As discussed in Response 4.18(a), the WRP currently has a capacity of 25 mgd.

The City's water supply system provides reliable service to a population of nearly half a million people within the service area. According to the City's 2015 Urban Water Management Plan (UWMP), the total projected water demand for the retail customers served by the City is approximately 55,206 acre-feet (af) annually. The City consumed approximately 59,542 af in 2015, and the projected water demand for 2020 is 59,106 af per year. According to the 2015 UWMP, the City's water supplies are projected to meet full service demands due to projected increases in efficiency and water conservation.

The proposed project would use a total of approximately 4,624 gpd of water for indoor uses.[2] The project site contains existing water services in support of the existing concession stand building, but services will need to be extended to the point of connections at the new building. As stated previously, the proposed project will involve the redevelopment of a concession stand, including a restaurant and café, and restroom facilities. However, the operation of these facilities will not be considerably expanded as compared to existing conditions. Therefore, it is not anticipated that operation of the redevelopment will result in an increase in potable water usage.

The project would also include landscaped areas that would require a new automatic drip irrigation system on the project site. The system would be installed with a programmable weather-smart controller and would be drought-tolerant to achieve maximum water efficiency. Consequently, this increased demand for irrigated water is anticipated to be minimal[3] (295 gpd of outdoor water uses) and would be within the existing service capacity (25 mgd) of the Long Beach WRPs. Therefore, implementation of the proposed project would not require or result in the construction of new or expanded water treatment facilities, and no mitigation would be required.

Wastewater. The LBWD operates and maintains approximately 765 miles of sanitary sewer lines in the City. As stated in Response 4.18(a), LACSD is the primary agency responsible for treatment operations once the wastewater passes through the City's system. The LBWD delivers over 40 million gpd of wastewater to LACSD facilities for treatment.[4]

LACSD is responsible for the collection, treatment, and disposal of domestic, commercial, and industrial wastewater generated by over 5.6 million people living and working in Los Angeles

1 LBWD. Sources of Water. Website: http://www.lbwater.org/sources-water, (accessed April 17, 2017).

2 CalEEMod outputs for the proposed project. August 2017.
1.68765 million gallons per year (mgy) of indoor water uses (the equivalent of 4,919 gpd).

3 CalEEMod outputs for the proposed project. August 2017.
0.107722 mgy of outdoor water uses (equivalent of 295 gpd).

4 LBWD. Sewage Treatment. Website: http://www.lbwater.org/sewage-treatment (accessed June 9, 2017).

County. LACSD facilities would receive wastewater generated from the proposed project. The majority of wastewater generated in the City is treated at LACSD's JWPCP in Carson; treated wastewater is discharged into the Pacific Ocean. The remaining portion of the City's wastewater is delivered to the WRP, located at 7400 E. Willow Street in Long Beach. Treated wastewater from the WRP is used to irrigate various forms of landscape and recharge the groundwater basin. As previously stated, average flows for JWPCP and WRP are 260 million mgd and 25 mgd, respectively. The combined average flow at both plants is 285 mgd.

The project site contains existing sewer services in support of the existing concession stand building, but services will need to be extended to the point of connections at the new building. In addition, with food services being proposed, a grease interceptor would be required prior to waste entering the sanitary sewer system. According to the 2014 Long Beach Sewer System Management Plan (SSMP), facilities where food is prepared and served to the public are required to install and maintain an approved grease interceptor to prevent excessive discharge; total oil and grease in the wastewater discharge is required to be less than 600 milligrams per liter.

The proposed project would generate a total of approximately 4,427 gpd of wastewater[1], which is less than 0.01 percent of the available daily treatment capacity at both the JWPCP and WRP, respectively. Both plants are in compliance with the Los Angeles RWQCB's wastewater treatment requirements and have the capacity to accommodate the increased wastewater flows from the proposed project. Therefore, development of the proposed project would not require, nor would it result in, the construction of new wastewater treatment or collection facilities or expansion of existing facilities other than those facilities to be constructed on site. Project impacts related to the construction of wastewater treatment or collection facilities would be less than significant, and no mitigation would be required.

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

Less than Significant Impact. Within the City of Long Beach Public Works Department, the Stormwater/Environmental Compliance Division is responsible for maintaining the storm drain system and monitoring stormwater quality. Development of the proposed project includes the redevelopment of a concession stand building, which would result in new, expanded facilities. Implementation of the proposed project would increase the impervious surface area on the project site, which would increase runoff from the site. Landscaping included as part of the project would capture stormwater runoff to offset an increase in flow. Additionally, Compliance Measure WQ-3, which requires preparation of a Final LID Plan that details the LID BMPs that would be implemented to capture stormwater runoff and reduce impacts to existing water

[1] Wastewater is generally assumed to be 90 percent of a project's total water demand. The project's total water demand for outdoor and indoor water uses would be 4,949 gpd (4,624 gpd of indoor water uses + 295 of outdoor water uses = 4,919 gpd). Therefore, the project's wastewater demand is anticipated to be 4,427 gpd.

drainage facilities during operation. Therefore, with implementation of Compliance Measure WQ-3, the proposed project would not exceed the capacity of downstream stormwater drainage facilities or cause the expansion of existing facilities. No mitigation is required.

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

Less Than Significant Impact. As previously stated in Response 4.18(b), above, a relatively moderate increase in water use from implementation of the proposed project would result from the irrigation of the proposed landscape areas. The proposed project would not necessitate new or expanded water entitlements, and the City would be able to accommodate the increased demand for potable water. Therefore, incremental water demand increases from the proposed project would be within the LBWD's current and projected water supplies available to serve the project, and would not require new or expanded entitlements. Therefore, impacts related to water supplies would be less than significant, and no mitigation would be required.

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

Less Than Significant Impact. As previously stated in Response 4.18(b), above, the proposed project would increase wastewater demand on site. However, the increased wastewater flows from the proposed project can be accommodated within the existing design capacity of the treatment plants that currently serve the City. Therefore, the wastewater treatment provider would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Therefore, impacts related to wastewater generation are less than significant, and no mitigation would be required.

(f) Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. The Long Beach Public Works Department provides a wide range of services to the City including waste collection, which is administered through the Environmental Services Bureau. Citizens and businesses in the City generate approximately 368,000 tons of solid waste per year. Within the City, collection of solid waste is contracted to EDCO. EDCO collects solid waste, green waste (e.g., grass clippings and tree and shrub clippings), and items for recycling. The City provides two different carts for automated collection of trash, recyclables, and green waste.[1]

Solid waste, excluding recyclables, is collected from residential, commercial, and industrial properties and delivered to the Southeast Resource Recovery Facility (SERRF), located at 120 Pier S Avenue in Long Beach. SERRF is owned by a joint powers authority between LACSD and the City of Long Beach, but is operated by a private company under contract. Solid waste is sent

[1] Environmental Services Bureau. Automated Refuse Collection. Website: http://www.longbeach-recycles.org/refuse_collection/automated_collection.htm (accessed June 9, 2017).

to the facility where it is processed through one of three boilers and incinerated in order to produce electricity. The electricity is used to operate the facility and the remainder is sold to Southern California Edison. Using mass burn technology, the facility reduces the volume of solid waste by about 80 percent, while also recovering about 825 tons of recycled metal per year. SERRF processes and average of 1,290 tons of municipal solid waste per day; it has the capacity to process 1,380 tons of solid waste per day.[1] As a result, SERRF has a remaining capacity to process an additional 90 tons of solid waste per day. Following combustion, ash byproduct is transported to a local landfill where it is used as a road base material. LACSD operates two sanitary landfills, including the Scholl Canyon Landfill and Calabasas Landfill. The Scholl Canyon Landfill at 7721 North Figueroa Street in Los Angeles is the closest LACSD landfill to the project site.

Construction of the proposed project would require the demolition of the existing building and associated foundations. The majority of waste generated during demolition and construction activities would be building materials (e.g., concrete, dirt, and waste generated by construction workers). The generation of construction waste would be temporary, would cease upon construction completion, and would not be substantial. Non-hazardous waste from project construction activities would be recycled to the extent feasible, and where necessary, would be disposed of through SERRF. Section 18.67.020 of the City's Municipal Code stipulates that construction projects valued over $75,000 and all demolition projects are required to divert at least 60 percent of project-related construction and demolition materials. Thus, the proposed project would be required to meet the City's waste diversion requirement. Furthermore, construction waste is anticipated to be minimal compared to waste generated throughout the lifetime of the project during operation.

As described further in Section 4.13. Population and Housing, the proposed project includes the redevelopment of a concession stand that would not result in any increase in population or employment. However, the proposed improvements included as part of the project may result in increased visitors to the site. Specifically, the proposed project would generate a total of approximately 0.17 ton of solid waste per day (64.05 tons per year) during project operation.[2] As stated previously, SERRF has the capacity to process an additional 90 tons of solid waste per day. The incremental increase of solid waste generated by the proposed project would constitute less than 0.01 percent of the remaining daily available capacity at SERRF. Therefore, solid waste generated by the proposed project would not cause the capacity of SERRF to be exceeded. The proposed project would result in a less than significant impact to solid waste and landfill facilities, and no mitigation would be required.

1 LACSD. Southeast Resource Recovery Facility (SERRF) Brochure. Website: http://lacsd.org/solidwaste/swfacilities/rtefac/serrf/brochure.asp (accessed June 9, 2017).

2 CalEEMod output files for the GHG analysis. August 2017. Also note that the solid waste generated by the proposed project does not factor in the solid waste currently generated by the existing café emissions.

(g) Would the project comply with federal, State, and local statutes and regulations related to solid wastes.

Less Than Significant Impact. The California Integrated Waste Management Act (AB 939) changed the focus of solid waste management from landfill to diversion strategies (e.g., source reduction, recycling, and composting). The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. AB 939 established mandatory diversion goals of 25 percent by 1995 and 50 percent by 2000. The City provides curbside recycling for residential, commercial, and industrial uses, which counts toward the City's solid waste diversion rate. In addition, the City collects curbside residential green waste, which also counts toward the City's diversion rate. These efforts, combined with SERRF, have resulted in one of the highest waste diversion rates in the nation. In 2006, the City reported a 69 percent waste diversion rate to the California Integrated Waste Management Board, surpassing the required rate by nearly 20 percent.[1]

As stated in Response 4.17(f), above, the proposed project would be required to meet the City's construction waste diversion requirement (Section 18.67.020 of the Municipal Code). In addition, the proposed project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed project would comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation of the project. Therefore, the proposed project is anticipated to result in less than significant impacts related to potential conflicts with federal, State, and local statutes and regulations related to solid waste, and no mitigation is required.

[1] City of Long Beach. Sustainable Long Beach. Waste Diversion. Website: http://www.longbeach.gov/sustainability/green-urban-services/waste-reduction/ (accessed June 9, 2017).

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4.19 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

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

Impact Analysis:

(a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact with Mitigation Incorporated. The project site is in an urbanized coastal area immediately adjacent to a beach and the Pacific Ocean. While no portion of the project site contains an open body of water, the Pacific Ocean is located directly south of the site and serves as natural habitat in which fish exist. Construction and operation of the project would adhere to Compliance Measures WQ-1 through WQ-4, which require compliance with the Construction General Permit, compliance with the Groundwater Discharge Permit, preparation of a final Low Impact Development Plan, and preparation of a final Hydrology Report. Adherence to the provisions outlined in Compliance Measures WQ-1 through WQ-4 would reduce project impacts with respect to water quality, thereby reducing potential adverse impacts to fish habitats and wildlife in the Pacific Ocean and adjacent bodies of water to a less than significant level.

The disturbed nature of vegetation, soil, and sand on the site, and the site's geographical isolation from native habitat, offers little potential for special-status plant species to occur on the project site. In addition, while special-status animal species could potentially occur in some of the adjacent open space habitat, they are not expected to occur within the project limits due to the high level of recreational users on the beach. Due to the urban nature of the site and the prevalence of nonnative ornamental landscaping, impacts to candidate, sensitive, or special-status plant and animal species would be less than significant. Based on the Project Description and the preceding responses, development of the proposed project does not have the potential to degrade the quality of the natural environment. Implementation of the proposed project would include the relocation of some nonnative landscaping, including mature trees. The proposed project would also include the planting of a variety of drought-tolerant landscaping, shrubs, and grassy areas throughout the site. The existing on-site trees may provide suitable habitat for nesting birds, some of which are protected by the MBTA. Disturbing or destroying active nests that are protected is a violation of the MBTA. In addition, nests and eggs are protected under California Fish and Game Code Section 3503. Adherence to Mitigation Measure BIO-1 would ensure that the project complies with the MBTA. Additionally, Mitigation Measure BIO-1 requires nesting bird surveys if any vegetation or tree removal occurs between January 15 and September 1 to reduce potential project impacts related to migratory birds. With implementation of Mitigation Measure BIO-1, potential impacts to biological resources would be less than significant.

There are no previously recorded cultural resources within the project area. Because the project site was originally located along the beach at and below the water level, and because substrate on the site is composed of sand that naturally accumulated or was bulldozed into place, it is unlikely that the project site contains cultural resources. Furthermore, soils on the project site have been disturbed previously from development of the existing concession stand building, and any unknown archaeological resources would have likely been unearthed at the time of the previous disturbance on the project site. In addition, the potential for paleontological resources on the project site is considered low because soils on the project site are predominantly man-made fill and sand. The shallowest depth at which fossils were recovered near the project site was 25 ft below the surface, and ground-disturbing activities for the project are only expected to extend to approximately 5 ft. Therefore, new ground-disturbing activities associated with project construction activities are unlikely to disturb any previously unknown archeological and/or paleontological resources for the following reasons: the majority of the site has previously been disturbed; the remainder of the project site is located on a sandy beach; and the shallow depth at which ground-disturbing activities are expected to occur. However, in the unlikely event that human remains are discovered on the project site, Compliance Measure CUL-1 requires notification of the proper authorities and adherence to standard procedures for the respectful handling of human remains. Implementation of Compliance Measure CUL-1 would reduce any potential impacts to previously undiscovered cultural resources, paleontological resources, or human remains to a less than significant level.

Mitigation Measures: Refer to Compliance Measures WQ-1 through WQ-4, as well as Compliance Measures BIO-1 and CUL-1.

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

Less than Significant Impact. The project site is currently developed with uses similar to the proposed project, and is located in an urbanized coastal area. The proposed project involves the redevelopment of a concession stand and related facilities, including a restroom and a recreational equipment storage building. The proposed project would rely on and can be accommodated by the existing road system, public parks, public services, and utilities. As discussed in Response 4.19(a), the proposed project would not result in or contribute to a significant biological or cultural impact. Based on the Project Description and the preceding responses, impacts related to the proposed project are less than significant or can be reduced to less than significant levels with incorporation of mitigation measures. Therefore, the proposed project's contribution to any significant cumulative impacts would be less than cumulatively considerable.

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

Less than Significant Impact with Mitigation Incorporated. The project site is currently developed and is located in an urbanized coastal area. The proposed project involves the redevelopment of a concession stand and related facilities, including a restroom and a recreational equipment storage building. The proposed project would be consistent with all applicable zoning regulations. Therefore, the proposed project would not require or necessitate a Zone Change, a Zoning Variance, or a General Plan Amendment. In addition, the proposed project is consistent with the City's LCP and the CCA, which prioritizes recreation and visitor-serving uses in the project area. Furthermore, the proposed project would result in less than significant impacts with respect to air quality and GHG emissions, and less than significant impacts with respect to noise and hazards with the incorporation of Mitigation Measures NOI-1 through NOI-5 and HAZ-1 through HAZ-3, respectively. Based on the Project Description and the preceding responses, development of the proposed project would not cause substantial adverse effects to human beings because all potentially significant impacts of the proposed project would be mitigated to a less than significant level.

Mitigation Measures: Refer to Compliance Measures WQ-1 through WQ-4, BIO-1, and CUL-1, as well as Mitigation Measures AES-1, BIO-1, GEO-1, HAZ-1 through HAZ-3, and NOI-1 through NOI-5.

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5.0 MITIGATION MONITORING AND REPORTING PROGRAM

5.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code (PRC) Section 21081.6 (enacted by the passage of Assembly Bill [AB] 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a Responsible Agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the Lead Agency or a Responsible Agency, prepare and submit a proposed reporting or monitoring program.

- The Lead Agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based. A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.

- Prior to the close of the public review period for a draft Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND), a Responsible Agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the Lead Agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the Responsible Agency or agency having jurisdiction over natural resources affected by the project, or refer the Lead Agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a Lead Agency by a Responsible Agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources that are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a Responsible Agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the Responsible Agency or agency having jurisdiction over natural resources affected by a project, or the authority of the Lead Agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

5.2 MITIGATION MONITORING PROCEDURES

The mitigation monitoring and reporting program has been prepared in compliance with PRC Section 21081.6. The program describes the requirements and procedures to be followed by the City of Long Beach to ensure that all mitigation measures adopted as part of the proposed project would be carried out as described in this Initial Study/Mitigated Negative Declaration (IS/MND). Table 5.A lists each of the mitigation measures specified in this IS/MND and identifies the party or parties responsible for implementation and monitoring of each measure.

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
4.1 Aesthetics			
Mitigation Measure AES-1:	**Maintenance of Construction Barriers.** Prior to issuance of any construction permits, the City of Long Beach (City) Development Services Director, or designee, shall verify that construction plans include the following note: During construction, the Construction Contractor shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that any such temporary barriers and walkways are maintained in a visually attractive manner. In the event that unauthorized materials or markings are discovered on any temporary construction barrier or temporary pedestrian walkway, the Construction Contractor shall remove such items within 48 hours.	City of Long Beach Development Services Director, or designee/ Construction Contractor	Prior to issuance of any construction permits/ during construction
4.2 Agriculture and Forest Resources			
The proposed project would not result in significant adverse impacts related to agriculture. No mitigation would be required.			
4.3 Air Quality			
The proposed project would not result in significant adverse impacts related to air quality. No mitigation would be required.			

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
4.4 Biological Resources			
Mitigation Measure BIO-1:	**Migratory Bird Treaty Act.** Tree and vegetation removal shall be restricted to outside the likely active nesting season (January 15 through September 1) for those bird species present or potentially occurring within the project area. That time period is inclusive of most other birds' nesting periods, thus maximizing avoidance of impacts to any nesting birds. If construction is proposed between January 15 and September 1, a qualified biologist familiar with local avian species and the requirements of the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code shall conduct a preconstruction survey for nesting birds no more than 3 days prior to construction. The survey shall include the entire area that will be disturbed. The results of the survey shall be recorded in a memorandum and submitted to the City of Long Beach (City) Parks, Recreation, and Marine Director within 48 hours. If the survey is positive, and the nesting species are subject to the MBTA or the California Fish and Game Code, the memorandum shall be submitted to the California Department of Fish and Wildlife (CDFW) to determine appropriate action. If nesting birds are present, a qualified biologist shall be retained to monitor the site during initial vegetation clearing and grading, as well as during other activities that would have the potential to disrupt nesting behavior. The monitor shall be empowered by the City to halt construction work in the vicinity of the nesting birds if the monitor believes the nest is at risk of failure or the birds are excessively disturbed.	City of Long Beach Parks, Recreation, and Marine Director, or designee	Three (3) days prior to commencement of construction activities

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
Compliance Measure BIO-1:	**Local Tree Removal Ordinances.** Prior to the start of any demolition or construction activities, the City of Long Beach (City) Parks, Recreation, and Marine Director, or designee, shall obtain a tree removal permit from the City's Director of Public Works in the event any trees are required to be removed as part of the project. A City-approved Construction Plan shall be submitted with the permit to remove tree(s). The City-approved Plan shall show that the existing City (parkway) tree has a direct impact on the design and function of the proposed project. The City shall incur all removal costs, including site cleanup, make any necessary repair of hardscape damage, and replace the tree. The removed tree shall be replaced with an approved 15-gallon tree and payment of a fee that is equivalent to a City-approved 15-gallon tree.	City of Long Beach Parks, Recreation, and Marine Director, or designee	Prior to the start of any demolition or construction activities
4.5 Cultural Resources			
Compliance Measure CUL-1:	**Human Remains.** In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner shall be notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With	City of Long Beach Development Services Department, or designee	In the event that human remains are encountered on the project site

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
	the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City of Long Beach shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of Long Beach Development Services Department, or designee, shall verify that all grading plans include notes specifying the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98		
4.6 Geology and Soils			
Mitigation Measure GEO-1:	**Incorporation of and Compliance with the Recommendations in the Geotechnical Study.** All grading operations and construction shall be conducted in conformance with the recommendations included in the *Geotechnical Report for the Alamitos Beach Concession Buildings, 780 East Shoreline Drive Long Beach, California* (May 30, 2017), prepared by AESCO. Recommendations found in the geotechnical document address topics including but not limited to: • Earthwork, including site preparations, soil replacement, compaction standards, and fill placement;	City of Long Beach Engineer, or designee	Prior to the start of grading activities

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures	Responsible Party	Timing for PDF or Mitigation Measure
• Liquefaction; • Foundations, including foundation design parameters, reinforced foundation systems, and the overexcavation of shallow soils; • Seismic design parameters; • Concrete flatwork, including slabs, pavement, walkways, and design of these features; • Soil corrosion; and • Utility trenches. Additional site grading, foundation, and utility plans shall be reviewed by the project Geotechnical Consultant prior to construction to check for conformance with the recommendations of this report. The project Geotechnical Consultant shall be present during site grading and foundation construction to observe and document proper implementation of the geotechnical recommendations. The City shall require the project Geotechnical Consultant to conduct observations and field testing during the following construction activities: • Excavation and backfill for footings and subgrade for slabs on grade; • Placement of fill and backfill; • Backfilling of utility trenches; • Concrete placement of slabs, foundation, and pavement; and		

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
	• Installation of foundation and slab reinforcement. Grading plan review shall also be conducted by the City of Long Beach Engineer, or designee, prior to the start of grading to verify that requirements developed during the preparation of Geotechnical Report (AESCO) have been appropriately incorporated into the project plans. Design, grading, and construction shall be performed in accordance with the requirements of the City Building Code and the California Building Code applicable at the time of grading, as well as the recommendations of the project Geotechnical Consultant as summarized in the final Geotechnical Report subject to review by the City Engineer, or designee, prior to the start of grading activities. The final Geotechnical Report shall present the results of observation and testing done during grading activities.		
4.7 Greenhouse Gas Emissions			
The proposed project would not result in significant adverse impacts related to greenhouse gas emissions. No mitigation would be required.			
4.8 Hazards and Hazardous Materials			
Mitigation Measure HAZ-1:	**Abatement of ACMs and Universal Wastes.** Wherever evidence of asbestos-containing materials (ACMs) and fluorescent light tubes are present in areas proposed for demolition, all such materials shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 Code of Federal Regulations [CFR], Subchapter R, Toxic Substances Control Act [TSCA], Part 763). During demolition, air monitoring shall be	Chief of the Long Beach Fire Department, or designee	Prior to the commencement of demolition activities and during demolition activities

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures	Responsible Party	Timing for PDF or Mitigation Measure
completed by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations (e.g., South Coast Air Quality Management District [SCAQMD]) and to provide safety to workers and the adjacent community. The City shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the Chief of the Long Beach Fire Department (LBFD), or designee, showing that abatement of any ACMs identified in these structures has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agencies, including, but not limited to those promulgated by the Occupational Safety and Health Administration (OSHA), the United States Environmental Protection Agency (EPA), the California Occupational Safety and Health Administration (Cal/OSHA), the California Environmental Protection Agency (Cal/EPA), the California Department of Homeland Security (Cal-DHS), the Department of Toxic Substances Control (DTSC), and the SCAQMD (40 CFR, Subchapter R, TSCA, Parts 716 and 763). An Operating & Maintenance Plan (O&M) shall be prepared for any ACM to remain in place, if any, and shall be reviewed and approved by the LBFD.		

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
Mitigation Measure HAZ-2:	**Disposal or Recycling of Fluorescent Light Tubes.** Wherever evidence fluorescent light tubes are present in areas proposed for demolition, all such materials shall be removed and properly recycled or taken to a household hazardous waste disposal facility, a universal waste handler (e.g., storage facility or broker) or an authorized recycling facility (Title 22, Division 4.5, Chapter 23, Section 66273.8), in accordance with regulations established by the DTSC. The City shall provide documentation to the Chief of the LBFD, or designee, showing that all fluorescent light tubes identified in these structures have been disposed of or recycled in full compliance with all applicable regulations established by the DTSC and the California Department of Resources Recycling and Recovery (CalRecycle).	Chief of the Long Beach Fire Department, or designee	Prior to the commencement of demolition activities and during demolition activities
Mitigation Measure HAZ-3:	**Contingency Plan.** Prior to commencement of grading activities, the City of Long Beach (City) Fire Department (LBFD), or designee, shall review and approve a contingency plan that addresses the procedures to be followed should on-site unknown hazards or hazardous substances be encountered during demolition and construction activities. The plan shall indicate that if construction workers encounter underground tanks, gases, odors, uncontained spills, or other unidentified substances, the contractor shall stop work, cordon off the affected area, and notify the LBFD. The LBFD responder shall determine the next steps regarding possible site evacuation, sampling, and disposal of the substance consistent with local, State, and federal regulations.	Director of the County Environmental Health Division, or designee	Prior to commencement of grading activities

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
4.9 Hydrology and Water Quality			
Compliance Measure WQ-1:	**Construction General Permit.** Prior to issuance of a grading permit, the City of Long Beach (City) Development Services Director, or designee, shall obtain coverage under the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System [NPDES} No. CAS000002) (Construction General Permit) if the disturbed soil area during construction exceeds 1 acre. This shall include submission of Permit Registration Documents, including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB). The Construction Contractor shall ensure that a Storm Water Pollution Prevention Plan (SWPPP) is prepared and implemented for the project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction Best Management Practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities. The SWPPP shall serve as the project Erosion and Sediment Control Plan (ESCP), in compliance with the City of Long Beach MS4 Permit (Order No. R4-2014-0024, NPDES No. CAS004003). If it is determined during final design that the disturbed soil area would be less than 1 acre, the project would be exempt from coverage under the Construction General	City of Long Beach Development Services Director, or designee	Prior to issuance of a grading permit

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
	Permit and the project would be exempt from coverage under the Construction General Permit and the above requirements would not be applicable		
Compliance Measure WQ-2:	**Groundwater Discharge Permit.** During groundwater dewatering activities, the Construction Contractor shall comply with the requirements of the Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0095, Permit No. CAG994004) (Groundwater Discharge Permit), or subsequent permit. The Construction Contractor shall comply with all applicable provisions in the permit, including water sampling, analysis, and reporting of dewatering-related discharges. The City Development Services Director, or designee, shall submit a Notice of Intent for coverage under the permit to the Los Angeles Regional Water Quality Control Board (RWQCB) at least 60 days prior to the start of dewatering. Upon completion of groundwater dewatering activities, the City of Long Beach shall submit a Notice of Termination to the Los Angeles RWQCB.	City Development Services Director, or designee	During groundwater dewatering activities/ 60 days prior to the start of dewatering
Compliance Measure WQ-3:	**Final Low Impact Development Plan.** In compliance with the City of Long Beach MS4 Permit and as specified in Chapter 18.74, Low Impact Development Standards, of the City of Long Beach Municipal Code, the City Development Services Director, or designee, shall ensure that a Final Low Impact Development (LID) Plan, or equivalent, is prepared for the project prior to issuance of a grading permit. The LID Plan shall be prepared consistent with the requirements of the *City of Long Beach Low Impact*	City Development Services Director, or designee,	Prior to issuance of a grading permit

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
	Development (LID) Best Management Practices (BMP) Design Manual (February 2013; revised December 2013) and shall include BMPs to be incorporated into the project to target pollutants of concern in runoff from the project site.		
Compliance Measure WQ-4:	**Final Hydrology Report.** Prior to issuance of grading permits, the City Development Services Director, or designee, shall ensure that a final hydrology report, or equivalent, is prepared and approved by the City. The hydrology report shall demonstrate, based on hydrologic calculations, that the project's on-site storm conveyance and retention facilities, including landscaped areas, are designed in accordance with the requirement of the Los Angeles County Department of Public Works Hydrology and Hydraulic Design Manual.	City Development Services Director, or designee	Prior to issuance of grading permits
4.10 Land Use/Planning			
The proposed project would not result in significant adverse impacts related to land use/planning. No mitigation would be required.			
4.11 Mineral Resources			
The proposed project would not result in significant adverse impacts related to mineral resources. No mitigation would be required.			
4.12 Noise			
Mitigation Measure NOI-1:	**Construction Noise.** Prior to issuance of building permits, the City of Long Beach (City), or its designee, (or its contractor), shall verify that grading and construction plans include the following requirements to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved:	City of Long Beach, its designee, or its contractor	Prior to issuance of building permits/during construction activities/ during all project area excavation and on-site grading

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
	• Construction activities occurring as part of the project shall be subject to the limitations and requirements of the City Municipal Code, which states that construction activities shall occur only between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and federal holidays, and from 9:00 a.m. to 6:00 p.m. on Saturdays. No outdoor noise-generating construction activity is allowed on Sundays. • During all project area excavation and on-site grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. • The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project area. • Construction staging areas shall be located as far away from sensitive receptors as possible during all phases of construction.		
Mitigation Measure NOI-2:	**HVAC Noise.** Prior to issuance of an occupancy permit, the City Director of Development Services, or designee, shall verify that the operator/tenant of the proposed project has obtained from an acoustical consultant, a memorandum confirming that the heating, ventilation, and air conditioning (HVAC) equipment would comply with the Municipal Code standards.	City Director of Development Services, or designee	Prior to issuance of an occupancy permit
Mitigation Measure NOI-3:	**PA Speaker Noise.** Prior to issuance of an occupancy permit, the City Director of Development Services, or designee, shall verify that an acoustical engineer has verified that operation of the	City Director of Development Services,	Prior to issuance of an occupancy permit

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
	Public Announcement (PA) speaker is in compliance with the City's exterior maximum noise standards at the surrounding sensitive land uses. Measures capable of reducing the noise levels include, but are not limited to: • Reducing the source levels; • Directing the speakers away from adjacent noise-sensitive land uses; and • Using highly directional speakers.	or designee	
Mitigation Measure NOI-4:	**Speaker System Noise.** Prior to issuance of an occupancy permit, the City Director of Development Services, or designee, shall verify that an acoustical engineer has verified that operation of the live music speaker system is in compliance with the City's exterior maximum noise standards at the surrounding sensitive land uses. Due to the varying noise levels that may be generated by on-site events and due to the number of instruments being used, types of music, and most importantly, speaker volume, it is recommended that during the first three events that utilize amplified speakers and that are representative of a typical event, noise monitoring be completed such that compliance with the City's Noise Ordinance be determined. If it is discovered that noise level impacts exceed the City's exterior noise level requirements, additional mitigation would be recommended by an acoustical engineer that may include, but would not be limited to, speaker noise level restriction and additional noise barriers.	City Director of Development Services, or designee	Prior to issuance of an occupancy permit

Table 5.A: Mitigation and Monitoring Reporting Program

Mitigation Measures and Compliance Measures		Responsible Party	Timing for PDF or Mitigation Measure
Mitigation Measure NOI-5	**Construction Vibration.** Prior to the commencement of any construction activities, the City Director of Development Services, or designee, shall verify that the operator/tenant of the proposed project has agreed to post signs at the project site notifying surrounding receptors that vibration from construction activities may be perceptible within 50 feet.	City Director of Development Services, or designee	Prior to issuance of an occupancy permit
4.13 Population and Housing			
The proposed project would not result in significant adverse impacts related to population or housing. No mitigation would be required.			
4.14 Public Services and Utilities			
The proposed project would not result in significant adverse impacts related to public services or utilities. No mitigation would be required.			
4.15 Recreation			
The proposed project would not result in significant adverse impacts related to recreation. No mitigation would be required.			
4.16 Transportation/Traffic			
The proposed project would not result in significant adverse impacts related to transportation/traffic. No mitigation would be required.			
4.17 Utilities/Service Systems			
The proposed project would not result in significant adverse impacts related to utilities/service systems. No mitigation would be required.			
4.18 Tribal Cultural Resources			
The proposed project would not result in significant adverse impacts related to tribal cultural resources. No mitigation would be required.			

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APPENDIX A

AIR QUALITY AND GREENHOUSE GAS MODELING OUTPUTS

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Alamitos Concession Stand Rebuild

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.87	1000sqft	0.09	0.00	0
Other Non-Asphalt Surfaces	0.89	Acre	0.89	0.00	0
Parking Lot	12.00	Space	0.11	0.00	0
Fast Food Restaurant w/o Drive Thru	5.56	1000sqft	0.13	5,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The "Other Asphalt Surfaces" represents the pedestrian and bike paths and unenclosed open space for the Café Dining Deck and Concession Dining Deck.

Construction Phase -

Trips and VMT - Approximately 16 truck trips per day will occur during concrete paving. All other parameters are CalEEMod default.

On-road Fugitive Dust - Mean vehicle speed in beach area and parking lot is 15 mph.

Demolition -

Architectural Coating - Assume all architectural coatings comply with SCAQMD Rule 1113.

Vehicle Trips - The rooftop dining area could serve to draw new visitors to Alamitos Beach exclusively to visit to rooftop dining area, assumed peak day could occur on any day.

Road Dust - Mean vehicle speed in beach area and parking lot is 15 mph.

Area Coating - Assume all architectural coatings comply with SCAQMD Rule 1113.

Construction Off-road Equipment Mitigation - Application of on-site watering twice daily for dust control measures, vehicle speeds controlled to 15 mph.

Fleet Mix - Adjusted fleet mix for beachside restaurant (smaller delivery trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.78
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.20	0.06
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0900e-003	0.06
tblFleetMix	MCY	5.0050e-003	0.00
tblFleetMix	MDV	0.12	0.06
tblFleetMix	MH	9.0700e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.4380e-003	0.00
tblFleetMix	SBUS	6.7700e-004	0.00
tblFleetMix	UBUS	2.3590e-003	0.00
tblLandUse	BuildingSpaceSquareFeet	3,870.00	0.00
tblLandUse	BuildingSpaceSquareFeet	38,768.40	0.00
tblLandUse	BuildingSpaceSquareFeet	4,800.00	0.00
tblLandUse	LandUseSquareFeet	3,870.00	0.00
tblLandUse	LandUseSquareFeet	38,768.40	0.00

tblLandUse	LandUseSquareFeet	4,800.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblRoadDust	MeanVehicleSpeed	40	15
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	696.00	38.85
tblVehicleTrips	SU_TR	500.00	38.85
tblVehicleTrips	WD_TR	716.00	38.85

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1674	1.2230	0.9166	1.4900e-003	0.0200	0.0725	0.0925	9.0400e-003	0.0695	0.0785	0.0000	127.1093	127.1093	0.0265	0.0000	127.7714
2019	0.1280	0.8229	0.7037	1.1700e-003	2.1900e-003	0.0468	0.0490	5.9000e-004	0.0451	0.0457	0.0000	97.7424	97.7424	0.0189	0.0000	98.2142
Maximum	**0.1674**	**1.2230**	**0.9166**	**1.4900e-003**	**0.0200**	**0.0725**	**0.0925**	**9.0400e-003**	**0.0695**	**0.0785**	**0.0000**	**127.1093**	**127.1093**	**0.0265**	**0.0000**	**127.7714**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1674	1.2230	0.9166	1.4900e-003	0.0108	0.0725	0.0833	4.5500e-003	0.0695	0.0740	0.0000	127.1092	127.1092	0.0265	0.0000	127.7713
2019	0.1280	0.8229	0.7037	1.1700e-003	2.1900e-003	0.0468	0.0490	5.9000e-004	0.0451	0.0457	0.0000	97.7423	97.7423	0.0189	0.0000	98.2141
Maximum	**0.1674**	**1.2230**	**0.9166**	**1.4900e-003**	**0.0108**	**0.0725**	**0.0833**	**4.5500e-003**	**0.0695**	**0.0740**	**0.0000**	**127.1092**	**127.1092**	**0.0265**	**0.0000**	**127.7713**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**41.50**	**0.00**	**6.50**	**46.63**	**0.00**	**3.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-2-2018**	**10-1-2018**	0.7276	0.7276
2	**10-2-2018**	**1-1-2019**	0.6621	0.6621
3	**1-2-2019**	**4-1-2019**	0.5912	0.5912
4	**4-2-2019**	**7-1-2019**	0.3530	0.3530
		Highest	0.7276	0.7276

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0214	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.5000e-004	5.5000e-004	0.0000	0.0000	5.9000e-004
Energy	6.9200e-003	0.0630	0.0529	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003	0.0000	147.8765	147.8765	4.5900e-003	1.9300e-003	148.5676
Mobile	0.0447	0.0672	0.5227	1.5200e-003	0.1470	1.4200e-003	0.1484	0.0392	1.3200e-003	0.0405	0.0000	137.4084	137.4084	3.7800e-003	0.0000	137.5029

Waste						0.0000	0.0000		0.0000	0.0000	13.0016	0.0000	13.0016	0.7684	0.0000	32.2108
Water						0.0000	0.0000		0.0000	0.0000	0.5354	7.3830	7.9184	0.0553	1.3600e-003	9.7066
Total	**0.0730**	**0.1301**	**0.5758**	**1.9000e-003**	**0.1470**	**6.2000e-003**	**0.1532**	**0.0392**	**6.1000e-003**	**0.0453**	**13.5370**	**292.6684**	**306.2054**	**0.8320**	**3.2900e-003**	**327.9885**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0214	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.5000e-004	5.5000e-004	0.0000	0.0000	5.9000e-004
Energy	6.9200e-003	0.0630	0.0529	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003	0.0000	147.8765	147.8765	4.5900e-003	1.9300e-003	148.5676
Mobile	0.0447	0.0672	0.5227	1.5200e-003	0.1470	1.4200e-003	0.1484	0.0392	1.3200e-003	0.0405	0.0000	137.4084	137.4084	3.7800e-003	0.0000	137.5029
Waste						0.0000	0.0000		0.0000	0.0000	13.0016	0.0000	13.0016	0.7684	0.0000	32.2108
Water						0.0000	0.0000		0.0000	0.0000	0.5354	7.3830	7.9184	0.0553	1.3600e-003	9.7066
Total	**0.0730**	**0.1301**	**0.5758**	**1.9000e-003**	**0.1470**	**6.2000e-003**	**0.1532**	**0.0392**	**6.1000e-003**	**0.0453**	**13.5370**	**292.6684**	**306.2054**	**0.8320**	**3.2900e-003**	**327.9885**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/2/2018	7/27/2018	5	20	
2	Site Preparation	Site Preparation	7/28/2018	7/31/2018	5	2	

3	Grading	Grading	8/1/2018	8/6/2018	5	4	
4	Building Construction	Building Construction	8/7/2018	5/13/2019	5	200	
5	Paving	Paving	5/14/2019	5/27/2019	5	10	
6	Architectural Coating	Architectural Coating	5/28/2019	6/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,340; Non-Residential Outdoor: 2,780; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	16.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-003	0.0000	1.1000e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
Total	**0.0248**	**0.2436**	**0.1511**	**2.4000e-004**	**1.1000e-003**	**0.0144**	**0.0155**	**1.7000e-004**	**0.0134**	**0.0136**	**0.0000**	**21.6923**	**21.6923**	**5.5000e-003**	**0.0000**	**21.8297**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.6700e-003	3.4000e-004	0.0000	9.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3944	0.3944	3.0000e-005	0.0000	0.3951
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	6.2000e-004	6.6300e-003	2.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.4154	1.4154	5.0000e-005	0.0000	1.4168
Total	**7.7000e-004**	**2.2900e-003**	**6.9700e-003**	**2.0000e-005**	**1.5100e-003**	**2.0000e-005**	**1.5300e-003**	**4.0000e-004**	**2.0000e-005**	**4.2000e-004**	**0.0000**	**1.8098**	**1.8098**	**8.0000e-005**	**0.0000**	**1.8118**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.9000e-004	0.0000	4.9000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
Total	**0.0248**	**0.2436**	**0.1511**	**2.4000e-004**	**4.9000e-004**	**0.0144**	**0.0149**	**7.0000e-005**	**0.0134**	**0.0135**	**0.0000**	**21.6923**	**21.6923**	**5.5000e-003**	**0.0000**	**21.8297**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.6700e-003	3.4000e-004	0.0000	9.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3944	0.3944	3.0000e-005	0.0000	0.3951
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	6.2000e-004	6.6300e-003	2.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.4154	1.4154	5.0000e-005	0.0000	1.4168
Total	**7.7000e-004**	**2.2900e-003**	**6.9700e-003**	**2.0000e-005**	**1.5100e-003**	**2.0000e-005**	**1.5300e-003**	**4.0000e-004**	**2.0000e-005**	**4.2000e-004**	**0.0000**	**1.8098**	**1.8098**	**8.0000e-005**	**0.0000**	**1.8118**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0208	8.0800e-003	2.0000e-005		9.5000e-004	9.5000e-004		8.8000e-004	8.8000e-004	0.0000	1.5743	1.5743	4.9000e-004	0.0000	1.5866
Total	**1.8100e-003**	**0.0208**	**8.0800e-003**	**2.0000e-005**	**5.8000e-003**	**9.5000e-004**	**6.7500e-003**	**2.9500e-003**	**8.8000e-004**	**3.8300e-003**	**0.0000**	**1.5743**	**1.5743**	**4.9000e-004**	**0.0000**	**1.5866**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	4.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0871	0.0871	0.0000	0.0000	0.0872

Total	**4.0000e-005**	**4.0000e-005**	**4.1000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0871**	**0.0871**	**0.0000**	**0.0000**	**0.0872**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0208	8.0800e-003	2.0000e-005		9.5000e-004	9.5000e-004		8.8000e-004	8.8000e-004	0.0000	1.5743	1.5743	4.9000e-004	0.0000	1.5866
Total	**1.8100e-003**	**0.0208**	**8.0800e-003**	**2.0000e-005**	**2.6100e-003**	**9.5000e-004**	**3.5600e-003**	**1.3300e-003**	**8.8000e-004**	**2.2100e-003**	**0.0000**	**1.5743**	**1.5743**	**4.9000e-004**	**0.0000**	**1.5866**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	4.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0871	0.0871	0.0000	0.0000	0.0872
Total	**4.0000e-005**	**4.0000e-005**	**4.1000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0871**	**0.0871**	**0.0000**	**0.0000**	**0.0872**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0341	0.0135	3.0000e-005		1.5900e-003	1.5900e-003		1.4600e-003	1.4600e-003	0.0000	2.5787	2.5787	8.0000e-004	0.0000	2.5988
Total	**2.9900e-003**	**0.0341**	**0.0135**	**3.0000e-005**	**9.8300e-003**	**1.5900e-003**	**0.0114**	**5.0500e-003**	**1.4600e-003**	**6.5100e-003**	**0.0000**	**2.5787**	**2.5787**	**8.0000e-004**	**0.0000**	**2.5988**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1742	0.1742	1.0000e-005	0.0000	0.1744
Total	**9.0000e-005**	**8.0000e-005**	**8.2000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1742**	**0.1742**	**1.0000e-005**	**0.0000**	**0.1744**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0341	0.0135	3.0000e-005		1.5900e-003	1.5900e-003		1.4600e-003	1.4600e-003	0.0000	2.5787	2.5787	8.0000e-004	0.0000	2.5988
Total	**2.9900e-003**	**0.0341**	**0.0135**	**3.0000e-005**	**4.4200e-003**	**1.5900e-003**	**6.0100e-003**	**2.2700e-003**	**1.4600e-003**	**3.7300e-003**	**0.0000**	**2.5787**	**2.5787**	**8.0000e-004**	**0.0000**	**2.5988**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1742	0.1742	1.0000e-005	0.0000	0.1744
Total	**9.0000e-005**	**8.0000e-005**	**8.2000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1742**	**0.1742**	**1.0000e-005**	**0.0000**	**0.1744**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1361	0.9150	0.7285	1.1600e-003		0.0556	0.0556		0.0536	0.0536	0.0000	96.7232	96.7232	0.0195	0.0000	97.2100
Total	**0.1361**	**0.9150**	**0.7285**	**1.1600e-003**		**0.0556**	**0.0556**		**0.0536**	**0.0536**	**0.0000**	**96.7232**	**96.7232**	**0.0195**	**0.0000**	**97.2100**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	6.5700e-003	1.8500e-003	1.0000e-005	3.3000e-004	5.0000e-005	3.8000e-004	1.0000e-004	4.0000e-005	1.4000e-004	0.0000	1.3265	1.3265	9.0000e-005	0.0000	1.3288
Worker	5.8000e-004	5.0000e-004	5.3500e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1432	1.1432	4.0000e-005	0.0000	1.1443
Total	**8.3000e-004**	**7.0700e-003**	**7.2000e-003**	**2.0000e-005**	**1.4800e-003**	**6.0000e-005**	**1.5400e-003**	**4.1000e-004**	**5.0000e-005**	**4.6000e-004**	**0.0000**	**2.4697**	**2.4697**	**1.3000e-004**	**0.0000**	**2.4731**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1361	0.9150	0.7285	1.1600e-003		0.0556	0.0556		0.0536	0.0536	0.0000	96.7231	96.7231	0.0195	0.0000	97.2098
Total	**0.1361**	**0.9150**	**0.7285**	**1.1600e-003**		**0.0556**	**0.0556**		**0.0536**	**0.0536**	**0.0000**	**96.7231**	**96.7231**	**0.0195**	**0.0000**	**97.2098**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	6.5700e-003	1.8500e-003	1.0000e-005	3.3000e-004	5.0000e-005	3.8000e-004	1.0000e-004	4.0000e-005	1.4000e-004	0.0000	1.3265	1.3265	9.0000e-005	0.0000	1.3288
Worker	5.8000e-004	5.0000e-004	5.3500e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1432	1.1432	4.0000e-005	0.0000	1.1443
Total	**8.3000e-004**	**7.0700e-003**	**7.2000e-003**	**2.0000e-005**	**1.4800e-003**	**6.0000e-005**	**1.5400e-003**	**4.1000e-004**	**5.0000e-005**	**4.6000e-004**	**0.0000**	**2.4697**	**2.4697**	**1.3000e-004**	**0.0000**	**2.4731**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1079	0.7591	0.6406	1.0500e-003		0.0435	0.0435		0.0420	0.0420	0.0000	86.9592	86.9592	0.0167	0.0000	87.3771
Total	**0.1079**	**0.7591**	**0.6406**	**1.0500e-003**		**0.0435**	**0.0435**		**0.0420**	**0.0420**	**0.0000**	**86.9592**	**86.9592**	**0.0167**	**0.0000**	**87.3771**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	5.6100e-003	1.5300e-003	1.0000e-005	3.0000e-004	4.0000e-005	3.3000e-004	9.0000e-005	3.0000e-005	1.2000e-004	0.0000	1.1878	1.1878	8.0000e-005	0.0000	1.1898
Worker	4.8000e-004	4.0000e-004	4.3100e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	1.0007	1.0007	3.0000e-005	0.0000	1.0016

Total	**6.8000e-004**	**6.0100e-003**	**5.8400e-003**	**2.0000e-005**	**1.3400e-003**	**5.0000e-005**	**1.3800e-003**	**3.7000e-004**	**4.0000e-005**	**4.0000e-004**	**0.0000**	**2.1885**	**2.1885**	**1.1000e-004**	**0.0000**	**2.1913**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1079	0.7591	0.6406	1.0500e-003		0.0435	0.0435		0.0420	0.0420	0.0000	86.9591	86.9591	0.0167	0.0000	87.3770
Total	**0.1079**	**0.7591**	**0.6406**	**1.0500e-003**		**0.0435**	**0.0435**		**0.0420**	**0.0420**	**0.0000**	**86.9591**	**86.9591**	**0.0167**	**0.0000**	**87.3770**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	5.6100e-003	1.5300e-003	1.0000e-005	3.0000e-004	4.0000e-005	3.3000e-004	9.0000e-005	3.0000e-005	1.2000e-004	0.0000	1.1878	1.1878	8.0000e-005	0.0000	1.1898
Worker	4.8000e-004	4.0000e-004	4.3100e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	1.0007	1.0007	3.0000e-005	0.0000	1.0016
Total	**6.8000e-004**	**6.0100e-003**	**5.8400e-003**	**2.0000e-005**	**1.3400e-003**	**5.0000e-005**	**1.3800e-003**	**3.7000e-004**	**4.0000e-005**	**4.0000e-004**	**0.0000**	**2.1885**	**2.1885**	**1.1000e-004**	**0.0000**	**2.1913**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5200e-003	0.0459	0.0445	7.0000e-005		2.6100e-003	2.6100e-003		2.4100e-003	2.4100e-003	0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving	2.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7800e-003**	**0.0459**	**0.0445**	**7.0000e-005**		**2.6100e-003**	**2.6100e-003**		**2.4100e-003**	**2.4100e-003**	**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.5300e-003	5.4000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6230	0.6230	4.0000e-005	0.0000	0.6241
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.7000e-004	2.9500e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6847	0.6847	2.0000e-005	0.0000	0.6853
Total	**4.1000e-004**	**2.8000e-003**	**3.4900e-003**	**2.0000e-005**	**8.5000e-004**	**2.0000e-005**	**8.7000e-004**	**2.3000e-004**	**2.0000e-005**	**2.4000e-004**	**0.0000**	**1.3076**	**1.3076**	**6.0000e-005**	**0.0000**	**1.3093**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	4.5200e-003	0.0459	0.0445	7.0000e-005		2.6100e-003	2.6100e-003		2.4100e-003	2.4100e-003	0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving	2.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7800e-003**	**0.0459**	**0.0445**	**7.0000e-005**		**2.6100e-003**	**2.6100e-003**		**2.4100e-003**	**2.4100e-003**	**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.5300e-003	5.4000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6230	0.6230	4.0000e-005	0.0000	0.6241
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.7000e-004	2.9500e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6847	0.6847	2.0000e-005	0.0000	0.6853
Total	**4.1000e-004**	**2.8000e-003**	**3.4900e-003**	**2.0000e-005**	**8.5000e-004**	**2.0000e-005**	**8.7000e-004**	**2.3000e-004**	**2.0000e-005**	**2.4000e-004**	**0.0000**	**1.3076**	**1.3076**	**6.0000e-005**	**0.0000**	**1.3093**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total	**0.0142**	**9.1800e-003**	**9.2100e-003**	**1.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total	**0.0142**	**9.1800e-003**	**9.2100e-003**	**1.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0447	0.0672	0.5227	1.5200e-003	0.1470	1.4200e-003	0.1484	0.0392	1.3200e-003	0.0405	0.0000	137.4084	137.4084	3.7800e-003	0.0000	137.5029
Unmitigated	0.0447	0.0672	0.5227	1.5200e-003	0.1470	1.4200e-003	0.1484	0.0392	1.3200e-003	0.0405	0.0000	137.4084	137.4084	3.7800e-003	0.0000	137.5029

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	216.01	216.01	216.01	391,196	391,196
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	216.01	216.01	216.01	391,196	391,196

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Other Non-Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Fast Food Restaurant w/o Drive Thru	0.777800	0.055600	0.055500	0.055500	0.000000	0.055600	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	79.3471	79.3471	3.2800e-003	6.8000e-004	79.6309
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	79.3471	79.3471	3.2800e-003	6.8000e-004	79.6309
NaturalGas Mitigated	6.9200e-003	0.0630	0.0529	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003	0.0000	68.5294	68.5294	1.3100e-003	1.2600e-003	68.9367

NaturalGas Unmitigated	6.9200e-003	0.0630	0.0529	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003	0.0000	68.5294	68.5294	1.3100e-003	1.2600e-003	68.9367

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant w/o Drive Thru	1.28419e+006	6.9200e-003	0.0630	0.0529	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003	0.0000	68.5294	68.5294	1.3100e-003	1.2600e-003	68.9367
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.9200e-003**	**0.0630**	**0.0529**	**3.8000e-004**		**4.7800e-003**	**4.7800e-003**		**4.7800e-003**	**4.7800e-003**	**0.0000**	**68.5294**	**68.5294**	**1.3100e-003**	**1.2600e-003**	**68.9367**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant w/o Drive Thru	1.28419e+006	6.9200e-003	0.0630	0.0529	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003	0.0000	68.5294	68.5294	1.3100e-003	1.2600e-003	68.9367
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.9200e-003**	**0.0630**	**0.0529**	**3.8000e-004**		**4.7800e-003**	**4.7800e-003**		**4.7800e-003**	**4.7800e-003**	**0.0000**	**68.5294**	**68.5294**	**1.3100e-003**	**1.2600e-003**	**68.9367**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	249032	79.3471	3.2800e-003	6.8000e-004	79.6309
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**79.3471**	**3.2800e-003**	**6.8000e-004**	**79.6309**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	249032	79.3471	3.2800e-003	6.8000e-004	79.6309
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**79.3471**	**3.2800e-003**	**6.8000e-004**	**79.6309**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0214	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.5000e-004	5.5000e-004	0.0000	0.0000	5.9000e-004
Unmitigated	0.0214	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.5000e-004	5.5000e-004	0.0000	0.0000	5.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0201					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.5000e-004	5.5000e-004	0.0000	0.0000	5.9000e-004
Total	**0.0214**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.5000e-004**	**5.5000e-004**	**0.0000**	**0.0000**	**5.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0201					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.5000e-004	5.5000e-004	0.0000	0.0000	5.9000e-004
Total	**0.0214**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.5000e-004**	**5.5000e-004**	**0.0000**	**0.0000**	**5.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	7.9184	0.0553	1.3600e-003	9.7066
Unmitigated	7.9184	0.0553	1.3600e-003	9.7066

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Fast Food Restaurant w/o Drive Thru	1.68765 / 0.107722	7.9184	0.0553	1.3600e-003	9.7066
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**7.9184**	**0.0553**	**1.3600e-003**	**9.7066**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	1.68765 / 0.107722	7.9184	0.0553	1.3600e-003	9.7066
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**7.9184**	**0.0553**	**1.3600e-003**	**9.7066**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e

	MT/yr			
Mitigated	13.0016	0.7684	0.0000	32.2108
Unmitigated	13.0016	0.7684	0.0000	32.2108

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	64.05	13.0016	0.7684	0.0000	32.2108
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**13.0016**	**0.7684**	**0.0000**	**32.2108**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	64.05	13.0016	0.7684	0.0000	32.2108
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**13.0016**	**0.7684**	**0.0000**	**32.2108**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Alamitos Concession Stand Rebuild

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.87	1000sqft	0.09	0.00	0
Other Non-Asphalt Surfaces	0.89	Acre	0.89	0.00	0
Parking Lot	12.00	Space	0.11	0.00	0
Fast Food Restaurant w/o Drive Thru	5.56	1000sqft	0.13	5,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The "Other Asphalt Surfaces" represents the pedestrian and bike paths and unenclosed open space for the Café Dining Deck and Concession Dining Deck

Construction Phase -

Trips and VMT - Approximately 16 truck trips per day will occur during concrete paving. All other parameters are CalEEMod default.

On-road Fugitive Dust - Mean vehicle speed in beach area and parking lot is 15 mph.

Demolition -

Architectural Coating - Assume all architectural coatings comply with SCAQMD Rule 1113.

Vehicle Trips - The rooftop dining area could serve to draw new visitors to Alamitos Beach exclusively to visit to rooftop dining area, assumed peak day could occur on any day

Road Dust - Mean vehicle speed in beach area and parking lot is 15 mph.

Area Coating - Assume all architectural coatings comply with SCAQMD Rule 1113.

Construction Off-road Equipment Mitigation - Application of on-site watering twice daily for dust control measures, vehicle speeds controlled to 15 mph.

Fleet Mix - Adjusted fleet mix for beachside restaurant (smaller delivery trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.78
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.20	0.06
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0900e-003	0.06
tblFleetMix	MCY	5.0050e-003	0.00
tblFleetMix	MDV	0.12	0.06
tblFleetMix	MH	9.0700e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.4380e-003	0.00
tblFleetMix	SBUS	6.7700e-004	0.00
tblFleetMix	UBUS	2.3590e-003	0.00
tblLandUse	BuildingSpaceSquareFeet	3,870.00	0.00
tblLandUse	BuildingSpaceSquareFeet	38,768.40	0.00
tblLandUse	BuildingSpaceSquareFeet	4,800.00	0.00
tblLandUse	LandUseSquareFeet	3,870.00	0.00
tblLandUse	LandUseSquareFeet	38,768.40	0.00

tblLandUse	LandUseSquareFeet	4,800.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblRoadDust	MeanVehicleSpeed	40	15
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	696.00	38.85
tblVehicleTrips	SU_TR	500.00	38.85
tblVehicleTrips	WD_TR	716.00	38.85

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6075	24.5798	15.8463	0.0262	5.8890	1.4384	6.8421	2.9774	1.3447	3.8542	0.0000	2,597.9263	2,597.9263	0.6149	0.0000	2,613.2991
2019	2.8435	16.1033	13.6142	0.0225	0.1733	0.9168	0.9455	0.0462	0.8854	0.8932	0.0000	2,070.1629	2,070.1629	0.4261	0.0000	2,079.9270
Maximum	**2.8435**	**24.5798**	**15.8463**	**0.0262**	**5.8890**	**1.4384**	**6.8421**	**2.9774**	**1.3447**	**3.8542**	**0.0000**	**2,597.9263**	**2,597.9263**	**0.6149**	**0.0000**	**2,613.2991**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6075	24.5798	15.8463	0.0262	2.6992	1.4384	3.6523	1.3529	1.3447	2.2297	0.0000	2,597.9263	2,597.9263	0.6149	0.0000	2,613.2991
2019	2.8435	16.1033	13.6142	0.0225	0.1733	0.9168	0.9455	0.0462	0.8854	0.8932	0.0000	2,070.1629	2,070.1629	0.4261	0.0000	2,079.9270
Maximum	**2.8435**	**24.5798**	**15.8463**	**0.0262**	**2.6992**	**1.4384**	**3.6523**	**1.3529**	**1.3447**	**2.2297**	**0.0000**	**2,597.9263**	**2,597.9263**	**0.6149**	**0.0000**	**2,613.2991**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.62**	**0.00**	**40.96**	**53.73**	**0.00**	**34.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Energy	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Mobile	0.2657	0.3361	2.9533	8.6700e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		866.2917	866.2917	0.0235		866.8803
Total	**0.4210**	**0.6810**	**3.2453**	**0.0107**	**0.8237**	**0.0340**	**0.8578**	**0.2195**	**0.0335**	**0.2530**		**1,280.2186**	**1,280.2186**	**0.0315**	**7.5900e-003**	**1,283.2673**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Energy	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Mobile	0.2657	0.3361	2.9533	8.6700e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		866.2917	866.2917	0.0235		866.8803
Total	**0.4210**	**0.6810**	**3.2453**	**0.0107**	**0.8237**	**0.0340**	**0.8578**	**0.2195**	**0.0335**	**0.2530**		**1,280.2186**	**1,280.2186**	**0.0315**	**7.5900e-003**	**1,283.2673**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/2/2018	7/27/2018	5	20	
2	Site Preparation	Site Preparation	7/28/2018	7/31/2018	5	2	
3	Grading	Grading	8/1/2018	8/6/2018	5	4	
4	Building Construction	Building Construction	8/7/2018	5/13/2019	5	200	
5	Paving	Paving	5/14/2019	5/27/2019	5	10	
6	Architectural Coating	Architectural Coating	5/28/2019	6/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,340; Non-Residential Outdoor: 2,780; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving	5	13.00	0.00	16.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1100	0.0000	0.1100	0.0167	0.0000	0.0167			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429		2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.1100**	**1.4365**	**1.5464**	**0.0167**	**1.3429**	**1.3595**		**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.9600e-003	0.1615	0.0334	4.1000e-004	8.7400e-003	6.1000e-004	9.3600e-003	2.4000e-003	5.9000e-004	2.9800e-003		43.7807	43.7807	3.0100e-003		43.8561
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0718	0.0542	0.7021	1.6400e-003	0.1453	1.3000e-003	0.1466	0.0385	1.1900e-003	0.0397		162.9797	162.9797	6.1100e-003		163.1325

Total	**0.0768**	**0.2157**	**0.7355**	**2.0500e-003**	**0.1541**	**1.9100e-003**	**0.1560**	**0.0409**	**1.7800e-003**	**0.0427**		**206.7604**	**206.7604**	**9.1200e-003**		**206.9886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0495	0.0000	0.0495	7.4900e-003	0.0000	7.4900e-003			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.0495**	**1.4365**	**1.4859**	**7.4900e-003**	**1.3429**	**1.3504**	**0.0000**	**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.9600e-003	0.1615	0.0334	4.1000e-004	8.7400e-003	6.1000e-004	9.3600e-003	2.4000e-003	5.9000e-004	2.9800e-003		43.7807	43.7807	3.0100e-003		43.8561
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0718	0.0542	0.7021	1.6400e-003	0.1453	1.3000e-003	0.1466	0.0385	1.1900e-003	0.0397		162.9797	162.9797	6.1100e-003		163.1325
Total	**0.0768**	**0.2157**	**0.7355**	**2.0500e-003**	**0.1541**	**1.9100e-003**	**0.1560**	**0.0409**	**1.7800e-003**	**0.0427**		**206.7604**	**206.7604**	**9.1200e-003**		**206.9886**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**5.7996**	**0.9523**	**6.7518**	**2.9537**	**0.8761**	**3.8298**		**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0442	0.0334	0.4321	1.0100e-003	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		100.2952	100.2952	3.7600e-003		100.3892
Total	**0.0442**	**0.0334**	**0.4321**	**1.0100e-003**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**100.2952**	**100.2952**	**3.7600e-003**		**100.3892**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**2.6098**	**0.9523**	**3.5621**	**1.3292**	**0.8761**	**2.2052**	**0.0000**	**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0442	0.0334	0.4321	1.0100e-003	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		100.2952	100.2952	3.7600e-003		100.3892
Total	**0.0442**	**0.0334**	**0.4321**	**1.0100e-003**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**100.2952**	**100.2952**	**3.7600e-003**		**100.3892**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311		1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**4.9143**	**0.7947**	**5.7090**	**2.5256**	**0.7311**	**3.2568**		**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0442	0.0334	0.4321	1.0100e-003	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		100.2952	100.2952	3.7600e-003		100.3892
Total	**0.0442**	**0.0334**	**0.4321**	**1.0100e-003**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**100.2952**	**100.2952**	**3.7600e-003**		**100.3892**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311	0.0000	1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**2.2114**	**0.7947**	**3.0061**	**1.1365**	**0.7311**	**1.8677**	**0.0000**	**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0442	0.0334	0.4321	1.0100e-003	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		100.2952	100.2952	3.7600e-003		100.3892
Total	**0.0442**	**0.0334**	**0.4321**	**1.0100e-003**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**100.2952**	**100.2952**	**3.7600e-003**		**100.3892**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6000e-003	0.1226	0.0335	2.6000e-004	6.4000e-003	8.6000e-004	7.2700e-003	1.8400e-003	8.3000e-004	2.6700e-003		28.1679	28.1679	1.8500e-003		28.2143
Worker	0.0111	8.3400e-003	0.1080	2.5000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		25.0738	25.0738	9.4000e-004		25.0973

Total	**0.0157**	**0.1309**	**0.1415**	**5.1000e-004**	**0.0288**	**1.0600e-003**	**0.0298**	**7.7700e-003**	**1.0100e-003**	**8.7800e-003**		**53.2417**	**53.2417**	**2.7900e-003**		**53.3116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6000e-003	0.1226	0.0335	2.6000e-004	6.4000e-003	8.6000e-004	7.2700e-003	1.8400e-003	8.3000e-004	2.6700e-003		28.1679	28.1679	1.8500e-003		28.2143
Worker	0.0111	8.3400e-003	0.1080	2.5000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		25.0738	25.0738	9.4000e-004		25.0973
Total	**0.0157**	**0.1309**	**0.1415**	**5.1000e-004**	**0.0288**	**1.0600e-003**	**0.0298**	**7.7700e-003**	**1.0100e-003**	**8.7800e-003**		**53.2417**	**53.2417**	**2.7900e-003**		**53.3116**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
Total	**2.2721**	**15.9802**	**13.4870**	**0.0220**		**0.9158**	**0.9158**		**0.8846**	**0.8846**		**2,018.0224**	**2,018.0224**	**0.3879**		**2,027.7210**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1600e-003	0.1157	0.0307	2.6000e-004	6.4000e-003	7.4000e-004	7.1400e-003	1.8400e-003	7.1000e-004	2.5500e-003		27.8815	27.8815	1.7900e-003		27.9261
Worker	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799
Total	**0.0142**	**0.1231**	**0.1271**	**5.0000e-004**	**0.0288**	**9.3000e-004**	**0.0297**	**7.7700e-003**	**8.9000e-004**	**8.6600e-003**		**52.1405**	**52.1405**	**2.6200e-003**		**52.2060**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
Total	**2.2721**	**15.9802**	**13.4870**	**0.0220**		**0.9158**	**0.9158**		**0.8846**	**0.8846**	**0.0000**	**2,018.0224**	**2,018.0224**	**0.3879**		**2,027.7210**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1600e-003	0.1157	0.0307	2.6000e-004	6.4000e-003	7.4000e-004	7.1400e-003	1.8400e-003	7.1000e-004	2.5500e-003		27.8815	27.8815	1.7900e-003		27.9261
Worker	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799
Total	**0.0142**	**0.1231**	**0.1271**	**5.0000e-004**	**0.0288**	**9.3000e-004**	**0.0297**	**7.7700e-003**	**8.9000e-004**	**8.6600e-003**		**52.1405**	**52.1405**	**2.6200e-003**		**52.2060**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815		1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9562**	**9.1743**	**8.9025**	**0.0135**		**0.5225**	**0.5225**		**0.4815**	**0.4815**		**1,325.0953**	**1,325.0953**	**0.4112**		**1,335.3751**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0150	0.4901	0.1045	1.2800e-003	0.0280	1.8000e-003	0.0298	7.6700e-003	1.7200e-003	9.3900e-003		138.3219	138.3219	9.5300e-003		138.5600
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0477	0.6268	1.5800e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		157.6839	157.6839	5.4200e-003		157.8193
Total	**0.0800**	**0.5378**	**0.7313**	**2.8600e-003**	**0.1733**	**3.0500e-003**	**0.1763**	**0.0462**	**2.8700e-003**	**0.0491**		**296.0058**	**296.0058**	**0.0150**		**296.3793**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815	0.0000	1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9562**	**9.1743**	**8.9025**	**0.0135**		**0.5225**	**0.5225**		**0.4815**	**0.4815**	**0.0000**	**1,325.0953**	**1,325.0953**	**0.4112**		**1,335.3751**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0150	0.4901	0.1045	1.2800e-003	0.0280	1.8000e-003	0.0298	7.6700e-003	1.7200e-003	9.3900e-003		138.3219	138.3219	9.5300e-003		138.5600
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0477	0.6268	1.5800e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		157.6839	157.6839	5.4200e-003		157.8193
Total	**0.0800**	**0.5378**	**0.7313**	**2.8600e-003**	**0.1733**	**3.0500e-003**	**0.1763**	**0.0462**	**2.8700e-003**	**0.0491**		**296.0058**	**296.0058**	**0.0150**		**296.3793**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.5771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**2.8435**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.5771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**2.8435**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2657	0.3361	2.9533	8.6700e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		866.2917	866.2917	0.0235		866.8803
Unmitigated	0.2657	0.3361	2.9533	8.6700e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		866.2917	866.2917	0.0235		866.8803

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	216.01	216.01	216.01	391,196	391,196
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	216.01	216.01	216.01	391,196	391,196

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive Th	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

Other Non-Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Fast Food Restaurant w/o Drive Thru	0.777800	0.055600	0.055500	0.055500	0.000000	0.055600	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
NaturalGas Unmitigated	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	3518.34	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0379**	**0.3449**	**0.2898**	**2.0700e-003**		**0.0262**	**0.0262**		**0.0262**	**0.0262**		**413.9221**	**413.9221**	**7.9300e-003**	**7.5900e-003**	**416.3818**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	3.51834	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0379**	**0.3449**	**0.2898**	**2.0700e-003**		**0.0262**	**0.0262**		**0.0262**	**0.0262**		**413.9221**	**413.9221**	**7.9300e-003**	**7.5900e-003**	**416.3818**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Unmitigated	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Total	**0.1174**	**2.0000e-005**	**2.2900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.8800e-003**	**4.8800e-003**	**1.0000e-005**		**5.2100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Total	**0.1174**	**2.0000e-005**	**2.2900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.8800e-003**	**4.8800e-003**	**1.0000e-005**		**5.2100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Alamitos Concession Stand Rebuild

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.87	1000sqft	0.09	0.00	0
Other Non-Asphalt Surfaces	0.89	Acre	0.89	0.00	0
Parking Lot	12.00	Space	0.11	0.00	0
Fast Food Restaurant w/o Drive Thru	5.56	1000sqft	0.13	5,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The "Other Asphalt Surfaces" represents the pedestrian and bike paths and unenclosed open space for the Café Dining Deck and Concession Dining Deck

Construction Phase -

Trips and VMT - Approximately 16 truck trips per day will occur during concrete paving. All other parameters are CalEEMod default.

On-road Fugitive Dust - Mean vehicle speed in beach area and parking lot is 15 mph.

Demolition -

Architectural Coating - Assume all architectural coatings comply with SCAQMD Rule 1113.

Vehicle Trips - The rooftop dining area could serve to draw new visitors to Alamitos Beach exclusively to visit to rooftop dining area, assumed peak day could occur on any day

Road Dust - Mean vehicle speed in beach area and parking lot is 15 mph.

Area Coating - Assume all architectural coatings comply with SCAQMD Rule 1113.

Construction Off-road Equipment Mitigation - Application of on-site watering twice daily for dust control measures, vehicle speeds controlled to 15 mph.

Fleet Mix - Adjusted fleet mix for beachside restaurant (smaller delivery trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	0.78
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.20	0.06
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.0900e-003	0.06
tblFleetMix	MCY	5.0050e-003	0.00
tblFleetMix	MDV	0.12	0.06
tblFleetMix	MH	9.0700e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.4380e-003	0.00
tblFleetMix	SBUS	6.7700e-004	0.00
tblFleetMix	UBUS	2.3590e-003	0.00
tblLandUse	BuildingSpaceSquareFeet	3,870.00	0.00
tblLandUse	BuildingSpaceSquareFeet	38,768.40	0.00
tblLandUse	BuildingSpaceSquareFeet	4,800.00	0.00
tblLandUse	LandUseSquareFeet	3,870.00	0.00
tblLandUse	LandUseSquareFeet	38,768.40	0.00

tblLandUse	LandUseSquareFeet	4,800.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblRoadDust	MeanVehicleSpeed	40	15
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	696.00	38.85
tblVehicleTrips	SU_TR	500.00	38.85
tblVehicleTrips	WD_TR	716.00	38.85

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6089	24.5878	15.7930	0.0261	5.8890	1.4384	6.8421	2.9774	1.3447	3.8542	0.0000	2,587.6889	2,587.6889	0.6147	0.0000	2,603.0562
2019	2.8435	16.1042	13.6094	0.0225	0.1733	0.9168	0.9455	0.0462	0.8855	0.8932	0.0000	2,067.9927	2,067.9927	0.4262	0.0000	2,077.7586
Maximum	**2.8435**	**24.5878**	**15.7930**	**0.0261**	**5.8890**	**1.4384**	**6.8421**	**2.9774**	**1.3447**	**3.8542**	**0.0000**	**2,587.6889**	**2,587.6889**	**0.6147**	**0.0000**	**2,603.0562**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6089	24.5878	15.7930	0.0261	2.6992	1.4384	3.6523	1.3529	1.3447	2.2297	0.0000	2,587.6889	2,587.6889	0.6147	0.0000	2,603.0562
2019	2.8435	16.1042	13.6094	0.0225	0.1733	0.9168	0.9455	0.0462	0.8855	0.8932	0.0000	2,067.9927	2,067.9927	0.4262	0.0000	2,077.7586
Maximum	**2.8435**	**24.5878**	**15.7930**	**0.0261**	**2.6992**	**1.4384**	**3.6523**	**1.3529**	**1.3447**	**2.2297**	**0.0000**	**2,587.6889**	**2,587.6889**	**0.6147**	**0.0000**	**2,603.0562**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.62**	**0.00**	**40.96**	**53.73**	**0.00**	**34.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Energy	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Mobile	0.2543	0.3628	2.8298	8.2200e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		821.1206	821.1206	0.0227		821.6873
Total	**0.4096**	**0.7078**	**3.1218**	**0.0103**	**0.8237**	**0.0340**	**0.8578**	**0.2195**	**0.0335**	**0.2530**		**1,235.0475**	**1,235.0475**	**0.0306**	**7.5900e-003**	**1,238.0743**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Energy	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Mobile	0.2543	0.3628	2.8298	8.2200e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		821.1206	821.1206	0.0227		821.6873
Total	**0.4096**	**0.7078**	**3.1218**	**0.0103**	**0.8237**	**0.0340**	**0.8578**	**0.2195**	**0.0335**	**0.2530**		**1,235.0475**	**1,235.0475**	**0.0306**	**7.5900e-003**	**1,238.0743**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/2/2018	7/27/2018	5	20	
2	Site Preparation	Site Preparation	7/28/2018	7/31/2018	5	2	
3	Grading	Grading	8/1/2018	8/6/2018	5	4	
4	Building Construction	Building Construction	8/7/2018	5/13/2019	5	200	
5	Paving	Paving	5/14/2019	5/27/2019	5	10	
6	Architectural Coating	Architectural Coating	5/28/2019	6/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,340; Non-Residential Outdoor: 2,780; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving	5	13.00	0.00	16.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1100	0.0000	0.1100	0.0167	0.0000	0.0167			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429		2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.1100**	**1.4365**	**1.5464**	**0.0167**	**1.3429**	**1.3595**		**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.0900e-003	0.1637	0.0358	4.0000e-004	8.7400e-003	6.3000e-004	9.3700e-003	2.4000e-003	6.0000e-004	3.0000e-003		43.0482	43.0482	3.1300e-003		43.1265
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0795	0.0600	0.6465	1.5400e-003	0.1453	1.3000e-003	0.1466	0.0385	1.1900e-003	0.0397		153.4749	153.4749	5.7800e-003		153.6193

Total	**0.0846**	**0.2238**	**0.6822**	**1.9400e-003**	**0.1541**	**1.9300e-003**	**0.1560**	**0.0409**	**1.7900e-003**	**0.0427**		**196.5230**	**196.5230**	**8.9100e-003**		**196.7457**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0495	0.0000	0.0495	7.4900e-003	0.0000	7.4900e-003			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105
Total	**2.4838**	**24.3641**	**15.1107**	**0.0241**	**0.0495**	**1.4365**	**1.4859**	**7.4900e-003**	**1.3429**	**1.3504**	**0.0000**	**2,391.1659**	**2,391.1659**	**0.6058**		**2,406.3105**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.0900e-003	0.1637	0.0358	4.0000e-004	8.7400e-003	6.3000e-004	9.3700e-003	2.4000e-003	6.0000e-004	3.0000e-003		43.0482	43.0482	3.1300e-003		43.1265
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0795	0.0600	0.6465	1.5400e-003	0.1453	1.3000e-003	0.1466	0.0385	1.1900e-003	0.0397		153.4749	153.4749	5.7800e-003		153.6193
Total	**0.0846**	**0.2238**	**0.6822**	**1.9400e-003**	**0.1541**	**1.9300e-003**	**0.1560**	**0.0409**	**1.7900e-003**	**0.0427**		**196.5230**	**196.5230**	**8.9100e-003**		**196.7457**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**5.7996**	**0.9523**	**6.7518**	**2.9537**	**0.8761**	**3.8298**		**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0369	0.3978	9.5000e-004	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		94.4461	94.4461	3.5500e-003		94.5349
Total	**0.0489**	**0.0369**	**0.3978**	**9.5000e-004**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**94.4461**	**94.4461**	**3.5500e-003**		**94.5349**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**2.6098**	**0.9523**	**3.5621**	**1.3292**	**0.8761**	**2.2052**	**0.0000**	**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0369	0.3978	9.5000e-004	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		94.4461	94.4461	3.5500e-003		94.5349
Total	**0.0489**	**0.0369**	**0.3978**	**9.5000e-004**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**94.4461**	**94.4461**	**3.5500e-003**		**94.5349**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311		1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**4.9143**	**0.7947**	**5.7090**	**2.5256**	**0.7311**	**3.2568**		**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0369	0.3978	9.5000e-004	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		94.4461	94.4461	3.5500e-003		94.5349
Total	**0.0489**	**0.0369**	**0.3978**	**9.5000e-004**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**94.4461**	**94.4461**	**3.5500e-003**		**94.5349**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311	0.0000	1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**2.2114**	**0.7947**	**3.0061**	**1.1365**	**0.7311**	**1.8677**	**0.0000**	**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0369	0.3978	9.5000e-004	0.0894	8.0000e-004	0.0902	0.0237	7.4000e-004	0.0245		94.4461	94.4461	3.5500e-003		94.5349
Total	**0.0489**	**0.0369**	**0.3978**	**9.5000e-004**	**0.0894**	**8.0000e-004**	**0.0902**	**0.0237**	**7.4000e-004**	**0.0245**		**94.4461**	**94.4461**	**3.5500e-003**		**94.5349**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7900e-003	0.1228	0.0368	2.6000e-004	6.4000e-003	8.8000e-004	7.2800e-003	1.8400e-003	8.4000e-004	2.6800e-003		27.4150	27.4150	1.9800e-003		27.4644
Worker	0.0122	9.2300e-003	0.0995	2.4000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		23.6115	23.6115	8.9000e-004		23.6337

Total	**0.0170**	**0.1321**	**0.1363**	**5.0000e-004**	**0.0288**	**1.0800e-003**	**0.0298**	**7.7700e-003**	**1.0200e-003**	**8.7900e-003**		**51.0265**	**51.0265**	**2.8700e-003**		**51.0982**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7900e-003	0.1228	0.0368	2.6000e-004	6.4000e-003	8.8000e-004	7.2800e-003	1.8400e-003	8.4000e-004	2.6800e-003		27.4150	27.4150	1.9800e-003		27.4644
Worker	0.0122	9.2300e-003	0.0995	2.4000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		23.6115	23.6115	8.9000e-004		23.6337
Total	**0.0170**	**0.1321**	**0.1363**	**5.0000e-004**	**0.0288**	**1.0800e-003**	**0.0298**	**7.7700e-003**	**1.0200e-003**	**8.7900e-003**		**51.0265**	**51.0265**	**2.8700e-003**		**51.0982**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
Total	**2.2721**	**15.9802**	**13.4870**	**0.0220**		**0.9158**	**0.9158**		**0.8846**	**0.8846**		**2,018.0224**	**2,018.0224**	**0.3879**		**2,027.7210**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3300e-003	0.1159	0.0339	2.5000e-004	6.4000e-003	7.5000e-004	7.1500e-003	1.8400e-003	7.2000e-004	2.5600e-003		27.1277	27.1277	1.9100e-003		27.1754
Worker	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623
Total	**0.0154**	**0.1240**	**0.1224**	**4.8000e-004**	**0.0288**	**9.4000e-004**	**0.0297**	**7.7700e-003**	**9.0000e-004**	**8.6700e-003**		**49.9703**	**49.9703**	**2.7000e-003**		**50.0376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
Total	**2.2721**	**15.9802**	**13.4870**	**0.0220**		**0.9158**	**0.9158**		**0.8846**	**0.8846**	**0.0000**	**2,018.0224**	**2,018.0224**	**0.3879**		**2,027.7210**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3300e-003	0.1159	0.0339	2.5000e-004	6.4000e-003	7.5000e-004	7.1500e-003	1.8400e-003	7.2000e-004	2.5600e-003		27.1277	27.1277	1.9100e-003		27.1754
Worker	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623
Total	**0.0154**	**0.1240**	**0.1224**	**4.8000e-004**	**0.0288**	**9.4000e-004**	**0.0297**	**7.7700e-003**	**9.0000e-004**	**8.6700e-003**		**49.9703**	**49.9703**	**2.7000e-003**		**50.0376**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815		1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9562**	**9.1743**	**8.9025**	**0.0135**		**0.5225**	**0.5225**		**0.4815**	**0.4815**		**1,325.0953**	**1,325.0953**	**0.4112**		**1,335.3751**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0154	0.4966	0.1115	1.2600e-003	0.0280	1.8300e-003	0.0298	7.6700e-003	1.7500e-003	9.4200e-003		135.9760	135.9760	9.8900e-003		136.2232
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0720	0.0529	0.5752	1.4900e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		148.4770	148.4770	5.1100e-003		148.6047
Total	**0.0874**	**0.5495**	**0.6868**	**2.7500e-003**	**0.1733**	**3.0800e-003**	**0.1764**	**0.0462**	**2.9000e-003**	**0.0491**		**284.4530**	**284.4530**	**0.0150**		**284.8279**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815	0.0000	1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9562**	**9.1743**	**8.9025**	**0.0135**		**0.5225**	**0.5225**		**0.4815**	**0.4815**	**0.0000**	**1,325.0953**	**1,325.0953**	**0.4112**		**1,335.3751**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0154	0.4966	0.1115	1.2600e-003	0.0280	1.8300e-003	0.0298	7.6700e-003	1.7500e-003	9.4200e-003		135.9760	135.9760	9.8900e-003		136.2232
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0720	0.0529	0.5752	1.4900e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		148.4770	148.4770	5.1100e-003		148.6047
Total	**0.0874**	**0.5495**	**0.6868**	**2.7500e-003**	**0.1733**	**3.0800e-003**	**0.1764**	**0.0462**	**2.9000e-003**	**0.0491**		**284.4530**	**284.4530**	**0.0150**		**284.8279**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.5771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**2.8435**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.5771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**2.8435**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2543	0.3628	2.8298	8.2200e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		821.1206	821.1206	0.0227		821.6873
Unmitigated	0.2543	0.3628	2.8298	8.2200e-003	0.8237	7.8100e-003	0.8315	0.2195	7.2400e-003	0.2267		821.1206	821.1206	0.0227		821.6873

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	216.01	216.01	216.01	391,196	391,196
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	216.01	216.01	216.01	391,196	391,196

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive Th	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

Other Non-Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Fast Food Restaurant w/o Drive Thru	0.777800	0.055600	0.055500	0.055500	0.000000	0.055600	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
NaturalGas Unmitigated	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	3518.34	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0379**	**0.3449**	**0.2898**	**2.0700e-003**		**0.0262**	**0.0262**		**0.0262**	**0.0262**		**413.9221**	**413.9221**	**7.9300e-003**	**7.5900e-003**	**416.3818**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	3.51834	0.0379	0.3449	0.2898	2.0700e-003		0.0262	0.0262		0.0262	0.0262		413.9221	413.9221	7.9300e-003	7.5900e-003	416.3818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0379**	**0.3449**	**0.2898**	**2.0700e-003**		**0.0262**	**0.0262**		**0.0262**	**0.0262**		**413.9221**	**413.9221**	**7.9300e-003**	**7.5900e-003**	**416.3818**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Unmitigated	0.1174	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Total	**0.1174**	**2.0000e-005**	**2.2900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.8800e-003**	**4.8800e-003**	**1.0000e-005**		**5.2100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0600e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.2900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.8800e-003	4.8800e-003	1.0000e-005		5.2100e-003
Total	**0.1174**	**2.0000e-005**	**2.2900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.8800e-003**	**4.8800e-003**	**1.0000e-005**		**5.2100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT

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BERKELEY
CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: July 31, 2017

TO: Alyssa Helper, Environmental Planner, LSA

FROM: Leeann McDougall, Assistant Biologist, LSA

SUBJECT: Biological Resources Assessment for the Alamitos Beach Concession Stand Project

This memorandum provides a summary of the findings of a biological resources assessment for the proposed Alamitos Beach Concession Stand Project (project) located in the City of Long Beach (City), Los Angeles County, California (Figure 1, Project Location and Vicinity; all figures attached). The proposed project involves the replacement of an existing concession stand and café on the project site with an improved concession stand, a restroom facility, and an aquatic-equipment-rental facility. The project also includes an outdoor recreational area and improvements to the southern portion of the existing on-site parking lot. Additionally, the project would add a dedicated bike lane farther south of the existing pedestrian and bicycle pathway, along the southern boundary of the site, and would also relocate five existing volleyball courts south of the site to accommodate the additional bike lane. (Figure 2, Project Site).

SITE AND PROJECT DESCRIPTION

The project site is located in the Alamitos Beach area of the City of Long Beach. As shown on Figure 1, Project Location and Vicinity, regional access to the project site is provided via California State Route 1 (Pacific Coast Highway) to the north and Interstate 710 to the west of the project site. Local access to the site is provided via East Ocean Boulevard, East Shoreline Drive, and Beach Access Road. In addition, there is a multiuse trail adjacent to the south side of the project site that provides pedestrian and bicycle access to the site. The project site is situated at the western end of Alamitos Beach and is adjacent to the waterfront area near the City's downtown.

SURROUNDING LAND USES

The project site is bound by commercial, office, and high-rise residential uses to the north; sandy beach areas associated with Alamitos Beach to the east and south, as well as the Marina Green to the south; and Beach Access Road and East Shoreline Boulevard to the west.

The 1.22-acre project site (Assessor's Parcel No. 7265-021-901) is currently developed with the existing Alamitos Café, which itself is on the north end of the Marina Green. The existing one-story concession building is 2,234 square feet in size. A small outdoor patio and an automated teller machine (ATM) are present directly south of the building and are intended for use by patrons of the concession stand and visitors to the beach. An existing monument sign marks the southeastern corner of the site. Pedestrian and bicycle access to the project site are provided by an existing

bicycle pathway and an existing pedestrian pathway south of the site, both of which traverse Alamitos Beach in an east-west direction. Vehicular access to the site is provided via Beach Access Road and an onsite surface parking lot directly north of the existing concession stand. An electric vehicle charging station is located within the onsite parking lot, near the entrance to the concession stand. Bicycle racks are also present on the project site and are located in between the on-site parking lot and the existing concession stand.

Figure 3, Representative Site Photographs, depicts the project site in its existing condition.

METHODOLOGY

LSA conducted a literature review to determine the potential for occurrence of special-status plant and animal species on or in the immediate vicinity of the proposed project site. The site is on the *Long Beach, California* United States Geological Survey (USGS) 7.5-minute quadrangle (quad) map. Database records for the *Long Beach* quad and surrounding quads (*San Pedro, Inglewood, South Gate, Whittier, Los Alamitos, Seal Beach and Torrance*) were reviewed on July 3, 2017, using the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) *Rarefind 5* (Commercial Version, Version 5.2.14; Biogeographic Data Branch), the California Native Plant Society Inventory of Rare and Endangered Plants (online edition, v8-03), and the United States Fish and Wildlife Service Information for Planning and Conservation (IPaC; v3.0.9) online database.

LSA biologist Leeann McDougall conducted a site visit on July 3, 2017, to survey the existing biological conditions on the site.

BIOLOGICAL RESOURCES

The areas adjacent to the project site include sandy beach east of the site; the existing surface parking lot associated with the current concession stand to the north of the project site; and the Marina Green south of the site. The sand in the area is groomed on a regular basis and the area receives a high level of human recreational use. The project area offers poor habitat for most special-interest animal species that may occur in the project area. Given the extent of historical disturbance in the project area, the probability of any of the special-interest plant species occurring in the project area is very low. Summaries of the plants and wildlife observed during the July site visit are provided in the Plants and Wildlife sections below.

Plants

The vegetation on site consists of nonnative ruderal and ornamental landscaping, including ornamental trees and Mexican fan palms (*Washingtonia robusta*).

LSA carefully evaluated the list of special-status plant species generated by the literature search. However, due to the disturbed nature of the vegetation, sand, and soil and to the site's isolation from native habitats, there is little potential for special-status plant species to occur on the project site.

Wildlife

Given the site is heavily disturbed and located in an area that is almost entirely developed, species diversity is expected to be relatively low within the project boundaries. The site does not function as a wildlife movement corridor and does not offer much habitat for wildlife to reside beyond nonnative ruderal and ornamental vegetation; however, the site does contain foraging and nesting habitat for birds. Active nests of native bird species are protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. Therefore, the proposed project would be required to adhere to Mitigation Measure BIO-1, listed in the Conclusion and Recommendations section, which requires compliance with the MBTA.

Wildlife detected during the survey include nonnative rock pigeon (*Columba livia*), and native Western gull (*Larus occidentalis*), California gull (*Larus californicus*), and American crow (*Corvus brachyrhynchos*).

Special-status species identified through the CDFW's CNDDB as having been observed within 3 miles of the proposed project site include Western tidal-flat tiger beetle (*Cicindela gabbii*), Western beach tiger beetle (*Cicindela latesignata latesignata*), Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), California least tern (*Sternula antillarum browni*), bank swallow (*Riparia riparia*), and big free-tailed bat (*Nyctinomops macrotis*). These bird and bat species may be found foraging near the site; however, habitat is not suitable for nesting or maternity roosting. Therefore, no mitigation is required. While the Western tidal-flat tiger beetle and Western beach tiger beetle could potentially occur in some of the adjacent open space habitat, they are not expected to occur within the project limits due to the high level of recreational use of the beach. Therefore, no mitigation is required.

Jurisdictional Features

This project does not propose to impact jurisdictional wetlands or nonwetland waters; therefore, it will not be necessary to secure authorizations from the regulatory agencies (e.g., a 404 Permit from the United States Army Corps of Engineers, a 401 Water Quality Certification from the Regional Water Quality Control Board, or a 1602 Streambed Alteration Notification to CDFW). A Jurisdictional Delineation report will not be required because there are no proposed impacts to the surrounding waters.

Although the National Wetlands Inventory map (Figure 4, National Wetlands Inventory [NWI] Map) shows the site is partially mapped as Estuarine and Marine Wetland, Google Earth aerial images depicting the area during the time span of 1994 to 2017 were referenced and no evidence of tidal waters approaching the site was observed. The water appears to be at least 500 feet away from the site; therefore, the site would be considered outside of the tidal influence.

California Coastal Commission

The California Coastal Commission (CCC) oversees implementation of the California Coastal Act (CCA) and the Federal Coastal Zone Management Act. The CCC, through provisions of the CCA, is empowered to issue a Coastal Development Permit (CDP) for many projects located within the Coastal Zone. The Coastal Zone is generally defined as the distance from the ocean shoreline to 1,000 yards inland, or more in some locations. In areas where a local entity has a certified Local Coastal Program (LCP), the local entity (i.e., the City) can issue a CDP only if it is consistent with the LCP. The CCC, however, has appeal authority for portions of LCPs and retains jurisdiction over certain public trust lands and in areas without an LCP. Because the project is located within an area where a local entity has a certified LCP, the local entity (i.e., the City) can issue a CDP if it is consistent with the certified LCP.

Permits

As discussed previously, the project proposes no impacts to jurisdictional wetlands or nonwetland waters. As such, permits for impacts to such resources will not be required. The project will require a Coastal Developmental Permit from the City of Long Beach LCP because the project area is located within the Coastal Zone.

In addition, no listed endangered and/or threatened species or designated critical habitat is anticipated to be affected by the project; therefore, coordination with the respective resources listing agency will not be required.

CONCLUSION AND RECOMMENDATIONS

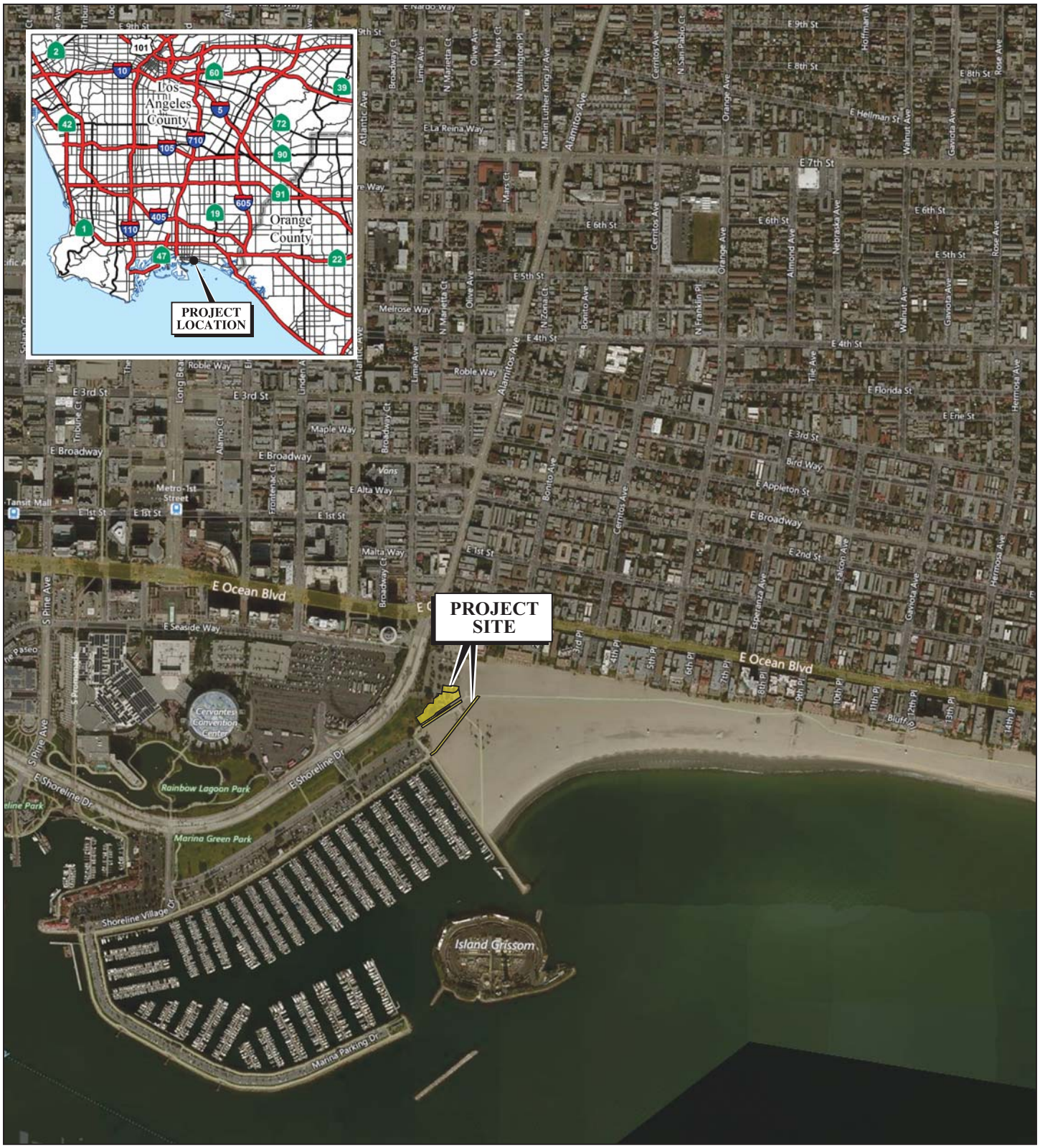
The project is not expected to impact special-status biological resources provided the following measures are implemented:

BIO-1: **Nesting Birds.** In order to avoid impacts to nesting birds that are protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, vegetation clearing or construction activities that impact existing vegetation shall be conducted outside the primary nesting season for birds. The nesting season accepted by the California Coastal Commission extends from January through September. If vegetation disturbance is scheduled to occur during the nesting season, a preconstruction nesting bird survey shall be conducted by a qualified biologist within 3 days prior to vegetation removal. If a nest is found with eggs or young of any species covered under the MBTA or California Fish and Game Code, work shall not be permitted within a buffer distance to be determined by the qualified biologist. Commencing project construction activities, including vegetation clearing, outside of the primary nesting season for birds reduces the chances of the biologist finding an active nest during the preconstruction nesting bird survey.

Attachment: Figures 1–4

FIGURES 1–4

Figure 1 – Project Location and Vicinity
Figure 2 – Project Site
Figure 3 – Representative Site Photographs
Figure 4 – National Wetlands Inventory (NWI) Map



LSA

FIGURE 1

N

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FEET

SOURCE: Bing Maps

Alamitos Beach Concession Stand
Project Location and Vicinity

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LSA

FIGURE 2

LEGEND

- Pedestrian Path
- Bike Path
- Bike Network

N

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FEET

SOURCE: Bing Maps

Alamitos Beach Concession Stand

Project Site

I:\CLB1702\G\Existing Project Site.cdr (4/19/2017)



Photo 1 - Concession Stand



Photo 2 - Parking Lot/Hardscape Plaza



Photo 3 - View South from Marina Green



Photo 4 - View South from Beach Access Road

LSA

FIGURE 3
(Page 1 of 2)

Alamitos Beach Concession Stand
Representative Site Photographs

SOURCE: City of Long Beach Site Plan Package

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Photo 5 - View East from Bicycle/Pedestrian Path



Photo 6 - View West from Bicycle/Pedestrian Path



Photo 7 - View South from Bicycle/Pedestrian Path



Photo 8 - Shoreline Marina

LSA

FIGURE 3
(Page 2 of 2)

Alamitos Beach Concession Stand
Representative Site Photographs

SOURCE: City of Long Beach Site Plan Package

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LSA

FIGURE 4

LEGEND

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

N

Alamitos Beach Concession Stand

National Wetlands Inventory (NWI) Map

SOURCE: U.S. Fish and Wildlife Service

I:\CLB1702\G\Wetlands Inventory.cdr (7/10/2017)

APPENDIX C

CULTURAL AND PALEONTOLOGICAL MEMORANDUMS

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LSA

BERKELEY
CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: July 31, 2017

TO: Alyssa Helper

FROM: Ivan Strudwick, Archaeologist/RPA

SUBJECT: Cultural Resources Technical Memorandum for the Alamitos Beach Concession Stand Project, City of Long Beach, Los Angeles County, California

This LSA memorandum documents the results of a review of historic maps and aerial photographs for purposes of providing recommendations as to whether a cultural resources survey is warranted for the Alamitos Beach Concession Stand Project (project) in the City of Long Beach (City), Los Angeles County, California.

PROJECT LOCATION AND DESCRIPTION

As illustrated by Figure 1, the 1.22-acre project area is located in the Alamitos Beach area of the City, generally described as adjacent to the waterfront area near the City's downtown. It is located at the very west end of the sandy beach from which Long Beach obtained its name. This locale is on the east bank at the mouth of the now channelized Los Angeles River, 700 feet (ft) directly south of the junction of Ocean Boulevard and East Shoreline Drive, and 2.6 mile south-southwest of Signal Hill, a local prominent landmark. The project area is depicted on the United States Geological Survey (USGS) *Long Beach, California* topographic quadrangle map in Township 5 South, Range 12 West in the southwest corner of Section 6, San Bernardino Baseline and Meridian (USGS 1981). The project is located at an elevation of approximately 14 to 17 ft, NAVD88.[1]

As illustrated by Figure 2, the proposed project includes the replacement of an existing concession stand and café on the project site with an improved concession stand, restroom facility, and a facility for the rental of aquatic equipment. The project also includes an outdoor recreational area and improvements to the southern portion of the existing on-site surface parking lot. The project will add a landscaped median between the existing pedestrian and bicycle pathway and an additional dedicated bike lane farther south of the pedestrian path on the beach, and will also relocate five existing volleyball courts south of the site to accommodate the additional bicycle lane. A water feature, ornamental landscaping, flagpole, and a relocated monument sign will define the proposed project entrance. Several other changes, such as replacing an existing hardscape plaza and

[1] NAVD88 refers to the North American Vertical Datum of 1988, which is the control datum for the height of the tidal bench mark.

picnic tables with a vehicular drop-off zone, and relocating palm trees from the existing hardscape plaza to the outdoor recreational area, are also proposed.

HISTORIC AERIAL PHOTOGRAPHS

A review of online aerial photographs (www.historicaerials.com) was conducted to provide the background for more extensive research. However, this review indicates that no additional research or field survey is necessary.

Based on recent aerial photographs, the project area is approximately 700-900 ft inland from its closest point to the ocean. The project is adjacent to a rock jetty that forms the east side of the marina located at the west end of the wide sandy beach that runs nearly 4.0 miles east-southeast to the mouth of the San Gabriel Rivermouth. Near the current project area and Shoreline Drive at the westernmost end of this long beach, the beach widens and curves southwest, ending at the rock jetty that is the east side of the marina. Island Grissom, a human-made island for drilling oil, forms a naturally-appearing island in the marina entrance. Island Grissom was constructed sometime between 1963 and 1972, prior to the construction of the marina and the marina's eastern jetty. Based on available aerial photographs, the history of the development of the beach is as follows.

The earliest available aerial photograph dates to 1953. At this time, the original beach parallels Ocean Boulevard, extending west all the way to the Los Angeles River. At this time, a building had been constructed at the end of Long Beach Boulevard on the coastal side of Ocean Boulevard on what was originally beach. A semi-circular rock jetty with a road on top ran around this building extending into the ocean like a horseshoe, connecting Pine Street on the west with Linden Street on the east. A pier extended farther southward into the ocean from the south tip of this semicircular horseshoe-shaped jetty road. A breaking ocean wave is visible on the east side of this jetty road (indicating no outside Harbor jetty) over 700 ft directly west of what is now the current project area. The point where the wave is breaking is now located near the Convention Center, west of Shoreline Drive. The north end of the current project would have been at the shoreline, whereas the south end of the current project area would have been an estimated 4-6 ft underwater.

A 1963 aerial photograph shows little change in the vicinity of the current project area, although the ocean inside the horseshoe-shaped jetty road had been in-filled. Most of the changes to the coast at this time were occurring west of the horseshoe-shaped jetty road.

A 1972 aerial photograph shows substantial changes had occurred in the vicinity of the project area. Island Grissom had been constructed, Queensway Bay Bridge was built, and Ocean Boulevard was under construction. From this aerial, it is evident that construction of Ocean Boulevard had first involved constructing a rock wall (jetty) along the outside of the infilled area. This rock jetty later formed the north edge of the marina. The east end of this jetty is approximately where the west edge of the current project area is located.

A 1980 aerial photograph shows that a long rock jetty had been constructed from the shore at the southwestern edge of the current project area (the west end of the additional bicycle lane) southeast to Island Grissom. As mentioned, this jetty now forms the eastern side of the marina.

Based on a 1994 aerial photograph, the marina was constructed between 1980 and 1994. The beach, which originally was less than 700 ft south of Ocean Boulevard in the vicinity of the project area, was over 1,000 ft south of Ocean Boulevard by 1994, when the jetty was constructed (1980-1994). Aerial photographs taken after 1994, subsequent to construction of the marine and final jetty, show that the beach slowly increased in width as naturally deposited sand was not removed by ocean currents, which were blocked by jetties. Today, the beach in the vicinity of the project area extends to a point that at its greatest extent is nearly 1,500 ft south of Ocean Boulevard.

SUMMARY AND CONCLUSIONS

Aerial photographs taken in 1953 and 1963 show that the north end of the current project area was along the water line, and that the south end of the project area was situated where waves broke in the ocean. Construction of Shoreline Drive between 1963 and 1972, and construction of the jetty forming the east side of the marina between 1972 and 1980, in-filled the area where the current project is located increasing the width of the beach over 300 ft. From 1980 to the present, aerial photographs show that natural sand accumulation slowly widened the beach another 500 ft to its current width, nearly 1,500 ft south of Ocean Boulevard.

Because the project area was originally located along the beach at and below water level, it is evident that the area was never occupied prehistorically and that the substrate is composed of sand that was bulldozed into place, as well as sand that accumulated naturally due to placement of the jetties. As such, neither a cultural resource record search nor a cultural resource survey is warranted, and it is unlikely the site contains cultural resources.

REFERENCES

United States Geological Survey (USGS)

1981 *Long Beach, California* 7.5-minute quadrangle map. U.S. Geological Survey, Denver, Colorado, 80225.

ATTACHMENT A

FIGURES 1 AND 2

Figure 1—Project Location

Figure 2—Proposed Project Features

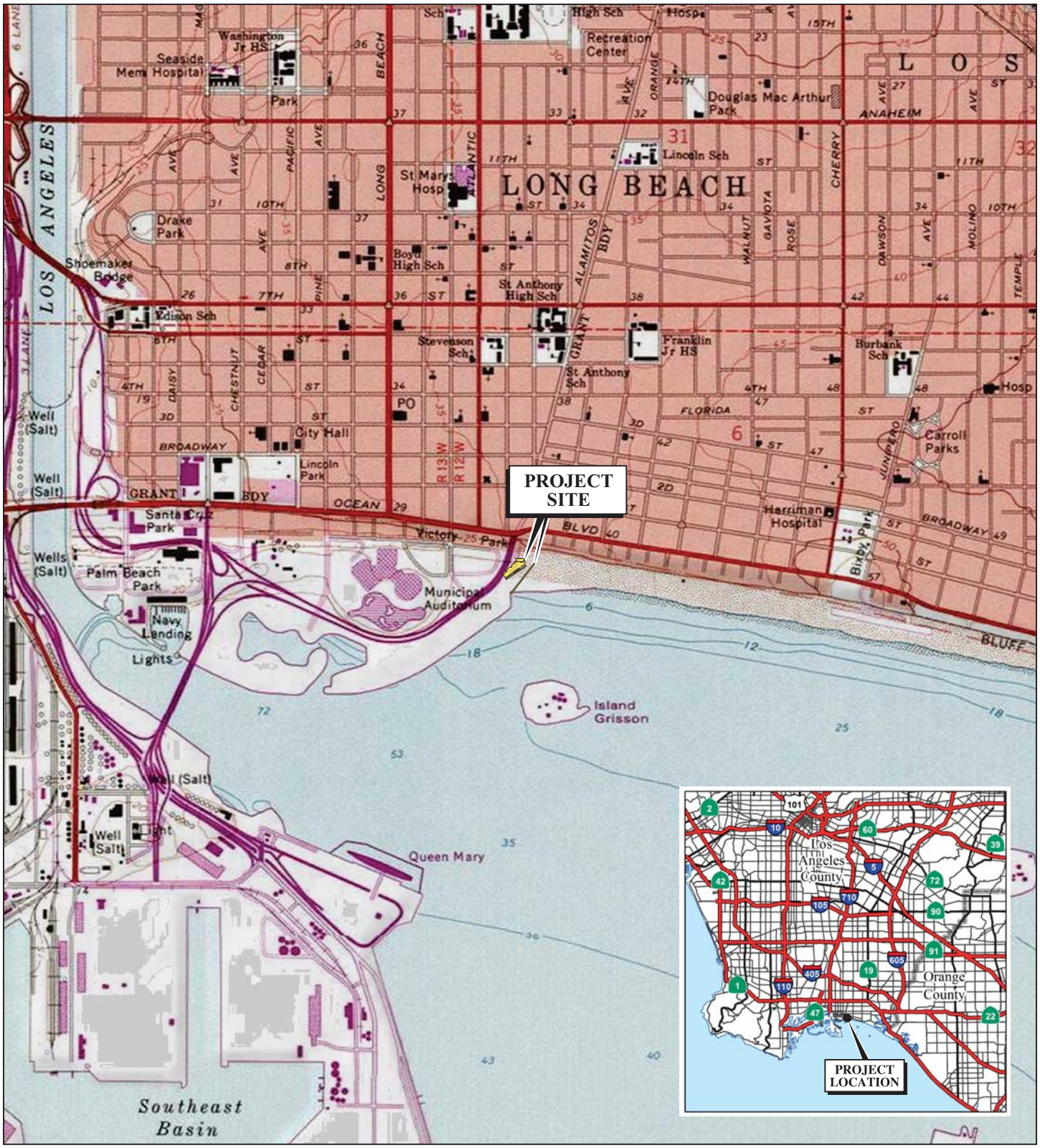


FIGURE 1

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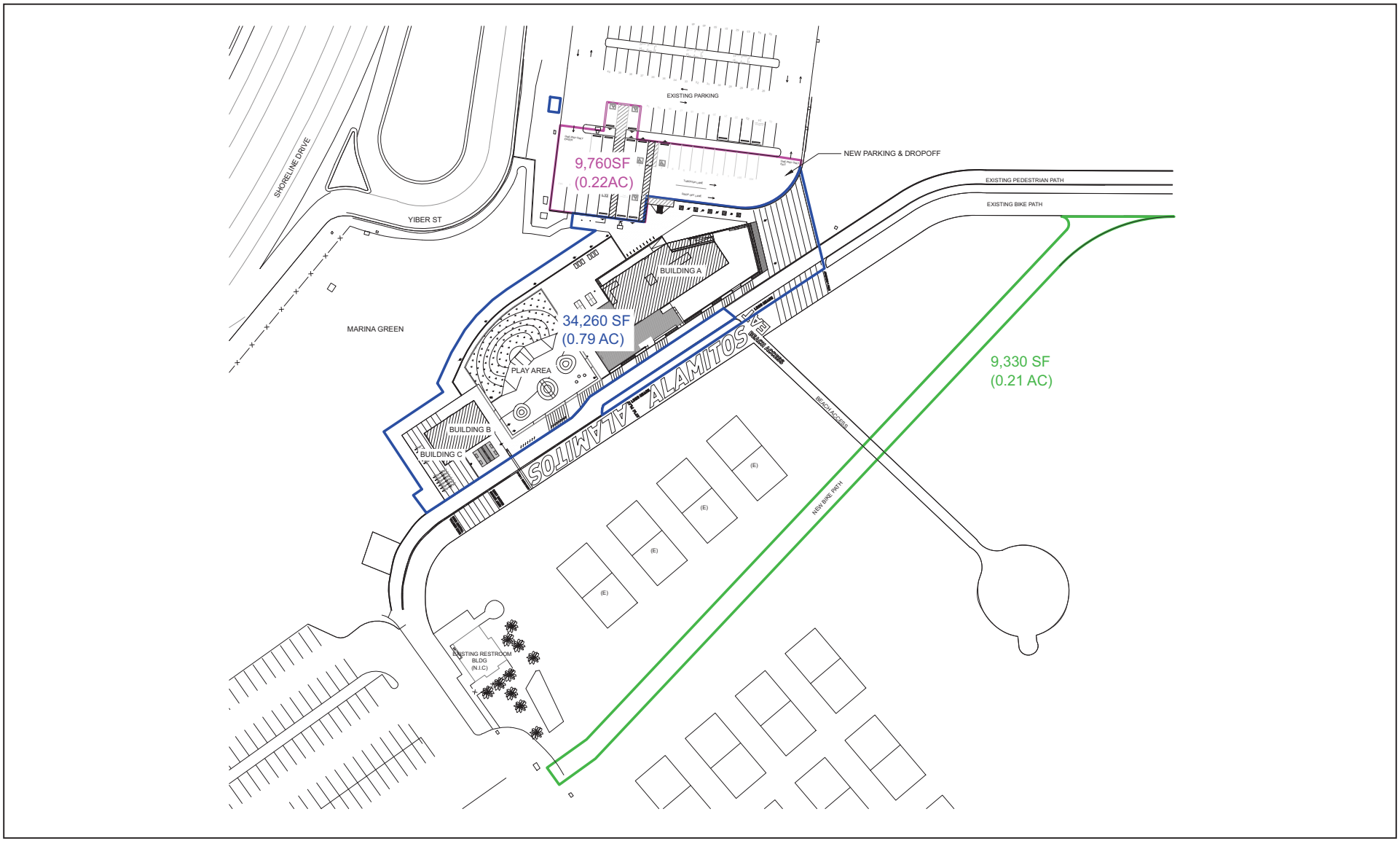
FEET

SOURCE: USGS 7.5' Quad - Long Beach, CA (1981)

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Alamitos Beach Concession Stand

Regional Project Location



LSA

FIGURE 2

LEGEND

- Parking Lot Improvements
- Concession Stand & Play Area Improvements
- Bike Path Lane Addition

N

0 50 1000

FEET

SOURCE: City of Long Beach

Alamitos Beach Concession Stand

Proposed Project Features

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BERKELEY
CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: July 12, 2017

TO: Alyssa Helper

FROM: Sarah Rieboldt, Ph.D.

SUBJECT: Paleontological Analysis of the Alamitos Beach Concession Stand Project, City of Long Beach, Los Angeles County, California

INTRODUCTION

This memorandum was prepared to ensure the Alamitos Beach Concession Stand Project (project) in the City of Long Beach (City), Los Angeles County, California, is in compliance with all applicable State regulations regarding paleontological resources, as well as guidelines of the Society of Vertebrate Paleontology (SVP, 2010). The applicable regulations include the California Environmental Quality Act (CEQA): Public Resources Code (PRC) Division 13, Chapter 2.6; the *State CEQA Guidelines*: California Code of Regulations, Title 14, Chapter 3, Appendix G; and PRC 5097.5. This memorandum addresses the potential for the project to impact paleontological resources and, if needed, includes mitigation measures and other recommendations to minimize these impacts. The City is the Lead Agency under CEQA.

PROJECT LOCATION AND DESCRIPTION

The project site is on Alamitos Beach just southeast of the intersection of Alamitos Avenue/ East Shoreline Drive and East Ocean Boulevard. The project site is depicted on the United States Geological Survey (USGS) *Long Beach, California* 7.5-minute topographic quadrangle map in Township 5 South, Range 12 West, Section 6 (USGS, 1978; Figure 1, Attachment A).

The proposed project includes the redevelopment of the existing concession stand and café on the project site with three buildings, an outdoor recreational area, and improvements to the southern portion of the existing on-site surface parking lot. The project would be aligned with the existing pedestrian and bicycle paths east of the site, creating a promenade area in front of the site, facing the beach.

The proposed project would also add a landscaped median between the existing pedestrian and bicycle pathway and an additional dedicated bike lane further south of the pedestrian path on the beach. The proposed project would relocate five of the existing volleyball courts south of the site to accommodate the additional bicycle lane; however, relocation of the existing palm trees currently present south of the site would not be required. The addition of a bicycle lane as proposed as part of

the project would reposition a sharp curve in the existing alignment, which currently poses a problem for pedestrian safety.

Building A

Building A is the concession stand/café building and would be 4,315 square feet (sf) in size and a maximum of 27 feet (ft) in height. The concession stand/café building would consist of a semi-enclosed ground level topped by an open outdoor roof deck. The first floor would feature a modern restaurant and café, a kitchen, and restroom facilities. It would also include indoor seating that would spill out into a larger ground-level deck containing outdoor seating areas. The open rooftop deck would feature outdoor seating, providing visitors a comfortable vantage point of the Pacific Ocean and the Long Beach Marina. The rooftop deck would include an enclosed space for mechanical equipment, a data room, and a service bar. The service bar would feature a cooler, sinks, multiple taps, and storage space.

The proposed concession stand/café building would be a low rectilinear building that would incorporate architectural features reminiscent of shipping container structures. The building would include metal panels that would slide open, revealing the building's interior spaces and interior cedar siding. The southeastern side of the building would feature tall glass doors connecting ground-floor interior seating with exterior uses on the ground-level deck, which itself would be 6 inches above the existing pedestrian path in front of the café and 18 inches above the existing pedestrian path in front of the restaurant. The roof deck would feature acid-etched glass guardrails designed to be visible and safe for birds in flight. The project would also have sliding doors on the southwestern end of the site to provide access to a games counter that would house board games and amenities for games in the grassy area east of the site.

Building B

Building B would be 817 sf in size and 12 ft in height. Plans for the building include restroom and storage facilities to serve patrons of the project and visitors to the beach. It would be locked for security purposes during the evening hours.

Building C

Building C would be 430 sf in size and 12 ft in height. This building would include recreational equipment for rent by visitors to the beach and park. The project also includes the installation of pedestrian furniture and a rinse station directly east of Buildings B and C.

Building Design

Building materials consist of profiled metal panels (similar to shipping containers) on the building exterior. As the panels would slide open, they would reveal a softer inner material (e.g., cedar siding) to give the building a softer appearance.

Open Space and Recreation

In addition to Buildings A through C, the project also features the installation of a playground and recreational area on the southern portion of the site. The proposed playground would include

concrete seating with skateboard guards, a grassy mound, a scramble wall with wood, a slide, a wobble pod, and a small pedestrian pathway. The outdoor recreational area would also include outdoor games, including a cornhole station and ping pong tables. An outdoor shade structure would be installed within this area to provide relief to visitors from weather conditions.

Based on the recommendations in the geotechnical report prepared for the project, excavation for the project is expected to extend to a minimum depth of 5 ft for the entire project footprint or to competent material as determined by the project geologist (AESCO, 2017).

METHODS

LSA examined geologic maps of the project site and reviewed relevant geological and paleontological literature to determine which geologic units are present in the project site, as well as whether fossils have been recovered in the project site or from those or similar geologic units elsewhere in the region. A search for known fossil localities was also conducted through the Natural History Museum of Los Angeles County (LACM) in order to determine the status and extent of previously recorded paleontological resources within and surrounding the project site.

RESULTS

Literature Review

The project is located at the northern end of the Peninsular Ranges Geomorphic Province, a 900-mile (mi) long northwest-southeast-trending structural block that extends from the Transverse Ranges in the north to the tip of Baja California in the south and includes the Los Angeles Basin (California Geological Survey, 2002; Norris and Webb, 1976). This province is characterized by mountains and valleys that trend in a northwest-southeast direction, roughly parallel to the San Andreas Fault. The total width of the province is approximately 225 mi, extending from the Colorado Desert in the east, across the continental shelf, to the southern Channel Islands (i.e., Santa Barbara, San Nicolas, Santa Catalina, and San Clemente) (Sharp, 1976). It contains extensive pre-Cenozoic (more than 66 million years ago [Ma]) igneous and metamorphic rock covered by Cenozoic (less than 66 Ma) sedimentary deposits (Norris and Webb, 1976).

Geologic mapping by Saucedo et al. (2003) shows that the project site contains only Artificial Fill. The geotechnical report prepared by AESCO (2017) identified silts and silty sands, consistent with Artificial Fill, in borings extending to depths of up to 50 ft within the project site. Artificial Fill consists of sediments that have been removed from one location and transported to another location by human activity rather than by natural means. The transportation distance can vary from a few feet to many miles, and composition is dependent on the source and purpose. Artificial Fill will sometimes contain modern debris such as asphalt, wood, bricks, concrete, metal, glass, plastic, and even plant material. While Artificial Fill may contain fossils, these fossils have been removed from their original location and are thus out of stratigraphic context. Therefore, they are not considered important for scientific study. As such, Artificial Fill has no paleontological sensitivity.

Fossil Locality Search

According to the locality search conducted by LACM, there are no known fossil localities within the boundaries of the project. The LACM reports that the project site is underlain by Artificial Fill and active beach sands. The museum notes that these surface deposits typically do not contain scientifically significant fossils in the uppermost layers, but older deposits that may be encountered at depth may produce important fossils. The closest vertebrate locality in these older deposits is LACM 6896, which is located northwest of the project site at the intersection of Magnolia Avenue/ West Ocean Boulevard. This locality produced specimens of fossil whale (*Cetacea*) at a depth of less than 100 ft below the surface. Along the beach to the east of the project site, between the shoreline and the Bluff Park parking lot, is locality LACM 7739, which, at a depth of 25 ft, produced a variety of fossil marine vertebrates (e.g., bony fish, sharks, and rays), as well as invertebrate fossils (e.g., snails, clams, tusk shells, barnacles, crabs, and sea urchins). Just to the west of this locality across from Bixby Park, south of East Ocean Boulevard, is vertebrate fossil locality LACM 1005. This locality produced fossils of mammoth (*Mammuthus columbi*) and ground sloth (*Nothrotheriops shastensis*) at a depth of about 60 ft.

The LACM believes that shallow excavations in the surface deposits at the project site are unlikely to recover any scientifically important vertebrate fossils. However, deeper excavations may encounter scientifically significant vertebrate remains and should be monitored to recover any such remains. The LACM also suggests sediment samples be collected and processed for small fossil potential. A copy of the letter describing the locality search results from the LACM is provided in Attachment B.

CONCLUSIONS AND RECOMMENDATIONS

The entire project site is underlain by Artificial Fill, which has no paleontological sensitivity. Based on the fossil locality search conducted by the LACM, the shallowest depth at which fossils were recovered near the project site was 25 ft below the surface. However, ground-disturbing activities for the project are expected to extend to approximately 5 ft. Therefore, LSA recommends that no paleontological mitigation measures are required for this project using current project plans. In the unlikely event that fossil remains are encountered, paleontological mitigation will need to be developed (including paleontological monitoring; collection of the observed resources; preservation, stabilization, and identification of collected resources; curation of resources into a museum repository; and preparation of a monitoring report of findings). If project plans change to include more substantial excavation or to include additional areas, this recommendation must be revisited.

Attachments: References
A – Figure 1: Project Location and Vicinity Map
B – Paleontological Locality Search Results from the Natural History Museum of Los Angeles County

REFERENCES

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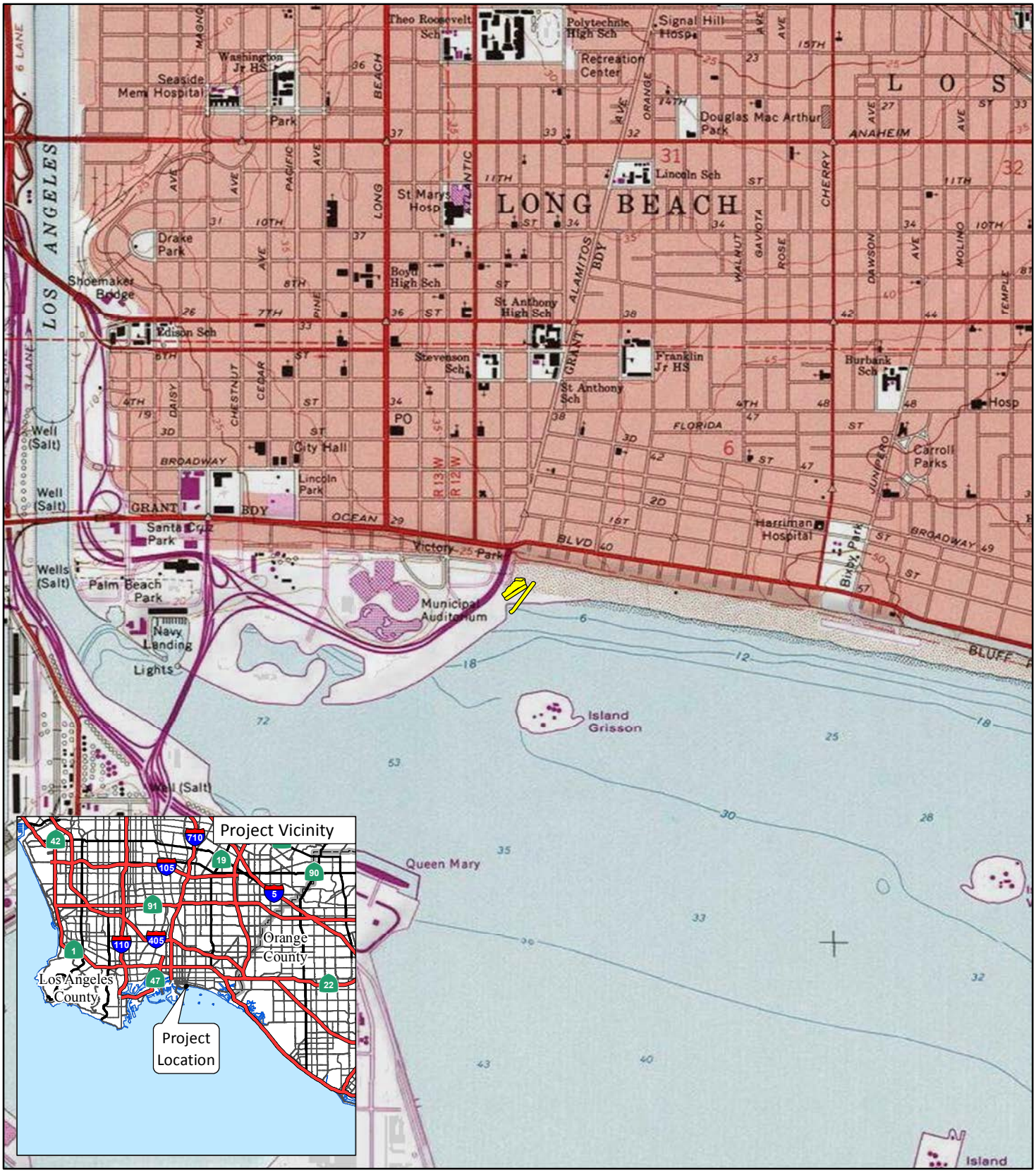
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ATTACHMENT A

FIGURE 1: PROJECT LOCATION MAP



LSA

LEGEND

Project Location

FIGURE 1

N

0 1000 2000

FEET

Alamitos Beach Concession Stand

Project Location

SOURCE: USGS 7.5' Quad - Long Beach (1978)

I:\CLB1702\GIS\ProjectLocation_USGS.mxd (6/26/2017)

ATTACHMENT B

PALEONTOLOGICAL LOCALITY SEARCH RESULTS FROM THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

NATURAL HISTORY MUSEUM
LOS ANGELES COUNTY

Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

5 July 2017

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614

Attn: Sarah Rieboldt, Ph.D., Senior Paleontological Resources Manager

re: Paleontological Resources Records Check for the proposed Alamitos Concession Stand Project, LSA Project # CLB1702, in the City of Long Beach, Los Angeles County, project area

Dear Sarah:

I have thoroughly searched our paleontology collection records for the locality and specimen data for the proposed Alamitos Concession Stand Project, LSA Project # CLB1702, in the City of Long Beach, Los Angeles County, project area as outlined on the portion of the Long Beach USGS topographic quadrangle map that you sent to me via e-mail on 27 June 2017. We do not have any vertebrate fossil localities that lie directly within the proposed project boundaries, but we do have localities nearby from the same sedimentary deposits that may occur at depth in the proposed project area.

From the level of geologic mapping available to me, it appears that the surface deposits in the proposed project area consist of artificial fill and active beach sands. These deposits are highly unlikely to contain significant fossil vertebrate remains, at least in the uppermost layers, but the underlying older *in situ* deposits found at varying depths may well contain significant vertebrate fossils.

Our closest vertebrate fossil locality from underlying older deposits is LACM 6896, just north of west of the proposed project area near the intersection of Magnolia Avenue and Ocean Boulevard, that produced a specimen of fossil whale, Cetacea, from pile driving activities at a

depth of less than 100 feet. To the east of the proposed project area along he nearby beach our vertebrate fossil locality LACM 7739, situated between the parking lot of Bluff Park and the shoreline, at a depth of 25 feet produced a rich suite of fossil marine vertebrates (see appendix for faunal list) in addition to associated fossil invertebrates including snails, clams, tusk shells, barnacles, crabs, and sea urchins, probably from the marine older Quaternary San Pedro Sand. Just to the west of locality LACM 7739, across from Bixby Park south of Ocean Boulevard at approximately 17th Place, our fossil vertebrate locality LACM 1005 produced fossil specimens of mammoth, *Mammuthus columbi*, and ground sloth, *Nothrotheriops shastensis*, at approximately 60 feet from the surface.

Shallow excavations in the artificial fill and active beach sands exposed in the proposed project area probably will not uncover any significant vertebrate fossils. Deeper excavations that extend down into older in situ deposits, however, may well encounter significant vertebrate fossils. Any substantial excavations below the uppermost layers in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosures: appendix, invoice

Fossil fish fauna from locality LACM 7739

- Chondrichthyes
  - Carcharhiniformes
    - Carcharhinidae - requiem sharks
      - *Carcharhinus*
      - *Galeorhinus galeus*
    - Sphyrnidae - hammerhead sharks
      - *Sphyrna*
    - Triakidae - smoothhounds
      - *Triakis semifasciata*
  - Heterodontiformes
    - Heterodontidae - horn sharks
      - *Heterodontus francisci*
  - Myliobatiformes
    - Dasyatidae - stingrays
      - *Dasyatis*
    - Myliobatidae - eagle rays
      - *Myliobatis californica*
  - Rajiformes
    - Rajidae - skates
      - *Raja*
    - Rhinobatidae - guitarfish
      - *Rhinobatos productus*
  - Squaliformes
    - Squalidae - dogfish sharks
      - *Squalus acanthias*
  - Squatiniformes
    - Squatinidae - angel sharks
      - *Squatina californica*
- Osteichthyes
  - Batrachoidiformes
    - Batrachoididae - toadfishes
      - *Porichthys notatus*
  - Clupeiformes
    - Clupeidae - herring
  - Ophidiiformes
    - Ophidiidae - cusk-eels
      - *Chilara taylori*
  - Perciformes
    - Embiotocidae - surfperches
      - *Cymatogaster aggregata*
      - *Damalichthys vacca*
      - *Embiotoca jacksoni*
      - *Hyperprosopon argenteum*
      - *Micrometrus aurora*
      - *Phanerodon furcatus*
    - Gobiidae - gobies
    - Sciaenidae - croakers
      - *Genyonemus lineatus*
      - *Seriphus politus*
    - Sphyraenidae - barracudas
      - *Sphyraena argentea*
  - Pleuronectiformes
    - Citharidae - sanddabs
      - *Citharichthys sordidus*
      - *Citharichthys stigmaeus*
    - Pleuronectidae - flounders
      - *Glyptocephalus zachirus*
      - *Lyopsetta exilis*
  - Scorpaeniformes
    - Cottidae - sculpins
    - Scorpaenidae - rockfish
      - *Sebastes goodei*

APPENDIX D

GEOTECHNICAL REPORT

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Orange County
17782 Georgetown Lane
Huntington Beach, California 92647
Tele: (714) 375-3830
Fax: (714) 375-3831

San Bernardino County
14163 Arrow Boulevard
Fontana, California 92335
Tele: (909) 284-9200
Fax: (909) 284-9201

GEOTECHNICAL REPORT
ALAMITOS BEACH CONCESSIONS BUILDINGS
780 EAST SHORELINE DRIVE
LONG BEACH, CALIFORNIA
AESCO PROJECT NO. 20171705-E5129

Prepared for:

RA-DA
7523 Norton Avenue
West Hollywood, CA 90046

Attention: Mr. Rania Alomar, AIA

Prepared By:

AESCO
17782 Georgetown Lane
Huntington Beach, California 92647
Adam Chamaa, MSCE, P.E., Manager

May 30, 2017

Orange County
17782 Georgetown Lane
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Fax: (909) 284-9201

May 30, 2017

Ms. Rania Alomar, AIA
RA-DA
7523 Norton Avenue
West Hollywood, CA 90046

Subject: **Geotechnical Report**
Alamitos Beach Concessions Buildings
780 East Shoreline Drive
Long Beach, CA
AESCO Project No. 20171705-E5129

Dear Ms. Alomar:

AESCO is pleased to provide you three (3) copies of the of the geotechnical report for the above-referenced project. The project consists of replacing the existing Beach Concessions Building with a new approximately 3,000 square foot, single-story structure. The new structure will have a full service commercial kitchen, a dining area, restrooms, storage, and a rooftop dining deck. Two additional structures; public restrooms and a storage building will also be constructed about 1,500 feet west of the proposed new concession structure.

AESCO will be happy to assist you further on this project by furnishing any Construction Materials Testing and Inspection Services you may require during the construction phase of the project. We are a full service-testing laboratory and inspection service and can supply the full range of testing and inspection services such as soils, concrete, asphalt, steel, welding, etc. that may be necessary for construction of this project.

Please do not hesitate to contact us if you have any questions or if we may be of any additional assistance. We look forward to assisting you during the construction of the proposed facility.

Sincerely,

AESCO, Inc.

Debra L. Perez
Project Manager

Adam Chamaa, P.E., G.E.
Senior Project Engineer

REGISTERED PROFESSIONAL ENGINEER
ADAM CHAMAA
GE 2784
EXP 12-31-17
GEOTECHNICAL
STATE OF CALIFORNIA

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Appendix

Site Plan

Logs of Borings B-1 through B-5

Laboratory Test Data

Seismic Design Data

Liquefaction Analysis

Geotechnical Report
Alamitos Beach Concessions Buildings
780 East Shoreline Drive
Long Beach, CA

This report authorized by RA-DA, based on our proposal dated February 8, 2016 presents the results of a geotechnical investigation performed by AESCO for the proposed replacement of the existing beach concessions building with a new approximately 3,000 square foot, single-story structure. The new structure will have a full service commercial kitchen, a dining area, restrooms, storage, and a rooftop dining deck. Two additional structures; public restrooms and a storage building will also be constructed about 1,500 feet west of the proposed new concession structure. A layout of the proposed structures are shown on the Site Plan, Figure 1.

The purpose of this study was to provide geotechnical recommendations for design of the new structures. The scope of our services included the following:

- Coordinating site access for the field investigation;
- Mark the site for underground utilities with USA;
- Performing geotechnical drilling and sampling at the site;
- Performing laboratory testing of representative samples;
- Conducting a seismic hazards screening;
- Performing engineering analyses; and
- Preparing this report.

This report summarizes our findings and presents geotechnical recommendations for design of the new structures.

2.1 FIELD INVESTIGATION

A field investigation was conducted at the site on May 2, 2017 to obtain information on the subsurface conditions. The field investigation consisted of drilling four borings with a hollow stem auger to a maximum depth of 50 feet. Borings B-1 and B-2 were placed at the location of the proposed new concession building; boring B-2 was placed at the location of the new public restrooms (Building B) and B-3 were placed at the new storage structure (Building C). A fifth boring (B-5) was hand augered in the proposed bike path. The approximate boring locations are shown on the Site Plan, Figure 1. The site plan is based on a proposed site layout drawing by RA-DA dated December 2, 2016. AESCO personnel logged the borings and visually classified and collected samples of the subsurface materials encountered in the borings. The borings were backfilled with cuttings. The Logs of Borings B-1 through B-5 are presented in the attached Appendix.

Drive samples were taken in borings B-1 through B-4 using either a Standard Penetration Test (SPT) sampler or a Modified California (MC) sampler. The sampler was driven 18 inches into the bottom of the borehole using a 140-pound hammer falling a distance of 30 inches. The MC sampler barrel was lined with stainless steel liners to collect relatively undisturbed soil samples. All of the samples were sealed and packaged to help preserve the natural moisture content and to protect them from further disturbance. Bag samples were collected in boring B-5.

2.2 LABORATORY TESTING

All testing was performed in accordance with ASTM Standards and California Test Methods. Laboratory testing performed in our Huntington Beach, California geotechnical laboratory consisted of water content (ASTM D4959), dry density (ASTM D2937), direct shear (ASTM D3080), Atterberg Limits (ASTM D4318), and washed sieve analysis (ASTM D1140). Results of the laboratory tests of samples collected from the borings are summarized on the Boring Logs and are included in the attached Appendix. Chemical analyses, including pH (ASTM D1293), soluble sulfates (CT417) and soluble chlorides (CT422) were also performed. Results of the chemical testing are presented in Section 4.7.

3.1 REGIONAL GEOLOGIC SETTING

The site is located within the Los Angeles Basin, near the northern boundary of the Peninsular Ranges Physiographic Province. The Peninsular Ranges Physiographic Province is characterized by northwest-trending topographic structures, including the Newport Inglewood Fault Zone and the axis of the Los Angeles Basin. The Santa Monica Mountains, located north of the site, are the southernmost of the east-west trending mountain ranges that comprise the Transverse Ranges Physiographic Province.

The Los Angeles basin is a northwest-trending alluviated lowland plain that is about 50 miles long and 20 miles wide. The Los Angeles basin has been subdivided into four structural blocks based on contrasting or partly contrasting rocks, separated by major zones of faulting or flexure in the basement rocks (Yerkes, et. al., 1965). These structural blocks are designated the southwestern, northwestern, central, and northeastern blocks.

3.2 SITE AND SUBSURFACE CONDITIONS

Currently the site is occupied by the existing concession stand and a grass area. The site is relatively flat. Existing underground utilities may be present within the site boundary.

The material encountered in boring B-1 consisted of medium dense silty sand to a depth of 7 feet, loose to medium dense sand/silty sand to a depth of 18 feet, stiff to very stiff sandy silt to a depth of 28 feet, medium dense silty sand to a depth of 38 feet, and medium stiff to stiff silty clay with sand to the total depth drilled of 50 feet below the existing ground surface. The material encountered in boring B-2 consisted of medium dense silty sand to a depth of 7 feet, medium dense sand to a depth of 18 feet and medium dense silty sand with interbedded sandy silt layers to the total depth drilled of 35 feet. Medium dense silty sand was encountered to a depth of 10 feet in boring B-3 which was underlain by medium dense sand to a depth of 18 feet and medium dense silty sand to the total depth drilled of 25 feet. Medium dense silty sand was encountered in boring B-4 to the total depth drilled of 25 feet. Silty sand was encountered in boring B-5 to the total depth drilled of 6 feet.

Groundwater was encountered within boring B-1 at a depth of 8 feet and within boring B-2, B-3 and B-4 at a depth of 13 feet below the existing ground surface. Groundwater was not encountered within boring B-5. Based on regional data, groundwater is anticipated to occur at a depth less than 10 feet (CGS, 1998). The depth to groundwater may fluctuate, depending on rainfall and possible groundwater recharge or pumping activity in the site vicinity.

4.1 SEISMIC DESIGN

A seismic hazards screening was performed for this site to evaluate potential seismic hazards. The seismic hazards screening consisted of reviewing available data published by the California Geological Survey (CGS) and the 2016 California Building Code (CBC). The site is located in the United States Geological Survey Long Beach Quadrangle. Data reviewed yielded the following Seismic Parameters:

Site Class	D
Spectral Response 'Ss'	1.593g
Spectral Response 'SMs'	1.593g
Spectral Response 'S1'	0.598g
Spectral Response 'SM1'	0.897g

The computer program (EQFAULT, Version 3.00b) and data published by the CGS "The Revised 2002 California Probabilistic Seismic Hazard Maps," June 2003, were reviewed. Results of the fault search are presented in the Appendix. The search indicates that the Newport Inglewood Connected alt 1 fault is 2.38 kilometers from the site.

The CGS (CDMG, 2000-003) does not delineate this site as being near an Alquist-Priolo Earthquake Fault Zone. However, with the active faults in the region, the site could be subjected to future strong ground shaking that may result from earthquakes on local to distant sources.

4.2 LIQUEFACTION POTENTIAL

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils exist below groundwater. The CGS has designated certain areas within southern California as potential liquefaction hazard zones. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table. The project site is located within a potential liquefaction hazard zone as designated by the CGS (1999). Materials encountered at the project site generally consist of loose to medium dense granular soil and medium stiff to very stiff cohesive material. Groundwater was encountered within borings B-1 through B-4 at depths between 8 feet and 13 feet beneath the existing ground surface. Historical high groundwater in the project vicinity is less than 10 feet below the ground surface (CGS,

1998). Liquefaction analysis for the site was performed in accordance with the DMG Special Publication 117 and is attached. The liquefaction study utilized the software "LiquefyPro" by CivilTech Software and calculated liquefaction assuming a depth to groundwater of 10 feet below the existing ground surface. This analysis was based on the soils data from the exploratory boring log and laboratory test results. Maximum acceleration was calculated using the UBE of 0.62g as determined by the CGS website. Liquefaction potential was calculated from a depth of 0 to 50 feet below the ground surface. The factor of safety was less than 1.3 between a depth of 10 feet and 11 feet and a depth of 19 feet and 38 feet where the factor of safety ranged from 0.46 to 0.57 and 0.31 to 0.69, respectively. Based on our analysis and test results we have concluded that the potential for liquefaction at the site is moderate. Other geologic hazards related to liquefaction, such as lateral spreading, are therefore also moderate.

Based on calculation results, seismically-induced settlement of saturated and dry sands is estimated to be 5.48 inches and differential settlement is estimated to be between 2.74 and 3.62 inches. The liquefaction analysis is included in the appendix.

4.3 FOUNDATION RECOMMENDATIONS

Based on the results of our investigation, the proposed structure may be supported on a shallow foundation system. The entire footprint of the proposed structure and 5 feet beyond, where possible, should be overexcavated to a depth of 3 feet below existing grade and recompacted to at least 90 percent relative compaction as determined by ASTM D1557 (See Section 4.6).

4.3.1 Shallow Foundations

The soil in the upper three feet has a low potential to swell and shrink. All sidewalk and outside slabs shall be reinforced and tied to the structure.

The recommended design bearing pressure for spread and continuous footings placed at a minimum depth of 24 inches below the existing surface is 1,500 psf and 1,800 psf, respectively, for dead plus live loads. A passive soil resistance of 150 pcf/ft may be used with a maximum of 1,000 psf and a friction coefficient of 0.35 may be assumed for design against lateral forces. This design bearing pressure can be increased by 1/3 for temporary loads, such as, wind or seismic loads. However, actual design of foundation reinforcement will be performed by the Structural Engineer.

AESCO recommends spread footings be a minimum of 24 inches wide and continuous footings be a minimum of 18 inches wide, to mitigate the potential for shear failure.

In accordance with Section 4.6, "Site Preparation and Earthwork," any undocumented fill should be removed and replaced with compacted engineered fill. A representative of AESCO should confirm the depth of fill at the time of construction.

All walkways, new slabs, and separately poured structures should be tied to any existing slabs and foundation with #4 rebar, 30 inches in length, on 18-inch centers, embedded a minimum of 8 inches into the building slab, or adjacent slabs, to reduce the potential for separation and differential settlement.

Under static loading, settlement of the footings designed according to our recommendations is estimated to be less than 1 inch. Differential settlement between similarly loaded footings is expected to be about one-half the total settlement.

4.4 CONCRETE SLAB ON GRADE

We anticipate that any concrete slab on grade for the new structures will extend about 4 inches above the final adjacent grade. We recommend that the slab sections be properly reinforced with a minimum of #5 bars, at 16 inches, on center, positioned mid-height placed on approved subgrade and have thickened edges with a minimum embedment (depth to bottom of edge) of 18 inches below finished grade on the free sides. The actual reinforcement should be designed by the Structural Engineer. To mitigate the potential for differential liquefaction induced settlement for the slab, the upper 5 feet below the existing surface should be over-excavated and recompacted. The excavation should extend 5 feet beyond the footprint of the slab (where possible). The fill material should be compacted to at least 95 percent relative compaction as determined by ASTM D 1557 to the ground surface. The fill material should be tested and monitored during placement by the Geotechnical Engineer or his representative. The actual concrete reinforcement should be designed by the Structural Engineer. Slabs on grade should be underlain by firm native soils or engineered fill. Additional subgrade requirements are presented in Section 4.6, "Site Preparation and Earthwork." Selective grading will be required to choose the most granular material to place beneath the slabs. A ten mil PVC or polyethylene membrane with a four-inch gravel blanket should be provided below all interior slabs to prevent moisture migration. The gravel blanket should be a clean 3/8-inch diameter gravel placed to prevent migration of moisture to the slab through capillary action. Outside slabs (side walks, drives, etc.) should be constructed with expansion joints placed at minimum 12 foot spacing each way to minimize cracking due to shrinkage and expansion of the concrete.

4.5 CONCRETE PAVEMENT

The concrete pavement path should consist of a 5-inch thick reinforced Portland cement concrete pavement overlying compacted subgrade. Only light weight trucks or automobiles are occasionally allowed to use the bike pavement path. If heavy trucks are anticipated to use the concrete, then the pavement should be thickened to 8 inches over 10 inches of base material. The base should be crushed aggregate compacted to 95 percent of maximum dry density per ASTM D-1557. The top 6 inches of the prepared subgrade soils should be scarified, moisture-conditioned and re-compacted to 95 percent of maximum dry density per ASTM D-1557.

All concrete paving shall be placed in lanes a maximum of 12 feet wide with contraction/expansion joints. Such measures will control the majority of cracking and still allow transfer of load across joints. Temperature/shrinkage cracks can be minimized by limiting the pours to a maximum of 10 feet by 12 feet, or smaller. Expansion/construction joints shall be placed every 18 feet of lane length. Pavement shall be reinforced with No. 5 reinforcing steel at mid-height on 18-inch centers in each direction. The concrete should have a minimum strength of 4,500 psi at 28 days. The pavement should not be used until a minimum compressive strength of 3,600 psi is achieved.

The crushed aggregate base shall be free from organic matter and other deleterious substances, and shall be of such nature that it can be compacted readily under watering and rolling to form a firm, stable base. Aggregate shall conform to the requirements of Section 200-2.2 Crushed Aggregate Base, of the latest version of Standard Specifications for Public Works Construction (Greenbook).

4.6 SITE PREPARATION AND EARTHWORK

All grading and site preparation should be observed by experienced personnel reporting to the project Geotechnical Engineer. Our field monitoring services are an essential continuation of our prior studies to confirm and correlate the findings and our prior recommendations with the actual subsurface conditions exposed during construction, and to confirm that suitable fill soils are placed and properly compacted.

The site should be cleared of vegetation, debris, concrete, organic matter, abandoned utility lines, contaminated soils (if any), topsoil, and other unsuitable material. Any existing fill encountered during site preparation should be excavated to the depth of the fill and to a horizontal distance equial to the depth of excavation. The entire footprint of the proposed structures should be overexcavated to a depth of a minimum of 5 feet below existing grade and re-compacted to at

least 95 percent relative compaction as determined by ASTM D1557 at moisture contents 1 to 4 percent above optimum moisture. The bottom of the excavation shall be inspected by the Geotechnical Engineer to confirm competent soil is reached. The side slopes of shallow excavations should be cut at a gradient no steeper than 1:1 (horizontal to vertical), while excavations greater than 5 feet high should be cut to a gradient no steeper than 1½:1. Excavation should not extend below an imaginary 1½:1 inclined plane projecting below the bottom edge of adjacent existing foundations and/or utilities unless properly shored or specifically analyzed further. All excavations should be observed by AESCO to confirm that all unsuitable material is removed from beneath the planned construction prior to placing fill.

The bottom of all excavations should be scarified to a depth of 6 inches, moisture conditioned to at least optimum water content, and compacted as described above. Excavations below the final grade level should be properly backfilled using approved fill material. The backfill and any additional fill should be placed in loose lifts less than 8 inches thick, moisture conditioned to 1 to 4 percent above optimum water content, and compacted as directed above. Engineered fill should consist of soils with a maximum particle size of 3 inches, at least 80 percent passing the ¾-inch sieve and with an expansion index not greater than 20. Fill materials should be free of construction debris, roots, organic matter, rubble, contaminated soils, and any other unsuitable or deleterious material as determined by the Geotechnical Engineer. The on-site soils appear to be suitable for use as compacted fill. We recommend that if imported fill material is used, it be reviewed for acceptability by the Geotechnical Engineer prior to importing it to the site for use as engineered fill.

A representative of the Geotechnical Engineer should observe all footing and slab subgrade surfaces and confirm that the exposed materials are firm. If loose, spongy, soft or other unacceptable materials, including undocumented fill, are encountered in the subgrade they should be removed to firm materials as determined by the Soil Engineer's representative and replaced with either concrete or compacted engineered fill.

4.7 SOIL CORROSIVITY

The results of pH, soluble chloride, and soluble sulfate laboratory tests on a sample of the near surface soils are summarized in the following table:

Soil Test	Test Results	Corrosion Potential
Soluble Sulfates (per CA 417)	600 ppm	Moderate sulfate attack on concrete.
Soluble Chlorides (per CA 422)	228 ppm	Very corrosive potential to buried ferrous metals
pH	8.2	Mild to moderate corrosion potential to buried ferrous metals

B-1

Soil Test	Test Results	Corrosion Potential
Soluble Sulfates (per CA 417)	174 ppm	Moderate sulfate attack on concrete.
Soluble Chlorides (per CA 422)	198 ppm	Very corrosive potential to buried ferrous metals
pH	7.8	Mild to moderate corrosion potential to buried ferrous metals

B-3

Soil Test	Test Results	Corrosion Potential
Soluble Sulfates (per CA 417)	183 ppm	Moderate sulfate attack on concrete.
Soluble Chlorides (per CA 422)	210 ppm	Very corrosive potential to buried ferrous metals
pH	7.8	Mild to moderate corrosion potential to buried ferrous metals

B-4

Soil Test	Test Results	Corrosion Potential
Soluble Sulfates (per CA 417)	141 ppm	Negligible sulfate attack on concrete.
Soluble Chlorides (per CA 422)	168 ppm	Very corrosive potential to buried ferrous metals
pH	7.6	Mild to moderate corrosion potential to buried ferrous metals

B-5

Concrete should be designed in accordance with the 2016 CBC, ACI 318 Section 4.3, Table 4.3.1 (2014). As the potential for sulfate attack on concrete appears moderate Type II Portland cement may be used with a 0.5 maximum water to cement ratio for the purpose of sulfate attack abatement. The minimum compressive strength of concrete shall be 4,500 psi at 28 days and maximum slump during placement shall be five inches. All subgrade soils should be moistened to 125% of optimum moisture prior to the concrete pour. A qualified inspector, under the supervision of a professional engineer, shall inspect the concrete placement.

The test results indicate that the on site soils can be classified as mild to very corrosive potential to buried metallic structures (e.g. pipes). As a minimum, buried metal piping should be protected with suitable coatings, wrappings, or seals. As an alternative, utility piping may be buried in PVC lined trenches and backfilled with clean sand. The width of the trenches should be a minimum of three times the diameter of the pipes. A corrosion consultant should be retained if a more detailed evaluation or a protection system is desired. AESCO recommends that additional corrosivity evaluation shall be performed during grading operations and for any imported fill to ensure that corrosivity characteristics have not changed.

4.8 UTILITY TRENCHES

It is anticipated that the on-site soils will provide suitable support for underground utilities and piping that may be installed. Any soft and/or unsuitable material encountered at the bottom of excavations should be removed and be replaced with an adequate bedding material. A non-expansive granular material with a sand equivalent greater than 30 should be used for bedding and shading of utilities.

On-site soils should be suitable for backfill of utility and pipe trenches from one foot above the top of the pipe to the final ground surface, provided the material is free of organic matter and deleterious substances; therefore, imported material may be needed for backfill. Trench backfill should be mechanically placed and compacted in 8-inch lifts to at least 90 percent of the maximum dry density as determined by ASTM Test Method D 1557 (i.e. 90 percent relative compaction). Where trenches are placed beneath slabs or footings the backfill shall satisfy the gradation and expansion index requirements of engineered fill (see Section 4.6). Flooding or jetting for placement and compaction of backfill is not recommended.

4.9 CONSTRUCTION OBSERVATIONS AND FIELD TESTING

As geotechnical engineer of record, construction observation and field testing services are an essential continuation of this geotechnical study to confirm and correlate our findings and recommendations with the actual subsurface conditions exposed during construction. As such, to maintain the status of geotechnical engineer of record, AESCO should be present to observe and provide testing during the following construction activities:

- Excavation and backfill for footings and subgrade for slabs on grade
- Placement of all fill and backfill (site preparation)
- Backfilling of utility trenches
- Concrete placement of slab, foundation and pavement
- Installation of foundation and slab reinforcement

5.1 LIMITATIONS

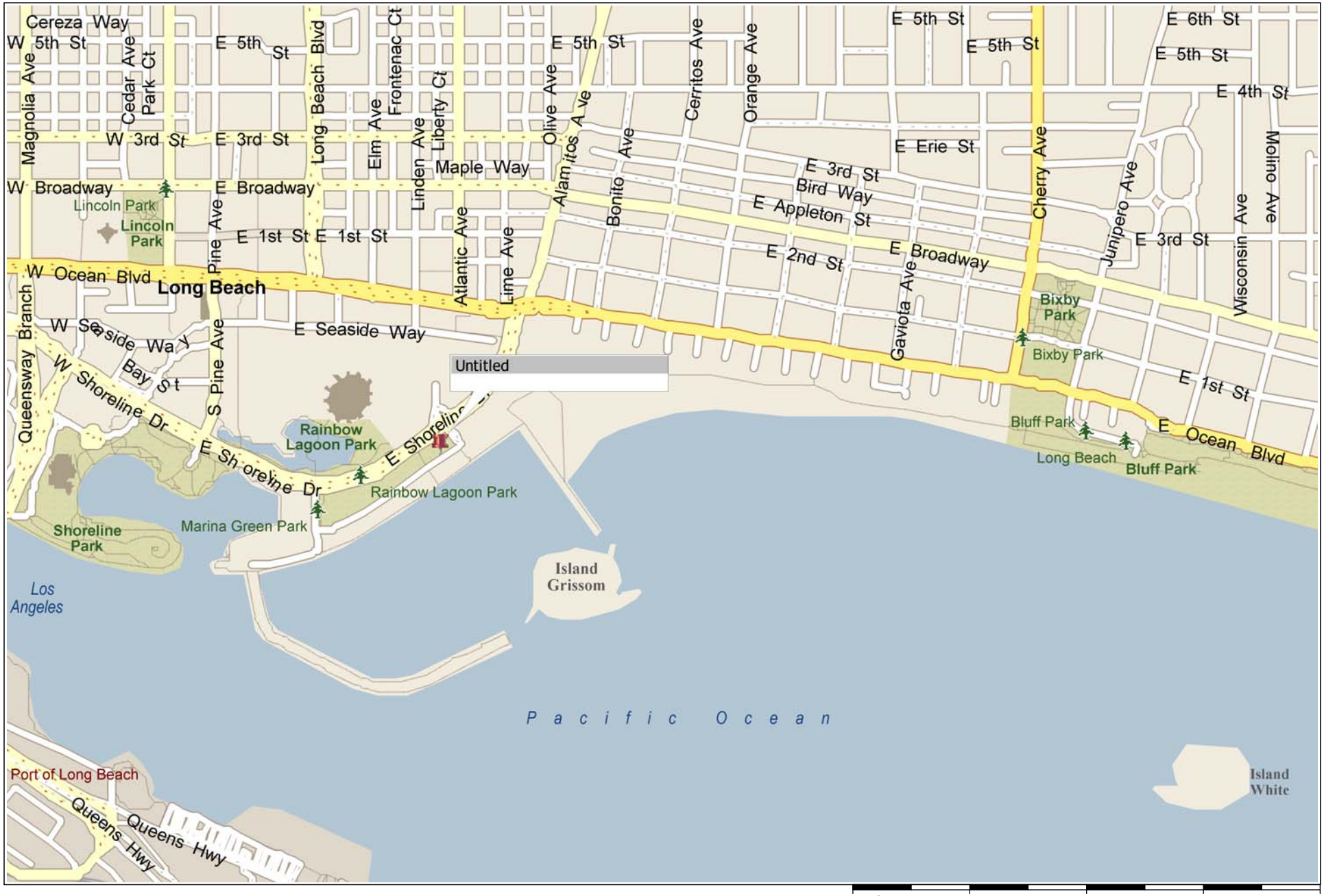
It must be recognized that conclusions reached in this report are based on conditions, which exist at the boring location. In any subsoil investigation, it is necessary to assume that the subsoil conditions between boring(s) do not change significantly. The number of the borings, locations, and spacing are chosen as per the client's direction and available budget. Note that the boring(s) were placed as close to the location of the proposed structure(s) as possible. The boring locations are approximate and surveying is beyond the scope of our work. Consequently, careful observations must be made during construction to detect significant deviations of actual conditions throughout the construction area from those inferred from the exploratory borings.

In the event that significant changes in design loads or structural characteristics are made, AESCO should be retained to review our original design recommendations and their applicability to the revised design plans. In this way, any required supplemental recommendations can be made in a timely manner.

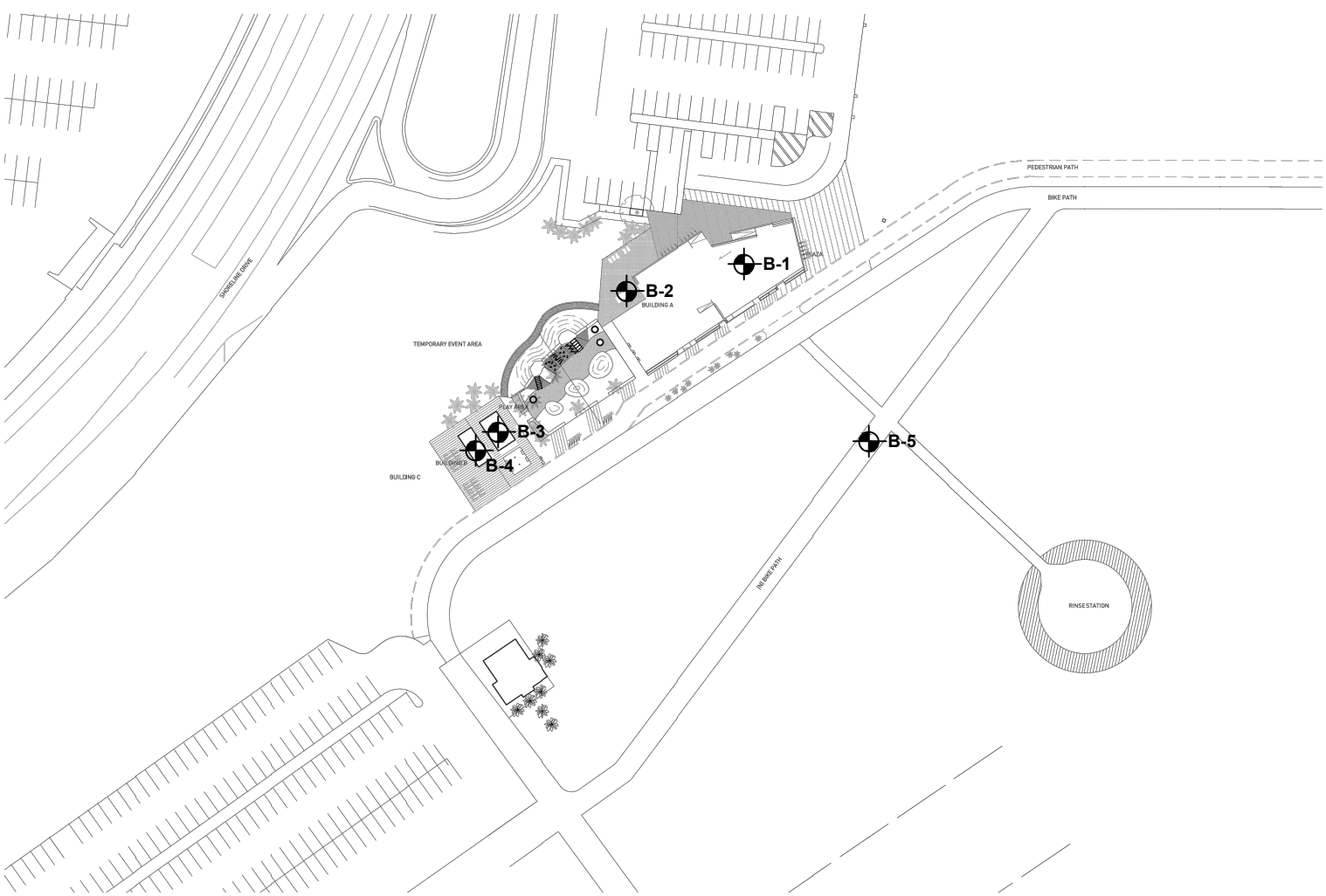
Should any unusual conditions be encountered during construction, this office should be notified immediately so that further investigations and supplemental recommendations can be made. Geotechnical observations and testing should be provided on a continuous basis during grading, excavation, and installation of the foundations. If parties other than AESCO are engaged to provide geotechnical services during construction they will be required to assume the full responsibility for the geotechnical phase of the project by adhering to the recommendations of this report.

APPENDIX
SITE PLAN

20171705



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LEGEND

B-1 Approximate Location of Boring

AESCO

City of Long Beach		
Project No. : 20171705-E5129	Scale: *1 inch ≅ 115 feet*	
Site Name: Alamitos Beach Concession Building		
Site Address: 780 East Shorline Drive, Long Beach, CA 90802		
SITE PLAN	Date: 5-19-17	Figure 1

APPENDIX
LOGS OF BORINGS B-1 through B-5

MAJOR DIVISION			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVEL (LITTLE OR NO FINES)		GW	WELL GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVEL WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL SAND SILT MIXTURE
				GC	CLAYEY GRAVELS, GRAVEL SAND CLAY MIXTURES
MORE THAN 50% BY WEIGHT OF MATERIAL IS LARGER THAN 200 SIEVE	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINE (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES
				SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT <50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% BY WEIGHT OF MATERIAL IS SMALLER THAN 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT >50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLATICITY, FAT CLAYS
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

AESCO

UNIFIED SOIL CLASSIFICATION SYSTEM

KEY

- ☒ Split Spoon Sample (SPT)
- C California Modified Sample
- ▯▯ Hand Auger Sample
- ▼ Ground Water Level
- **N** SPT Blows/ft
- **P** Penetrometer TSF

LOG OF BORING NO. B - 1

AESCO

Project: Alamitos Concession Stand — **Location:** 780 East Shoreline Drive, Long Beach, CA

WATER: Encountered at 8 Feet

Client: Ra-Da

Logger:

Date: 05/02/17

Project No. 20171705-E5129

DRILLING: Hollow Stem Auger

DESCRIPTION OF STRATUM

Elevation: 10 ft. AMSL

FIELD DATA			TESTS	LABORATORY DATA											
SOIL SYMBOL		DEPTH (FT)	N= T= P=	MOISTURE CONTENT %	DRY DENSITY PCF	LIQUID LIMITS %	PLASTIC LIMITS %	PLASTICITY INDEX %	Unconfined Comp. TSF	Unconfined Comp. Strain %	PASSING 200 SIEVE %	DIRECT SHEAR COHESION PSF	DIRECT SHEAR ANGLE Deg	EXPANSION INDEX	
		3		4.1											Brown silty SAND (SM), dry
		5	N=18	7.1											Medium dense at 3'
	C	7	N=18 P=3.0	5.6	114.1						25.2	0	27		
▼		8													Gray-brown SAND/silty SAND (SP/SM), loose, saturated
		10	N=17	15.4							8.9				
		13													
	C	15	N=26	21.6	101.4							0	30		Gray, medium dense at 13'
		18													
		20	N=15	25.4							51.7				Gray sandy SILT (ML), stiff, saturated, w/seashells
		23													
	C	25	N=18 P=1.0	23.8	102.8										Very stiff at 23'
		28													
		30	N=15	19.9							18.4				Gray silty SAND (SM), medium dense, saturated, w/seashells
		33													
	C	35	N=17 P=1.0	21.1	107.2										Continues same at 33'
		38													
		40	N=14	28.9		37	19	18			96.7				Dark gray silty CLAY (CL), stiff, saturated, w/minor black peat
		43													
	C	45	N=5 P=0.5	33.9	89.6										Medium stiff at 43'
		48													
		50	N=8	34.5		38	19	19			85.1				Medium stiff to stiff, w/sand at 48'

Boring Terminated at 50 Feet

TUBE SAMPLE — AUGER SAMPLE — C CALIFORNIA MODIFIED SAMPLER — SPLIT SPOON — NO RECOVERY

Ground Water Level — Hydrostatic Ground Water Level — Approximate Division of Soil Type

N= SPT, BLOWS/FT — T= THD,BLOWS/FT — P= HAND PEN.,TSF

SM — SP/SM — ML — CL

REMARKS:
NP: Non Plastic Materials
* Remolded Samples
Blow Counts Corrected for California Modified Sampler (0.6 multipller). Auto-Hammer. 8" HAS

LOG OF BORING NO. B - 2

AESCO

Project: Alamitos Concession Stand
Location: 780 East Shoreline Drive, Long Beach, CA
Client: Ra-Da
Logger:
Date: 05/02/17
Project No. 20171705-E5129

WATER: Encountered at 13 Feet

DRILLING: Hollow Stem Auger

DESCRIPTION OF STRATUM

Elevation: 10 ft. AMSL

FIELD DATA			TESTS	LABORATORY DATA											
SOIL SYMBOL		DEPTH (FT)	N= T= P=	MOISTURE CONTENT %	DRY DENSITY PCF	LIQUID LIMITS %	PLASTIC LIMITS %	PLASTICITY INDEX %	Unconfined Comp. TSF	Unconfined Comp. Strain %	PASSING 200 SIEVE %	DIRECT SHEAR COHESION PSF	DIRECT SHEAR ANGLE Deg	EXPANSION INDEX	
		3		9.8											Dark brown silty SAND (SM), moist
		5	N=17	4.9											Light brown, medium dense at 3'
	C	7	N=12 P=0.5	8.3	101.6						12.6	0	29		Brown at 5'
		8													Brown SAND (SP), medium dense, dry
		10	N=25	3.9											
▼		13													
	C	15	N=22	24.2	99.9										Gray, saturated at 13'
		18													
		20	N=25	30.4							14.1				Gray silty SAND (SM), medium dense, saturated
		23													
	C	25	N=26	23.5	103.6										W/minor interbedded dark gray sandy silt layers at 23'
		28													
		30	N=14	28.1											Brown at 28'
		33													
	C	35	N=15	25.7	101.6						40.4				Continues same at 33'

Boring Terminated at 35 Feet

TUBE SAMPLE
AUGER SAMPLE
C CALIFORNIA MODIFIED SAMPLER
SPLIT SPOON
NO RECOVERY
▼ Ground Water Level
▽ Hydrostatic Ground Water Level
---------- Approximate Division of Soil Type
SM SP
N= SPT, BLOWS/FT
T= THD,BLOWS/FT
P= HAND PEN.,TSF

REMARKS:
NP: Non Plastic Materials
* Remolded Samples
Blow Counts Corrected for California Modified Sampler (0.6 multipller). Auto-Hammer. 8" HAS

LOG OF BORING NO. B - 3

AESCO

Project: Alamitos Concession Stand

Location: 780 East Shoreline Drive, Long Beach, CA

WATER: Encountered at 13 Feet

Client: Ra-Da

Logger:

Date: 05/02/17

Project No. 20171705-E5129

DRILLING: Hollow Stem Auger

DESCRIPTION OF STRATUM

Elevation: 10 ft. AMSL

FIELD DATA			TESTS	LABORATORY DATA											
SOIL SYMBOL		DEPTH (FT)	N= T= P=	MOISTURE CONTENT %	DRY DENSITY PCF	LIQUID LIMITS %	PLASTIC LIMITS %	PLASTICITY INDEX %	Unconfined Comp. TSF	Unconfined Comp. Strain %	PASSING 200 SIEVE %	DIRECT SHEAR COHESION PSF	DIRECT SHEAR ANGLE Deg	EXPANSION INDEX	
		3		4.5											Brown silty SAND (SM), dry
		5	N=18	5.3											Medium dense, moist at 3'
	C	7	N=12 P=0.5	4.2	102.8						27.5	0	29		Dry at 5'
		8													
		10	N=21	4.4											
▼		13													Gray SAND (SP), medium dense, moist, medium grained
	C	15	N=17	17.6	114.3						4.5				Saturated at 13'
		18													
		20	N=23	28.7		NP	NP	NP			40.5				Dark gray silty SAND (SM), medium dense, saturated
		23													
	C	25	N=18 P=1.0	28.2	96.0						18.6				Dark gray at 23'

Boring Terminated at 25 Feet

TUBE SAMPLE
AUGER SAMPLE
C CALIFORNIA MODIFIED SAMPLER
SPLIT SPOON
NO RECOVERY

▼ Ground Water Level
▽ Hydrostatic Ground Water Level
Approximate Division of Soil Type
SM SP

N= SPT, BLOWS/FT
T= THD,BLOWS/FT
P= HAND PEN.,TSF

REMARKS:
NP: Non Plastic Materials
* Remolded Samples
Blow Counts Corrected for California Modified Sampler (0.6 multipller). Auto-Hammer. 8" HAS

LOG OF BORING NO. B - 4

AESCO

Project: Alamitos Concession Stand — Location: 780 East Shoreline Drive, Long Beach, CA

Client: Ra-Da

Date: 05/02/17

Logger:

Project No. 20171705-E5129

WATER: Encountered at 13 Feet

DRILLING: Hollow Stem Auger

DESCRIPTION OF STRATUM

Elevation: 10 ft. AMSL

FIELD DATA			TESTS	LABORATORY DATA											
SOIL SYMBOL		DEPTH (FT)	N= T= P=	MOISTURE CONTENT %	DRY DENSITY PCF	LIQUID LIMITS %	PLASTIC LIMITS %	PLASTICITY INDEX %	Unconfined Comp. TSF	Unconfined Comp. Strain %	PASSING 200 SIEVE %	DIRECT SHEAR COHESION PSF	DIRECT SHEAR ANGLE Deg	EXPANSION INDEX	
		3		4.7											Brown silty SAND (SM), moist
	X	5	N=14	7.2											Medium dense at 3'
	C	7	N=16	6.9	103.9						22.0	0	30		
		8													
	X	10	N=17	5.8											
▼		13													
	C	15	N=18	15.7	113.3						16.7	0	33		Gray, coarse grained at 13'
		18													
	X	20	N=25	30.1											Dark gray at 18'
		23													
	C	25	N=28	28.4	95.2						19.5				

Boring Terminated at 25 Feet

TUBE SAMPLE
AUGER SAMPLE
C CALIFORNIA MODIFIED SAMPLER
SPLIT SPOON
NO RECOVERY
▼ Ground Water Level
▽ Hydrostatic Ground Water Level
Approximate Division of Soil Type
SM

N= SPT, BLOWS/FT
T= THD,BLOWS/FT
P= HAND PEN.,TSF

REMARKS:
NP: Non Plastic Materials
* Remolded Samples
Blow Counts Corrected for California Modified Sampler (0.6 multipller). Auto-Hammer. 8" HAS

LOG OF BORING NO. B-5

AESCO

Project: Alamitos Concession Stand

Location: 780 East Shoreline Drive, Long Beach, CA

WATER: Not Encountered

Client:

Logger:

DRILLING: Hand Auger

Date: 05/02/17

Project No. 20171705-E5129

DESCRIPTION OF STRATUM

Elevation: 10 ft. AMSL

FIELD DATA		TESTS	LABORATORY DATA										
SOIL SYMBOL	DEPTH (FT)	N= T= P=	MOISTURE CONTENT %	DRY DENSITY PCF	LIQUID LIMITS %	PLASTIC LIMITS %	PLASTICITY INDEX %	Unconfined Comp. TSF	Unconfined Comp. Strain %	PASSING 200 SIEVE %	DIRECT SHEAR* COHESION PSF	DIRECT SHEAR* ANGLE Deg	EXPANSION INDEX
	2		3.9							13.6			
	4		6.1							27.8			
	6		10.9										

Brown silty SAND (SM), dry

Moist at 2'

Boring Terminated at 6 Feet

TUBE SAMPLE
AUGER SAMPLE
C CALIFORNIA MODIFIED SAMPLER
SPLIT SPOON
NO RECOVERY

Ground Water Level

Hydrostatic Ground Water Level

SM

N= SPT, BLOWS/FT
T= THD,BLOWS/FT
P= HAND PEN.,TSF

REMARKS:
NP: Non Plastic Materials
* Remolded Samples

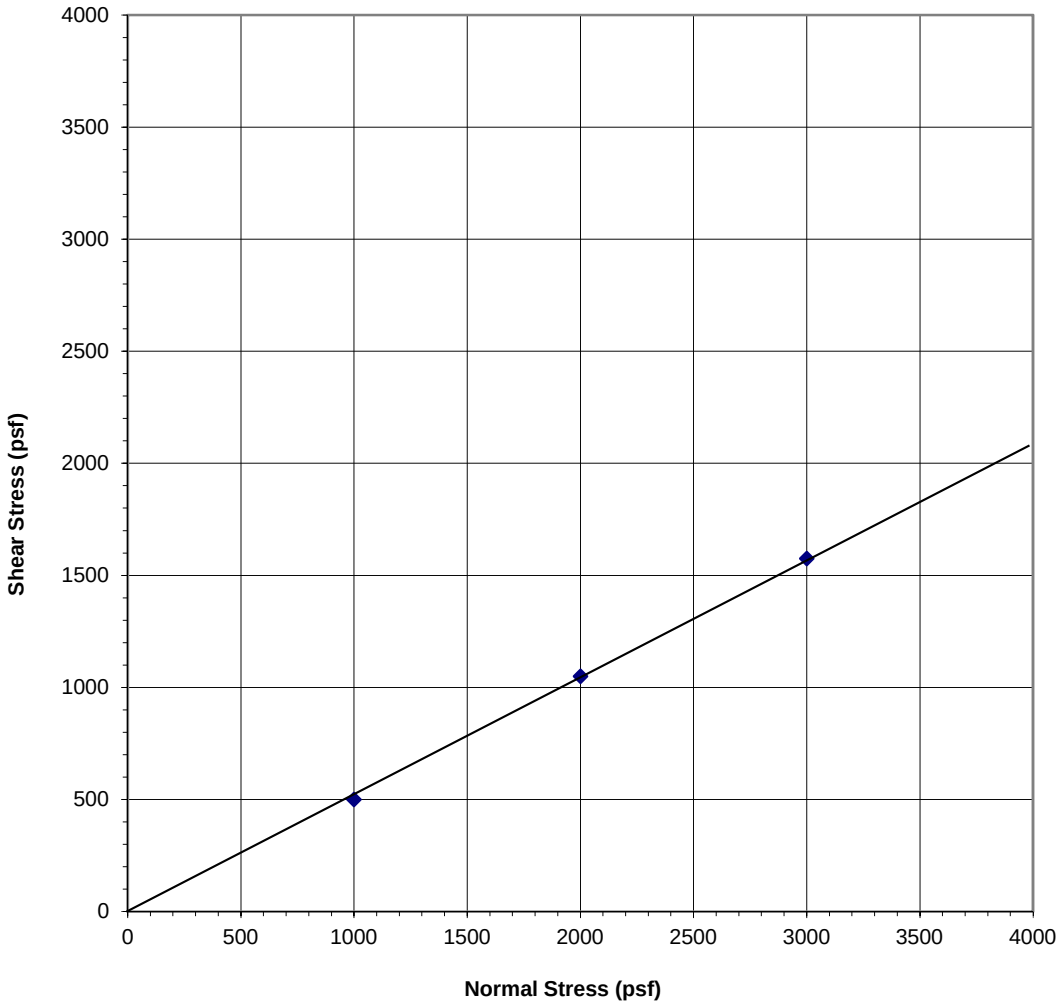
APPENDIX
LABORATORY TEST DATA

Orange County
17782 Georgetown Lane
Huntington Beach, California 92647
Tele: (714) 375-3830
Fax: (714)375-3831

San Bernardino County
14163 Arrow Boulevard
Fontana, California 92335
Tele:(909) 284-9200
Fax:(909) 284-9201

Site/Client: Alamitos
Project No: 20171705-E5129 Boring No: B-1 Depth (ft): 5-7'
γd (pcf)= 114.1 C (psf) = 0 ϕ (deg) = 27 W int = 5.6%
Remolded (Y/N): N Soil Type: SM

ASTM D3080
Direct Shear Results

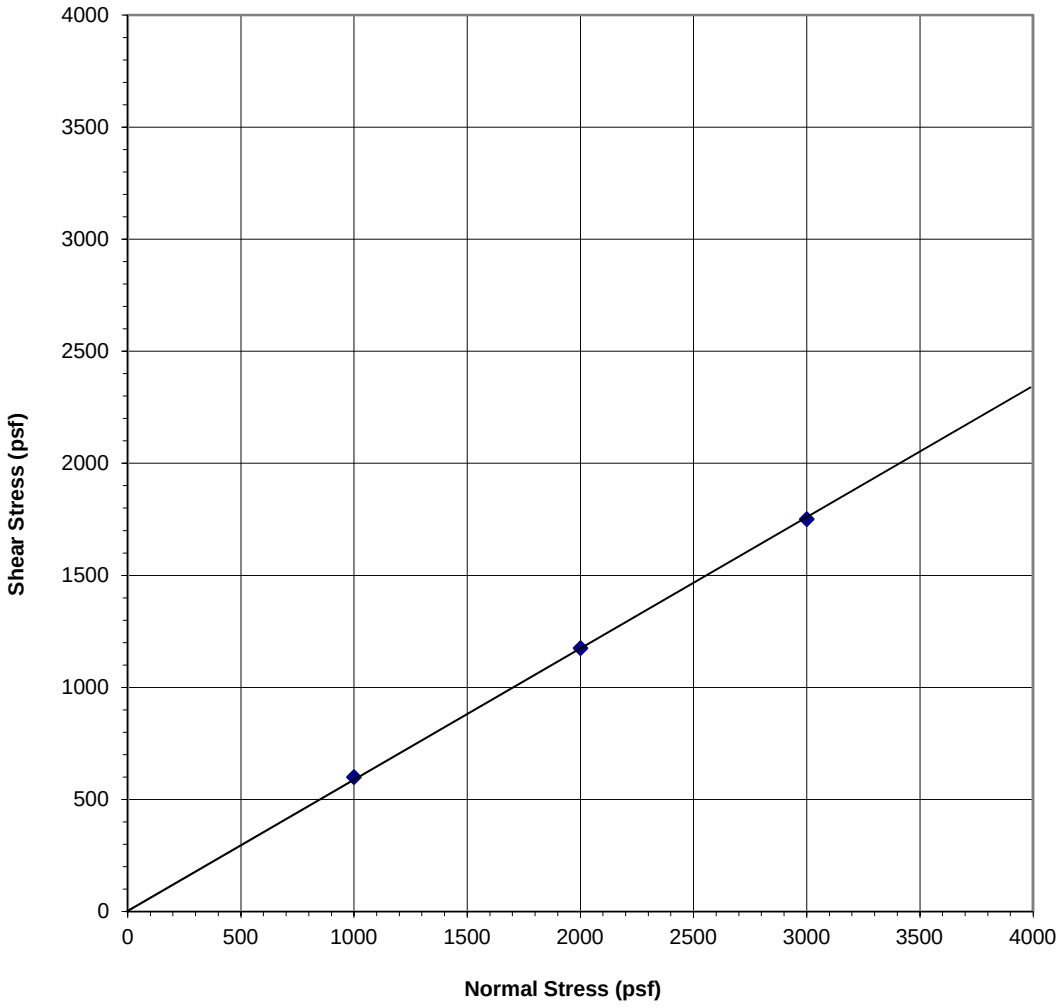


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Fax: (714)375-3831

San Bernardino County
14163 Arrow Boulevard
Fontana, California 92335
Tele:(909) 284-9200
Fax:(909) 284-9201

Site/Client: Alamitos
Project No: 20171705-E5129 Boring No: B-1 Depth (ft): 13-15'
γd (pcf)= 101.4 C (psf) = 0 ϕ (deg) = 30 W int = 21.6%
Remolded (Y/N): N Soil Type: SP/SM

ASTM D3080
Direct Shear Results

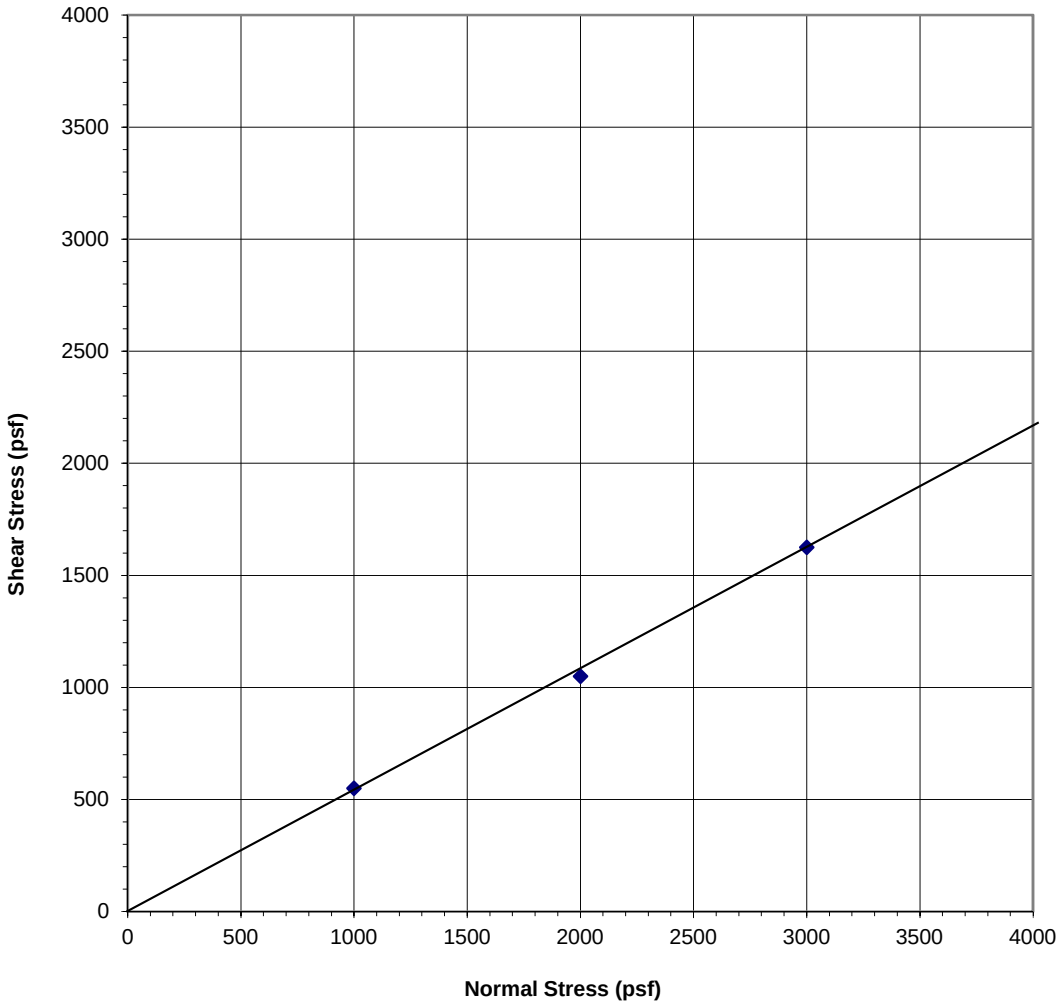


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San Bernardino County
14163 Arrow Boulevard
Fontana, California 92335
Tele:(909) 284-9200
Fax:(909) 284-9201

Site/Client: Alamitos
Project No: 20171705-E5129 Boring No: B-2 Depth (ft): 5-7'
γd (pcf)= 101.6 C (psf) = 0 ϕ (deg) = 29 W int = 8.3%
Remolded (Y/N): N Soil Type: SM

ASTM D3080
Direct Shear Results

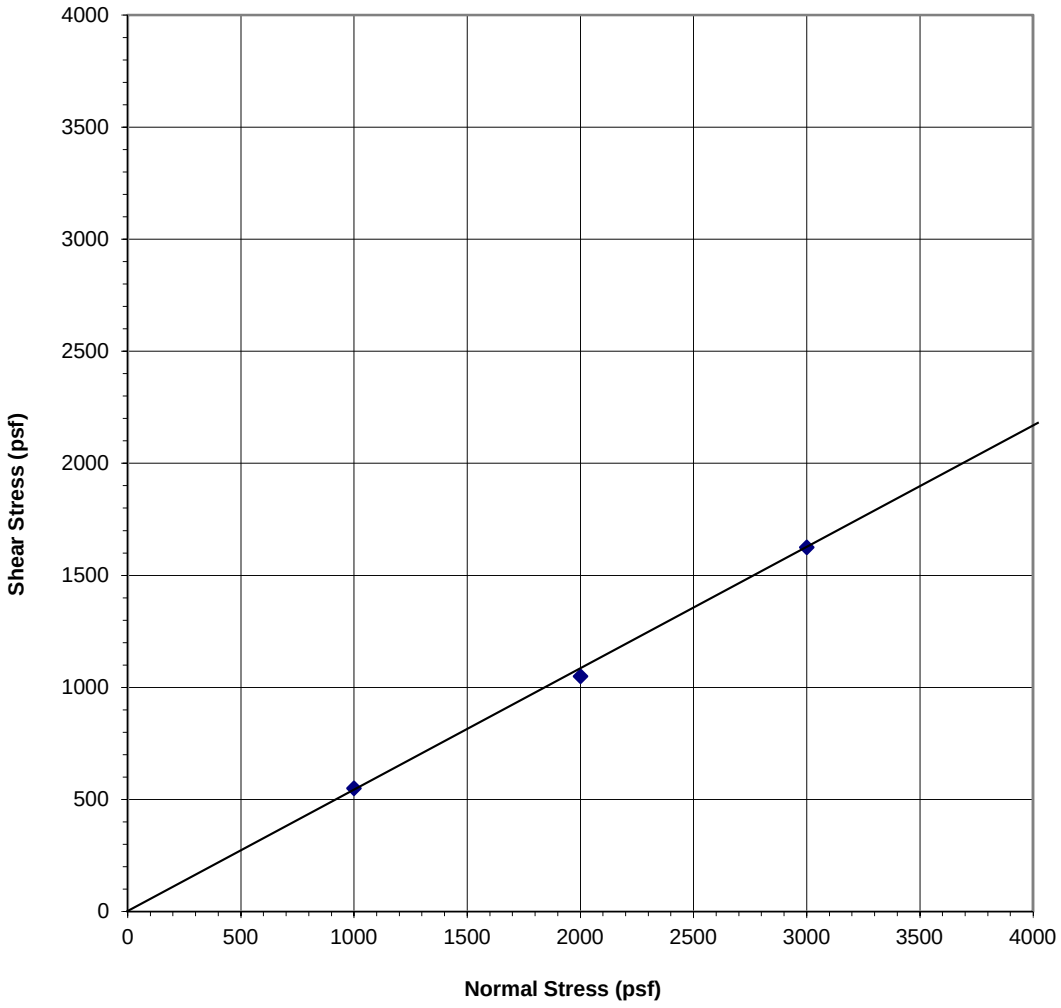


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San Bernardino County
14163 Arrow Boulevard
Fontana, California 92335
Tele:(909) 284-9200
Fax:(909) 284-9201

Site/Client: Alamitos
Project No: 20171705-E5129 Boring No: B-3 Depth (ft): 5-7'
γd (pcf)= 102.8 C (psf) = 0 ϕ (deg) = 29 W int = 4.2%
Remolded (Y/N): N Soil Type: SM

ASTM D3080
Direct Shear Results

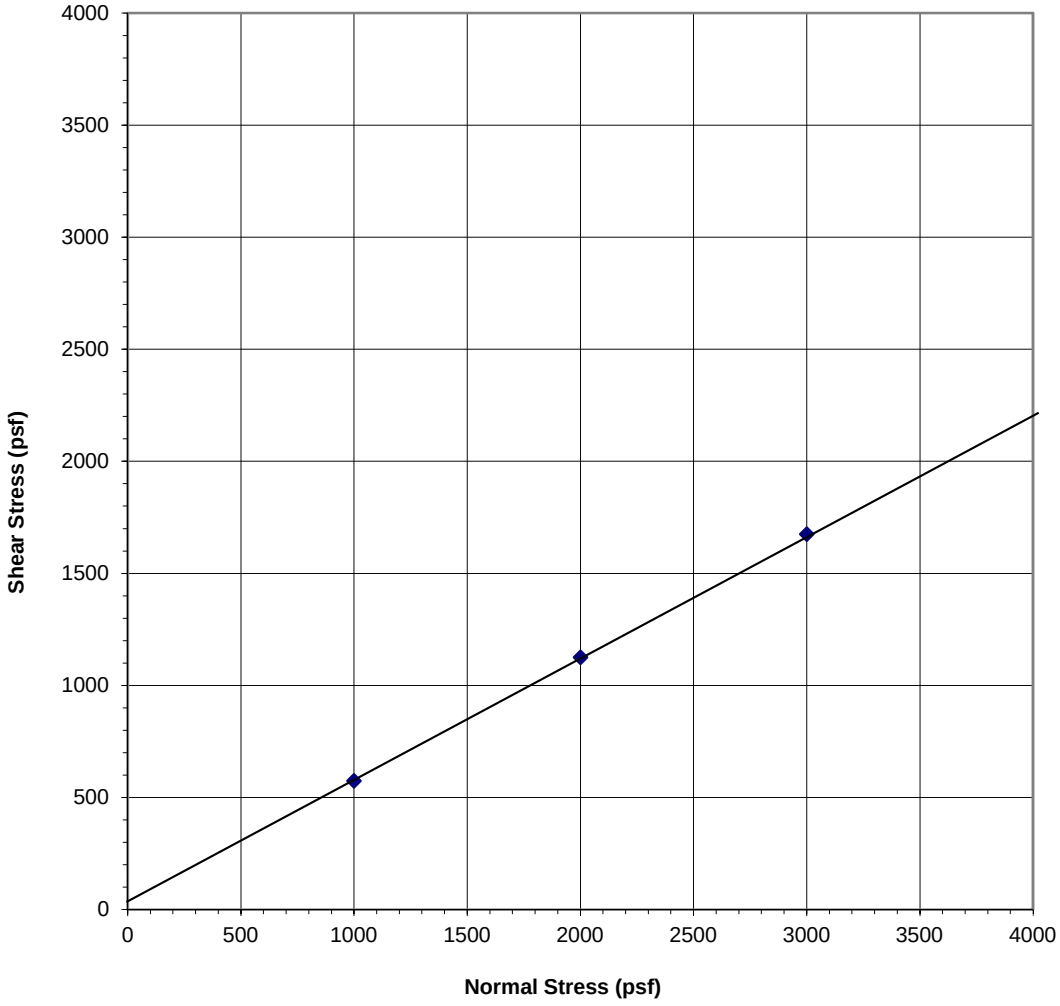


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San Bernardino County
14163 Arrow Boulevard
Fontana, California 92335
Tele:(909) 284-9200
Fax:(909) 284-9201

Site/Client: Alamitos
Project No: 20171705-E5129 Boring No: B-4 Depth (ft): 5-7'
γd (pcf)= 103.9 C (psf) = 0 ϕ (deg) = 30 W int = 6.9%
Remolded (Y/N): N Soil Type: SM

ASTM D3080
Direct Shear Results

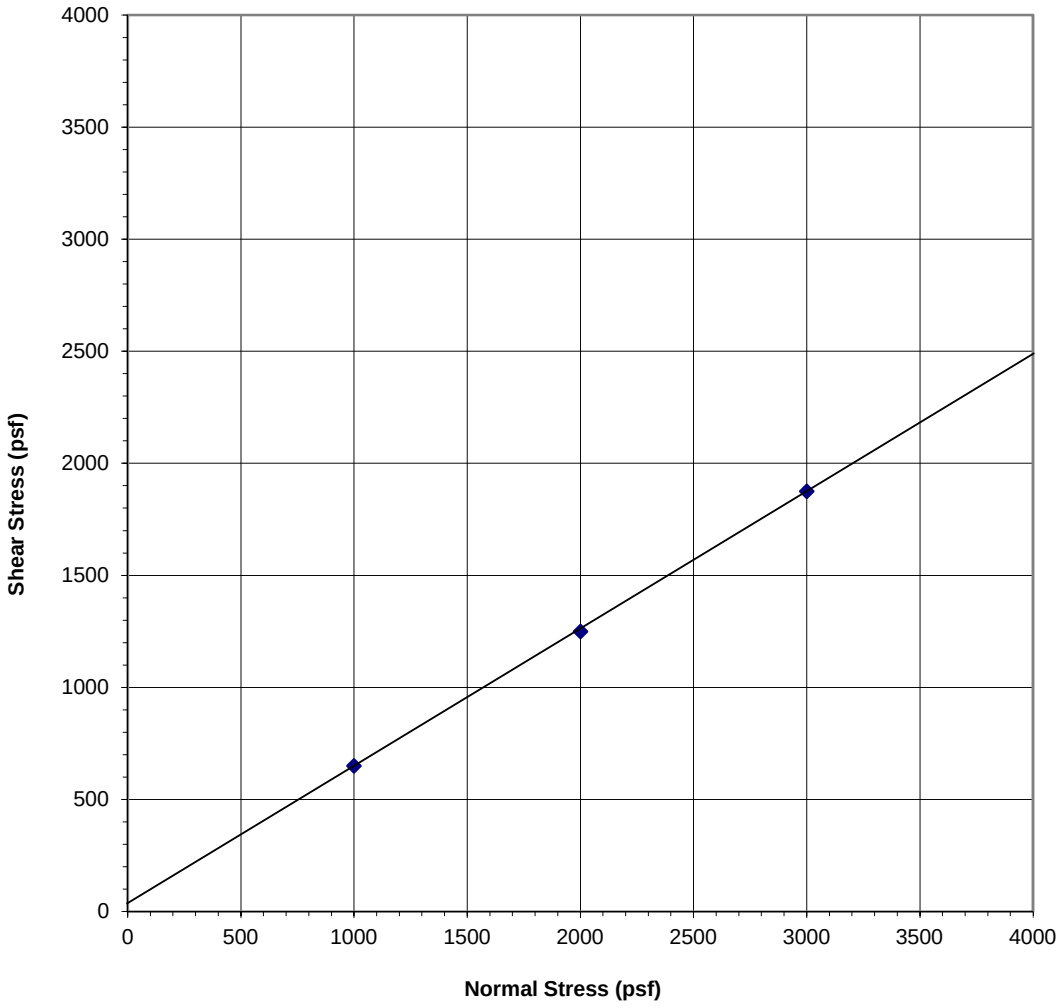


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Tele: (714) 375-3830
Fax: (714)375-3831

San Bernardino County
14163 Arrow Boulevard
Fontana, California 92335
Tele:(909) 284-9200
Fax:(909) 284-9201

Site/Client: Alamitos
Project No: 20171705-E5129 Boring No: B-4 Depth (ft): 13-15'
γd (pcf)= 103.9 C (psf) = 0 ϕ (deg) = 33 W int = 6.9%
Remolded (Y/N): N Soil Type: SM

ASTM D3080
Direct Shear Results

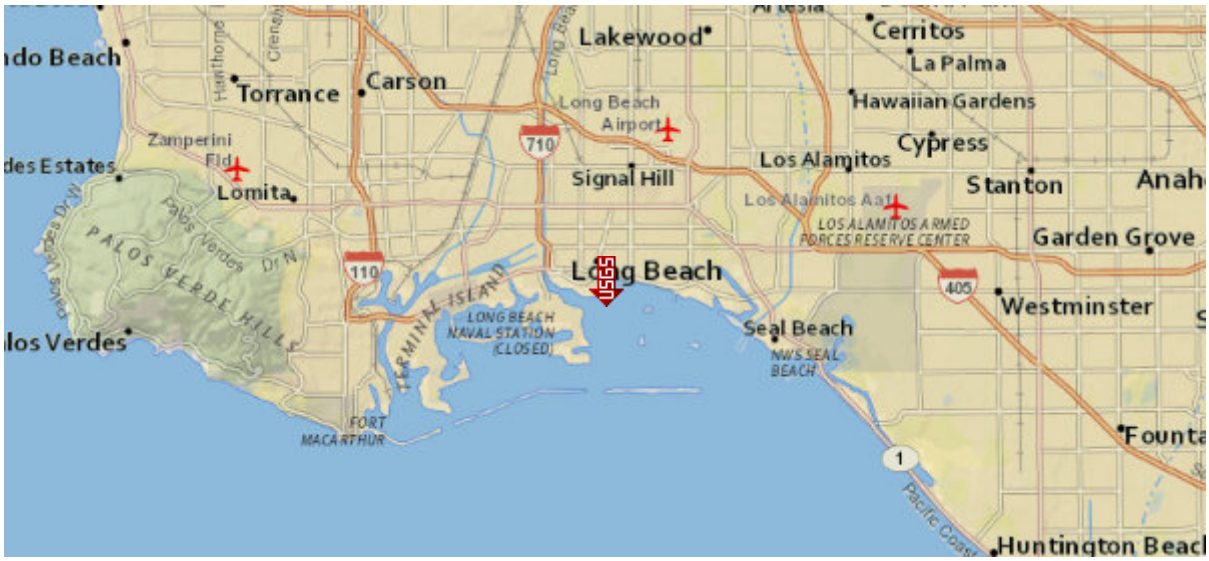


APPENDIX
SEISMIC DESIGN DATA

USGS Design Maps Summary Report

User–Specified Input

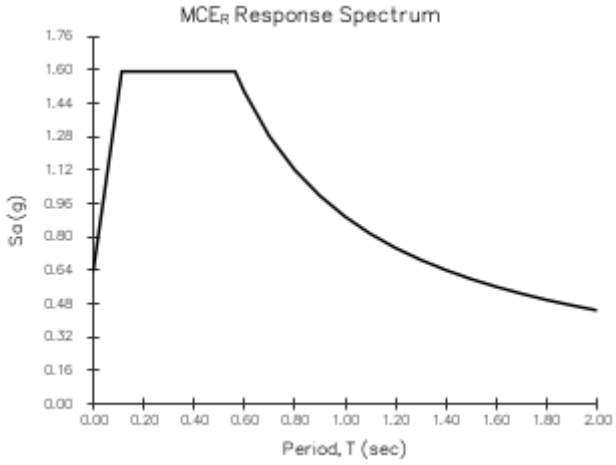
Report Title	Los Alamitos Concession Stand Wed May 17, 2017 22:35:31 UTC
Building Code Reference Document	ASCE 7-10 Standard (which utilizes USGS hazard data available in 2008)
Site Coordinates	33.7629°N, 118.1789°W
Site Soil Classification	Site Class D – "Stiff Soil"
Risk Category	I/II/III

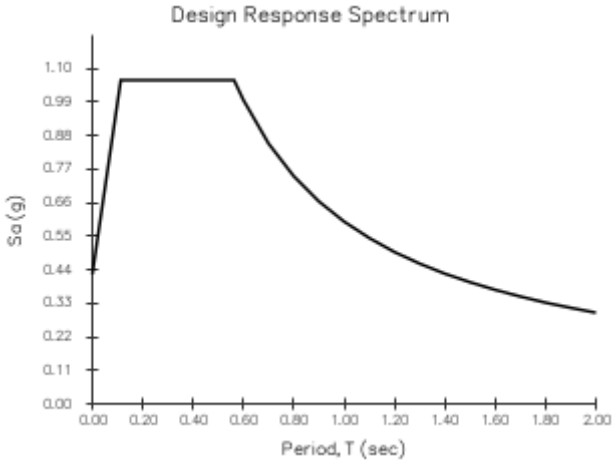


USGS–Provided Output

S_S =	1.593 g	S_{MS} =	1.593 g	S_{DS} =	1.062 g
S_1 =	0.598 g	S_{M1} =	0.897 g	S_{D1} =	0.598 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.





For PGA_M, T_L, C_{RS}, and C_{R1} values, please view the detailed report.

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

USGS Design Maps Detailed Report

ASCE 7-10 Standard (33.7629°N, 118.1789°W)

Site Class D – "Stiff Soil", Risk Category I/II/III

Section 11.4.1 — Mapped Acceleration Parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_S) and 1.3 (to obtain S_1). Maps in the 2010 ASCE-7 Standard are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

From Figure 22-1 [1] $S_S = 1.593$ g

From Figure 22-2 [2] $S_1 = 0.598$ g

Section 11.4.2 — Site Class

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class D, based on the site soil properties in accordance with Chapter 20.

Table 20.3–1 Site Classification

Site Class	$\overline{v}_S$	$\overline{N}$ or $\overline{N}_{ch}$	$\overline{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
	Any profile with more than 10 ft of soil having the characteristics: • Plasticity index PI > 20, • Moisture content w ≥ 40%, and • Undrained shear strength $\overline{s}_u$ < 500 psf		
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft² = 0.0479 kN/m²

Section 11.4.3 — Site Coefficients and Risk–Targeted Maximum Considered Earthquake (MCE_R) Spectral Response Acceleration Parameters

Table 11.4–1: Site Coefficient F_a

Site Class	Mapped MCE_R Spectral Response Acceleration Parameter at Short Period				
	$S_S \leq 0.25$	$S_S = 0.50$	$S_S = 0.75$	$S_S = 1.00$	$S_S \geq 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight–line interpolation for intermediate values of S_S

For Site Class = D and S_S = 1.593 g, F_a = 1.000

Table 11.4–2: Site Coefficient F_v

Site Class	Mapped MCE_R Spectral Response Acceleration Parameter at 1–s Period				
	$S_1 \leq 0.10$	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \geq 0.50$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight–line interpolation for intermediate values of S_1

For Site Class = D and S_1 = 0.598 g, F_v = 1.500

Equation (11.4–1): $S_{MS} = F_a S_S = 1.000 \times 1.593 = 1.593$ g

Equation (11.4–2): $S_{M1} = F_v S_1 = 1.500 \times 0.598 = 0.897$ g

Section 11.4.4 — Design Spectral Acceleration Parameters

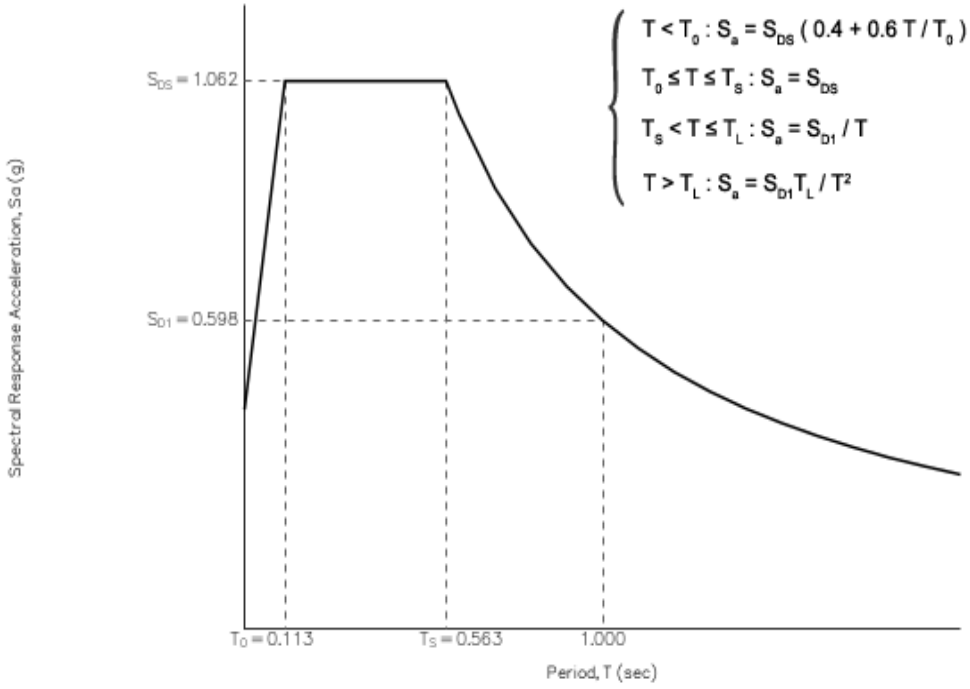
Equation (11.4–3): $S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 1.593 = 1.062$ g

Equation (11.4–4): $S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.897 = 0.598$ g

Section 11.4.5 — Design Response Spectrum

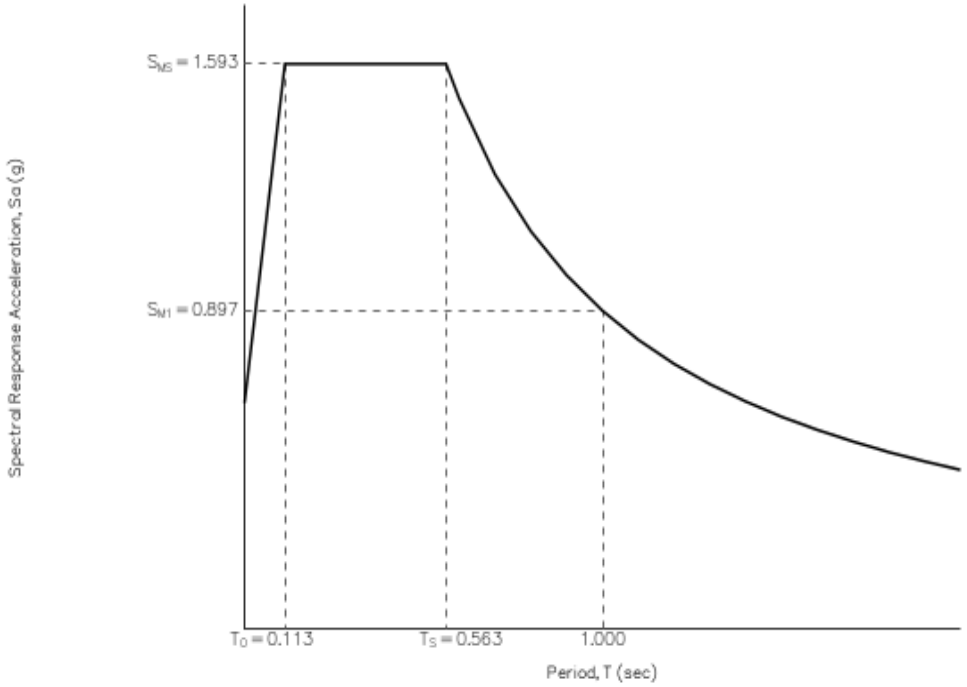
From Figure 22-12 [3] $T_L = 0$ seconds

Figure 11.4–1: Design Response Spectrum



Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE_R) Response Spectrum

The MCE_R Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



Section 11.8.3 — Additional Geotechnical Investigation Report Requirements for Seismic Design Categories D through F

From Figure 22-7 [4] PGA = 0.620

Equation (11.8–1): $PGA_M = F_{PGA}PGA = 1.000 \times 0.620 = 0.62$ g

Table 11.8–1: Site Coefficient F_{PGA}

Site Class	Mapped MCE Geometric Mean Peak Ground Acceleration, PGA				
	PGA ≤ 0.10	PGA = 0.20	PGA = 0.30	PGA = 0.40	PGA ≥ 0.50
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight–line interpolation for intermediate values of PGA

For Site Class = D and PGA = 0.620 g, F_{PGA} = 1.000

Section 21.2.1.1 — Method 1 (from Chapter 21 – Site-Specific Ground Motion Procedures for Seismic Design)

From Figure 22-17 [5] C_{RS} = 0.944

From Figure 22-18 [6] C_{R1} = 0.956

Section 11.6 — Seismic Design Category

Table 11.6-1 Seismic Design Category Based on Short Period Response Acceleration Parameter

VALUE OF S_{DS}	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \le S_{DS} < 0.33g$	B	B	C
$0.33g \le S_{DS} < 0.50g$	C	C	D
$0.50g \le S_{DS}$	D	D	D

For Risk Category = I and S_{DS} = 1.062 g, Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

VALUE OF S_{D1}	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \le S_{D1} < 0.133g$	B	B	C
$0.133g \le S_{D1} < 0.20g$	C	C	D
$0.20g \le S_{D1}$	D	D	D

For Risk Category = I and S_{D1} = 0.598 g, Seismic Design Category = D

Note: When S_1 is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category ≡ "the more severe design category in accordance with Table 11.6-1 or 11.6-2" = D

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

References

1. *Figure 22-1*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf
2. *Figure 22-2*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf
3. *Figure 22-12*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf
4. *Figure 22-7*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf
5. *Figure 22-17*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf
6. *Figure 22-18*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf

U.S. Geological Survey - Earthquake Hazards Program

2008 National Seismic Hazard Maps - Source Parameters

New Search

Fault Name	State
Newport Inglewood Connected alt 1	**California**

GEOMETRY	
Dip (degrees)	89
Dip direction	
Sense of slip	strike slip
Rupture top (km)	0
Rupture bottom (km)	11
Rake (degrees)	180
Length (km)	208

MODEL VALUES		
Slip Rate	1.3	
Probability of activity	1	
	ELLSWORTH	HANKS
Minimum magnitude	6.5	6.5
Maximum magnitude	7.50	7.50
b-value	0.8	0.8

Fault Model	Deformation	Char Rate [1]	GR-a-value [1]	Weight

	Model			
Stitched	2.1	3.79e-04 / 3.79e-04	1.884 / 1.884	0.50

[1] 1st Value is based on Ellsworth relation and 2nd value is based on Hanks and Bakun relation

Comments

Rose Canyon; Newport-Inglewood (Offshore); Newport-Inglewood, alt 1

Selected References

Working Group on California Earthquake Probabilities, 1995, Seismic hazards in southern California—Probable earthquakes, 1994 to 2024: Bulletin of the Seismological Society of America, v. 85, no. 2, p. 379-439.

U.S. Geological Survey - Earthquake Hazards Program

2008 National Seismic Hazard Maps - Source Parameters

New Search

Distance in Miles	Name	State	Pref Slip Rate (mm/yr)	Dip (degrees)	Dip Dir	Slip Sense	Rupture Top (km)	Rupture Bottom (km)	Length (km)
2.38	Newport Inglewood Connected alt 1	CA	1.3	89		strike slip	0	11	208
2.38	Newport-Inglewood, alt 1	CA	1	88		strike slip	0	15	65
2.47	Newport Inglewood Connected alt 2	CA	1.3	90	V	strike slip	0	11	208
4.50	Palos Verdes Connected	CA	3	90	V	strike slip	0	10	285
4.50	Palos Verdes	CA	3	90	V	strike slip	0	14	99
10.20	Puente Hills (Santa Fe Springs)	CA	0.7	29	N	thrust	2.8	15	11
11.84	Puente Hills (Coyote Hills)	CA	0.7	26	N	thrust	2.8	15	17
13.50	Puente Hills (LA)	CA	0.7	27	N	thrust	2.1	15	22
14.86	San Joaquin Hills	CA	0.5	23	SW	thrust	2	13	27
17.66	Elsinore;W+GI+T+J+CM	CA	n/a	84	NE	strike slip	0	16	241
17.66	Elsinore;W+GI+T	CA	n/a	84	NE	strike slip	0	14	124
17.66	Elsinore;W+GI	CA	n/a	81	NE	strike slip	0	14	83
17.66	Elsinore;W	CA	2.5	75	NE	strike slip	0	14	46
17.66	Elsinore;W+GI+T+J	CA	n/a	84	NE	strike slip	0	16	199
19.25	Newport-Inglewood (Offshore)	CA	1.5	90	V	strike slip	0	10	66
20.71	Elysian Park (Upper)	CA	1.3	50	NE	reverse	3	15	20
24.37	Santa Monica Connected alt 2	CA	2.4	44		strike slip	0.8	11	93
24.60	Raymond	CA	1.5	79	N	strike slip	0	16	22
24.75	Hollywood	CA	1	70	N	strike slip	0	17	17

24.96	Santa Monica, alt 1	CA	1	75	N	strike slip	0	18	14
24.96	Santa Monica Connected alt 1	CA	2.6	51		strike slip	0	16	79
25.43	Verdugo	CA	0.5	55	NE	reverse	0	15	29
25.66	San Jose	CA	0.5	74	NW	strike slip	0	15	20
27.08	Malibu Coast, alt 2	CA	0.3	74	N	strike slip	0	16	38
27.08	Malibu Coast, alt 1	CA	0.3	75	N	strike slip	0	8	38
27.87	Anacapa-Dume, alt 2	CA	3	41	N	thrust	1.2	12	65
29.16	Sierra Madre	CA	2	53	N	reverse	0	14	57
29.16	Sierra Madre Connected	CA	2	51		reverse	0	14	76
30.38	Clamshell-Sawpit	CA	0.5	50	NW	reverse	0	14	16
30.42	Chino, alt 1	CA	1	50	SW	strike slip	0	9	24
30.53	Chino, alt 2	CA	1	65	SW	strike slip	0	14	29
33.38	Anacapa-Dume, alt 1	CA	3	45	N	thrust	0	16	51
34.14	Elsinore;GI+T+J	CA	n/a	86	NE	strike slip	0	17	153
34.14	Elsinore;GI+T+J+CM	CA	n/a	86	NE	strike slip	0	16	195
34.14	Elsinore;GI	CA	5	90	V	strike slip	0	13	37
34.14	Elsinore;GI+T	CA	5	90	V	strike slip	0	14	78
35.91	Cucamonga	CA	5	45	N	thrust	0	8	28
36.16	Sierra Madre (San Fernando)	CA	2	45	N	thrust	0	13	18
36.54	Coronado Bank	CA	3	90	V	strike slip	0	9	186
38.70	San Gabriel	CA	1	61	N	strike slip	0	15	71
39.40	Northridge	CA	1.5	35	S	thrust	7.4	17	33
42.31	Santa Susana, alt 1	CA	5	55	N	reverse	0	16	27
45.92	Elsinore;T	CA	5	90	V	strike slip	0	14	52
45.92	Elsinore;T+J+CM	CA	n/a	85	NE	strike slip	0	16	169

45.92	Elsinore;T+J	CA	n/a	86	NE	strike slip	0	17	127
47.69	Simi-Santa Rosa	CA	1	60		strike slip	1	12	39
49.85	Holser, alt 1	CA	0.4	58	S	reverse	0	19	20
50.35	S. San Andreas;CH+CC+BB+NM+SM	CA	n/a	90	V	strike slip	0	14	306
50.35	S. San Andreas;CH+CC+BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	86		strike slip	0.1	13	512
50.35	S. San Andreas;SM	CA	29	90	V	strike slip	0	13	98
50.35	S. San Andreas;NM+SM+NSB+SSB+BG+CO	CA	n/a	84		strike slip	0.1	13	340
50.35	S. San Andreas;NM+SM+NSB+SSB+BG	CA	n/a	83		strike slip	0	14	271
50.35	S. San Andreas;PK+CH+CC+BB+NM+SM+NSB	CA	n/a	90	V	strike slip	0.1	13	377
50.35	S. San Andreas;NM+SM+NSB+SSB	CA	n/a	90	V	strike slip	0	13	213
50.35	S. San Andreas;NM+SM+NSB	CA	n/a	90	V	strike slip	0	13	170
50.35	S. San Andreas;NM+SM	CA	n/a	90	V	strike slip	0	14	134
50.35	S. San Andreas;CH+CC+BB+NM+SM+NSB+SSB+BG	CA	n/a	86		strike slip	0	14	442
50.35	S. San Andreas;CH+CC+BB+NM+SM+NSB+SSB	CA	n/a	90	V	strike slip	0	14	384
50.35	S. San Andreas;CH+CC+BB+NM+SM+NSB	CA	n/a	90	V	strike slip	0	14	341
50.35	S. San Andreas;CC+BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	86		strike slip	0.1	13	449
50.35	S. San Andreas;PK+CH+CC+BB+NM+SM+NSB+SSB	CA	n/a	90	V	strike slip	0.1	13	421
50.35	S. San Andreas;CC+BB+NM+SM+NSB+SSB+BG	CA	n/a	85		strike slip	0	14	380
50.35	S. San Andreas;CC+BB+NM+SM+NSB+SSB	CA	n/a	90	V	strike slip	0	14	322
50.35	S. San Andreas;CC+BB+NM+SM+NSB	CA	n/a	90	V	strike slip	0	14	279
50.35	S. San Andreas;CC+BB+NM+SM	CA	n/a	90	V	strike slip	0	14	243
50.35	S. San	CA	n/a	86		strike	0.1	13	479

	Andreas;PK+CH+CC+BB+NM+SM+NSB+SSB+BG					slip			
50.35	S. San Andreas;PK+CH+CC+BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	86		strike slip	0.1	13	548
50.35	S. San Andreas;BB+NM+SM+NSB	CA	n/a	90	V	strike slip	0	14	220
50.35	S. San Andreas;SM+NSB	CA	n/a	90	V	strike slip	0	13	133
50.35	S. San Andreas;SM+NSB+SSB	CA	n/a	90	V	strike slip	0	13	176
50.35	S. San Andreas;SM+NSB+SSB+BG	CA	n/a	81		strike slip	0	13	234
50.35	S. San Andreas;SM+NSB+SSB+BG+CO	CA	n/a	83		strike slip	0.1	13	303
50.35	S. San Andreas;BB+NM+SM+NSB+SSB	CA	n/a	90	V	strike slip	0	14	263
50.35	S. San Andreas;BB+NM+SM+NSB+SSB+BG	CA	n/a	84		strike slip	0	14	321
50.35	S. San Andreas;BB+NM+SM	CA	n/a	90	V	strike slip	0	14	184
50.35	S. San Andreas;BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	85		strike slip	0.1	13	390
50.35	S. San Andreas;PK+CH+CC+BB+NM+SM	CA	n/a	90	V	strike slip	0.1	13	342
50.75	San Jacinto;SBV+SJV	CA	n/a	90	V	strike slip	0	16	88
50.75	San Jacinto;SBV	CA	6	90	V	strike slip	0	16	45
50.75	San Jacinto;SBV+SJV+A	CA	n/a	90	V	strike slip	0	16	134
50.75	San Jacinto;SBV+SJV+A+C	CA	n/a	90	V	strike slip	0	17	181
50.75	San Jacinto;SBV+SJV+A+CC	CA	n/a	90	V	strike slip	0	16	181
50.75	San Jacinto;SBV+SJV+A+CC+B	CA	n/a	90	V	strike slip	0.1	15	215
50.75	San Jacinto;SBV+SJV+A+CC+B+SM	CA	n/a	90	V	strike slip	0.1	15	241
52.51	S. San Andreas;NSB+SSB+BG+CO	CA	n/a	79		strike slip	0.2	12	206
52.51	S. San Andreas;NSB	CA	22	90	V	strike slip	0	13	35
52.51	S. San Andreas;NSB+SSB	CA	n/a	90	V	strike slip	0	13	79

52.51	S. San Andreas;NSB+SSB+BG	CA	n/a	75		strike slip	0	14	136
53.77	Oak Ridge Connected	CA	3.6	53		reverse	0.6	15	94
53.77	Oak Ridge (Onshore)	CA	4	65	S	reverse	1	19	49
55.72	Cleghorn	CA	3	90	V	strike slip	0	16	25
56.86	San Jacinto;SJV+A+C	CA	n/a	90	V	strike slip	0	17	136
56.86	San Jacinto;SJV+A	CA	n/a	90	V	strike slip	0	17	89
56.86	San Jacinto;SJV+A+CC	CA	n/a	90	V	strike slip	0	16	136
56.86	San Jacinto;SJV	CA	18	90	V	strike slip	0	16	43
56.86	San Jacinto;SJV+A+CC+B+SM	CA	n/a	90	V	strike slip	0.1	15	196
56.86	San Jacinto;SJV+A+CC+B	CA	n/a	90	V	strike slip	0.1	15	170
57.22	San Cayetano	CA	6	42	N	thrust	0	16	42
61.05	S. San Andreas;SSB+BG	CA	n/a	71		strike slip	0	13	101
61.05	S. San Andreas;SSB	CA	16	90	V	strike slip	0	13	43
61.05	S. San Andreas;SSB+BG+CO	CA	n/a	77		strike slip	0.2	12	170
62.03	Rose Canyon	CA	1.5	90	V	strike slip	0	8	70
62.16	San Jacinto;A+C	CA	n/a	90	V	strike slip	0	17	118
62.16	San Jacinto;A+CC	CA	n/a	90	V	strike slip	0	16	118
62.16	San Jacinto;A	CA	9	90	V	strike slip	0	17	71
62.16	San Jacinto;A+CC+B+SM	CA	n/a	90	V	strike slip	0.1	15	178
62.16	San Jacinto;A+CC+B	CA	n/a	90	V	strike slip	0.1	15	152
64.03	Santa Cruz Island	CA	1	90	V	strike slip	0	13	69
64.65	North Frontal (West)	CA	1	49	S	reverse	0	16	50
64.94	Channel Islands Thrust	CA	1.5	20	N	thrust	5	12	59

67.21	S. San Andreas;BB+NM	CA	n/a	90	V	strike slip	0	15	87
67.21	S. San Andreas;CC+BB+NM	CA	n/a	90	V	strike slip	0	15	146
67.21	S. San Andreas;CH+CC+BB+NM	CA	n/a	90	V	strike slip	0	14	208
67.21	S. San Andreas;NM	CA	27	90	V	strike slip	0	15	37
67.21	S. San Andreas;PK+CH+CC+BB+NM	CA	n/a	90	V	strike slip	0.1	12	245
68.22	Pitas Point Connected	CA	1	55		reverse	1.2	13	78
68.22	Ventura-Pitas Point	CA	1	64	N	reverse	1	15	44
70.23	Santa Ynez (East)	CA	2	70	S	strike slip	0	13	68
70.23	Santa Ynez Connected	CA	2	70		strike slip	0	11	132
71.31	Oak Ridge (Offshore)	CA	3	32	S	thrust	0	8	38
73.50	Elsinore;J+CM	CA	3	84	NE	strike slip	0	17	118
73.50	Elsinore;J	CA	3	84	NE	strike slip	0	19	75
74.71	Mission Ridge-Arroyo Parida-Santa Ana	CA	0.4	70	S	reverse	0	8	69
75.82	Red Mountain	CA	2	56	N	reverse	0	14	101
79.77	Pitas Point (Lower)-Montalvo	CA	2.5	16	N	thrust	0.4	13	30
80.24	S. San Andreas;BG	CA	n/a	58		strike slip	0	13	56
80.24	S. San Andreas;BG+CO	CA	n/a	72		strike slip	0.3	12	125
81.17	North Channel	CA	1	26	N	thrust	1.1	5	51
82.74	S. San Andreas;BB	CA	34	90	V	strike slip	0	15	50
82.74	S. San Andreas;CC+BB	CA	n/a	90	V	strike slip	0	15	109
82.74	S. San Andreas;PK+CH+CC+BB	CA	n/a	90	V	strike slip	0.1	12	208
82.74	S. San Andreas;CH+CC+BB	CA	n/a	90	V	strike slip	0	14	171
83.31	Helendale-So Lockhart	CA	0.6	90	V	strike slip	0	13	114
83.46	Garlock;GC+GW	CA	n/a	90	V	strike	0.4	12	210

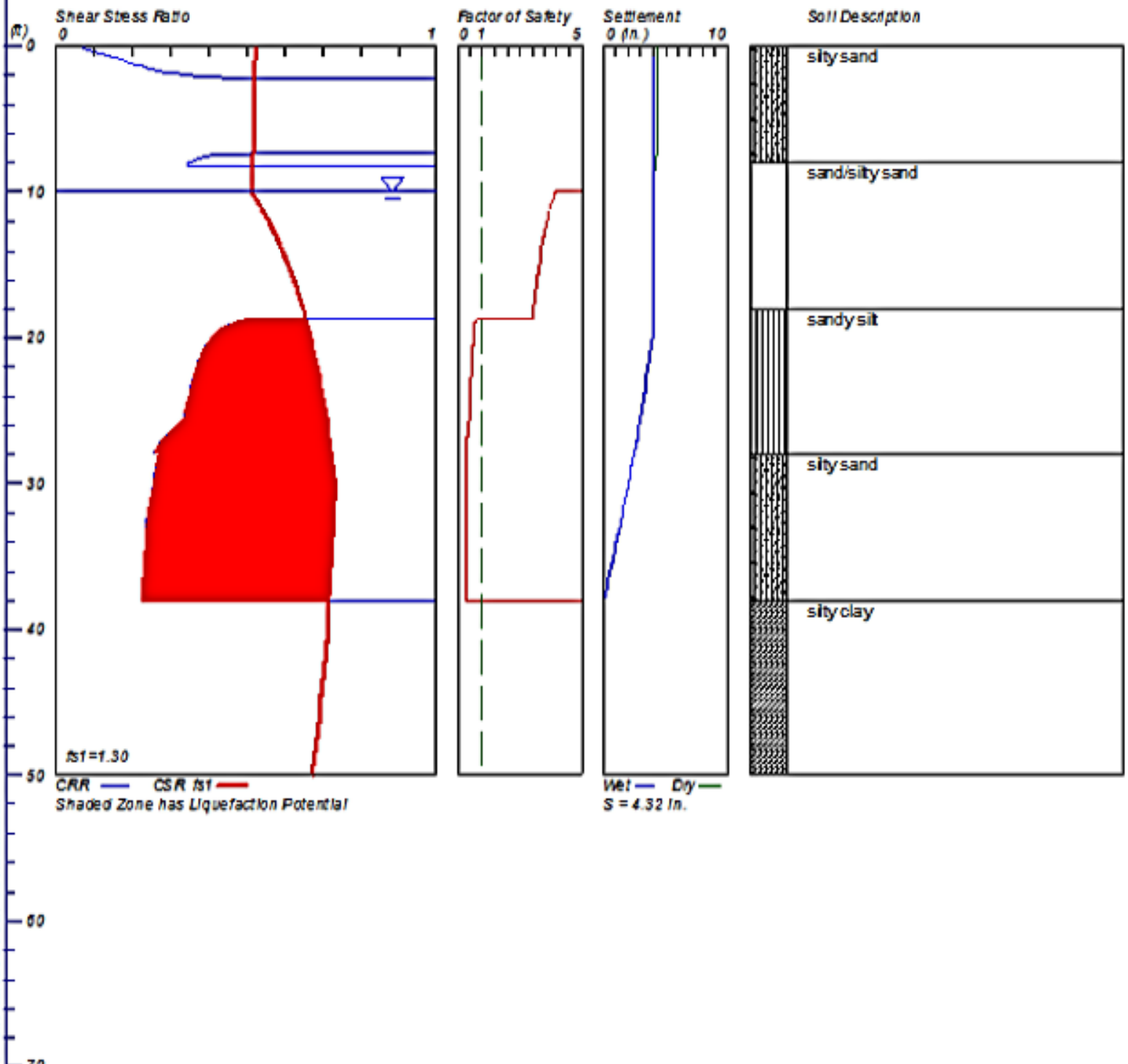
						slip			
83.46	Garlock;GE+GC+GW	CA	n/a	90	V	strike slip	0.3	12	256
83.46	Garlock;GW	CA	6	90	V	strike slip	0.7	14	98
86.15	Pinto Mtn	CA	2.5	90	V	strike slip	0	16	74
88.42	North Frontal (East)	CA	0.5	41	S	thrust	0	16	27
88.83	Pitas Point (Upper)	CA	1	42	N	thrust	1.4	10	35
90.19	Pleito	CA	2	46	S	reverse	0	14	44
96.43	San Jacinto;CC	CA	4	90	V	strike slip	0	16	43
96.43	San Jacinto;CC+B	CA	n/a	90	V	strike slip	0.2	14	77
96.43	San Jacinto;CC+B+SM	CA	n/a	90	V	strike slip	0.2	14	103
96.91	Lenwood-Lockhart-Old Woman Springs	CA	0.9	90	V	strike slip	0	13	145
97.30	Pitas Point (Lower, West)	CA	2.5	13	N	thrust	1.5	9	35
97.75	Santa Ynez (West)	CA	2	70	S	strike slip	0	9	63
97.81	San Jacinto;C	CA	14	90	V	strike slip	0	17	47
99.22	White Wolf	CA	2	75	S	reverse	0	14	63

APPENDIX
LIQUEFACTION ANALYSIS

Alamitos Concession Stand

Hole No.=B-1 Water Depth=10 ft

Magnitude=7.5
Acceleration=0.620g



****

LIQUEFACTION ANALYSIS CALCULATION SHEET

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Input File Name: J:\2017\20171705-E5129 Ra-Da Alamitos Beach Concessions Building, Long Beach\liquefaction.liq
Title: Alamitos Concession Stand
Subtitle: 20171705-E5129

Surface Elev.=
Hole No.=B-1
Depth of Hole= 50.0 ft
Water Table during Earthquake= 10.0 ft
Water Table during In-Situ Testing= 10.0 ft
Max. Acceleration= 0.62 g
Earthquake Magnitude= 7.5

Input Data:
Surface Elev.=
Hole No.=B-1
Depth of Hole=50.0 ft
Water Table during Earthquake= 10.0 ft
Water Table during In-Situ Testing= 10.0 ft
Max. Acceleration=0.62 g
Earthquake Magnitude=7.5

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2. Settlement Analysis Method: Ishihara / Yoshimine*
3. Fines Correction for Liquefaction: Stark/Olson et al.*
4. Fine Correction for Settlement: During Liquefaction*
5. Settlement Calculation in: All zones*
6. Hammer Energy Ratio, Ce = 1.25
7. Borehole Diameter, Cb= 1
8. Sampling Method, Cs= 1
9. User request factor of safety (apply to CSR) , User= 1.3
   Plot one CSR curve (fs1=User)
10. Use Curve Smoothing: Yes*
* Recommended Options

In-Situ Test Data:

Depth ft	SPT	gamma pcf	Fines %
0.0	0.0	118.8	25.2
3.0	22.0	122.2	25.2
8.0	20.0	117.0	8.9
13.0	26.0	123.3	8.9
18.0	18.0	128.9	51.7
23.0	18.0	127.3	51.7
28.0	18.0	128.5	18.4
33.0	17.0	129.8	18.4
38.0	17.0	115.5	NoLiq
43.0	5.0	120.0	NoLiq

48.0	8.0	120.5	NoLiq

Output Results:

Settlement of saturated sands=4.02 in.
Settlement of dry sands=0.30 in.
Total settlement of saturated and dry sands=4.32 in.
Differential Settlement=2.159 to 2.850 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	0.06	0.52	5.00	4.02	0.30	4.32
1.00	0.18	0.52	5.00	4.02	0.29	4.31
2.00	0.35	0.52	5.00	4.02	0.28	4.30
3.00	2.00	0.52	5.00	4.02	0.28	4.30
4.00	2.00	0.52	5.00	4.02	0.27	4.29
5.00	2.00	0.52	5.00	4.02	0.27	4.29
6.00	2.00	0.52	5.00	4.02	0.26	4.28
7.00	2.00	0.52	5.00	4.02	0.24	4.26
8.00	0.34	0.51	5.00	4.02	0.15	4.17
9.00	2.00	0.51	5.00	4.02	0.02	4.04
10.00	2.00	0.51	3.91	4.02	0.00	4.02
11.00	2.00	0.54	3.73	4.02	0.00	4.02
12.00	2.00	0.56	3.59	4.02	0.00	4.02
13.00	2.00	0.58	3.46	4.02	0.00	4.02
14.00	2.00	0.59	3.36	4.02	0.00	4.02
15.00	2.00	0.61	3.27	4.02	0.00	4.02
16.00	2.00	0.63	3.20	4.02	0.00	4.02
17.00	2.00	0.64	3.13	4.02	0.00	4.02
18.00	2.00	0.65	3.08	4.02	0.00	4.02
19.00	0.46	0.66	0.69*	3.99	0.00	3.99
20.00	0.41	0.67	0.61*	3.86	0.00	3.86
21.00	0.38	0.68	0.56*	3.72	0.00	3.72
22.00	0.37	0.69	0.54*	3.56	0.00	3.56
23.00	0.36	0.69	0.51*	3.39	0.00	3.39
24.00	0.35	0.70	0.49*	3.22	0.00	3.22
25.00	0.34	0.71	0.48*	3.04	0.00	3.04
26.00	0.31	0.71	0.44*	2.86	0.00	2.86
27.00	0.28	0.72	0.39*	2.65	0.00	2.65
28.00	0.27	0.72	0.37*	2.43	0.00	2.43
29.00	0.26	0.73	0.36*	2.21	0.00	2.21
30.00	0.25	0.73	0.34*	1.98	0.00	1.98
31.00	0.25	0.73	0.34*	1.75	0.00	1.75
32.00	0.24	0.73	0.33*	1.51	0.00	1.51
33.00	0.23	0.73	0.32*	1.26	0.00	1.26
34.00	0.23	0.73	0.32*	1.02	0.00	1.02
35.00	0.23	0.72	0.32*	0.77	0.00	0.77
36.00	0.23	0.72	0.31*	0.52	0.00	0.52
37.00	0.23	0.72	0.31*	0.27	0.00	0.27
38.00	0.22	0.72	0.31*	0.01	0.00	0.01
39.00	2.00	0.72	5.00	0.00	0.00	0.00
40.00	2.00	0.71	5.00	0.00	0.00	0.00
41.00	2.00	0.71	5.00	0.00	0.00	0.00
42.00	2.00	0.71	5.00	0.00	0.00	0.00
43.00	2.00	0.70	5.00	0.00	0.00	0.00
44.00	2.00	0.70	5.00	0.00	0.00	0.00
45.00	2.00	0.70	5.00	0.00	0.00	0.00
46.00	2.00	0.69	5.00	0.00	0.00	0.00
47.00	2.00	0.69	5.00	0.00	0.00	0.00
48.00	2.00	0.68	5.00	0.00	0.00	0.00
49.00	2.00	0.68	5.00	0.00	0.00	0.00
50.00	2.00	0.68	5.00	0.00	0.00	0.00

* F.S.<1, Liquefaction Potential Zone
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units Depth = ft, Stress or Pressure = tsf (atm), Unit Weight = pcf, Settlement = in.

CRRm	Cyclic resistance ratio from soils
CSRfs	Cyclic stress ratio induced by a given earthquake (with user request factor of safety)
F.S.	Factor of Safety against liquefaction, F.S.=CRRm/CSRfs
S_sat	Settlement from saturated sands
S_dry	Settlement from dry sands
S_all	Total settlement from saturated and dry sands
NoLiq	No-Liquefy Soils

****

LIQUEFACTION ANALYSIS CALCULATION SHEET

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Input File Name: J:\2017\20171705-E5129 Ra-Da Alamitos Beach Concessions Building, Long Beach\liquefaction.liq
Title: Alamitos Concession Stand
Subtitle: 20171705-E5129

Surface Elev.=
Hole No.=B-1
Depth of Hole= 50.0 ft
Water Table during Earthquake= 10.0 ft
Water Table during In-Situ Testing= 10.0 ft
Max. Acceleration= 0.62 g
Earthquake Magnitude= 7.5

Input Data:
Surface Elev.=
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5.00	2.00	0.52	5.00	4.02	0.27	4.29
6.00	2.00	0.52	5.00	4.02	0.26	4.28
7.00	2.00	0.52	5.00	4.02	0.24	4.26
8.00	0.34	0.51	5.00	4.02	0.15	4.17
9.00	2.00	0.51	5.00	4.02	0.02	4.04
10.00	2.00	0.51	3.91	4.02	0.00	4.02
11.00	2.00	0.54	3.73	4.02	0.00	4.02
12.00	2.00	0.56	3.59	4.02	0.00	4.02
13.00	2.00	0.58	3.46	4.02	0.00	4.02
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23.00	0.36	0.69	0.51*	3.39	0.00	3.39
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25.00	0.34	0.71	0.48*	3.04	0.00	3.04
26.00	0.31	0.71	0.44*	2.86	0.00	2.86
27.00	0.28	0.72	0.39*	2.65	0.00	2.65
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29.00	0.26	0.73	0.36*	2.21	0.00	2.21
30.00	0.25	0.73	0.34*	1.98	0.00	1.98
31.00	0.25	0.73	0.34*	1.75	0.00	1.75
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34.00	0.23	0.73	0.32*	1.02	0.00	1.02
35.00	0.23	0.72	0.32*	0.77	0.00	0.77
36.00	0.23	0.72	0.31*	0.52	0.00	0.52
37.00	0.23	0.72	0.31*	0.27	0.00	0.27
38.00	0.22	0.72	0.31*	0.01	0.00	0.01
39.00	2.00	0.72	5.00	0.00	0.00	0.00
40.00	2.00	0.71	5.00	0.00	0.00	0.00
41.00	2.00	0.71	5.00	0.00	0.00	0.00
42.00	2.00	0.71	5.00	0.00	0.00	0.00
43.00	2.00	0.70	5.00	0.00	0.00	0.00
44.00	2.00	0.70	5.00	0.00	0.00	0.00
45.00	2.00	0.70	5.00	0.00	0.00	0.00
46.00	2.00	0.69	5.00	0.00	0.00	0.00
47.00	2.00	0.69	5.00	0.00	0.00	0.00
48.00	2.00	0.68	5.00	0.00	0.00	0.00
49.00	2.00	0.68	5.00	0.00	0.00	0.00
50.00	2.00	0.68	5.00	0.00	0.00	0.00

* F.S.<1, Liquefaction Potential Zone
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

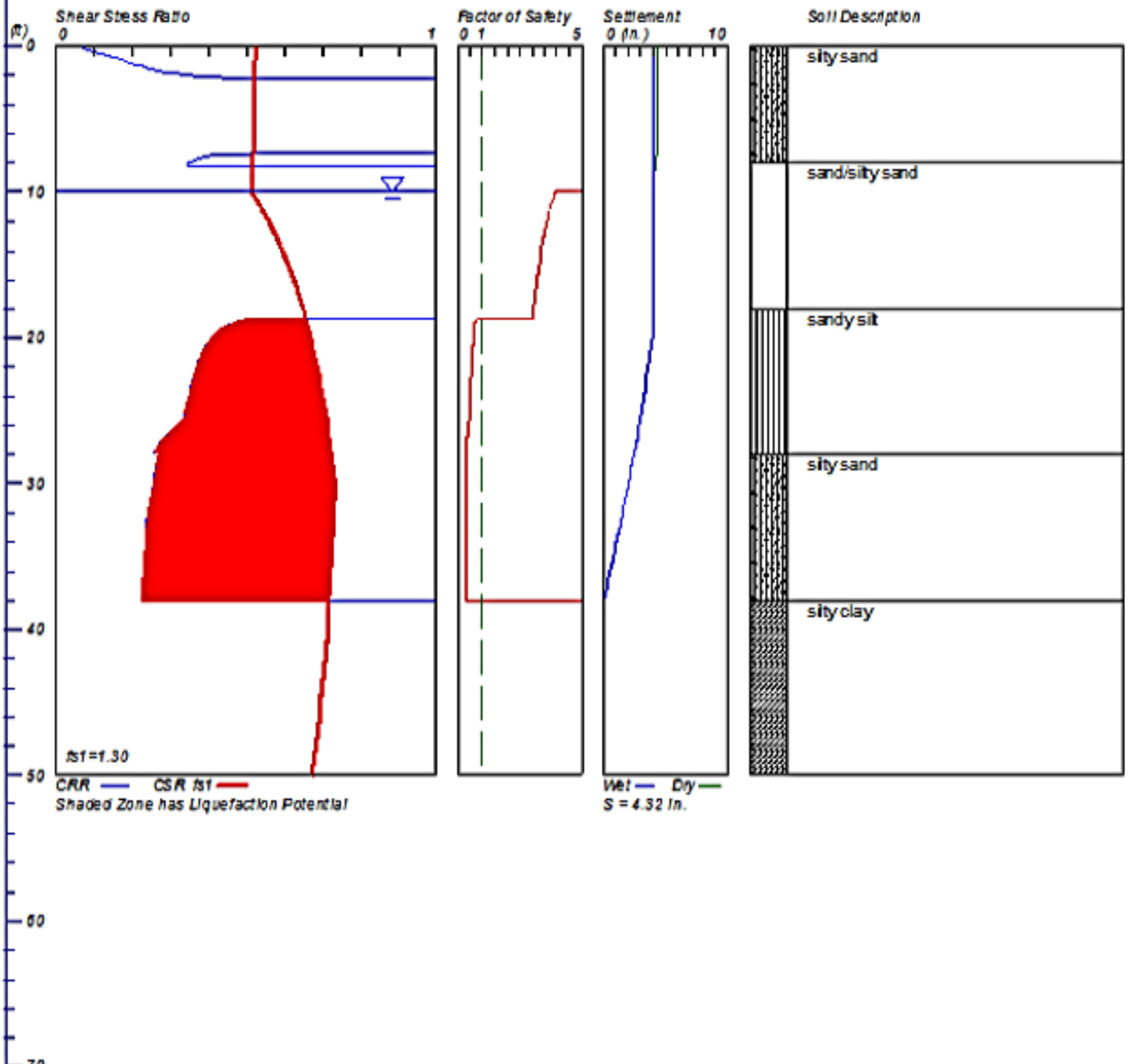
Units Depth = ft, Stress or Pressure = tsf (atm), Unit Weight = pcf, Settlement = in.

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S_sat	Settlement from saturated sands
S_dry	Settlement from dry sands
S_all	Total settlement from saturated and dry sands
NoLiq	No-Liquefy Soils

Alamitos Concession Stand

Hole No.=B-1 Water Depth=10 ft

Magnitude=7.5
Acceleration=0.620g



APPENDIX E

SEA LEVEL RISE REPORT

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ALAMITOS BEACH CONCESSION STAND PROJECT
SEA LEVEL RISE ASSESSMENT

FINAL

Prepared For:

LSA

Prepared By:

Everest International Consultants, Inc.

EVEREST

July 2017

ALAMITOS BEACH CONCESSION STAND PROJECT

SEA LEVEL RISE ASSESSMENT

Final

Prepared for:

LSA
20 Executive Park, Suite 200
Irvine, California 92614

Prepared by:

Everest International Consultants, Inc.
444 West Ocean Boulevard. Suite 1104
Long Beach, California 90802

July 2017

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1. INTRODUCTION

The City of Long Beach (City) is conducting environmental review under the California Environmental Quality Act (CEQA) for a proposed project to be located at the western end of Alamitos Beach in Long Beach, California. The proposed project (Project), known as the Alamitos Beach Concession Stand, includes a combination of new development and redevelopment across an area of 1.22 acres located within Assessor's Parcel No. 7265-021-901. There is currently a bike path and pedestrian path at the project site as well as a small café (Alamitos Café), beach rental facility (Alfredo's Beach Rentals), on-site parking lot, and supporting facilities (e.g., bike racks, outdoor patio, automated teller machine). The project site is located on the landward side of a wide sandy beach that is the result of a sand fillet that was formed against the rubblemound (rock) jetty constructed as part of the Downtown Shoreline Marina. The location of the proposed project is shown in Figure 1.



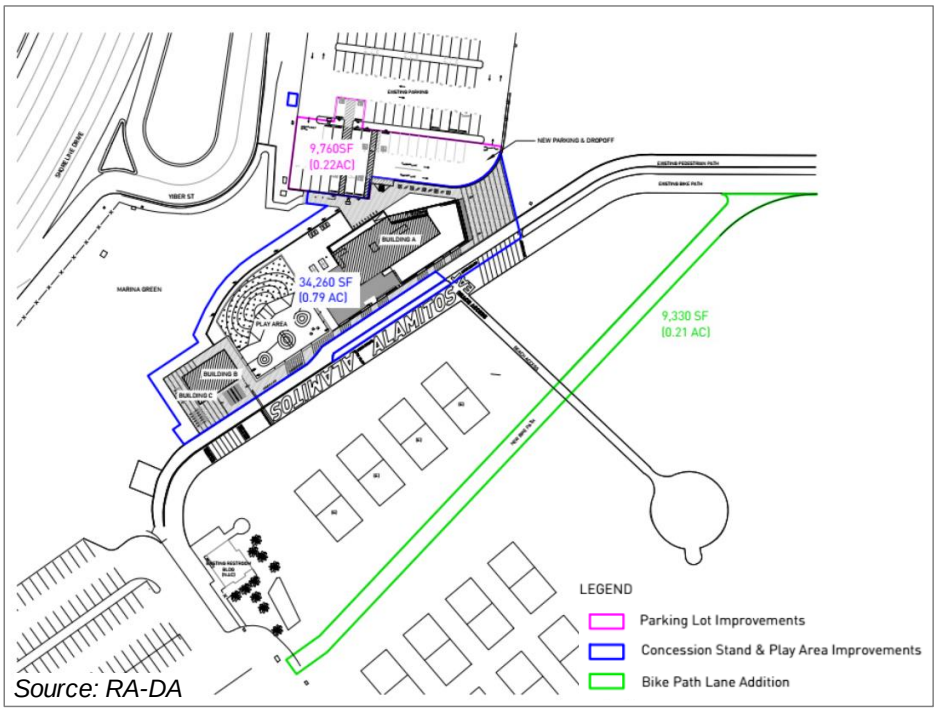
Figure 1. Project Location Map

The proposed project includes the demolition of the existing structures and subsequent replacement of those structures with three buildings, an outdoor recreational area, and improvements to the southern portion of the existing on-site parking lot. The Project would be aligned with the existing bike and pedestrian paths east of the project site, creating a promenade area in front of the project site facing the beach. In addition, the Project includes the addition of a new bike path that would improve pedestrian safety via repositioning of the sharp curve in the alignment of the existing bike path. The proposed conceptual project site plan and an artistic rendering are shown in Figure 2.

The City has retained LSA to conduct an Initial Study/Mitigated Negative Declaration (IS/MND) for CEQA compliance. In identifying the issues and associated analyses that would be needed for the IS/MND, LSA identified sea level rise as an issue of concern. LSA retained Everest International Consultants (Everest) to perform a sea level rise (SLR) assessment for use in evaluating the potential environmental impacts associated with the Project.

The purpose of the sea level rise assessment (SLR Assessment) is to determine the potential for coastal hazards to impact the proposed project in the future as sea level rises. Knowing the level and extent of potential coastal hazard impacts that the proposed project might be exposed to in the future will help inform the level of environmental analysis required for the Project. The following objectives were developed to achieve the purpose of the SLR Assessment.

- Obtain relevant project data and information including existing project site topography, proposed project site topography, proposed building pad elevations, and SLR hazard model results.
- Identify relevant sea-level rise policy guidance (e.g., City, California Coastal Commission (CCC)) and decide on the appropriate set of sea-level rise projections and associated timeframes.
- Conduct an analysis for the selected SLR projections and associated SLR timeframes via comparison of projected water levels to existing and proposed ground elevations as well as the proposed building pad elevations. This analysis should include consideration of future hazards due to higher mean sea levels (tidal flooding), coastal storms (wave storms), and tsunamis.



a) Conceptual Site Plan



b) Conceptual Renderings

Figure 2. Conceptual Project Site Plan and Renderings

2. METHODS

2.1 Relevant Project Data and Information

LSA was contacted for project data and information including existing and proposed project site topography as well as proposed building pad elevation data. In cases where such data/information was lacking, LSA contacted City staff who then provided the requested data/information in time to conduct the SLR Assessment.

2.2 Relevant Sea-Level Rise Policy Guidance

The City website was searched for information regarding relevant sea-level rise policy. In addition, City staff was contacted via LSA to obtain recent City sea-level rise policy information. It was determined that the City did not have specific, relevant SLR policy guidance so state policy guidance from the CCC would be the most relevant information applicable to the Project. The CCC website was searched for recent information regarding SLR policy guidance and the most relevant policy guidance was downloaded for use in conducting the SLR Assessment. That guidance was found in the August 12, 2015 document titled, "California Coastal Commission Sea Level Rise Policy Guidance, Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits" prepared by the California Coastal Commission. The SLR projections presented in that document are summarized in Table 1 below with the original source (NRC 2012) indicated in the table title.

Table 1. Sea Level Rise Projections for California (NRC 2012)

TIME PERIOD*	NORTH OF CAPE MENDOCINO	SOUTH OF CAPE MENDOCINO
By 2030	-4 cm to +23 cm	+4 cm to +30 cm
By 2050	-3 cm to +48 cm	+12cm to +61 cm
By 2100	+10 cm to +143 cm	+42 cm to +167 cm

**Baseline was Year 2000.*

2.3 SLR Analysis

In recent years, the U.S. Geological Survey (USGS) has been developing a numerical modeling system capable of simulating various coastal hazards under existing mean sea level and future mean sea level conditions (i.e., SLR projections). This modeling system, known as the Coastal Storm Modeling System or CoSMoS (Erikson, et al. 2017), has been updated several times to better simulate the complex processes that affect the accuracy of the results. Results from the most recent version of CoSMoS (Version 3.0, Phase 2) were accessed from the "Our Coast, Our Future" website (http://data.pointblue.org/apps/ocof/cms/)

in the form of flood hazard area maps. The maps were printed and used to analyze tidal flooding and coastal storm flooding under the three SLR projection timeframes identified in the 2015 CCC SLR Policy Guidance as shown in Table 1 above (South of Cape Mendocino). The CoSMoS provides results for various amounts of SLR (ranging from 0 cm to 500 cm) with no consideration of year or timeframe. Since the CCC SLR Policy Guidance requires analysis of various SLR projections associated with timeframes, the CoSMoS results closest to the SLR projections associated with the CCC SLR timeframes were used to conduct the analysis presented herein. For example, the top end of the SLR projection for Year 2100 is 167 cm (Table 1, South of Mendocino) while the closest two CoSMoS results were for 150 cm and 175 cm. For this analysis, the CoSMoS results for the SLR projection of 175 cm were used and the result was assumed to be associated with Year 2100. In addition, GIS data of the studied scenarios were downloaded from the USGS Science Base-Catalog website for CoSMoS v3.0 Phase 2 – Los Angeles County (https://www.sciencebase.gov/catalog/item/5845d431e4b04fc80e52356c). These data provided water elevation projections for different SLR scenarios.

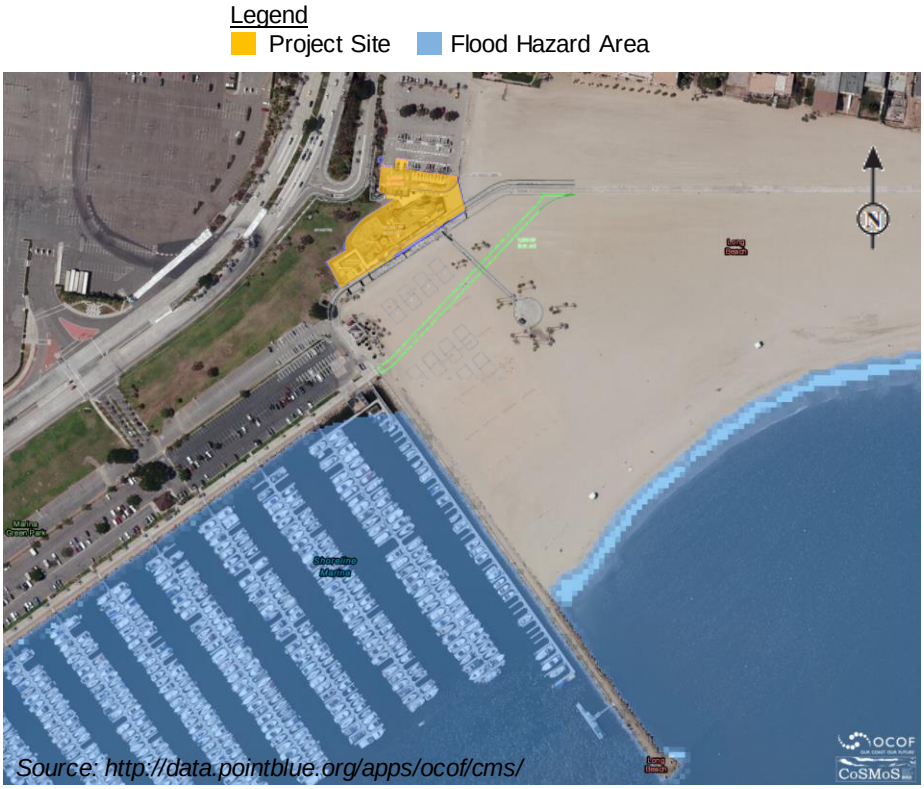
To analyze potential coastal hazards associated with tsunamis the California Department of Conservation website was searched for relevant information. Tsunami inundation maps for the California coastline prepared by the California Emergency Management Agency, California Geological Survey, and University of Southern California were found on this website and the most relevant map (Long Beach Quadrangle) was downloaded for use in conducting the SLR Assessment. The downloaded tsunami inundation map, which was dated March 1, 2009, does not include consideration of SLR so the inundation mapping represents inundation under existing (2009) mean sea level.

3. RESULTS

3.1 Tidal Flooding with SLR

The results of the CoSMoS 3.0 sea level rise hazard mapping analysis for Year 2016, Year 2030, Year 2050, and Year 2100 are shown in Figures 3, 4, 5, and 6, respectively. The Year 2016 results represent current (i.e., existing) conditions with no rise in sea level (i.e., 0 cm SLR). The Year 2030, Year 2050, and Year 2100 maps depict flood hazards associated with a 25 cm, 75 cm, and 175 cm rise in sea level, respectively (i.e., 25 cm SLR, 75 cm SLR, 175 cm SLR). There are two images shown in each figure with the top ('a' panel) and bottom ('b' panel) images depicting the results without and with 100-year return period coastal (wave) storms, respectively.

The mapped results for the conditions without coastal wave storms (Figures 3a, 4a, 5a, & 6a) were reviewed to assess the vulnerability of the project site to tidal flooding now and in the future with SLR. In general, the results indicated that the project site would not be



a) Without Wave Storm

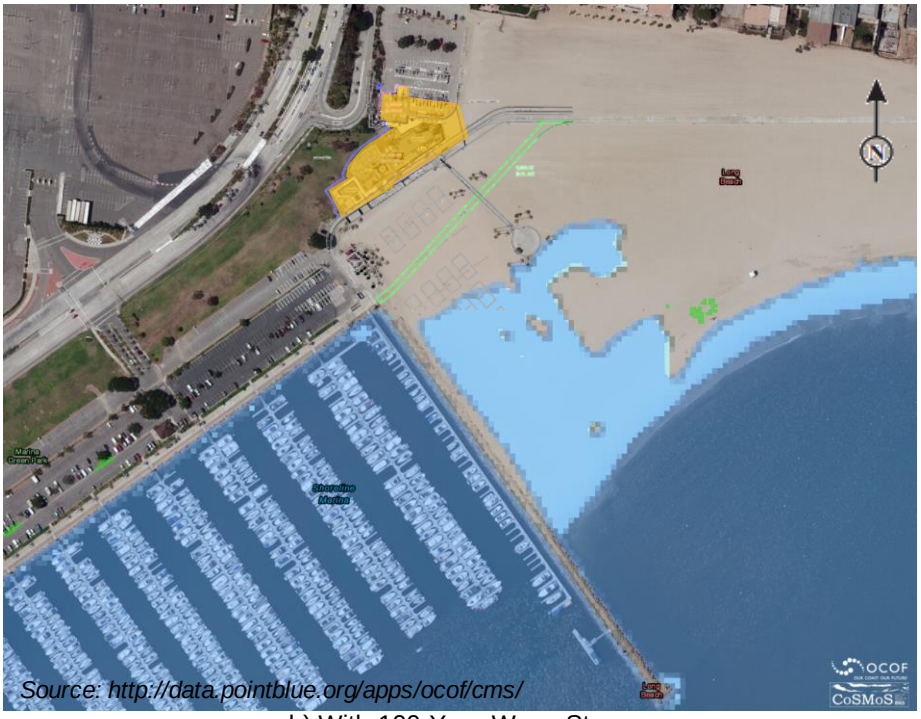


b) With 100-Year Wave Storm

Figure 3. CoSMoS 3.0 Flood Hazard Map
Current Sea Level Scenarios



a) Without Wave Storm



b) With 100-Year Wave Storm

Figure 4. CoSMoS 3.0 Flood Hazard Map
25 cm Sea Level Rise Scenarios
Selected to Represent CCC SLR Policy Guidance Projection for Year 2030

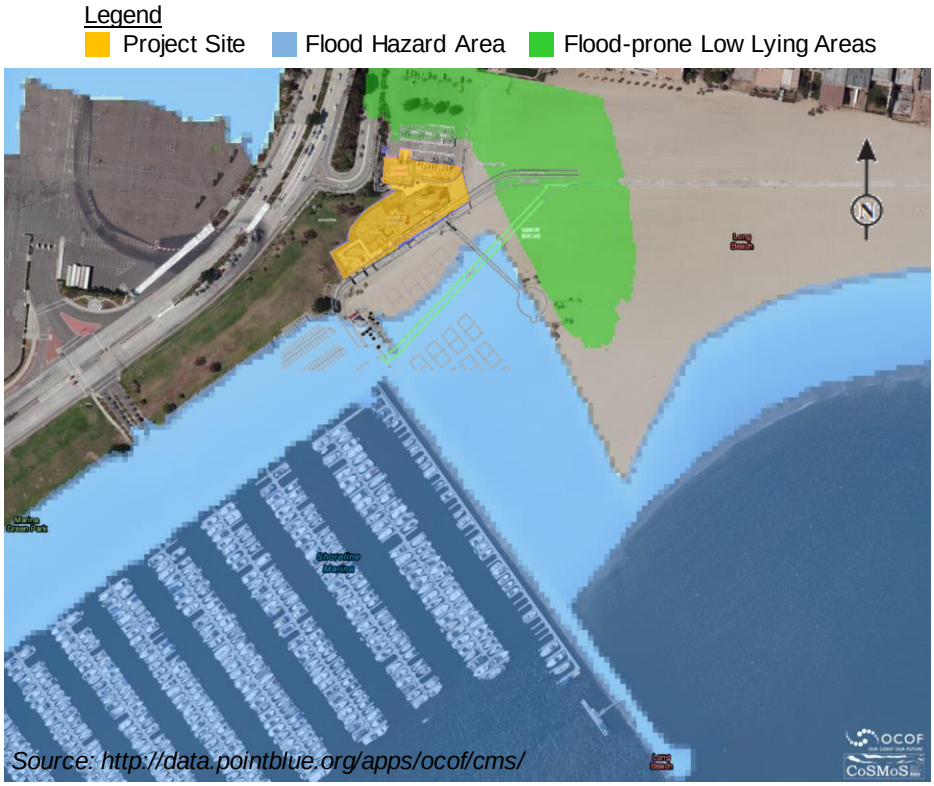


a) Without Wave Storm

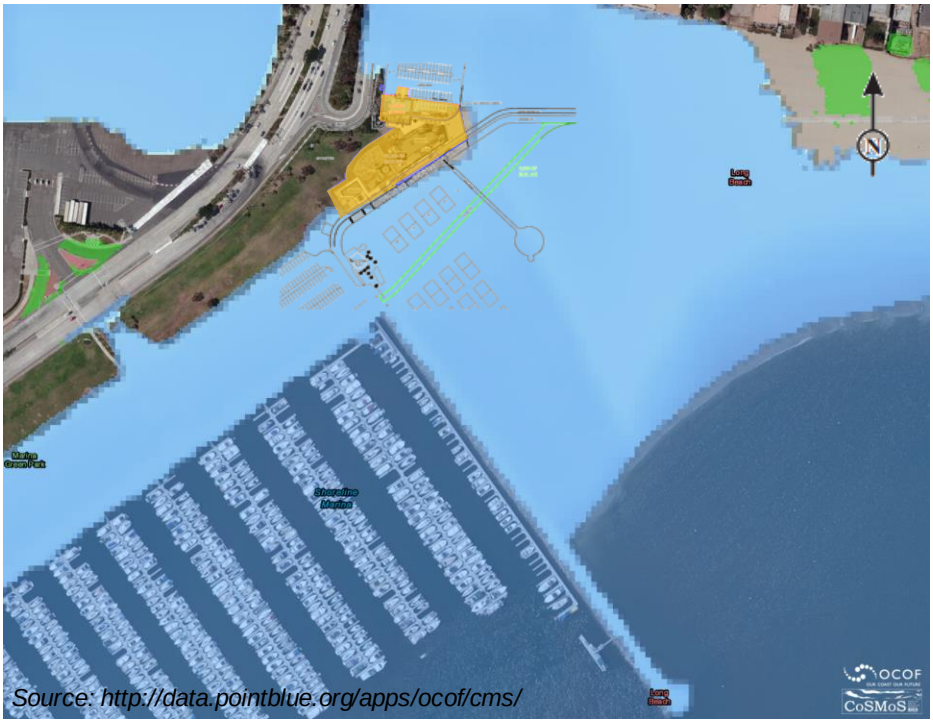


b) With 100-Year Wave Storm

Figure 5. CoSMoS 3.0 Flood Hazard Map
75 cm Sea Level Rise Scenarios
Selected to Represent CCC SLR Policy Guidance Projection for Year 2050



a) Without Wave Storm



b) With 100-Year Wave Storm

Figure 6. CoSMoS 3.0 Flood Hazard Map
175 cm Sea Level Rise Scenarios
Selected to Represent CCC SLR Policy Guidance Projection for Year 2100

subject to coastal hazards associated with tidal flooding now or in the future under all SLR projections (25 cm, 75 cm, and 175 cm) and through all timeframes (Year 2016, Year 2030, Year 2050, and Year 2100). The one exception is the proposed bike path that may be subject to tidal flooding with 175 cm of SLR (Year 2100) but not with lower levels of SLR (25 cm & 50 cm) estimated to occur in earlier years (Year 2030 & Year 2050). This assumes that the finished ground elevation of the proposed bike path is at the same ground elevation modeled in CoSMoS 3.0, which is likely the existing ground elevation.

The tidal flooding elevation projections in the vicinity of the project site are presented in Table 2, along with relevant proposed project site elevations (top of existing pedestrian path, proposed concession deck of Building A, proposed café finished floor & deck of Building A, and proposed finished floor of Buildings B & C). It can be seen that the proposed project site elevations are above the highest tidal flooding elevation projection of 12.5 ft, NAVD88, indicating that the proposed project would not be subject to tidal flooding under all SLR projections (25 cm, 75 cm, 175 cm) and through all timeframes (Year 2016, Year 2030, Year 2050, and Year 2100).

Table 2. CoSMoS 3.0 Water Elevation Projections for Conditions Without Coastal (Wave) Storm Compared with Project Site Elevations

SEA LEVEL RISE SCENARIO	WATER ELEVATION	
	METER, NAVD88*	FEET, NAVD88
Current Sea Level	2.0	6.6
25 cm SLR	2.3	7.5
75 cm SLR	2.8	9.2
175 cm SLR	3.8	12.5
PROJECT SITE ELEVATION (FEET, NAVD88)**		
Top of Existing Pedestrian Path (Low to High)		14.35 to 16.03
Proposed Concession Deck of Building A		16.97
Proposed Café Finished Floor and Deck of Building A (Concession Building)		17.47
Proposed Finished Floor of Buildings B and C (Rental and Restroom Building)		15.00

Source: * *CoSMoS 3.0 GIS Data*
** *City of Long Beach*

3.2 Coastal (Wave) Storm Flooding with SLR

The mapped results for the conditions with 100-year return period coastal (wave) storms (Figures 3b, 4b, 5b, & 6b) were reviewed to assess the vulnerability of the project site to coastal (wave) storm flooding now and in the future with SLR. In general, the results indicated that the project site would not be subject to coastal hazards associated with coastal (wave) storms now or in the future under all SLR projections (25 cm, 75 cm, 175 cm) and through all timeframes (Year 2016, Year 2030, Year 2050, Year 2100). Like with the tidal flooding coastal hazard, the one exception is the proposed bike path that would be subject to coastal (wave) storm flooding with 175 cm of SLR (Year 2100) but not with lower levels of SLR (25 cm & 50 cm) estimated to occur in earlier years (Year 2030 & Year 2050). This assumes that the finished ground elevation of the proposed bike path is at the same ground elevation modeled in CoSMoS 3.0, which is likely the existing ground elevation.

CoSMoS 3.0 includes the ability to estimate the increased erosion of beaches and erodible bluffs associated with sea level rise, including direct beach inundation and increased wave erosion due to more frequent and intense wave action. The CoSMoS 3.0 results for various coastal erosion scenarios (e.g., with & without beach nourishment) were reviewed for existing conditions (0 cm SLR and Year 2016), all SLR projections (25 cm, 50 cm, & 175 cm) and timeframes (Year 2030, Year 2050, & Year 2100) as part of this SLR Assessment. The results indicated that SLR-induced coastal erosion would not impact the project site now or in the future with SLR. The results do not indicate any SLR-induced beach erosion in the vicinity of the project site, although such erosion is observed on downcoast beaches located east/southeast of the project site. This finding is likely due to the stable nature of the beach in the vicinity of the project site.

The flood elevation projections with the 100-year coastal storm conditions in the vicinity of the project site are presented in Table 3, along with relevant proposed project site elevations (top of existing pedestrian path, proposed concession deck of Building A, proposed café finished floor & deck of Building A, and proposed finished floor of Buildings B & C). It can be seen that the proposed project site elevations are above the highest flood elevation projection of 14.8 ft, NAVD88, indicating that the buildings would not be subject to tidal flooding under all SLR projections (25 cm, 75 cm, 175 cm) and through all timeframes (Year 2016, Year 2030, Year 2050, and Year 2100) with one exception. The lower portions of the proposed bike path might be flooded in Year 2100.

Table 3. CoSMoS 3.0 Water Elevation Projections for 100-Year Coastal (Wave) Storm Conditions Compared with Project Site Elevations

Sea Level Rise Scenario	Water Elevation	
	Meter, NAVD88*	Feet, NAVD88
Current Sea Level	2.2	7.2
25 cm SLR	2.6	8.5
75 cm SLR	3.2	10.5
175 cm SLR	4.5	14.8
Project Site Elevation (Feet, NAVD88)**		
Top of Existing Pedestrian Path (Low to High)		14.35 to 16.03
Proposed Concession Deck of Building A		16.97
Proposed Café Finished Floor and Deck of Building A (Concession Building)		17.47
Proposed Finished Floor of Buildings B and C (Rental and Restroom Building)		15.00

*Source: * CoSMoS 3.0 GIS Data*
*** City of Long Beach*

3.3 Tsunami Inundation

The results of the tsunami inundation modeling conducted by the State of California are shown in Figure 7. The results indicate that the entire coast of Long Beach would likely be inundated by a tsunami of the magnitude and duration analyzed as part of the study conducted by the State of California. Specific to the proposed project, the results indicate that the project site would be vulnerable to tsunami inundation under existing conditions, including existing mean sea level (i.e., without sea level rise). As mentioned above, the tsunami hazard mapping analysis conducted by the State of California did not include an evaluation of tsunami hazards in the future with sea level rise. However, since the entire project site is in a tsunami hazard area under existing conditions it is reasonable to assume the entire area would be in a tsunami hazard area under future conditions with sea level rise, and the magnitude of inundation would likely be higher in the future for a given tsunami event due to the higher water elevations associated with sea level rise.

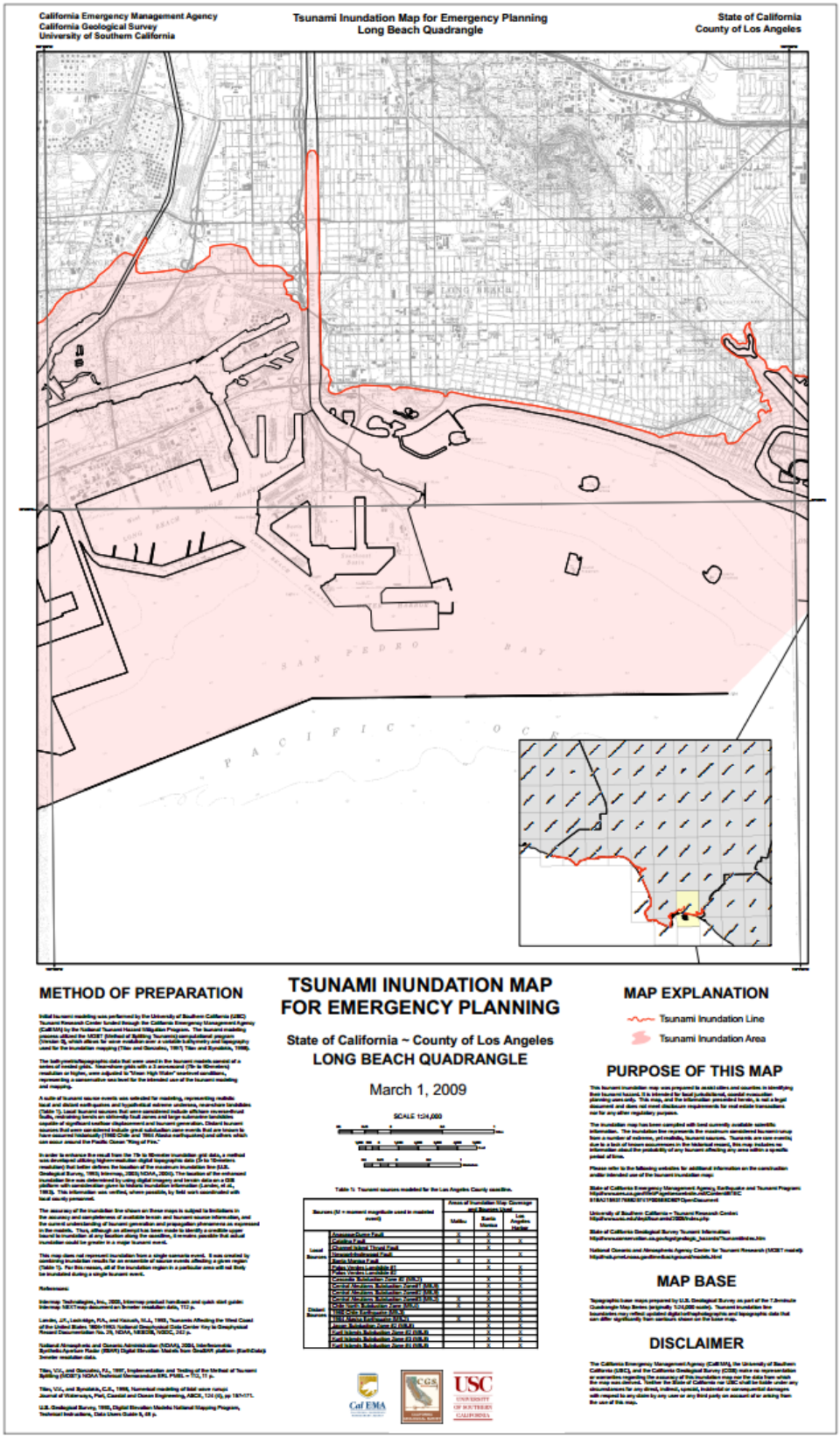


Figure 7. Tsunami Inundation Map

4. CONCLUSIONS

The CoSMoS 3.0 results reviewed for this SLR Assessment indicate that the proposed project site is not currently subject to coastal hazards associated with tidal flooding and coastal (wave) storms. In addition, the CoSMoS 3.0 results indicate that the proposed project site would not be subject to coastal hazards associated with tidal flooding and coastal (wave) storms until SLR reaches 175 cm, which is projected to occur sometime around Year 2100 according to the CCC's SLR policy guidance. These conclusions are based on the ground elevations used in the CoSMoS 3.0 simulations without regards to proposed project ground elevation changes and/or building pad elevation changes. Since the proposed project is not proposing any ground elevation reductions (i.e., excavation), the CoSMoS 3.0 results are directly applicable to assessing coastal hazard risk now and in the future with SLR. Consequently, with one exception, the proposed project would not be expected to be vulnerable to coastal hazards associated with tidal flooding and coastal (wave) storms now or in the future with SLR (25 cm in Year 2030, 75 cm in Year 2050, 175 cm in Year 2100). The one exception is the proposed bike path that would be expected to be vulnerable to coastal hazards associated with tidal flooding and coastal (wave) storms for a SLR of 175 cm, which is projected to occur sometime around Year 2100 according to the CCC's SLR policy guidance. This assumes that the finished ground elevation of the proposed bike path is at the same ground elevation modeled in CoSMoS 3.0, which is likely the existing ground elevation. If the finished ground elevation of the proposed bike path is designed to be higher than the existing ground and the flood elevations of the SLR projections, then this vulnerability would be alleviated.

In April 2017, the State of California, through the Ocean Protection Council (OPC) and Ocean Science Trust, released a report titled, "Rising Seas in California: An Update on Sea-Level Rise Science" (Griggs et al. 2017). It is the intent of this report to update sea level rise science applicable to the California coast. The State of California plans to use the information in the report to update the State's sea level rise policy. Public outreach for this effort started in May 2017 and the OPC anticipates that the updated State policy for SLR will be complete in January 2018. Once the State SLR policy is adopted it is anticipated that State resource (e.g., California Department of Fish & Wildlife) and regulatory agencies (e.g., California Coastal Commission) will update their SLR policy guidance. Under this approach and timeline, it is likely that the State resource and regulatory agencies will update their SLR policy guidance sometime in the spring or summer of 2018. Consequently, the SLR Assessment presented herein may have to be updated next year once the relevant State agencies (e.g., CCC) update their SLR policy guidance.

5. REFERENCES

California Coastal Commission. 2015. California Coastal Commission Sea Level Rise Policy Guidance, Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits. Published by the California Coastal Commission. Adopted August 12, 2015.

Erikson, L.H., Barnard, P.L., O'Neill, A.C., Vitousek, S., Limber, P., Foxgrover, A.C., Herdman, L.H., and Warrick, J., 2017. CoSMoS 3.0 Phase 2 Southern California Bight: Summary of data and methods. U.S. Geological Survey. http://dx.doi.org/10.5066/F7T151Q4.

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National Research Council. 2012. *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future.* Published by the National Academies Press. ISBN 978-0-309-25594-3. 250pp. 2012.

APPENDIX F

HAZARDOUS BUILDING MATERIALS INSPECTION REPORT

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Hazardous Building Materials Inspection Report

Alamitos Beach Concessions Building
Long Beach, California

Prepared for:

RA-DA
7523 Norton Avenue
West Hollywood, California 90046

Tidelands Capital Improvement Division - City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, California 90802

Prepared by:

Pacific Environmental Company
28202 Cabot Road, Suite 300
Laguna Niguel, CA 92677

April 28, 2017

Project Number: 17090

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Appendix B Asbestos Sample Analysis Reports and Chain of Custody
Appendix C Lead Sample Analysis Reports and Chain of Custody

Hazardous Building Materials Inspection Report

Alamitos Beach Concessions Building
Long Beach, California

Introduction

Pacific Environmental Company has completed inspection services to identify asbestos-containing materials, deteriorated lead-containing paints and universal wastes that would require treatment or removal prior to the demolition of the Alamitos Beach Concessions Building located along the Long Beach Pedestrian Path in Long Beach, California.

The inspection was carried out on April 24, 2017 to comply with the requirements associated with the planned demolition of the existing improvements and the redevelopment of the site with new food and recreational concessions as a part of the Tidelands Capital Improvement Project that is being carried out by the City of Long Beach.

Scope of Work

ASBESTOS: The asbestos survey was performed by identifying suspect ACMs (defined by U.S. EPA and Occupational Safety and Health Administration (OSHA) as any material containing more than 1% asbestos) and performing sampling in compliance with the regulations that specify the identification of ACM. The suspect ACMs were grouped into Homogeneous Sampling Areas (HSAs). An HSA is a material that exhibits similar physical characteristics and that was installed at the same time as observed by the licensed inspector. Enclosed and/or encased materials were deemed inaccessible and as such, this investigation and all sampling was conducted only in generally accessible areas. Walls, ceiling, floors or soffits were not demolished to gain access.

Upon identifying the suspect ACMs, representative bulk samples were collected from each HSA following OSHA and National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations. Bulk samples were collected using a variety of cutting and/or coring tools, each cleaned prior to and following the collection of each sample. Samples were generally collected through the entire strata of each material sampled, unless otherwise noted. To minimize the generation of dust, a liberal amount of water was applied during the collection of each sample, particularly during the collection of friable materials, such as spray-applied acoustic ceiling material. Water was amended with a surfactant and applied using a small sprayer. Samples were placed inside a clean (new) plastic container and labeled with a unique sampling number corresponding to a material description on PEC's bulk sample collection logs.

Sample locations were chosen so as to be representative of the material sampled and based on the licensed inspector's professional judgment. Each sample collected was given a unique sample number. The friability of each material was evaluated and noted prior to the collection of each sample. Friable materials can be crushed into powder using hand pressure.

At the completion of the fieldwork, the bulk samples collected were logged onto chain of custody sheets and forwarded to AQ Environmental Laboratories for analysis by Polarized Light Microscopy (PLM). AQ Environmental Laboratories participates in the National Voluntary Laboratory Accreditation Program (NVLAP). The bulk samples were analyzed in accordance with the U.S. EPA "Method for Determination of Asbestos in Bulk Building Materials" 600/R-93/116. This method requires that multiple and distinct layers be analyzed separately.

The National Emission Standard for Hazardous Air Pollutants (NESHAPS), EPA, OSHA and SCAQMD define an ACM as any material containing a concentration of asbestos greater than 1.0% by weight as determined by Polarized Light Microscopy. These agencies further separate ACM into the following three categories:

- **Regulated Asbestos-Containing Materials (RACM)** - Includes all friable asbestos materials, Class 1 non-friable asbestos materials that have become friable or will become friable and Class 2 non-friable materials that have a high probability of becoming friable when crumbled, pulverized or reduced to powder by forces expected to act on the materials in the course of renovation or demolition.
- **Class 1 Non-friable asbestos-containing materials** - Includes asbestos- containing packing, gaskets, resilient floor covering and asphalt roofing products that when dry can be crumbled, pulverized or reduced to powder by hand pressure.
- **Class 2 Non-friable asbestos-containing materials -** Includes all non-friable materials, excluding Class 1 materials that when dry cannot be crumbled, pulverized or reduced to powder by hand pressure.

The California Department of Occupational Safety and Health (Cal/OSHA) defines an asbestos-containing construction material (ACCM) as a material that contains greater than one-tenth of one percent (>0.10%) asbestos. It is this definition where the issue of "trace asbestos" arises. Material found to contain less than 1% asbestos (trace) does not meet the EPA or SCAQMD definition of ACM and therefore, does not require disposal as such. However, Cal-OSHA's employee protection requirements for materials containing less than 1% asbestos prohibit unrestricted demolition and require personal protective equipment (PPE), training, and special equipment during abatement.

Based upon these criteria, the results of the sampling are separated into those containing greater than 1% asbestos, less than 1% (trace) asbestos and those where no asbestos was detected.

LEAD-CONTAINING PAINT: Construction activities (including demolition) that disturb materials or paints containing any amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR, Section 1532.1. Deteriorated paint is defined by Title 17, CCR, Division 1, Chapter 8, §35022 as a surface coating that is cracking, chalking, flaking, chipping, peeling, non-intact, failed, or otherwise separating from a component. Demolition of a deteriorated LCP component would require waste characterization and appropriate disposal. Intact LCP on a

component is currently accepted by most landfills and recycling facilities; however, contractors are responsible for segregating and characterizing waste streams prior to disposal.

Potential hazards exist to workers who remove or cut through LCP coatings during demolition. Dust containing hazardous concentrations of lead may be generated during scraping or cutting materials coated with lead-containing paint. Torching of these materials may produce lead oxide fumes. Guidelines regarding regulatory provisions for construction work where workers may be exposed to lead are presented in the Title 8, CCR, Section 1532.1.

The lead inspection included a visual inspection to identify and sample defective painted surfaces within the interior and exterior of the subject property that would require treatment prior to demolition activities.

UNIVERSAL WASTES: The Environmental Protection Agency (EPA) universal waste regulations streamline hazardous waste management standards for federally designated "universal wastes", which include; batteries, pesticides, mercury-containing equipment and bulbs (lamps), and polychlorinated biphenyls (PCBs).

PCBs are a group of chemical mixtures used as insulators in electrical equipment such as transformers and fluorescent light ballasts. Federal regulations govern items containing 50 to 499 ppm PCBs. Chemicals classified as PCBs were widely manufactured and used in the United States throughout the 1950s and 1960s. PCB-containing oil is typically found in older electrical transformers and light fixtures (ballasts). Transformers containing greater than 500 ppm PCBs, between 50 and 500 ppm PCBs, and less than 50 ppm PCBs are considered PCB, PCB-contaminated, and non-PCB, respectively.

Mercury vapor contained in fluorescent lamps is immediately released in to the air when a fluorescent lamp is broken. A portion of the mercury will remain with the glass and white powder (phosphors). This results in initially high concentrations of mercury vapor. The initial concentration will rapidly go down as fresh air circulates in to the building. EPA and ATSDR studies do not indicate that mercury exposure resulting from occasional cleanup of broken fluorescent lamps will result in adverse health effects.

Mercury can be found in various consumer and commercial products. When a mercury-containing product breaks and the mercury is spilled, the exposed mercury can evaporate and become an invisible, odorless toxic vapor. Some of these products such as mercury-containing thermometers can break easily and spill mercury. To prevent mercury releases, these products should be used and stored safely, and managed properly at the end of their useful lives. (EPA Publication).

Our services included a visual inspection to seek potential hazards that will be encountered during the demolition project.

Site Description

The property is a single-story concession and restroom building located along the newly improved Long Beach Pedestrian Path. The building comprises approximately 1,600 square feet and the existing improvements include a kitchen, storage areas, restrooms and equipment rental storage areas.

The building is a frame and stucco structure. Interior finishes include plaster, stucco and drywall walls and ceilings with 2' x 4' suspended ceiling tiles in the kitchen. Floors are concrete with newer ceramic tile finishes in the restrooms. There is a plumbing chase located between the restrooms and none of the pipes were insulated. The roof is covered with asphalt shingles except for over the cage area, which is covered with lattice.

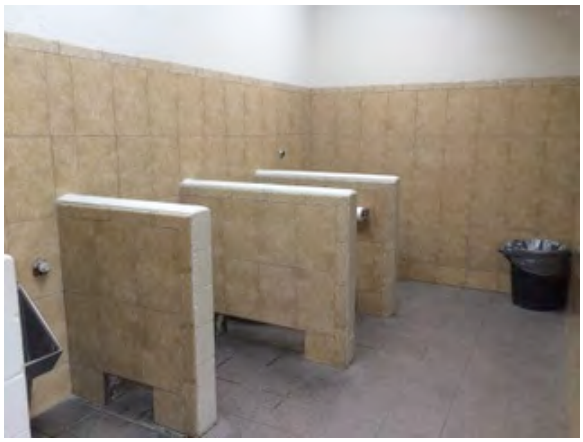
The following photographs illustrate the existing site conditions.



Exterior



Exterior



Interior of Restroom



Interior of Restroom



Cage Area



Exterior



Exterior



Kitchen



Roof



Roof

Asbestos Inspection Results

A total of seventeen (17) bulk samples were collected for this assessment. The laboratory analyzed each layer (19 layers) by Polarized Light Microscopy with dispersion staining per EPA protocols.

Based on our assessment services, the following suspect materials are classified as asbestos-containing materials.

Summary of Asbestos-Containing Materials		
Material	**Location**	**Category**
Roof Mastics	Roof Penetrations ~6 SF	Category 1 Non-Friable

Materials that were sampled and determined to not contain asbestos include the following:

- 2' x 4' Acoustic Ceiling Panels
- Drywall
- Drywall Joint Compound
- Stucco/Plaster in the Storage Rooms
- Exterior Stucco
- Plaster in the Restrooms
- Shingled Roofing
- Roof Underlayments

Sample location plans are included as Appendix A, the laboratory reports and chain of custody forms are included as Appendix B.

Lead Containing Paint

Lead-based paint is of concern both as a source of direct exposure through ingestion of paint chips, and as a contributor to lead interior dust. Lead was widely used as a major ingredient in most interior and exterior oil-based paints prior to 1950. Lead compounds continued to be used as corrosion inhibitors, pigments and drying agents beginning in the early 1950's. In 1972, the Consumer Products Safety Commission limited lead content in new paint to 0.5% (5000 ppm) and, in 1978, to 0.06% (600 ppm).

Several public (government) agencies have a published "regulatory action level" to classify LBP. To further complicate matters, some of the established "levels" are quantified in different units of measurement. Listed below are the current regulatory agencies that have defined LBP, along with the respective action level:

Agency	Ordinance	Action Level (mg/cm2)	Action Level (ppm)
HUD / EPA	24 CFR 35.86 & 40 CFR 745.103	1.0 mg/cm2	5,000 ppm
L.A. County	Title 11, 11.28.010	0.7 mg/cm2	600 ppm
OSHA / CAL OSHA	29 CFR 1926.62 & Title 8, 1532.1	not Specified	600 ppm

Based on the various action levels, we are reporting lead-based paint (LBP) and lead-containing paint (LCP) to ensure compliance during the renovation. LBP and LCP are defined below:

- **Lead-Based Paint:** Paint or other surface coating that contains lead in excess of 1.0 milligrams per centimeter squared (mg/cm2) or 5,000 parts per million (ppm).
- **Lead-Containing Paint**: painted material or surfaces containing lead levels between 600 to 5,000 ppm of lead.

Representative paint chip samples of defective paints were collected and submitted for analysis to AQ Environmental Laboratories for analysis by Flame Atomic Absorption Spectrophotometry (Flame AAS) in accordance with EPA Method 7420/3050 analytical protocols.

The results of the analysis are detailed in the following table:

Sample ID	Paint Sample Location	Result	Classification
01	Exterior Wall Paint from Stucco	<47 ppm	Negative

There are no applications of defective LCP at this property that would require treatment to facilitate the planned demolition.

Universal Wastes

Polychlorinated Biphenyl (PCBs) and Fluorescent Light Tubes (FLTs): Suspect PCB-containing light fixtures and FLT visual identification was performed by entering each area, assessing the lighting fixture assemblies and quantifying.

Only those ballasts which include the manufacturer's clearly marked labeling of "No PCB's" are considered non-PCB containing ballasts. Representative ballasts were inspected and all of the fixtures appear to have newer, non-pcb ballasts.

There are seven fixtures with FLTs which should be recycled or disposed of in accordance with DTSC guidelines.

Mercury-Containing Thermostat Switches: We also visually searched for thermostats that are suspected to contain mercury switches. There are no thermostats at this property.

Other Hazardous Wastes: No batteries, pesticides or other indications of hazardous waste were noted during our inspection.

Summary and Recommendations

Based on our observations and the data collected for this inspection, the only asbestos-containing material at this site is the roof penetration mastic. There is a very limited quantity (approximately six square feet) that will have to be removed by an asbestos abatement contractor prior to demolition.

There were no indications of defective lead-containing paints that would require treatment prior to demolition and there were also no indications of any universal wastes that will be impacted.

The owner should provide notification to contractors and subcontractors performing work at the buildings as to the presence and location of ACMs at the building prior to the start of any construction work.

The building owner should retain a State of California licensed asbestos contractor to perform pre-demolition abatement of all ACM identified in accordance with applicable federal, state, and local regulations governing asbestos related work including, but not limited to those promulgated by OSHA, EPA, Cal-OSHA, Cal-EPA, Cal-DHS, DTSC, and the South Coast Air Quality Management District (SCAQMD).

An advance written notification to the local Cal-OSHA office is required from a contractor regarding their "Intent To Conduct Asbestos Related Work." Based on the limited quantity of ACM, there is no requirement for SCAQMD notifications for abatement, only demolition.

All asbestos waste must be properly disposed of and documented. Waste Manifests must be submitted at the end of a project. Disposing of a known hazardous waste is illegal in the State of California.

Limitations

The information contained within this report was prepared for the exclusive use and reliance of the RA-DA and the City of Long Beach and PEC. This information is based on the specific parameters of the scope of work for this project and the regulations in force at the time of this report. PEC accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein without the written authorization of PEC.

Often materials are located in confined or inaccessible locations with little or no visible manifestation of their presence. These materials may be found in various areas under existing flooring materials, above ceilings, behind walls, materials within fixtures, electrical wire casing, or buried pipes and wires. As previously stated, because of the potential for hidden materials, it may not be possible to determine if all suspect building materials have been identified, located, and subsequently tested. Destructive measures to access these potentially hidden materials were not employed by PEC as part of this project. However, PEC does warrant that its investigations and methodology reflect our best efforts based upon prevailing standard of care in the environmental industry.

Report prepared by:



Michael J. Lyssy
President
CAC 94-3911

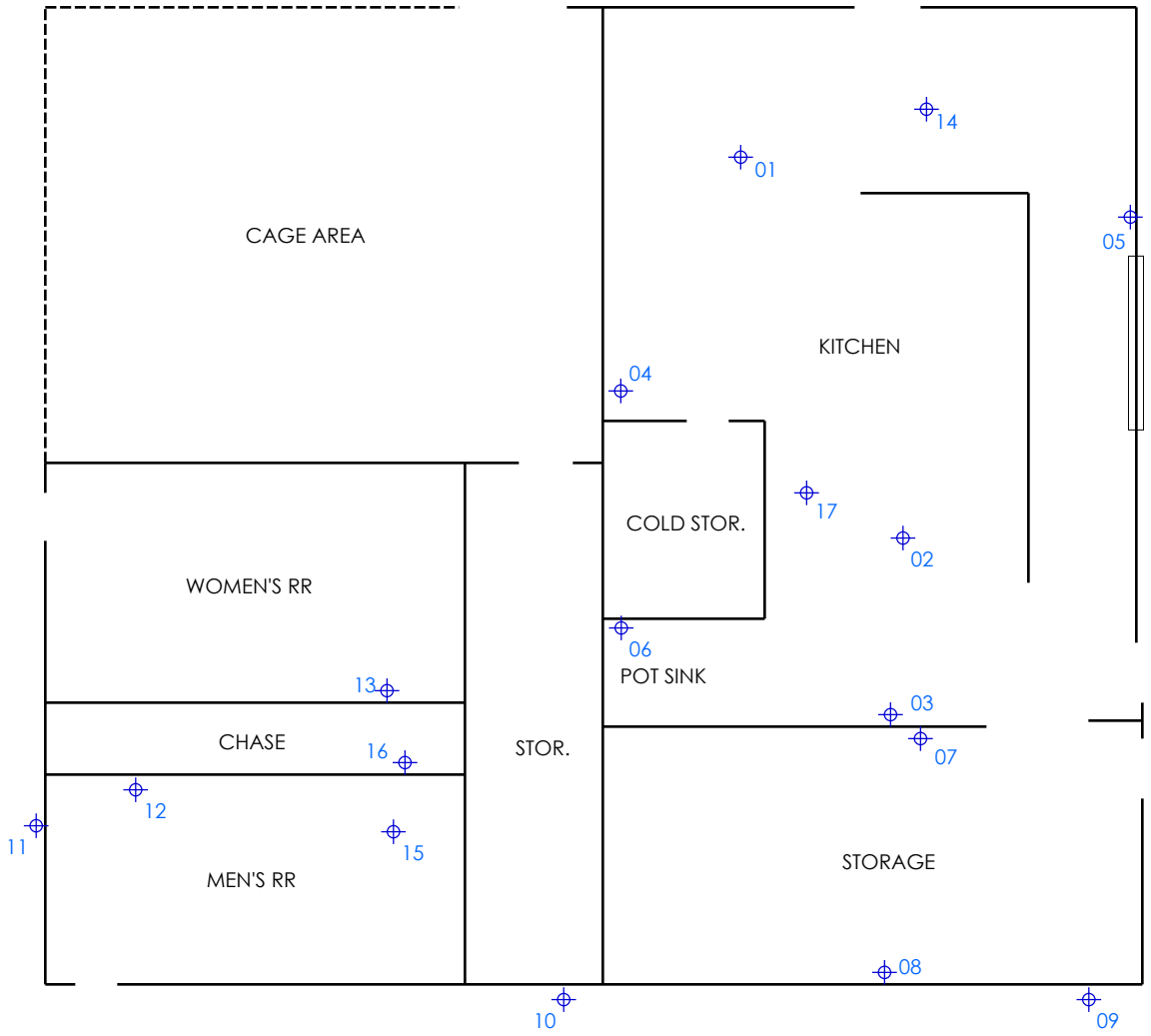
Tables

Table 1.0 Identified Homogeneous Areas				
Homogeneous Area	**Material Description**	**Material Location**	**Number of Samples**	**Result**
HSA1	2' x 4' Ceiling Panels	Kitchen Ceilings	2	No Asbestos Detected
HSA2	Drywall	Kitchen Walls	2	No Asbestos Detected
HSA3	Drywall Joint Compound	Kitchen Walls	2	No Asbestos Detected
HSA4	Stucco	Storage Room Walls	2	No Asbestos Detected
HSA5	Exterior Stucco	Exterior Walls	3	No Asbestos Detected
HSA5	Plaster	Bathroom Walls and Ceilings	2	No Asbestos Detected
HSA6	Roof Shingles	Roof	2	No Asbestos Detected
HSA7	Roof Underlayment	Roof	2	No Asbestos Detected
HSA8	Roof Mastics	Roof Penetrations	2	4% Chrysotile Asbestos

Table 2.0 Summary of Asbestos Containing Materials			
Homogeneous Area	**Material Description**	**Material Locations**	**Friable/Non-Friable**
HSA8	Roof Mastics	Roof Penetrations Approx 6 SF	Non-Friable

Appendix A

Site and Sample Location Plans



NORTH

Indicates Approximate Sample Location

DATE PREPARED: 4/25/17	PREPARED BY: TG	DRAWING TITLE: Sample Location Plan Alamitos Beach Concessions Building
REVISION:	SOURCE: field	
PROJECT NO: 17090	APPROX. SCALE: NTS	
PROJECT NAME: HAZARDOUS MATERIALS INSPECTION		CLIENT: CITY OF LONG BEACH
		FIGURE NO. 1

Appendix B

Asbestos Sample Analysis Reports and Chain of Custody

ENVIRONMENTAL LABORATORIES LLC

1508 East 33rd Street
Signal Hill, CA 90755
Toll: 888-207-2022
Tel: 562-206-2770
Fax: 562-206-2773

Pacific Environmental Company
28202 Cabot Road, Suite 300
Laguna Niguel CA 92677
Attn.: Mike Lyssy

Report Number 1727631

Project Number
Project Name Alamitos Beach Concession
Location
PO Number
WO Number

Date Received 04/24/2017
Date Analyzed 04/26/2017
Date Reported 04/27/2017

Date Sampled 04/24/2017
Sampled By Thom Gannon
Total Samples 19

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1727631-001	Kitchen NE					
01	2'x4' CT, White/Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite Binder/Filler	35% 20% 40% 5%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-002	Kitchen S					
02	2'x4' CT, White/Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite Binder/Filler	35% 20% 40% 5%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-003	Kitchen W Wall					
03	Drywall, White/Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	15% <1 85%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-004	Kitchen NW Wall					
04	Drywall, White/Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	10% <1 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-005						
05	Joint Compound, Cream, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Mica Binder/Filler	70% 15% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

ENVIRONMENTAL LABORATORIES LLC

1508 East 33rd Street
Signal Hill, CA 90755
Toll: 888-207-2022
Tel: 562-206-2770
Fax: 562-206-2773

Pacific Environmental Company
28202 Cabot Road, Suite 300
Laguna Niguel CA 92677
Attn.: Mike Lyssy

Report Number 1727631

Project Number
Project Name Alamitos Beach Concession
Location
PO Number
WO Number

Date Received 04/24/2017
Date Analyzed 04/26/2017
Date Reported 04/27/2017

Date Sampled 04/24/2017
Sampled By Thom Gannon
Total Samples 19

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1727631-006						
06	Joint Compound, Cream, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Mica Binder/Filler	70% 15% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-007	Storage Rm SE					
07	Stucco, White/Gray, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Quartz OtHher Non-Fibrous Material	20% 45% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-008	Storage Rm SW					
08	Stucco, White/Gray, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Quartz OtHher Non-Fibrous Material	20% 45% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-009	SW					
09	Ext Stucco, Cream/Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Quartz Other Non-Fibrous Material	25% 45% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-010	W					
10	Ext Stucco, Cream/Beige/Gray, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Quartz Other Non-Fibrous Material	20% 45% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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28202 Cabot Road, Suite 300
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Project Number
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Date Received 04/24/2017
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Date Sampled 04/24/2017
Sampled By Thom Gannon
Total Samples 19

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1727631-011	N					
11	Ext Stucco, Cream/Beige/Gray, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Quartz Other Non-Fibrous Material	20% 45% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-012	Mens Rm					
12	Plaster, White, Homogeneous	LAYER 1 100%	Calcium Carbonate Gypsum Quartz Other Non-Fibrous Material	15% 25% 45% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-013	Womens Rm					
13	Plaster, White, Homogeneous	LAYER 1 100%	Calcium Carbonate Gypsum Quartz Other Non-Fibrous Material	15% 25% 45% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-014	SE					
14A	Shingle Roof, Gray/Black, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Bituminous Matrix Other Non-Fibrous Material	45% 35% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-015	SE					
14B	Shingle Roof, Brown/Beige/Black, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Bituminous Matrix Other Non-Fibrous Material	45% 35% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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28202 Cabot Road, Suite 300
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Project Number
Project Name Alamitos Beach Concession
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Date Received 04/24/2017
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Date Reported 04/27/2017

Date Sampled 04/24/2017
Sampled By Thom Gannon
Total Samples 19

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1727631-016	NW					
15A	Shingle Roof, Gray/Black, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Bituminous Matrix Other Non-Fibrous Material	45% 35% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-017	NW					
15B	Shingle Roof, Brown/Beige/Black, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Bituminous Matrix Other Non-Fibrous Material	45% 35% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1727631-018	NW					
16	Roof Mastic, Black/Gray, Non-homogeneous	LAYER 1 100%	Bituminous Matrix/Filler	96%	Chrysotile	4%
	Asbestos Present: Yes		Total % Non-Asbestos:	96.0%	**Total %Asbestos:**	**4.0%**
1727631-019	Center					
17	Roof Mastic, Black/Gray, Non-homogeneous	LAYER 1 100%	Bituminous Matrix/Filler	97%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Due to PLM limitations, results on samples with None Detected or samples with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported.

Analyst - Fred Chappelear

Approved Signatory Cristina E. Tabatt

NVLAP® Lab Code 500044-0

1727631

Date:	4 / 24 / 2017
Client:	
Site:	Alamitos Beach Concession
Project No:	
Inspector(s):	Thom. Gannon /

PACIFIC
ENVIRONMENTAL

ASBESTOS BULK SAMPLE FIELD LOG AND CHAIN OF CUSTODY

Sample Number	Material Sampled	Sample Location	Condition
01	2'x4' CT	Kitchen NE	
02	" "	" " S.	
03	Drywall	" " W. Wall	
04	" "	" " NW Wall	
05	Joint Comp		
06	" "		
07	Stucco	Storage Rm SE	
08	" "	Storage Rm SW	
09	Ext Stucco	SW	
10	" "	W	
11	" "	N.	
12	Plaster	Mens Rm	
13	" "	Womens Rm	
14	Shingle Roof	SE	
15	" "	NW	
16	Roof Mastic	NW	
17	" "	Center	
18			
19			
20			
21			
22			
23			
24			

Any questions please call Thom. Gannon 949-289-3567

Analytical Method: PLM

Turn Around Time: (STD) 48 24 "RUSH"
Please email results to
mike@pacificenvironmental.com and
results@pacificenvironmental.com

Pacific Environmental Company
28202 Cabot Road, Suite 300
Laguna Niguel, California 92677

CHAIN OF CUSTODY:

Name	Signature	Date/Time
Thomas Gannon		04/24/2017
FD Chappelear		4/24/17 1415

Appendix C

Lead Sample Analysis Reports and Chain of Custody

1508 East 33rd Street
Signal Hill, CA 90755
Tel (562) 206-2770
Fax (562) 206-2773

Pacific Environmental Company
28202 Cabot Road, Suite 300
Laguna Niguel, CA 92677
Attention: Mike Lyssy

Project Number:
Project Name: Alamitos Beach Concession

Report Number: **1727639**

Date Received: 4/26/2017
Date Analyzed: 4/27/2017
Date Reported: 4/27/2017

Date Sampled: 4/27/2017
Sampled By:
Total Samples: 1

Analytical Method: **EPA 7420/3050**
Reporting Limit: **5.0 µg Pb**

Lead (Pb) in Paint by Flame AAS

Lab ID Client ID	Location/Description	Sample Weight (g)	Lead Concentration ppm (mg/kg)
1727639-001 P-01	Paint Chip - Bldg Body	0.1057	< 47

Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. This report shall not be reproduced without the written approval of this laboratory. The client shall be solely responsible for interpreting analytical results. Samples have not been blank corrected. Samples shall be disposed according to local, state and federal laws, 30 days after reporting results.

CA ELAP Cert #2823

Approved Signatory- Cristina E. Tabatt

CHAIN OF CUSTODY

AQ ENVIRONMENTAL LABORATORIES
1508 E. 33rd Street
Signal Hill, CA 90755
562-206-2770 Tel
562-206-2773 Fax
services@AQenvlabs.com

(Lab) Order No. 1727639

CUSTOMER INFORMATION		Turnaround Time		Shipped By		Report Send Via:	
Company	Pacific Env. Co	Same Day	☐	Fedex	☐	Web	☐
Address		1 Day	☐	UPS	☐	Email	☐
City/State/Zip		2 Day	☐	USPS	☐	Fax	☐
Contact		3 Day	☑	Drop Off	☐	Verbal	☐
Office Phone		5 Day	☐	Drop Box	☐	Mail	☐
Cell		Weekend	☐	Other	☐	Pick up	☐
Fax		**Special Instructions:**					
Email							

PROJECT INFORMATION

Project Name:	Alamitos Beach Concession	PO Number:	
Project Number:		Work Order No.:	
Location:		Sampled By:	

PLM		PCM		MOLD		LEAD (Pb)			
PLM EPA 600/M4-82-020	☐	NIOSH 7400A	☐	Spore Trap	☐	Air	☐	TTLC	☐
PLM 400 Pt. Count (<0.25%)	☐	NIOSH 7400B	☐	Tape Lift	☐	Paint	☑		
PLM 1000 Pt. Count (<0.1%)	☐	w/ TWA	☐	Bulk Sample	☐	Wipe	☐		
				Swab	☐	Soil	☐		

SAMPLE ID	SAMPLE TYPE	LOCATION	Date Sampled	Start Time / Stop Time	Avg Flow Rate	Volume (L)
P-01	Paint Chip	Bldg Body.	4/27			

Relinquished By:	Tim Connor	Received By:	FD Chapplear
Date/Time:	4/26/17	Date/Time:	4/26/17 1335
Relinquished By:		Received By:	
Date/Time:		Date/Time:	

Alamitos Beach Concession Stand
East Ocean Blvd and East Shoreline Dr
Long Beach, CA 90802

Inquiry Number: 4981366.2s
June 29, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Map Findings Summary	4
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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
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Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

EAST OCEAN BLVD AND EAST SHORELINE DR
LONG BEACH, CA 90802

COORDINATES

Latitude (North):	33.7641070 - 33° 45' 50.78''
Longitude (West):	118.1827150 - 118° 10' 57.77''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	390472.4
UTM Y (Meters):	3736435.8
Elevation:	4 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5652670 LONG BEACH, CA
Version Date:	2012
South Map:	5633769 LONG BEACH OE S, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140513
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
EAST OCEAN BLVD AND EAST SHORELINE DR
LONG BEACH, CA 90802

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	DOWNTOWN MARINA	700 E SHORELINE DR	LUST, HIST UST	Higher	311, 0.059, NNW
A2	SHORELINE MARINE FUE	0700 E SHORELINE DR	UST	Higher	311, 0.059, NNW
A3	DOWNTOWN MARINA	700 E SHORELINE DR	SWEEPS UST, CA FID UST	Higher	311, 0.059, NNW
A4	LONG BEACH SHORELINE	700 E SHORELINE DR	UST	Higher	311, 0.059, NNW
B5	LONG BEACH MARINE BU	0500 E SHORELINE DR	UST	Higher	358, 0.068, WSW
B6	CITY OF LONG BEACH	500 E SHORELINE DR	SWEEPS UST	Higher	358, 0.068, WSW
A7	VILLA RIVIERA GARAGE	800 E OCEAN BLVD	EDR Hist Auto	Higher	368, 0.070, North
A8	VILLA RIVIERA	0800 E OCEAN BLVD	UST	Higher	368, 0.070, North
A9	TILLETT W E	800 E OCEAN BLVD	EDR Hist Cleaner	Higher	368, 0.070, North
A10		0800 W OCEAN BLVD	UST	Higher	368, 0.070, North
A11	INTERNATIONAL TOWER	700 E OCEAN BLVDS	RCRA-SQG, FINDS, ECHO	Higher	470, 0.089, NW
C12	PACIFIC COAST CLUB C	0850 E OCEAN BLVD	UST	Higher	492, 0.093, NNE
13	WESTON S LAUNDRY	635 W SEASIDE BLVD	EDR Hist Cleaner	Higher	504, 0.095, NW
C14	VILLA VALET SHOP	820 E OCEAN BLVD	EDR Hist Cleaner	Higher	508, 0.096, NNE
C15	BRALLIER H F	848 W OCEAN BLVD	EDR Hist Auto	Higher	508, 0.096, NNE
C16	VILLA RIVIERA GARAGE	820 E OCEAN BLVD W	EDR Hist Auto	Higher	508, 0.096, NNE
A17		0725 E OCEAN BLVD	UST	Higher	570, 0.108, NNW
A18	STANDARD STATIONS IN	725 E OCEAN BLVD	EDR Hist Auto	Higher	570, 0.108, NNW
C19	76 PRODUCTS STATION	805 OCEAN	LUST, HIST CORTESE	Higher	589, 0.112, North
C20	76 PRODUCTS STATION	805 OCEAN BLVD E	LUST	Higher	589, 0.112, North
C21	LONG BEACH OCEAN COR	805 E OCEAN	UST	Higher	609, 0.115, North
C22	SERVICE STATION 2999	805 E OCEAN BLVD	HIST UST, CHMIRS	Higher	609, 0.115, North
C23	UNION 76 UNOCAL 76	805 E OCEAN BLVD	EDR Hist Auto	Higher	609, 0.115, North
C24	7-ELEVEN INC. STORE	805 E OCEAN BLVD	UST	Higher	609, 0.115, North
C25	TEXACO (2 12M MODERN	0805 E OCEAN BLVD	UST	Higher	609, 0.115, North
C26	UNION OIL SERVICE ST	805 E OCEAN BLVD	HIST UST	Higher	609, 0.115, North
D27	CITY OF LONG BEACH	400 E SHORELINE DR	SWEEPS UST	Higher	822, 0.156, WSW
D28	LONG BEACH MARINE BU	0400 E SHORELINE DR	UST	Higher	822, 0.156, WSW
E29	ARTABAN APTS.	0010 ATLANTIC AVE	UST	Higher	857, 0.162, NNW
F30		0051 ALAMITOS AVE	UST	Higher	923, 0.175, North
F31	HANEY CO (OLD OFFCO	0050 ALAMITOS AVE	UST	Higher	942, 0.178, North
E32	STAR SHIPPING USWC I	555 E OCEAN BLVD STE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1067, 0.202, NW
33		0034 CERRITOS AVE	UST	Higher	1110, 0.210, NE
34	THUMS LONG BEACH CO	ISLAND GRISSOM	RCRA-SQG, HAZNET	Lower	1177, 0.223, South
G35	CITY OF LONG BEACH	350 E SHORELINE BLVD	SWEEPS UST	Higher	1215, 0.230, WSW
G36	LONG BEACH MARINE BU	0350 E SHORELINE DR	UST	Higher	1215, 0.230, WSW
37	SEE 123 LIME AVE	0633 E 01ST ST	UST	Higher	1237, 0.234, NNW
H38	YANGS OIL CORP	200 ALAMITOS AVE	LUST, HAZNET	Higher	1492, 0.283, North
H39	EQUILON ENTERPRISES	200 ALAMITOS	LUST, FINDS, ECHO	Higher	1492, 0.283, North

MAPPED SITES SUMMARY

Target Property Address:
EAST OCEAN BLVD AND EAST SHORELINE DR
LONG BEACH, CA 90802

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
H40	WAYNE PERRY CONSTRUC	200 ALAMITOS	HIST CORTESE	Higher	1492, 0.283, North
H41	EDISON/LONG BEACH MG	740 EAST BROADWAY	EDR MGP	Higher	1602, 0.303, North
H42	EDISON/LONG BEACH #1	740 EAST BROADWAY	ENVIROSTOR, VCP	Higher	1602, 0.303, North
H43	CHR CORPORATION PROP	210 ALAMITOS AVE	LUST	Higher	1715, 0.325, North
H44	CHR CORPORATION PROP	210 ALAMITOS AVENUE	LUST, ENF, HIST CORTESE	Higher	1715, 0.325, North
I45	F C SITE #9		ENVIROSTOR	Higher	1793, 0.340, WNW
J46	TORRANCE MUNICIPAL W	101 ELM	SLIC	Higher	1827, 0.346, NW
47	BROADWAY/GOLDEN AVEN	BROADWAY AVENUE/GOLD	ENVIROSTOR, SCH	Higher	1907, 0.361, North
I48	LONG BEACH SCHROEDER		LUST, MCS	Higher	1955, 0.370, WNW
I49	U.S. NAVY, LONG BEAC	300 SHIPYARD ROAD CO	ENVIROSTOR	Higher	1955, 0.370, WNW
I50	DEFENSE FUEL SUPPORT	NAVY MOLE, PIER 12	ENVIROSTOR	Higher	1955, 0.370, WNW
J51	SOUTHERN CA EDISON C	134 ELM ST	LUST	Higher	1974, 0.374, NW
J52	SOUTHERN CA EDISON C	134 ELM	LUST, HIST CORTESE	Higher	1974, 0.374, NW
J53	SOUTHERN CA EDISON C	125 ELM AVE	LUST, SWEEPS UST, HIST CORTESE	Higher	2048, 0.388, NW
54	HYATT REGENCY LONG B	200 S PINE AVE	RCRA-SQG, LUST, UST, SWEEPS UST, HIST UST, CA FID...	Higher	2580, 0.489, West
55	PORT OF LONG BEACH	1400 BROADWAY BLVD W	LUST	Higher	2601, 0.493, ENE
56		532 E. 7TH	Notify 65	Higher	3826, 0.725, NNW
57	LONG BEACH UNI SCH D	235 E 8TH ST	ENVIROSTOR, SCH, EMI, NPDES	Higher	4795, 0.908, NNW
58	THE PROCTER AND GAMB	1601 WEST 7TH ST	ENVIROSTOR, HIST UST	Higher	5012, 0.949, NE
59	LONG BEACH NAVAL SHI		CA BOND EXP. PLAN	Lower	5046, 0.956, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

EXECUTIVE SUMMARY

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---------- Waste Management Unit Database
SWRCY ---------- Recycler Database
HAULERS ---------- Registered Waste Tire Haulers Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

AOCONCERN ---------- San Gabriel Valley Areas of Concern
US HIST CDL ---------- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---------- Historical Calsites Database
SCH ---------- School Property Evaluation Program
CDL ---------- Clandestine Drug Labs

Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	National Clandestine Laboratory Register

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information

FUELS PROGRAM	EPA Fuels Program Registered Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
LOS ANGELES CO. HMS	HMS: Street Number List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
LA Co. Site Mitigation	Site Mitigation List
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 2

RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTERNATIONAL TOWER	***700 E OCEAN BLVDS***	***NW 0 - 1/8 (0.089 mi.)***	***A11***	***14***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
THUMS LONG BEACH CO	***ISLAND GRISSOM***	***S 1/8 - 1/4 (0.223 mi.)***	***34***	***35***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2017 has revealed that there are 7 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDISON/LONG BEACH #1 Facility Id: 19490211 Status: Certified	***740 EAST BROADWAY***	***N 1/4 - 1/2 (0.303 mi.)***	***H42***	***43***
F C SITE #9 Facility Id: 80000243 Status: Inactive - Needs Evaluation		WNW 1/4 - 1/2 (0.340 mi.)	I45	58
BROADWAY/GOLDEN AVEN Facility Id: 19880010 Status: No Further Action	***BROADWAY AVENUE/GOLD***	***N 1/4 - 1/2 (0.361 mi.)***	***47***	***59***
U.S. NAVY, LONG BEAC Facility Id: 71003605 Status: Refer: Other Agency	300 SHIPYARD ROAD CO	WNW 1/4 - 1/2 (0.370 mi.)	I49	64
DEFENSE FUEL SUPPORT Facility Id: 71003581 Status: Refer: Other Agency	NAVY MOLE, PIER 12	WNW 1/4 - 1/2 (0.370 mi.)	I50	65
LONG BEACH UNI SCH D Facility Id: 60002434 Status: Active	***235 E 8TH ST***	***NNW 1/2 - 1 (0.908 mi.)***	***57***	***85***
THE PROCTER AND GAMB Facility Id: 19280309 Status: Refer: RWQCB	***1601 WEST 7TH ST***	***NE 1/2 - 1 (0.949 mi.)***	***58***	***90***

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 13 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOWNTOWN MARINA	***700 E SHORELINE DR***	***NNW 0 - 1/8 (0.059 mi.)***	***A1***	***8***
Database: LUST, Date of Government Version: 03/13/2017 Status: Completed - Case Closed Global Id: T0603753318				
76 PRODUCTS STATION	***805 OCEAN***	***N 0 - 1/8 (0.112 mi.)***	***C19***	***17***
Database: LUST REG 4, Date of Government Version: 09/07/2004 Facility Id: 908020216A Status: Preliminary site assessment underway Global ID: T0603792915				
76 PRODUCTS STATION	805 OCEAN BLVD E	N 0 - 1/8 (0.112 mi.)	C20	19
Database: LUST REG 4, Date of Government Version: 09/07/2004 Database: LUST, Date of Government Version: 03/13/2017 Status: Completed - Case Closed Facility Id: 908020216 Status: Case Closed Global Id: T0603701705 Global Id: T0603792915 Global ID: T0603701705				
YANGS OIL CORP	***200 ALAMITOS AVE***	***N 1/4 - 1/2 (0.283 mi.)***	***H38***	***39***
Database: LUST REG 4, Date of Government Version: 09/07/2004 Facility Id: 001015 Status: Case Closed Global ID: T0603700027				
EQUILON ENTERPRISES	***200 ALAMITOS***	***N 1/4 - 1/2 (0.283 mi.)***	***H39***	***41***
Database: LUST, Date of Government Version: 03/13/2017 Status: Completed - Case Closed Global Id: T0603700027				
CHR CORPORATION PROP	210 ALAMITOS AVE	N 1/4 - 1/2 (0.325 mi.)	H43	48
Database: LUST REG 4, Date of Government Version: 09/07/2004 Facility Id: 908020261 Status: Remedial action (cleanup) Underway Global ID: T0603701709				
CHR CORPORATION PROP	***210 ALAMITOS AVENUE***	***N 1/4 - 1/2 (0.325 mi.)***	***H44***	***50***
Database: LUST, Date of Government Version: 03/13/2017 Status: Completed - Case Closed Global Id: T0603701709				
LONG BEACH SCHROEDER		***WNW 1/4 - 1/2 (0.370 mi.)***	***I48***	***62***
Database: LUST REG 4, Date of Government Version: 09/07/2004 Global ID: T0603762833				
SOUTHERN CA EDISON C	134 ELM ST	NW 1/4 - 1/2 (0.374 mi.)	J51	66
Database: LUST REG 4, Date of Government Version: 09/07/2004				

Facility Id: 091588-06
Status: Remedial action (cleanup) Underway
Global ID: T0603700109

SOUTHERN CA EDISON C ***134 ELM*** ***NW 1/4 - 1/2 (0.374 mi.)*** ***J52*** ***67***
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Global Id: T0603700109

SOUTHERN CA EDISON C ***125 ELM AVE*** ***NW 1/4 - 1/2 (0.388 mi.)*** ***J53*** ***68***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Id: 908020107
Status: Case Closed
Global Id: T0603701695
Global ID: T0603701695

HYATT REGENCY LONG B ***200 S PINE AVE*** ***W 1/4 - 1/2 (0.489 mi.)*** ***54*** ***71***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Id: 908020061
Status: Case Closed
Global Id: T0603701691
Global ID: T0603701691

PORT OF LONG BEACH 1400 BROADWAY BLVD W ENE 1/4 - 1/2 (0.493 mi.) 55 82
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Id: 908020043
Status: Case Closed
Global Id: T0603701690
Global ID: T0603701690

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TORRANCE MUNICIPAL W	101 ELM	NW 1/4 - 1/2 (0.346 mi.)	J46	59

Database: SLIC REG 4, Date of Government Version: 11/17/2004
Database: SLIC, Date of Government Version: 03/13/2017
Facility Status: Completed - Case Closed
Facility Status: No further action required
Global Id: SLT43225223

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 17 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHORELINE MARINE FUE Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0700 E SHORELINE DR	NNW 0 - 1/8 (0.059 mi.)	A2	10
LONG BEACH SHORELINE Database: LONG BEACH UST, Date of Government Version: 03/09/2017 Database: UST, Date of Government Version: 03/12/2017 Facility Id: 19-060-104	700 E SHORELINE DR	NNW 0 - 1/8 (0.059 mi.)	A4	12
LONG BEACH MARINE BU Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0500 E SHORELINE DR	WSW 0 - 1/8 (0.068 mi.)	B5	12
VILLA RIVIERA Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0800 E OCEAN BLVD	N 0 - 1/8 (0.070 mi.)	A8	13
Not reported Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0800 W OCEAN BLVD	N 0 - 1/8 (0.070 mi.)	A10	14
PACIFIC COAST CLUB C Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0850 E OCEAN BLVD	NNE 0 - 1/8 (0.093 mi.)	C12	16
Not reported Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0725 E OCEAN BLVD	NNW 0 - 1/8 (0.108 mi.)	A17	17
LONG BEACH OCEAN COR Database: LONG BEACH UST, Date of Government Version: 03/09/2017	805 E OCEAN	N 0 - 1/8 (0.115 mi.)	C21	27
7-ELEVEN INC. STORE Database: UST, Date of Government Version: 03/12/2017	805 E OCEAN BLVD	N 0 - 1/8 (0.115 mi.)	C24	31
TEXACO (2 12M MODERN Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0805 E OCEAN BLVD	N 0 - 1/8 (0.115 mi.)	C25	31
LONG BEACH MARINE BU Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0400 E SHORELINE DR	WSW 1/8 - 1/4 (0.156 mi.)	D28	32
ARTABAN APTS. Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0010 ATLANTIC AVE	NNW 1/8 - 1/4 (0.162 mi.)	E29	33
Not reported Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0051 ALAMITOS AVE	N 1/8 - 1/4 (0.175 mi.)	F30	33
HANEY CO (OLD OFFCO Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0050 ALAMITOS AVE	N 1/8 - 1/4 (0.178 mi.)	F31	33
Not reported Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0034 CERRITOS AVE	NE 1/8 - 1/4 (0.210 mi.)	33	35
LONG BEACH MARINE BU Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0350 E SHORELINE DR	WSW 1/8 - 1/4 (0.230 mi.)	G36	38
SEE 123 LIME AVE Database: LONG BEACH UST, Date of Government Version: 03/09/2017	0633 E 01ST ST	NNW 1/8 - 1/4 (0.234 mi.)	37	38

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 01/30/2017 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDISON/LONG BEACH #1 Status: Certified Facility Id: 19490211	***740 EAST BROADWAY***	***N 1/4 - 1/2 (0.303 mi.)***	***H42***	***43***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 4 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOWNTOWN MARINA Status: A Tank Status: A Comp Number: 41360	***700 E SHORELINE DR***	***NNW 0 - 1/8 (0.059 mi.)***	***A3***	***10***
CITY OF LONG BEACH Status: A Tank Status: A Comp Number: 33984	500 E SHORELINE DR	WSW 0 - 1/8 (0.068 mi.)	B6	12
CITY OF LONG BEACH Status: A Tank Status: A Comp Number: 33983	400 E SHORELINE DR	WSW 1/8 - 1/4 (0.156 mi.)	D27	32
CITY OF LONG BEACH Status: A Tank Status: A Comp Number: 33979	350 E SHORELINE BLVD	WSW 1/8 - 1/4 (0.230 mi.)	G35	38

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOWNTOWN MARINA Facility Id: 00000041360	***700 E SHORELINE DR***	***NNW 0 - 1/8 (0.059 mi.)***	***A1***	***8***
SERVICE STATION 2999 Facility Id: 00000029448	***805 E OCEAN BLVD***	***N 0 - 1/8 (0.115 mi.)***	***C22***	***28***
UNION OIL SERVICE ST Facility Id: 00000056026	805 E OCEAN BLVD	N 0 - 1/8 (0.115 mi.)	C26	31

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOWNTOWN MARINA Facility Id: 19012820 Status: A	***700 E SHORELINE DR***	***NNW 0 - 1/8 (0.059 mi.)***	***A3***	***10***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STAR SHIPPING USWC I	***555 E OCEAN BLVD STE***	***NW 1/8 - 1/4 (0.202 mi.)***	***E32***	***33***

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LONG BEACH NAVAL SHI		W 1/2 - 1 (0.956 mi.)	59	92

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 5 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
76 PRODUCTS STATION Reg Id: 908020216	***805 OCEAN***	***N 0 - 1/8 (0.112 mi.)***	***C19***	***17***
WAYNE PERRY CONSTRUC Reg Id: 001015	200 ALAMITOS	N 1/4 - 1/2 (0.283 mi.)	H40	42
CHR CORPORATION PROP Reg Id: 908020261	***210 ALAMITOS AVENUE***	***N 1/4 - 1/2 (0.325 mi.)***	***H44***	***50***
SOUTHERN CA EDISON C Reg Id: 091588-06	***134 ELM***	***NW 1/4 - 1/2 (0.374 mi.)***	***J52***	***67***
SOUTHERN CA EDISON C Reg Id: 908020107	***125 ELM AVE***	***NW 1/4 - 1/2 (0.388 mi.)***	***J53***	***68***

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/16/2016 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	532 E. 7TH	NNW 1/2 - 1 (0.725 mi.)	56	85

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDISON/LONG BEACH MG	740 EAST BROADWAY	N 1/4 - 1/2 (0.303 mi.)	H41	42

EXECUTIVE SUMMARY

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 5 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VILLA RIVIERA GARAGE	800 E OCEAN BLVD	N 0 - 1/8 (0.070 mi.)	A7	13
BRALLIER H F	848 W OCEAN BLVD	NNE 0 - 1/8 (0.096 mi.)	C15	16
VILLA RIVIERA GARAGE	820 E OCEAN BLVD W	NNE 0 - 1/8 (0.096 mi.)	C16	17
STANDARD STATIONS IN	725 E OCEAN BLVD	NNW 0 - 1/8 (0.108 mi.)	A18	17
UNION 76 UNOCAL 76	805 E OCEAN BLVD	N 0 - 1/8 (0.115 mi.)	C23	30

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 3 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

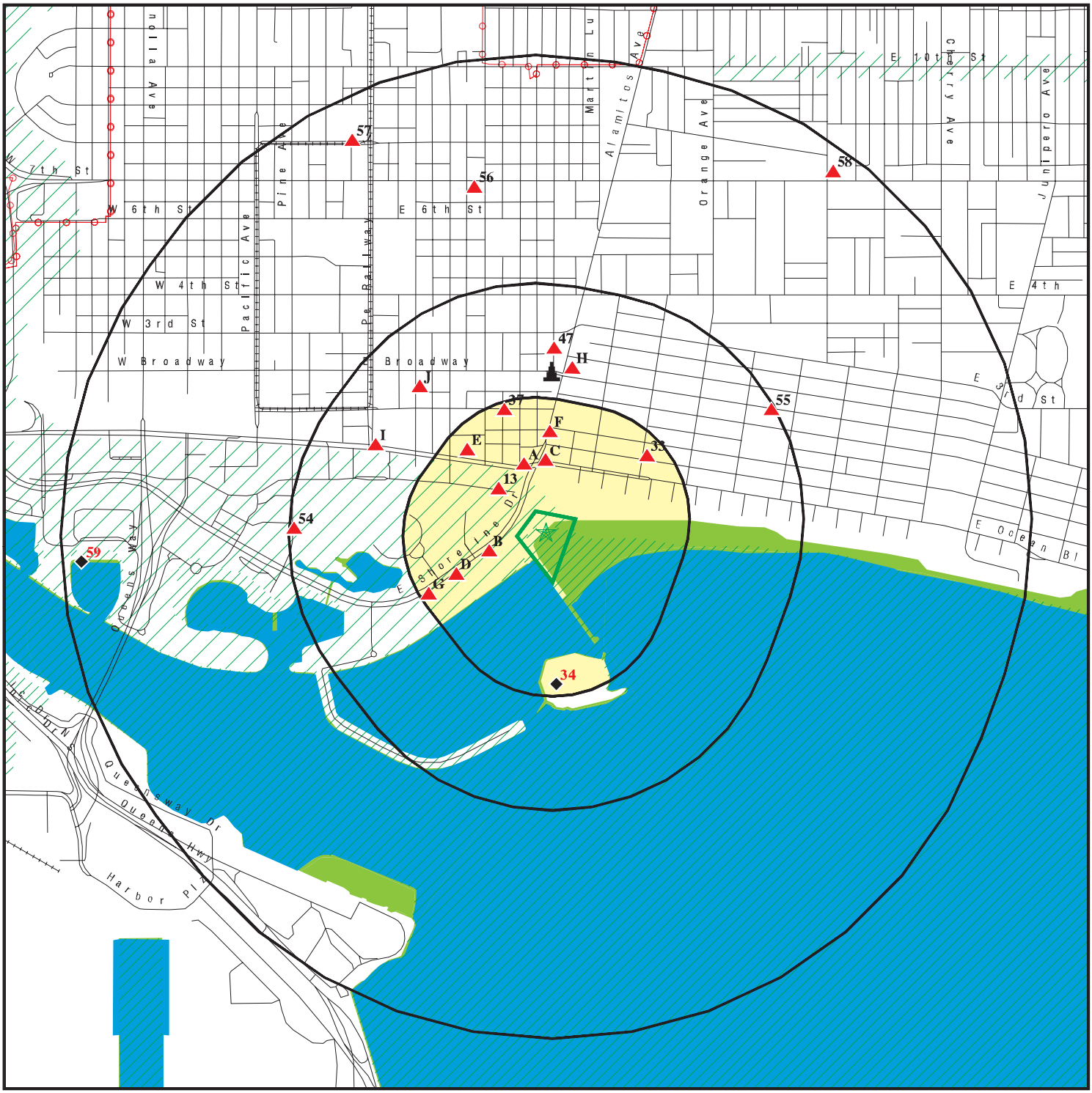
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TILLETT W E	800 E OCEAN BLVD	N 0 - 1/8 (0.070 mi.)	A9	13
WESTON S LAUNDRY	635 W SEASIDE BLVD	NW 0 - 1/8 (0.095 mi.)	13	16
VILLA VALET SHOP	820 E OCEAN BLVD	NNE 0 - 1/8 (0.096 mi.)	C14	16

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

Site Name	Database(s)
CHEVRON #9-5649 (FORMER)	LUST
LONG BEACH NSY - LONG BEACH NSY	FINDS
LONG BEACH NAVAL COMPLEX - LONG BE	FINDS
DOD - LONG BEACH NAVAL SHIPYARD	SLIC
ANAHEIM STREET SCHOOL	ENVIROSTOR, SCH

OVERVIEW MAP - 4981366.2S

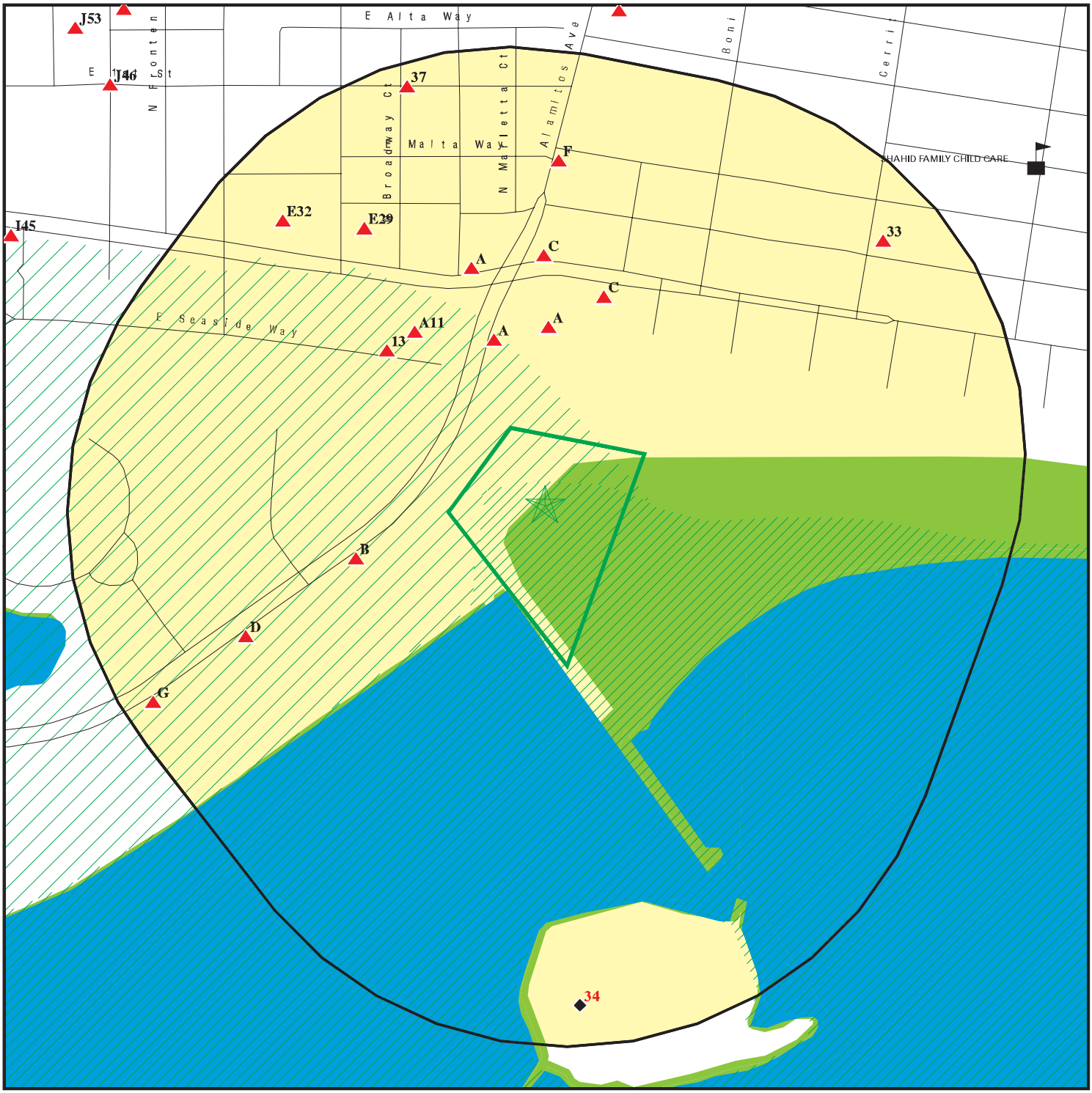


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Alamitos Beach Concession Stand	CLIENT:	LSA Associates
ADDRESS:	East Ocean Blvd and East Shoreline Dr Long Beach CA 90802	CONTACT:	Carmen Lo
LAT/LONG:	33.764107 / 118.182715	INQUIRY #:	4981366.2s
		DATE:	June 29, 2017 7:09 pm

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DETAIL MAP - 4981366.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Alamitos Beach Concession Stand	CLIENT:	LSA Associates
ADDRESS:	East Ocean Blvd and East Shoreline Dr Long Beach CA 90802	CONTACT:	Carmen Lo
LAT/LONG:	33.764107 / 118.182715	INQUIRY #:	4981366.2s
		DATE:	June 29, 2017 7:10 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	5	2	NR	7
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		3	0	10	NR	NR	13

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	1	NR	NR	1
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		10	7	NR	NR	NR	17
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	1	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
AOCONCERN	1.000		0	0	0	0	NR	0
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		2	2	NR	NR	NR	4
HIST UST	0.250		3	0	NR	NR	NR	3
CA FID UST	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	4	NR	NR	5
LOS ANGELES CO. HMS	0.001		0	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
LA Co. Site Mitigation	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	1	0	NR	1
EDR Hist Auto	0.125		5	NR	NR	NR	NR	5
EDR Hist Cleaner	0.125		3	NR	NR	NR	NR	3
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	29	11	22	4	0	66

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **DOWNTOWN MARINA** **LUST** **U001565838**
NNW **700 E SHORELINE DR** **HIST UST** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.059 mi.
311 ft. **Site 1 of 11 in cluster A**

Relative:
Higher

Actual:
11 ft.

LUST:

Region:	STATE
Global Id:	T0603753318
Latitude:	33.76504
Longitude:	-118.183543
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/06/2007
Lead Agency:	LONG BEACH, CITY OF
Case Worker:	CP
Local Agency:	LONG BEACH, CITY OF
RB Case Number:	Not reported
LOC Case Number:	PR0021279
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603753318
Contact Type:	Local Agency Caseworker
Contact Name:	CARMEN PIRO
Organization Name:	LONG BEACH, CITY OF
Address:	2525 GRAND AVE.
City:	LONG BEACH
Email:	carmen.piro@longbeach.gov
Phone Number:	5625704137

Global Id:	T0603753318
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0603753318
Status:	Completed - Case Closed
Status Date:	03/06/2007

Global Id:	T0603753318
Status:	Open - Case Begin Date
Status Date:	10/21/2005

Global Id:	T0603753318
Status:	Open - Site Assessment
Status Date:	03/05/2007

DOWNTOWN MARINA (Continued) **U001565838**

Regulatory Activities:

Global Id:	T0603753318
Action Type:	Other
Date:	12/20/2006
Action:	Leak Reported
Global Id:	T0603753318
Action Type:	Other
Date:	10/21/2005
Action:	Leak Discovery

HIST UST:

File Number:	00027649
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00027649.pdf
Region:	STATE
Facility ID:	00000041360
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	BILL WALKER
Telephone:	2135940951
Owner Name:	LONG BEACH MARINE BUREAU
Owner Address:	450 E SHORELINE DR
Owner City,St,Zip:	LONG BEACH, CA 90802
Total Tanks:	0004
Tank Num:	001
Container Num:	(1) ONE
Year Installed:	1982
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	(2) TWO
Year Installed:	1982
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	0000000001
Year Installed:	1982
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	(4) FOUR
Year Installed:	1982

DOWNTOWN MARINA (Continued) **U001565838**

Tank Capacity:	00004000
Tank Used for:	PRODUCT
Type of Fuel:	06
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

A2 **SHORELINE MARINE FUEL 76 (4 S/W XERXES)** **UST** **U003854889**
NNW **0700 E SHORELINE DR** **N/A**
< 1/8 **LONG BEACH, CA**
0.059 mi.
311 ft. **Site 2 of 11 in cluster A**

Relative:
Higher

Actual:
11 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	4T
Tank Test:	02/19/99
Leak Test:	02/19/99
Tank Status:	Not reported

A3 **DOWNTOWN MARINA** **SWEEPS UST** **S101617985**
NNW **700 E SHORELINE DR** **CA FID UST** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.059 mi.
311 ft. **Site 3 of 11 in cluster A**

Relative:
Higher

Actual:
11 ft.

SWEEPS UST:

Status:	Active
Comp Number:	41360
Number:	9
Board Of Equalization:	44-013531
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	(1) ONE
SWRCB Tank Id:	19-060-041360-000001
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	4

Status:	Active
Comp Number:	41360
Number:	9
Board Of Equalization:	44-013531
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	(2) TWO
SWRCB Tank Id:	19-060-041360-000002
Tank Status:	A

DOWNTOWN MARINA (Continued) **S101617985**

Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 41360
Number: 9
Board Of Equalization: 44-013531
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 19-060-041360-000003
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 41360
Number: 9
Board Of Equalization: 44-013531
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: (4) FOUR
SWRCB Tank Id: 19-060-041360-000004
Tank Status: A
Capacity: 4000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19012820
Regulated By: UTNKA
Regulated ID: 00041360
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 2135940951
Mail To: Not reported
Mailing Address: 450 E SHORELINE DR
Mailing Address 2: Not reported
Mailing City,St,Zip: LONG BEACH 90802
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported

DOWNTOWN MARINA (Continued) **S101617985**

Comments: Not reported
Status: Active

A4 **LONG BEACH SHORELINE MARINA- FUEL DOCK, (SITE 41)** **UST** **U003779433**
NNW **700 E SHORELINE DR** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.059 mi.
311 ft. **Site 4 of 11 in cluster A**

Relative:
Higher

Actual:
11 ft.

UST:
Facility ID: Not reported
Permitting Agency: Long Beach Environmental Heath
Latitude: 33.76499
Longitude: -118.18355

Facility ID: 19-060-104
Permitting Agency: LONG BEACH, CITY OF
Latitude: 33.76496
Longitude: -118.18356

LONG BEACH UST:
Region: LONG BEACH
Tanks: Not reported
Tank Test: Not reported
Leak Test: Not reported
Tank Status: Not reported

B5 **LONG BEACH MARINE BUREAU (500 D/W JOOR)** **UST** **U003854888**
WSW **0500 E SHORELINE DR** **N/A**
< 1/8 **LONG BEACH, CA**
0.068 mi.
358 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
8 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:
Region: LONG BEACH
Tanks: 1T
Tank Test: Dual Walled
Leak Test: Not reported
Tank Status: Not reported

B6 **CITY OF LONG BEACH** **SWEEPS UST** **S106924592**
WSW **500 E SHORELINE DR** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.068 mi.
358 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
8 ft.

SWEEPS UST:
Status: Active
Comp Number: 33984
Number: 4
Board Of Equalization: Not reported
Referral Date: 02-16-93
Action Date: 06-15-93

CITY OF LONG BEACH (Continued) **S106924592**

Created Date:	06-15-93
Owner Tank Id:	27893
SWRCB Tank Id:	19-060-033984-000001
Tank Status:	A
Capacity:	500
Active Date:	02-16-93
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	1

A7 **VILLA RIVIERA GARAGE** **EDR Hist Auto** **1009015647**
North **800 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.070 mi.
368 ft. **Site 5 of 11 in cluster A**

Relative: **Higher**

Actual: **38 ft.**

EDR Hist Auto

Year:	Name:	Type:
1939	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES
1944	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES
1948	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES
1948	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES
1957	VILLA RIVIERA GARAGE	AUTOMOBILE REPAIRING
1957	VILLA RIVIERA GARAGE	AUTOMOBILE REPAIRING
1963	BLDG VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES
1969	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES
1969	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES

A8 **VILLA RIVIERA** **UST** **U003854833**
North **0800 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.070 mi.
368 ft. **Site 6 of 11 in cluster A**

Relative: **Higher**

Actual: **38 ft.**

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	0T
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

A9 **TILLETT W E** **EDR Hist Cleaner** **1009143192**
North **800 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.070 mi.
368 ft. **Site 7 of 11 in cluster A**

Relative: **Higher**

Actual: **38 ft.**

EDR Hist Cleaner

Year:	Name:	Type:
1931	VILLA RIVIERA VALET	CLOTHES PRESSERS AND CLEANERS

TILLETT W E (Continued) **1009143192**

1935 TILLETT W E CLOTHES PRESSERS AND CLEANERS CONT
1935 TILLETT W E CLOTHES PRESSERS AND CLEANERS

A10 **UST** **U003920149**
North **0800 W OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.070 mi.
368 ft. **Site 8 of 11 in cluster A**

Relative:
Higher

Actual:
38 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	0F
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

A11 **INTERNATIONAL TOWER** **RCRA-SQG** **1001967375**
NW **700 E OCEAN BLVDS** **FINDS** **CAR000068288**
< 1/8 **LONG BEACH, CA 90802** **ECHO**
0.089 mi.
470 ft. **Site 9 of 11 in cluster A**

Relative:
Higher

Actual:
11 ft.

RCRA-SQG:

Date form received by agency:	03/20/2000
Facility name:	INTERNATIONAL TOWER
Facility address:	700 E OCEAN BLVDS LONG BEACH, CA 908025034
EPA ID:	CAR000068288
Contact:	RICHARD KERR
Contact address:	700 E OCEAN BLVDS LONG BEACH, CA 908025034
Contact country:	US
Contact telephone:	(562) 436-9066
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	INTERNATIONAL TOWER OWNERS ASSOC
Owner/operator address:	700 E OCEAN BLVDS LONG BEACH, CA 90802
Owner/operator country:	Not reported
Owner/operator telephone:	(562) 436-9066
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

INTERNATIONAL TOWER (Continued) **1001967375**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110002933979

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001967375
Registry ID: 110002933979
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002933979

C12 **PACIFIC COAST CLUB CONDOMINIUM ASSOC** **UST** **U003661093**
NNE **0850 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.093 mi.
492 ft. **Site 1 of 12 in cluster C**

Relative:
Higher

LONG BEACH UST:

DATA AS OF 02/25/2014:

Actual:
39 ft.

Region:	LONG BEACH
Tanks:	0T
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

---

13 **WESTON S LAUNDRY** **EDR Hist Cleaner** **1009143990**
NW **635 W SEASIDE BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.095 mi.
504 ft.

Relative:
Higher

EDR Hist Cleaner

Actual:
12 ft.

Year:	Name:	Type:
1957	WESTON S LAUNDRY	LAUNDRIES SELF SERVE
1957	WESTON S LAUNDRY	LAUNDRIES SELF SERVE
1963	WESTON S LAUNDRY	LAUNDRIES SELF SERVE
1963	WESTON S LAUNDRY	LAUNDRIES SELF SERVE

C14 **VILLA VALET SHOP** **EDR Hist Cleaner** **1009142639**
NNE **820 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.096 mi.
508 ft. **Site 2 of 12 in cluster C**

Relative:
Higher

EDR Hist Cleaner

Actual:
39 ft.

Year:	Name:	Type:
1948	JOHNSTON L A MRS	CLOTHES PRESSERS AND CLEANERS
1948	JOHNSTON L A MRS	CLOTHES PRESSERS AND CLEANERS
1952	VILLA VALET SHOP	CLEANERS AND DYERS
1952	VILLA VALET SHOP	CLEANERS AND DYERS
1957	VILLA MODEL CLEANERS	CALIF CLEANERS AND DYERS
1957	VILLA MODEL CLEANERS	CALIF CLEANERS AND DYERS
1963	VILLA MODEL CLEANERS	CLEANERS AND DYERS
1963	VILLA MODEL CLEANERS	CLEANERS AND DYERS

C15 **BRALLIER H F** **EDR Hist Auto** **1009017644**
NNE **848 W OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.096 mi.
508 ft. **Site 3 of 12 in cluster C**

Relative:
Higher

EDR Hist Auto

Actual:
39 ft.

Year:	Name:	Type:
1939	BRALLIER H F	GASOLINE AND OIL SERVICE STATIONS

C16 **VILLA RIVIERA GARAGE** **EDR Hist Auto** **1009050202**
NNE **820 E OCEAN BLVD WEST THIRD STREET GARAGE** **N/A**
< 1/8 **LONG BEACH, CA**
0.096 mi.
508 ft. **Site 4 of 12 in cluster C**

Relative: EDR Hist Auto
Higher

Year:	Name:	Type:
1952	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES
1952	VILLA RIVIERA GARAGE	AUTOMOBILE GARAGES

Actual:
39 ft.

A17 **UST** **U003920147**
NNW **0725 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.108 mi.
570 ft. **Site 10 of 11 in cluster A**

Relative: LONG BEACH UST:
Higher

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	0T
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

Actual:
38 ft.

A18 **STANDARD STATIONS INC** **EDR Hist Auto** **1009016106**
NNW **725 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.108 mi.
570 ft. **Site 11 of 11 in cluster A**

Relative: EDR Hist Auto
Higher

Year:	Name:	Type:
1935	STANDARD STATIONS INC	GASOLINE AND OIL SERVICE STATIONS
1969	STANDARD STATIONS INC	GASOLINE STATIONS
1969	STANDARD STATIONS INC	GASOLINE STATIONS

Actual:
38 ft.

C19 **76 PRODUCTS STATION #2999** **LUST** **S104539558**
North **805 OCEAN** **HIST CORTESE** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.112 mi.
589 ft. **Site 5 of 12 in cluster C**

Relative: LUST REG 4:
Higher

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	908020216A
Status:	Preliminary site assessment underway
Substance:	Gasoline
Substance Quantity:	Not reported
Local Case No:	Not reported
Case Type:	Groundwater
Abatement Method Used at the Site:	OT

Actual:
39 ft.

76 PRODUCTS STATION #2999 (Continued) **S104539558**

Global ID:	T0603792915	
W Global ID:	Not reported	
Staff:	NC	
Local Agency:	19060	
Cross Street:	ALAMITOS	
Enforcement Type:	TA-GEN	
Date Leak Discovered:	5/15/2000	
Date Leak First Reported:		5/16/2000
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	2/2/2000	
Date Case Last Changed on Database:		7/20/2002
Date the Case was Closed:		Not reported
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		15730.494306187399050866834962
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		9/17/2001
Preliminary Site Assessment Began:		2/19/2002
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		5/16/2000
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		3/3/2004
Hist Max MTBE Conc in Groundwater:		930
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	=	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	PATRICK J. TOELKES	
RP Address:	P.O. BOX 25376	
Program:	LUST	
Lat/Long:	33.766537 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	Not reported	

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	908020216

C20 **76 PRODUCTS STATION #2999** **LUST** **S102628483**
North **805 OCEAN BLVD E** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.112 mi.
589 ft. **Site 6 of 12 in cluster C**

Relative:
Higher

Actual:
39 ft.

LUST:

Region:	STATE
Global Id:	T0603701705
Latitude:	33.7665828
Longitude:	-118.1829582
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/19/1997
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	Not reported
Local Agency:	LONG BEACH, CITY OF
RB Case Number:	908020216
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603701705
Contact Type:	Local Agency Caseworker
Contact Name:	CARMEN PIRO
Organization Name:	LONG BEACH, CITY OF
Address:	2525 GRAND AVE.
City:	LONG BEACH
Email:	carmen.piro@longbeach.gov
Phone Number:	5625704137

Status History:

Global Id:	T0603701705
Status:	Completed - Case Closed
Status Date:	05/19/1997
Global Id:	T0603701705
Status:	Open - Case Begin Date
Status Date:	07/19/1988
Global Id:	T0603701705
Status:	Open - Remediation
Status Date:	01/20/1996
Global Id:	T0603701705
Status:	Open - Remediation
Status Date:	05/03/1996
Global Id:	T0603701705
Status:	Open - Site Assessment
Status Date:	11/28/1995
Global Id:	T0603701705
Status:	Open - Site Assessment

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Status Date: 12/26/1995

Global Id: T0603701705
Status: Open - Verification Monitoring
Status Date: 10/31/1996

Regulatory Activities:
Global Id: T0603701705
Action Type: Other
Date: 12/20/1988
Action: Leak Discovery

Global Id: T0603701705
Action Type: Other
Date: 07/19/1988
Action: Leak Reported

Region: STATE
Global Id: T0603792915
Latitude: 33.766537
Longitude: -118.182795
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/30/2010
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: DMB
Local Agency: LONG BEACH, CITY OF
RB Case Number: 908020216A
LOC Case Number: Not reported
File Location: Regional Board
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603792915
Contact Type: Local Agency Caseworker
Contact Name: CARMEN PIRO
Organization Name: LONG BEACH, CITY OF
Address: 2525 GRAND AVE.
City: LONG BEACH
Email: carmen.piro@longbeach.gov
Phone Number: 5625704137

Global Id: T0603792915
Contact Type: Regional Board Caseworker
Contact Name: DAVID M. BJOSTAD
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4th Street, Suite 200
City: Los Angeles
Email: dave.bjostad@waterboards.ca.gov
Phone Number: Not reported

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Status History:

Global Id:	T0603792915
Status:	Completed - Case Closed
Status Date:	03/30/2010
Global Id:	T0603792915
Status:	Open - Case Begin Date
Status Date:	11/28/1995
Global Id:	T0603792915
Status:	Open - Remediation
Status Date:	01/20/1996
Global Id:	T0603792915
Status:	Open - Remediation
Status Date:	03/01/2006
Global Id:	T0603792915
Status:	Open - Remediation
Status Date:	03/05/2008
Global Id:	T0603792915
Status:	Open - Site Assessment
Status Date:	11/28/1995
Global Id:	T0603792915
Status:	Open - Site Assessment
Status Date:	09/17/2001
Global Id:	T0603792915
Status:	Open - Site Assessment
Status Date:	02/19/2002
Global Id:	T0603792915
Status:	Open - Site Assessment
Status Date:	10/30/2007
Global Id:	T0603792915
Status:	Open - Site Assessment
Status Date:	09/16/2008
Global Id:	T0603792915
Status:	Open - Verification Monitoring
Status Date:	02/26/2009

Regulatory Activities:

Global Id:	T0603792915
Action Type:	ENFORCEMENT
Date:	04/20/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0603792915
Action Type:	RESPONSE
Date:	04/15/2006
Action:	Monitoring Report - Quarterly

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/19/2007
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 08/11/2005
Action: Interim Remedial Action Plan

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 12/31/2008
Action: Well Installation Report

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2003
Action: Well Installation Report

Global Id: T0603792915
Action Type: ENFORCEMENT
Date: 03/30/2010
Action: Closure/No Further Action Letter

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/12/2009
Action: Request for Closure

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/30/2007
Action: Soil and Water Investigation Workplan

Global Id: T0603792915
Action Type: RESPONSE

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Date: 01/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 04/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 09/03/2008
Action: Remedial Progress Report

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0603792915
Action Type: ENFORCEMENT
Date: 02/24/2010
Action: Notification - Preclosure

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/15/2010
Action: Monitoring Report - Semi-Annually

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: ENFORCEMENT
Date: 09/17/2001
Action: Staff Letter

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/31/2002
Action: Other Report / Document

Global Id: T0603792915
Action Type: RESPONSE
Date: 04/19/2002
Action: Soil and Water Investigation Report

Global Id: T0603792915
Action Type: RESPONSE
Date: 03/26/2007
Action: Request for Closure

Global Id: T0603792915
Action Type: Other
Date: 02/02/2000
Action: Leak Stopped

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Date: 04/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 04/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 07/15/2002
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2002
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: ENFORCEMENT
Date: 08/02/2002
Action: Technical Correspondence / Assistance / Other

Global Id: T0603792915
Action Type: Other
Date: 05/16/2000
Action: Leak Reported

Global Id: T0603792915
Action Type: ENFORCEMENT
Date: 06/13/2002
Action: Staff Letter

Global Id: T0603792915
Action Type: Other
Date: 05/15/2000
Action: Leak Discovery

Global Id: T0603792915
Action Type: RESPONSE
Date: 01/15/2004
Action: Monitoring Report - Quarterly

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Global Id: T0603792915
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603792915
Action Type: REMEDIATION
Date: 03/01/2000
Action: Excavation

Global Id: T0603792915
Action Type: REMEDIATION
Date: 03/01/2006
Action: Soil Vapor Extraction (SVE)

Global Id: T0603792915
Action Type: REMEDIATION
Date: 03/05/2008
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0603792915
Action Type: REMEDIATION
Date: 03/05/2008
Action: Soil Vapor Extraction (SVE)

Global Id: T0603792915
Action Type: REMEDIATION
Date: 03/01/2006
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0603792915
Action Type: REMEDIATION
Date: 02/01/1999
Action: Excavation

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 908020216
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: VE
Global ID: T0603701705
W Global ID: Not reported
Staff: Not reported
Local Agency: 19060
Cross Street: ALAMITOS AVENUE
Enforcement Type: Not reported
Date Leak Discovered: 12/20/1988
Date Leak First Reported: 7/19/1988
Date Leak Record Entered: 7/19/1988
Date Confirmation Began: Not reported

76 PRODUCTS STATION #2999 (Continued) **S102628483**

Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		10/15/1998
Date the Case was Closed:		5/19/1997
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	Not reported	
Operator:	OLD CASE #071988-02	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		15748.848778378823528752684449
Source of Cleanup Funding:		Not reported
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		11/28/1995
Pollution Characterization Began:		12/26/1995
Remediation Plan Submitted:		1/20/1996
Remedial Action Underway:		5/3/1996
Post Remedial Action Monitoring Began:		10/31/1996
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		9/27/2002
Hist Max MTBE Conc in Groundwater:		1100
Hist Max MTBE Conc in Soil:		140
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	=	
Soil Qualifier:	=	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	TOSCO/76 PRODUCTS TEAM	
RP Address:	P.O. BOX 25376, SANTA ANA, CA 92799-5376	(714)577-1846
Program:	LUST	
Lat/Long:	33.7665828 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	01/02/97 REPORT DOES NOT CONTAIN REQUIRED SAMPL & ANALYZE QTRLY MON RPT 1997 ; 04/15/98 QTRLY MON RPT 1998; 6/29/98 WELL ABANDONMENT REPORT	03/31/97

C21 **LONG BEACH OCEAN CORP** **UST** **U004220370**
North **805 E OCEAN** **N/A**
< 1/8 **LONG BEACH, CA**
0.115 mi.
609 ft. **Site 7 of 12 in cluster C**

Relative:
Higher

Actual:
39 ft.

LONG BEACH UST:

Region:	LONG BEACH
Tanks:	Not reported
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

C22 **SERVICE STATION 2999** **HIST UST** **U001565865**
North **805 E OCEAN BLVD** **CHMIRS** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.115 mi.
609 ft. **Site 8 of 12 in cluster C**

Relative:
Higher

Actual:
39 ft.

HIST UST:

File Number:	00028321
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00028321.pdf
Region:	STATE
Facility ID:	00000029448
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	JOHN H. WRAY
Telephone:	2134326887
Owner Name:	UNION OIL COMPANY OF CALIF.
Owner Address:	3701 WILSHIRE BOULEVARD ST 830
Owner City,St,Zip:	LOS ANGELES, CA 90010
Total Tanks:	0003
Tank Num:	001
Container Num:	2999-1
Year Installed:	1969
Tank Capacity:	00009940
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test
Tank Num:	001
Container Num:	2999-1
Year Installed:	1969
Tank Capacity:	00009940
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test
Tank Num:	002
Container Num:	2999-2
Year Installed:	1969
Tank Capacity:	00009940
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test
Tank Num:	002
Container Num:	2999-2
Year Installed:	1969
Tank Capacity:	00009940
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test
Tank Num:	003
Container Num:	2999-4
Year Installed:	1969

SERVICE STATION 2999 (Continued) **U001565865**

Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test

Tank Num:	003
Container Num:	2999-4
Year Installed:	1969
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test

Click here for Geo Tracker PDF:

CHMIRS:

OES Incident Number:	1-2730
OES notification:	05/11/2001
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	Storm Drain/Pacific Ocean
Spill Site:	Not reported
Cleanup By:	Contractor
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported

SERVICE STATION 2999 (Continued) **U001565865**

Year:	2001
Agency:	Long Beach FD
Incident Date:	5/11/200112:00:00 AM
Admin Agency:	Long Beach Fire Department
Amount:	Not reported
Contained:	No
Site Type:	Service Station
E Date:	Not reported
Substance:	Gasoline
Unknown:	Unk
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Fuel Tanker delivering to a gas station and an equipment malfunction caused the release. An Unknown amount of the spill entered the storm drain . Incident location is one block from the ocean.

C23 **UNION 76 UNOCAL 76** **EDR Hist Auto** **1020197054**
North **805 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.115 mi.
609 ft. **Site 9 of 12 in cluster C**

Relative:
Higher

EDR Hist Auto

Actual:
39 ft.

Year:	Name:	Type:
1985	WRAYS AUTO CENTER	Gasoline Service Stations
1986	UNION 76 UNOCAL 76	Gasoline Service Stations
1987	UNION 76 UNOCAL 76	Gasoline Service Stations
1988	UNION 76 UNOCAL 76	Gasoline Service Stations
1989	JOHNS GARAGE	General Automotive Repair Shops
1989	UNION 76 UNOCAL 76	Gasoline Service Stations
1990	UNION 76 UNOCAL 76	Gasoline Service Stations
1991	JOHNS GARAGE	General Automotive Repair Shops
1991	UNION 76 UNOCAL 76	Gasoline Service Stations
1992	JOHNS GARAGE	General Automotive Repair Shops
1992	UNION 76 UNOCAL 76	Gasoline Service Stations
1993	UNION 76 UNOCAL 76	Gasoline Service Stations
1994	UNION 76 UNOCAL 76	Gasoline Service Stations
1995	UNION 76 UNOCAL 76	Gasoline Service Stations
1996	UNION 76 UNOCAL 76	Gasoline Service Stations
2003	SUMMIT PETROLEUM LB LLC	Gasoline Service Stations
2004	SUMMIT PETROLEUM LB LLC	Gasoline Service Stations
2005	SUMMIT PETROLEUM LB LLC	Gasoline Service Stations

UNION 76 UNOCAL 76 (Continued) **1020197054**

2006	SUMMIT PETROLEUM LB LLC	Gasoline Service Stations
2007	SUMMIT PETROLEUM LB LLC	Gasoline Service Stations
2008	SUMMIT PETROLEUM LB LLC	Gasoline Service Stations
2011	SHELL OIL COMPANY	Gasoline Service Stations, NEC
2012	LB OCEAN CORP	Gasoline Service Stations
2012	SHELL OIL COMPANY	Gasoline Service Stations, NEC
2013	SHELL OIL COMPANY	Gasoline Service Stations, NEC
2013	LB OCEAN CORP	Gasoline Service Stations
2014	SHELL OIL COMPANY	Gasoline Service Stations, NEC
2014	LB OCEAN CORP	Gasoline Service Stations

C24 **7-ELEVEN INC. STORE #39328** **UST** **U004262820**
North **805 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.115 mi.
609 ft. **Site 10 of 12 in cluster C**

Relative:
Higher

Actual:
39 ft.

UST:

Facility ID:	Not reported
Permitting Agency:	Long Beach Environmental Heath
Latitude:	33.76645
Longitude:	-118.18286

C25 **TEXACO (2 12M MODERN)** **UST** **U003854834**
North **0805 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA**
0.115 mi.
609 ft. **Site 11 of 12 in cluster C**

Relative:
Higher

Actual:
39 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	2T
Tank Test:	Dual Walled
Leak Test:	Not reported
Tank Status:	Not reported

C26 **UNION OIL SERVICE STATION #299** **HIST UST** **1000166827**
North **805 E OCEAN BLVD** **N/A**
< 1/8 **LONG BEACH, CA 90802**
0.115 mi.
609 ft. **Site 12 of 12 in cluster C**

Relative:
Higher

Actual:
39 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000056026
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	JOHN H. WRAY
Telephone:	2134326887
Owner Name:	UNION OIL COMPANY OF CALIFORNI
Owner Address:	3701 WILSHIRE BOULEVARD-SUITE

UNION OIL SERVICE STATION #299 (Continued) **1000166827**

Owner City,St,Zip: LOS ANGELES, CA 90010
Total Tanks: 0001

Tank Num: 001
Container Num: 2999-00
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: 06
Container Construction Thickness: Not reported
Leak Detection: None

D27 **CITY OF LONG BEACH** **SWEEPS UST** **S106924591**
WSW **400 E SHORELINE DR** **N/A**
1/8-1/4 **LONG BEACH, CA 90802**
0.156 mi.
822 ft. **Site 1 of 2 in cluster D**

Relative:
Higher

Actual:
6 ft.

SWEEPS UST:
Status: Active
Comp Number: 33983
Number: 4
Board Of Equalization: Not reported
Referral Date: 02-12-93
Action Date: 06-15-93
Created Date: 06-15-93
Owner Tank Id: 27904
SWRCB Tank Id: 19-060-033983-000001
Tank Status: A
Capacity: 500
Active Date: 02-12-93
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: 1

D28 **LONG BEACH MARINE BUREAU (500 D/W JOOR)** **UST** **U003854887**
WSW **0400 E SHORELINE DR** **N/A**
1/8-1/4 **LONG BEACH, CA**
0.156 mi.
822 ft. **Site 2 of 2 in cluster D**

Relative:
Higher

Actual:
6 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:
Region: LONG BEACH
Tanks: 1T
Tank Test: Dual Walled
Leak Test: Not reported
Tank Status: Not reported

E29
NNW
1/8-1/4
0.162 mi.
857 ft.

ARTABAN APTS.
0010 ATLANTIC AVE
LONG BEACH, CA

Site 1 of 2 in cluster E

Relative:
Higher

Actual:
31 ft.

UST **U003660284**
N/A

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	1F
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

F30
North
1/8-1/4
0.175 mi.
923 ft.

0051 ALAMITOS AVE
LONG BEACH, CA

Site 1 of 2 in cluster F

Relative:
Higher

Actual:
39 ft.

UST **U003919727**
N/A

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	0F
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

F31
North
1/8-1/4
0.178 mi.
942 ft.

HANEY CO (OLD OFFCO YARD)
0050 ALAMITOS AVE
LONG BEACH, CA

Site 2 of 2 in cluster F

Relative:
Higher

Actual:
39 ft.

UST **U003854682**
N/A

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	0T
Tank Test:	Not reported
Leak Test:	Not reported
Tank Status:	Not reported

E32
NW
1/8-1/4
0.202 mi.
1067 ft.

STAR SHIPPING USWC INC
555 E OCEAN BLVD STE 600
LONG BEACH, CA 90802

Site 2 of 2 in cluster E

Relative:
Higher

Actual:
33 ft.

RCRA NonGen / NLR **1000597499**
FINDS **CAD983615121**
ECHO

RCRA NonGen / NLR:

Date form received by agency:	12/27/1991
Facility name:	STAR SHIPPING USWC INC
Facility address:	555 E OCEAN BLVD STE 600 LONG BEACH, CA 90802
EPA ID:	CAD983615121
Mailing address:	E OCEAN BLVD STE 600

STAR SHIPPING USWC INC (Continued) **1000597499**

LONG BEACH, CA 90802
Contact: MARK MOSUNIC
Contact address: 555 E OCEAN BLVD STE 600
LONG BEACH, CA 90802
Contact country: US
Contact telephone: (310) 437-2771
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: STAR SHIPPING USWC INC
Owner/operator address: 425 CALIFORNIA ST
SAN FRANCISCO, CA 94104
Owner/operator country: Not reported
Owner/operator telephone: (415) 433-4900
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002866113

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

STAR SHIPPING USWC INC (Continued) **1000597499**

ECHO:
Envid: 1000597499
Registry ID: 110002866113
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002866113

33
NE
1/8-1/4
0.210 mi.
1110 ft.

0034 CERRITOS AVE **UST** **U003919882**
LONG BEACH, CA **N/A**

Relative:
Higher

Actual:
43 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:
Region: LONG BEACH
Tanks: 0F
Tank Test: Not reported
Leak Test: Not reported
Tank Status: Not reported

34
South
1/8-1/4
0.223 mi.
1177 ft.

THUMS LONG BEACH CO **RCRA-SQG** **1001111720**
ISLAND GRISSOM **HAZNET** **CAR000012583**
LONG BEACH, CA 90802

Relative:
Lower

Actual:
0 ft.

RCRA-SQG:
Date form received by agency: 06/27/1996
Facility name: THUMS LONG BEACH CO
Facility address: ISLAND GRISSOM
SAN PEDRO BAY
LONG BEACH, CA 90802
EPA ID: CAR000012583
Contact: KATHYE GRIFFIS
Contact address: 111 W OCEAN BLVD STE 800
LONG BEACH, CA 90802
Contact country: US
Contact telephone: (310) 624-3443
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: LONG BEACH CITY OF AS UNIT OPERATOR
Owner/operator address: 211 E OCEAN STE 500
LONG BEACH, CA 90802
Owner/operator country: Not reported
Owner/operator telephone: (310) 570-3900
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported

THUMS LONG BEACH CO (Continued) **1001111720**

Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

HAZNET:
envid: 1001111720
Year: 2014
GEPAID: CAR000012583
Contact: NAUMAN CHARANIA
Telephone: 5626243208
Mailing Name: Not reported
Mailing Address: 111 W OCEAN BLVD STE 800
Mailing City,St,Zip: LONG BEACH, CA 908020000
Gen County: Los Angeles
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.035
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Los Angeles

envid: 1001111720
Year: 2014
GEPAID: CAR000012583
Contact: NAUMAN CHARANIA
Telephone: 5626243208
Mailing Name: Not reported
Mailing Address: 111 W OCEAN BLVD STE 800
Mailing City,St,Zip: LONG BEACH, CA 908020000
Gen County: Los Angeles
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Other organic solids
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.04
Cat Decode: Not reported

THUMS LONG BEACH CO (Continued) **1001111720**

Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1001111720
Year:	2013
GEPAID:	CAR000012583
Contact:	KRISTY MONJI
Telephone:	5626243391
Mailing Name:	Not reported
Mailing Address:	111 W OCEAN BLVD STE 800
Mailing City,St,Zip:	LONG BEACH, CA 908020000
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.09
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Not reported
envid:	1001111720
Year:	2013
GEPAID:	CAR000012583
Contact:	KRISTY MONJI
Telephone:	5626243391
Mailing Name:	Not reported
Mailing Address:	111 W OCEAN BLVD STE 800
Mailing City,St,Zip:	LONG BEACH, CA 908020000
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.005
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Not reported
envid:	1001111720
Year:	2013
GEPAID:	CAR000012583
Contact:	KRISTY MONJI
Telephone:	5626243391
Mailing Name:	Not reported
Mailing Address:	111 W OCEAN BLVD STE 800
Mailing City,St,Zip:	LONG BEACH, CA 908020000
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.075
Cat Decode:	Not reported

THUMS LONG BEACH CO (Continued) **1001111720**

Method Decode: Not reported
Facility County: Not reported

Click this hyperlink while viewing on your computer to access
23 additional CA_HAZNET: record(s) in the EDR Site Report.

G35 **CITY OF LONG BEACH** **SWEEPS UST** **S106924590**
WSW **350 E SHORELINE BLVD** **N/A**
1/8-1/4 **LONG BEACH, CA 90802**
0.230 mi.
1215 ft. **Site 1 of 2 in cluster G**

Relative:
Higher

Actual:
6 ft.

SWEEPS UST:

Status:	Active
Comp Number:	33979
Number:	4
Board Of Equalization:	Not reported
Referral Date:	02-12-93
Action Date:	06-15-93
Created Date:	06-15-93
Owner Tank Id:	27876
SWRCB Tank Id:	19-060-033979-000001
Tank Status:	A
Capacity:	500
Active Date:	02-12-93
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	1

G36 **LONG BEACH MARINE BUREAU (500 D/W JOOR)** **UST** **U003854886**
WSW **0350 E SHORELINE DR** **N/A**
1/8-1/4 **LONG BEACH, CA**
0.230 mi.
1215 ft. **Site 2 of 2 in cluster G**

Relative:
Higher

Actual:
6 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	1T
Tank Test:	Dual Walled
Leak Test:	Not reported
Tank Status:	Not reported

---

37 **SEE 123 LIME AVE** **UST** **U003659791**
NNW **0633 E 01ST ST** **N/A**
1/8-1/4 **LONG BEACH, CA**
0.234 mi.
1237 ft.

Relative:
Higher

Actual:
37 ft.

LONG BEACH UST:

DATA AS OF 02/25/2014:

Region:	LONG BEACH
Tanks:	0F

SEE 123 LIME AVE (Continued) **U003659791**

Tank Test: Not reported
Leak Test: Not reported
Tank Status: Not reported

H38 **YANGS OIL CORP** **LUST** **S102441112**
North **200 ALAMITOS AVE** **HAZNET** **N/A**
1/4-1/2 **LONG BEACH, CA 90802**
0.283 mi.
1492 ft. **Site 1 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	001015	
Status:	Case Closed	
Substance:	1	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603700027	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19060	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	Not reported	
Date Leak First Reported:		11/20/1986
Date Leak Record Entered:	8/5/1987	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		8/5/1987
Date the Case was Closed:		11/20/1986
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		15001.331644236762863365805346
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	

YANGS OIL CORP (Continued) **S102441112**

Responsible Party:	WAYNE PERRY CONSTRUCTION, INC
RP Address:	8301 W COMMONWEALTH AVE, BUENA PARK, CA 90621
Program:	LUST
Lat/Long:	33.7686118 / -1
Local Agency Staff:	Not reported
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported

HAZNET:

envid:	S102441112
Year:	2015
GEPAID:	CAL000326375
Contact:	SUSAN YANG
Telephone:	8184251003
Mailing Name:	Not reported
Mailing Address:	19832 FALLON CREST WAY
Mailing City,St,Zip:	NORTHRIDGE, CA 913260000
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.025
Cat Decode:	Other organic solids
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

envid:	S102441112
Year:	2015
GEPAID:	CAL000326375
Contact:	SUSAN YANG
Telephone:	8184251003
Mailing Name:	Not reported
Mailing Address:	19832 FALLON CREST WAY
Mailing City,St,Zip:	NORTHRIDGE, CA 913260000
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Tank bottom waste
Disposal Method:	Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)
Tons:	0.22935
Cat Decode:	Tank bottom waste
Method Decode:	Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)
Facility County:	Los Angeles

H39 **EQUILON ENTERPRISES** **LUST** **1008152980**
North **200 ALAMITOS** **FINDS** **N/A**
1/4-1/2 **LONG BEACH, CA 90802** **ECHO**
0.283 mi.
1492 ft. **Site 2 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

LUST:

Region:	STATE
Global Id:	T0603700027
Latitude:	33.7688
Longitude:	-118.18187
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	11/20/1986
Lead Agency:	LONG BEACH, CITY OF
Case Worker:	CP
Local Agency:	LONG BEACH, CITY OF
RB Case Number:	001015
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700027
Contact Type:	Local Agency Caseworker
Contact Name:	CARMEN PIRO
Organization Name:	LONG BEACH, CITY OF
Address:	2525 GRAND AVE.
City:	LONG BEACH
Email:	carmen.piro@longbeach.gov
Phone Number:	5625704137

Global Id:	T0603700027
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0603700027
Status:	Completed - Case Closed
Status Date:	11/20/1986

Global Id:	T0603700027
Status:	Open - Case Begin Date
Status Date:	11/20/1986

Regulatory Activities:

Global Id:	T0603700027
Action Type:	Other
Date:	11/20/1986
Action:	Leak Reported

EQUILON ENTERPRISES (Continued) **1008152980**

FINDS:

Registry ID: 110018972548

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1008152980
Registry ID: 110018972548
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110018972548

H40 **WAYNE PERRY CONSTRUCTION** **HIST CORTESE** **S103639586**
North **200 ALAMITOS** **N/A**
1/4-1/2 **LONG BEACH, CA 90802**
0.283 mi.
1492 ft. **Site 3 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 001015

H41 **EDISON/LONG BEACH MGP** **EDR MGP** **1008407697**
North **740 EAST BROADWAY** **N/A**
1/4-1/2 **LONG BEACH, CA 90802**
0.303 mi.
1602 ft. **Site 4 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

Manufactured Gas Plants:
The former Long Beach I Manufactured Gas Plant (MGP) site was identified in a 1902 map as occupying one acre of real property. The site is currently occupied by two vacant buildings and is bounded to the north, south, and east by properties designateed for commercial use. Town gas plants were the primary source of household heating and lighting in the 1900s. Coal as well as oil were the raw materials used to manufacture gas products. By- products of the operation include tar and lampblack whichcontains polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and heavy metals. Although hazardous wastes management was not common practice in the early days, water separations and recyling to recover and/or treat effluents coould have

EDISON/LONG BEACH MGP (Continued) **1008407697**

been employed at town gas sites. However, incidences of spills and leaks could have been common

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H42 **EDISON/LONG BEACH #1 MGP (BROADWAY)** **ENVIROSTOR** **S106568225**
North **740 EAST BROADWAY** **VCP** **N/A**
1/4-1/2 **LONG BEACH, CA 90802**
0.303 mi.
1602 ft. **Site 5 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

ENVIROSTOR:

Facility ID:	19490211
Status:	Certified
Status Date:	02/27/1998
Site Code:	Not reported
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	0.1
NPL:	NO
Regulatory Agencies:	DTSC
Lead Agency:	DTSC
Program Manager:	Jess Villamayor
Supervisor:	Philip Chandler
Division Branch:	Cleanup Chatsworth
Assembly:	70
Senate:	33
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.76898
Longitude:	-118.1825
APN:	7281-021-032, 7281021032
Past Use:	MANUFACTURED GAS PLANT
Potential COC:	* CONTAMINATED SOIL
Confirmed COC:	10097-NO
Potential Description:	SOIL
Alias Name:	EDISON MGP LONG BEACH #1
Alias Type:	Alternate Name
Alias Name:	EDISON/LONG BEACH #1 (BROADWAY)
Alias Type:	Alternate Name
Alias Name:	TOWN GAS PLANT LONG BEACH #1
Alias Type:	Alternate Name
Alias Name:	TOWN GAS PLANT LONG BEACH #3
Alias Type:	Alternate Name
Alias Name:	TOWN GAS SITE (POTENTIAL)
Alias Type:	Alternate Name
Alias Name:	7281-021-032
Alias Type:	APN
Alias Name:	7281021032
Alias Type:	APN
Alias Name:	110033618814
Alias Type:	EPA (FRS #)
Alias Name:	19490211
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report

EDISON/LONG BEACH #1 MGP (BROADWAY) (Continued) **S106568225**

Completed Date: 12/31/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 09/30/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 08/18/1997
Comments: On August 18, 1997, DTSC accepted the Remedial Investigation/ Feasibility Study (RI/FS) report as final and determined that the RI/FS phase for the Site is complete under the voluntary cleanup program/agreement between DTSC and Southern California Edison Company (SCE). Concurrent with the FS review, DTSC also reviewed SCE's draft Removal Action Workplan (RAW) proposed for the site. The RAW proposed to excavate and transport contaminated soil to an off- site facility for treatment and disposal. An initial study re- quired by the California Environmental Quality Act (CEQA) was prepared to determine the impact of the alternative selected for the site. Opportunity for public comment was announced and a public meeting was conducted on September 24, 1997.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/15/1995
Comments: THE PEA REPORT FOR THE LONG BEACH I SITE IS REVIEWED AND APPROVED. THE PEA INVESTIGATION SHOWED PAHS, VOCS, AND HEAVY METALS CONTAMINATION AT THE SITE. DTSC RECOMMENDED FURTHER ACTION IN THE FORM OF A DEED NOTICE AND/OR FURTHER INVESTIGATION WITH DTSC OVERSIGHT. THE SITE HAS THE POTENTIAL FOR ECONOMIC BENEFIT TO THE CITY AND PEOPLE BE- CAUSE THE SITE IS SITUATED IN A COMMERCIALLY ZONED LOCATION.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/10/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 09/06/1995
Comments: THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) ENTERED INTO A CONSENT ORDER WITH THE SOUTHERN CALIFORNIA EDISON. THE OBJECTIVE OF THE ORDER IS TO CONDUCT A REMEDIAL INVESTIGATION/FEASIBILITY STUDY UNDER THE OVERSIGHT OF DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 11/29/1994

EDISON/LONG BEACH #1 MGP (BROADWAY) (Continued) **S106568225**

Comments: THE DEPARTMENT SIGNS AN AMENDED AGREEMENT WITH THE SOUTHERN CALIFORNIA GAS COMPANY TO CONDUCT A PEA AT THE LONG BEACH #1 MGP SITE.
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 12/10/1990
Comments: FACILITY IDENTIFIED NOTE RECEIVED BY DHS INQUIRING AS TO WHETHER OR NOT 740 EAST BROADWAY WAS A TOWN GAS SITE. PUBLIC UTILITIES INFORMED INQUIRER THAT IT WAS A POSSIBLE TOWN GAS SITE. SITE SCREENING DONE PENDING STATUS: WAITING FOR UTILITY DISTRICT TO CONFIRM/DENY WHETHER OR NOT SITE WAS A TOWN GAS SITE.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 02/27/1998
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 09/30/1997
Comments: DTSC has finalized the CEQA after the close of the public comment period for the site. DTSC has determined that the proposed project could not have a significant effect on the public health and the environment. Therefore a Negative Declaration was pre- pared for this project. DTSC has approved the finalized version of the RAW without further revisions after the end of the public comment period and the responsiveness summary as required by CEQA was mailed to interested parties. The final RAW proposes to excavate and transport contaminated soil to an offsite facility for treatment and disposal. Approximately 1,500 cubic yards of in-place soil is planned for excavation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/02/1997
Comments: On Jan 2, 1997 DTSC and Edison executed an agreeement (Consent Order) to address remediation activities at this site - as soon as the final RI/FS work is completed under the prior order.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Facility ID: 19490211
Site Type: Voluntary Cleanup

EDISON/LONG BEACH #1 MGP (BROADWAY) (Continued) **S106568225**

Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	0.1
National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Jess Villamayor
Supervisor:	Philip Chandler
Division Branch:	Cleanup Chatsworth
Site Code:	Not reported
Assembly:	70
Senate:	33
Special Programs Code:	Voluntary Cleanup Program
Status:	Certified
Status Date:	02/27/1998
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	33.76898 / -118.1825
APN:	7281-021-032, 7281021032
Past Use:	MANUFACTURED GAS PLANT
Potential COC:	10097
Confirmed COC:	10097-NO
Potential Description:	SOIL
Alias Name:	EDISON MGP LONG BEACH #1
Alias Type:	Alternate Name
Alias Name:	EDISON/LONG BEACH #1 (BROADWAY)
Alias Type:	Alternate Name
Alias Name:	TOWN GAS PLANT LONG BEACH #1
Alias Type:	Alternate Name
Alias Name:	TOWN GAS PLANT LONG BEACH #3
Alias Type:	Alternate Name
Alias Name:	TOWN GAS SITE (POTENTIAL)
Alias Type:	Alternate Name
Alias Name:	7281-021-032
Alias Type:	APN
Alias Name:	7281021032
Alias Type:	APN
Alias Name:	110033618814
Alias Type:	EPA (FRS #)
Alias Name:	19490211
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	12/31/1997
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Workplan
Completed Date:	09/30/1997
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

EDISON/LONG BEACH #1 MGP (BROADWAY) (Continued) **S106568225**

Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 08/18/1997
Comments: On August 18, 1997, DTSC accepted the Remedial Investigation/ Feasibility Study (RI/FS) report as final and determined that the RI/FS phase for the Site is complete under the voluntary cleanup program/agreement between DTSC and Southern California Edison Company (SCE). Concurrent with the FS review, DTSC also reviewed SCE's draft Removal Action Workplan (RAW) proposed for the site. The RAW proposed to excavate and transport contaminated soil to an off- site facility for treatment and disposal. An initial study re- quired by the California Environmental Quality Act (CEQA) was prepared to determine the impact of the alternative selected for the site. Opportunity for public comment was announced and a public meeting was conducted on September 24, 1997.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/15/1995
Comments: THE PEA REPORT FOR THE LONG BEACH I SITE IS REVIEWED AND APPROVED. THE PEA INVESTIGATION SHOWED PAHS, VOCS, AND HEAVY METALS CONTAMINATION AT THE SITE. DTSC RECOMMENDED FURTHER ACTION IN THE FORM OF A DEED NOTICE AND/OR FURTHER INVESTIGATION WITH DTSC OVERSIGHT. THE SITE HAS THE POTENTIAL FOR ECONOMIC BENEFIT TO THE CITY AND PEOPLE BE- CAUSE THE SITE IS SITUATED IN A COMMERCIALLY ZONED LOCATION.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/10/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 09/06/1995
Comments: THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) ENTERED INTO A CONSENT ORDER WITH THE SOUTHERN CALIFORNIA EDISON. THE OBJECTIVE OF THE ORDER IS TO CONDUCT A REMEDIAL INVESTIGATION/FEASIBILITY STUDY UNDER THE OVERSIGHT OF DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 11/29/1994
Comments: THE DEPARTMENT SIGNS AN AMENDED AGREEMENT WITH THE SOUTHERN CALIFORNIA GAS COMPANY TO CONDUCT A PEA AT THE LONG BEACH #1 MGP SITE. Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 12/10/1990
Comments: FACILITY IDENTIFIED NOTE RECEIVED BY DHS INQUIRING AS TO WHETHER OR NOT 740 EAST BROADWAY WAS A TOWN GAS SITE. PUBLIC UTILITIES INFORMED INQUIRER THAT IT WAS A POSSIBLE TOWN GAS SITE. SITE SCREENING DONE

EDISON/LONG BEACH #1 MGP (BROADWAY) (Continued) **S106568225**

PENDING STATUS: WAITING FOR UTILITY DISTRICT TO CONFIRM/DENY WHETHER OR NOT SITE WAS A TOWN GAS SITE.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 02/27/1998
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 09/30/1997
Comments: DTSC has finalized the CEQA after the close of the public comment period for the site. DTSC has determined that the proposed project could not have a significant effect on the public health and the environment. Therefore a Negative Declaration was pre- pared for this project. DTSC has approved the finalized version of the RAW without further revisions after the end of the public comment period and the responsiveness summary as required by CEQA was mailed to interested parties. The final RAW proposes to excavate and transport contaminated soil to an offsite facility for treatment and disposal. Approximately 1,500 cubic yards of in-place soil is planned for excavation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/02/1997
Comments: On Jan 2, 1997 DTSC and Edison executed an agreeement (Consent Order) to address remediation activities at this site - as soon as the final RI/FS work is completed under the prior order.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

H43 **CHR CORPORATION PROPERTY** **LUST** **S103437983**
North **210 ALAMITOS AVE** **N/A**
1/4-1/2 **LONG BEACH, CA 90802**
0.325 mi.
1715 ft. **Site 6 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 908020261
Status: Remedial action (cleanup) Underway
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported

CHR CORPORATION PROPERTY (Continued) **S103437983**

Case Type:	Groundwater	
Abatement Method Used at the Site:		SVE AS
Global ID:	T0603701709	
W Global ID:	Not reported	
Staff:	HDN	
Local Agency:	19060	
Cross Street:	BROADWAY/APPLETON	
Enforcement Type:	DLSEL	
Date Leak Discovered:	1/19/1993	
Date Leak First Reported:		1/19/1993
Date Leak Record Entered:	3/2/1993	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		7/26/2002
Date the Case was Closed:		Not reported
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	Tank	
Operator:	OLD CASE #043093-01	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		14753.500126784697764372527704
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		1/19/1993
Preliminary Site Assessment Began:		10/12/1993
Pollution Characterization Began:		5/9/1996
Remediation Plan Submitted:		1/21/2000
Remedial Action Underway:		9/25/2000
Post Remedial Action Monitoring Began:		1/19/1993
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		6/30/1997
Hist Max MTBE Conc in Groundwater:		350
Hist Max MTBE Conc in Soil:		.01
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	<	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	HAZEL E. MACPHERSON	
RP Address:	500 WINSLOW AVE.	
Program:	LUST	
Lat/Long:	33.7693587 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	3/21/00 4TH QTR GW MON RPT 1999; 5/30/00 2ND QTR GW MON RPT 2000; 9/20/00 PILOT STUDY RPT VE/SPARGING TESTS; 10/28/00 3RD QTR GW MON RPT 2000; 3/20/01 4TH QTR GW MON RPT 2001	

H44 **CHR CORPORATION PROPERTY** **LUST** **S101307349**
North **210 ALAMITOS AVENUE** **ENF** **N/A**
1/4-1/2 **LONG BEACH, CA 90802** **HIST CORTESE**
0.325 mi.
1715 ft. **Site 7 of 7 in cluster H**

Relative:
Higher

Actual:
40 ft.

LUST:

Region:	STATE
Global Id:	T0603701709
Latitude:	33.7693587
Longitude:	-118.1818252
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/22/2008
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	Not reported
Local Agency:	LONG BEACH, CITY OF
RB Case Number:	908020261
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603701709
Contact Type:	Local Agency Caseworker
Contact Name:	CARMEN PIRO
Organization Name:	LONG BEACH, CITY OF
Address:	2525 GRAND AVE.
City:	LONG BEACH
Email:	carmen.piro@longbeach.gov
Phone Number:	5625704137

Status History:

Global Id:	T0603701709
Status:	Completed - Case Closed
Status Date:	12/22/2008
Global Id:	T0603701709
Status:	Open - Case Begin Date
Status Date:	01/19/1993
Global Id:	T0603701709
Status:	Open - Remediation
Status Date:	01/21/2000
Global Id:	T0603701709
Status:	Open - Remediation
Status Date:	09/25/2000
Global Id:	T0603701709
Status:	Open - Site Assessment
Status Date:	01/19/1993
Global Id:	T0603701709
Status:	Open - Site Assessment

CHR CORPORATION PROPERTY (Continued) **S101307349**

Status Date: 10/12/1993

Global Id: T0603701709
Status: Open - Site Assessment
Status Date: 05/09/1996

Global Id: T0603701709
Status: Open - Verification Monitoring
Status Date: 01/19/1993

Regulatory Activities:
Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 11/20/1996
Action: Staff Letter

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 09/26/2000
Action: Staff Letter

Global Id: T0603701709
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 02/03/2006
Action: Interim Remedial Action Plan

Global Id: T0603701709
Action Type: RESPONSE
Date: 09/11/2005
Action: Soil and Water Investigation Report

Global Id: T0603701709
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 07/15/2002
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 06/21/2002
Action: Staff Letter

Global Id: T0603701709
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603701709

CHR CORPORATION PROPERTY (Continued) **S101307349**

Action Type: RESPONSE
Date: 01/15/2004
Action: Remedial Progress Report

Global Id: T0603701709
Action Type: RESPONSE
Date: 01/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 04/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 10/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 04/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 01/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: Other
Date: 01/19/1993
Action: Leak Discovery

Global Id: T0603701709
Action Type: RESPONSE
Date: 04/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 12/29/2008
Action: Site Visit / Inspection / Sampling

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 12/22/2008
Action: Closure/No Further Action Letter

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 10/01/2003

CHR CORPORATION PROPERTY (Continued) **S101307349**

Action: Staff Letter

Global Id: T0603701709
Action Type: RESPONSE
Date: 10/15/2002
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 11/15/2002
Action: Interim Remedial Action Report

Global Id: T0603701709
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 08/15/2005
Action: Staff Letter

Global Id: T0603701709
Action Type: Other
Date: 01/19/1993
Action: Leak Reported

Global Id: T0603701709
Action Type: RESPONSE
Date: 04/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 02/13/2003
Action: Staff Letter

Global Id: T0603701709
Action Type: RESPONSE
Date: 01/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 10/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 08/18/2008
Action: Request for Closure

CHR CORPORATION PROPERTY (Continued) **S101307349**

Global Id: T0603701709
Action Type: RESPONSE
Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: ENFORCEMENT
Date: 08/13/2002
Action: Staff Letter

Global Id: T0603701709
Action Type: RESPONSE
Date: 07/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 01/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 07/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 05/31/2000
Action: CAP/RAP - Feasibility Study Report

Global Id: T0603701709
Action Type: RESPONSE
Date: 04/15/2003
Action: Interim Remedial Action Report

Global Id: T0603701709
Action Type: RESPONSE
Date: 07/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603701709
Action Type: REMEDIATION
Date: 01/09/2007
Action: Pump & Treat (P&T) Groundwater

Global Id: T0603701709
Action Type: REMEDIATION
Date: 07/01/2006
Action: Soil Vapor Extraction (SVE)

CHR CORPORATION PROPERTY (Continued) **S101307349**

ENF:

Region:	4
Facility Id:	214429
Agency Name:	Not reported
Place Type:	Service/Commercial
Place Subtype:	Service/Commercial Site, NEC
Facility Type:	All other facilities
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	33.769309
Place Longitude:	-118.182041
SIC Code 1:	7549
SIC Desc 1:	Automotive Services, Except Repair and Carwashes
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported

CHR CORPORATION PROPERTY (Continued) **S101307349**

WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	382524
Region:	4
Order / Resolution Number:	Notice of Non-Compliance
Enforcement Action Type:	Notice to Comply
Effective Date:	03/25/2011
Adoption/Issuance Date:	03/25/2011
Achieve Date:	Not reported
Termination Date:	04/25/2011
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NTC 03/25/2011 for CHR Property
Description:	Notice of Non-Compliance issued on 03/25/2011 for failing to submit annual summary report, monitoring reports and late submittal of monitoring reports.
Program:	WDR
Latest Milestone Completion Date:	4/25/2011
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	4
Facility Id:	214429
Agency Name:	MacPherson, Robert
Place Type:	Service/Commercial
Place Subtype:	Service/Commercial Site, NEC
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.769309
Place Longitude:	-118.182041
SIC Code 1:	7549
SIC Desc 1:	Automotive Services, Except Repair and Carwashes
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas

CHR CORPORATION PROPERTY (Continued) **S101307349**

Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	UST
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	908020261
Reg Measure Id:	168130
Reg Measure Type:	Unregulated
Region:	4
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	03/15/2011
Effective Date:	09/26/2000
Expiration/Review Date:	Not reported
Termination Date:	12/22/2008
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	227960
Region:	4
Order / Resolution Number:	NOV
Enforcement Action Type:	Notice of Violation
Effective Date:	09/26/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	10/27/2000
Termination Date:	09/26/2000
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 908020261
Description:	Notice of Violation sent 9/26/00 for overdue pilot study report.
Program:	UST
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0

CHR CORPORATION PROPERTY (Continued) **S101307349**

Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	908020261

I45 **F C SITE #9** **ENVIROSTOR** **S107736307**
WNW **N/A**
1/4-1/2 **LONG BEACH, CA**
0.340 mi.
1793 ft. **Site 1 of 4 in cluster I**

Relative:
Higher

Actual:
32 ft.

ENVIROSTOR:

Facility ID:	80000243
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	70
Senate:	33
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	33.76666
Longitude:	-118.1888
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799F543800
Alias Type:	Federal Facility ID
Alias Name:	J09CA0356
Alias Type:	INPR
Alias Name:	80000243
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported

F C SITE #9 (Continued) **S107736307**

Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

J46 **TORRANCE MUNICIPAL WATER DEPT.** **SLIC** **S103546879**
NW **101 ELM** **N/A**
1/4-1/2 **TORRANCE, CA 90503**
0.346 mi.
1827 ft. **Site 1 of 4 in cluster J**

Relative:
Higher

Actual:
34 ft.

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 09/09/1996
Global Id: SLT43225223
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number: Not reported
Latitude: 33.8365829171484
Longitude: -118.339320544477
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: 0356
File Location: Not reported
Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 4:
Region: 4
Facility Status: No further action required
SLIC: 0356
Substance: TPH
Staff: Manjulika Chakarbarti

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47 **BROADWAY/GOLDEN AVENUE PROPERTY** **ENVIROSTOR** **S106153043**
North **BROADWAY AVENUE/GOLDEN AVENUE** **SCH** **N/A**
1/4-1/2 **LONG BEACH, CA 90802**
0.361 mi.
1907 ft.

Relative:
Higher

Actual:
40 ft.

ENVIROSTOR:
Facility ID: 19880010
Status: No Further Action
Status Date: 01/13/2004
Site Code: 404254

BROADWAY/GOLDEN AVENUE PROPERTY (Continued) **S106153043**

Site Type: School Investigation
Site Type Detailed: School
Acres: 2.6
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Amit Pathak
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 70
Senate: 33
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.77003
Longitude: -118.1824
APN: NONE SPECIFIED
Past Use: RESIDENTIAL AREA
Potential COC: Lead
Confirmed COC: NONE SPECIFIED
Potential Description: SOIL
Alias Name: BROADWAY/GOLDEN AVENUE PROPERTY
Alias Type: Alternate Name
Alias Name: LONG BEACH USD-BROADWAY/GOLDEN AV PRPRTY
Alias Type: Alternate Name
Alias Name: 404254
Alias Type: Project Code (Site Code)
Alias Name: 19880010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 11/14/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 03/18/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 05/18/2004
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported

BROADWAY/GOLDEN AVENUE PROPERTY (Continued) **S106153043**

Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Facility ID: 19880010
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 2.6
National Priorities List: NO
Cleanup Oversight Agencies: DTSC
Lead Agency: DTSC
Lead Agency Description: * DTSC
Project Manager: Amit Pathak
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404254
Assembly: 70
Senate: 33
Special Program Status: Not reported
Status: No Further Action
Status Date: 01/13/2004
Restricted Use: NO
Funding: School District
Latitude: 33.77003
Longitude: -118.1824
APN: NONE SPECIFIED
Past Use: RESIDENTIAL AREA
Potential COC: Lead
Confirmed COC: NONE SPECIFIED
Potential Description: SOIL
Alias Name: BROADWAY/GOLDEN AVENUE PROPERTY
Alias Type: Alternate Name
Alias Name: LONG BEACH USD-BROADWAY/GOLDEN AV PRPRTY
Alias Type: Alternate Name
Alias Name: 404254
Alias Type: Project Code (Site Code)
Alias Name: 19880010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 11/14/2001

BROADWAY/GOLDEN AVENUE PROPERTY (Continued) **S106153043**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Report
Completed Date:	03/18/2004
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	05/18/2004
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

I48 **LONG BEACH SCHROEDER HALL USAR** **LUST** **S105790772**
WNW **MCS** **N/A**
1/4-1/2 **LONG BEACH, CA**
0.370 mi.
1955 ft. **Site 2 of 4 in cluster I**

Relative:
Higher

Actual:
31 ft.

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	Not reported	
Status:	Not reported	
Substance:	Not reported	
Substance Quantity:	Not reported	
Local Case No:	400684	
Case Type:	Not reported	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603762833	
W Global ID:	Not reported	
Staff:	AVT	
Local Agency:	Not reported	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	Not reported	
Date Leak First Reported:		Not reported
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		Not reported
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	

LONG BEACH SCHROEDER HALL USAR (Continued) **S105790772**

Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): Not reported
Source of Cleanup Funding: Not reported
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: Not reported
Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: Wayne Alves
RP Address: Not reported
Program: DOD
Lat/Long: Not reported
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

MCS:
Global Id: T0603762833
Latitude: 33.76696
Longitude: -118.1892
Case Type: Military Cleanup Site
Status: Completed - Case Closed
Status Date: 05/12/2010
Lead Agency: DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Caseworker: Not reported
Local Agency: DEPARTMENT OF TOXIC SUBSTANCES CONTROL
RB Case Number: Not reported
LOC Case Number: 19970017
File Location: Not reported
Potential Media Affect: Not reported
EDR Link ID: T0603762833
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

I49
WNW
1/4-1/2
0.370 mi.
1955 ft.

U.S. NAVY, LONG BEACH NAVAL SHIPYARD
300 SHIPYARD ROAD CODE 1171
LONG BEACH, CA 90822

Site 3 of 4 in cluster I

ENVIROSTOR | **S110494410** | **N/A**

Relative:
Higher

Actual:
31 ft.

ENVIROSTOR:

Facility ID:	71003605
Status:	Refer: Other Agency
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Chatsworth
Assembly:	70
Senate:	33
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.76696
Longitude:	-118.1892
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA6170023109
Alias Type:	EPA Identification Number
Alias Name:	71003605
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

I50 **DEFENSE FUEL SUPPORT POINT SAN PEDRO** **ENVIROSTOR** **S110493773**
WNW **NAVY MOLE, PIER 12** **N/A**
1/4-1/2 **LONG BEACH, CA 90822**
0.370 mi.
1955 ft. **Site 4 of 4 in cluster I**

Relative:
Higher

Actual:
31 ft.

ENVIROSTOR:

Facility ID:	71003581
Status:	Refer: Other Agency
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Chatsworth
Assembly:	70
Senate:	33
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.76696
Longitude:	-118.1892
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA0000737858
Alias Type:	EPA Identification Number
Alias Name:	71003581
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1 Non-Submittal
Completed Date:	10/03/2001
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

J51 **SOUTHERN CA EDISON CO** **LUST** **S104233770**
NW **134 ELM ST** **N/A**
1/4-1/2 **LONG BEACH, CA 90813**
0.374 mi.
1974 ft. **Site 2 of 4 in cluster J**

Relative: **Higher**

Actual: **35 ft.**

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	091588-06	
Status:	Remedial action (cleanup) Underway	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603700109	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19060	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	9/14/1988	
Date Leak First Reported:		9/14/1988
Date Leak Record Entered:	9/10/1988	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		12/13/1988
Date the Case was Closed:		Not reported
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	Structure Failure	
Leak Source:	Tank	
Operator:	JOHNSON, CHRIS	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		16096.598107473809281793497659
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		9/15/1988
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		12/13/1988
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	SOUTHERN CALIFORNIA EDISON	
RP Address:	Not reported	
Program:	LUST	
Lat/Long:	33.7686868 / -1	
Local Agency Staff:	Not reported	

SOUTHERN CA EDISON CO (Continued) **S104233770**

Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	CROSBY AND OVERTON IS THE CONSULTANT LEAK OF 1800 GAL WAS DUE TO DRILLING MISHAP

J52 **SOUTHERN CA EDISON CO** **LUST** **S103065319**
NW **134 ELM** **HIST CORTESE** **N/A**
1/4-1/2 **LONG BEACH, CA 90805**
0.374 mi.
1974 ft. **Site 3 of 4 in cluster J**

Relative:
Higher

Actual:
35 ft.

LUST:

Region:	STATE
Global Id:	T0603700109
Latitude:	33.768784
Longitude:	-118.1876465
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/03/2009
Lead Agency:	LONG BEACH, CITY OF
Case Worker:	CP
Local Agency:	LONG BEACH, CITY OF
RB Case Number:	091588-06
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700109
Contact Type:	Local Agency Caseworker
Contact Name:	CARMEN PIRO
Organization Name:	LONG BEACH, CITY OF
Address:	2525 GRAND AVE.
City:	LONG BEACH
Email:	carmen.piro@longbeach.gov
Phone Number:	5625704137

Global Id:	T0603700109
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0603700109
Status:	Completed - Case Closed
Status Date:	04/03/2009

SOUTHERN CA EDISON CO (Continued) **S103065319**

Global Id: T0603700109
Status: Open - Case Begin Date
Status Date: 09/14/1988

Global Id: T0603700109
Status: Open - Remediation
Status Date: 12/13/1988

Global Id: T0603700109
Status: Open - Site Assessment
Status Date: 09/15/1988

Regulatory Activities:
Global Id: T0603700109
Action Type: Other
Date: 09/14/1988
Action: Leak Discovery

Global Id: T0603700109
Action Type: Other
Date: 09/14/1988
Action: Leak Reported

Global Id: T0603700109
Action Type: ENFORCEMENT
Date: 07/31/2006
Action: InterAgency Agreement

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 091588-06

J53 **SOUTHERN CA EDISON CO** **LUST** **S102437779**
NW **125 ELM AVE** **SWEEPS UST** **N/A**
1/4-1/2 **LONG BEACH, CA 90802** **HIST CORTESE**
0.388 mi.
2048 ft. **Site 4 of 4 in cluster J**

Relative:
Higher

Actual:
34 ft.

LUST:
Region: STATE
Global Id: T0603701695
Latitude: 33.7686601
Longitude: -118.1876847
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 05/20/1998
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: DK
Local Agency: LONG BEACH, CITY OF
RB Case Number: 908020107
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline

SOUTHERN CA EDISON CO (Continued) **S102437779**

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603701695
Contact Type:	Local Agency Caseworker
Contact Name:	CARMEN PIRO
Organization Name:	LONG BEACH, CITY OF
Address:	2525 GRAND AVE.
City:	LONG BEACH
Email:	carmen.piro@longbeach.gov
Phone Number:	5625704137

Global Id:	T0603701695
Contact Type:	Regional Board Caseworker
Contact Name:	DAVID KOO
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	david.koo@waterboards.ca.gov
Phone Number:	2136206155

Status History:

Global Id:	T0603701695
Status:	Completed - Case Closed
Status Date:	05/20/1998

Global Id:	T0603701695
Status:	Open - Case Begin Date
Status Date:	09/14/1988

Global Id:	T0603701695
Status:	Open - Site Assessment
Status Date:	10/22/1997

Regulatory Activities:

Global Id:	T0603701695
Action Type:	Other
Date:	09/14/1988
Action:	Leak Discovery

Global Id:	T0603701695
Action Type:	Other
Date:	12/15/1988
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	908020107
Status:	Case Closed
Substance:	Gasoline
Substance Quantity:	Not reported

SOUTHERN CA EDISON CO (Continued) **S102437779**

Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Excavate and Dispose
Global ID:	T0603701695	
W Global ID:	Not reported	
Staff:	DK	
Local Agency:	19060	
Cross Street:	ALAMO COURT	
Enforcement Type:	Not reported	
Date Leak Discovered:	9/14/1988	
Date Leak First Reported:		12/15/1988
Date Leak Record Entered:	12/22/1988	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		3/3/1999
Date the Case was Closed:		5/20/1998
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	Other Cause	
Leak Source:	Tank	
Operator:	SOUTHERN DIVISION OFFICE	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		16169.157547036746456596997665
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		10/22/1997
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		1/1/1965
Hist Max MTBE Conc in Groundwater:		100
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Yes
GW Qualifier:	<	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	SOUTHERN CALIFORNIA EDISON CO.	
RP Address:	2244 WALNUT GROVE AVE., RM #405, ROSEMEAD CA 91770	
Program:	LUST	
Lat/Long:	33.7686228 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	LOP/LOW - MINOR OR NO POTENTIAL WATER RESOURCE IMPACT	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	END OF UST DAMAGED BY A HOLLOW STEM AUGER WHILE INSTALLING GW MONITORING WELLS.; 03/03/99 WELL ABANDONMENT REPORT	

SWEEPS UST:

Status:	Active
Comp Number:	431
Number:	1

SOUTHERN CA EDISON CO (Continued) **S102437779**

Board Of Equalization: Not reported
Referral Date: 09-03-93
Action Date: 04-19-94
Created Date: 04-19-94
Owner Tank Id: 586
SWRCB Tank Id: 19-060-000431-000001
Tank Status: A
Capacity: 10000
Active Date: 09-03-93
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 2

Status: Active
Comp Number: 431
Number: 1
Board Of Equalization: Not reported
Referral Date: 09-03-93
Action Date: 04-19-94
Created Date: 04-19-94
Owner Tank Id: 588
SWRCB Tank Id: 19-060-000431-000002
Tank Status: A
Capacity: 550
Active Date: 09-03-93
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 908020107

54
West
1/4-1/2
0.489 mi.
2580 ft.

Relative:
Higher

Actual:
12 ft.

HYATT REGENCY LONG BEACH
200 S PINE AVE
LONG BEACH, CA 90802

RCRA-SQG **1000421536**
LUST **CAD981584212**
UST
SWEEPS UST
HIST UST
CA FID UST
FINDS
ECHO
EMI
HAZNET

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: HYATT REGENCY LONG BEACH
Facility address: 200 S PINE AVE
LONG BEACH, CA 90802
EPA ID: CAD981584212
Contact: Not reported
Contact address: Not reported
Not reported

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: DBA HYATT REGENCY CORP
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/21/1987
Site name: HYATT REGENCY LONG BEACH
Classification: Large Quantity Generator

Violation Status: No violations found

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Evaluation Action Summary:
- Evaluation date: 01/24/1994
- Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
- Area of violation: Not reported
- Date achieved compliance: Not reported
- Evaluation lead agency: State Contractor/Grantee

LUST:
- Region: STATE
- Global Id: T0603701691
- Latitude: 33.763533
- Longitude: -118.191465
- Case Type: LUST Cleanup Site
- Status: Completed - Case Closed
- Status Date: 08/22/1990
- Lead Agency: LOS ANGELES RWQCB (REGION 4)
- Case Worker: YR
- Local Agency: LONG BEACH, CITY OF
- RB Case Number: 908020061
- LOC Case Number: Not reported
- File Location: Not reported
- Potential Media Affect: Aquifer used for drinking water supply
- Potential Contaminants of Concern: Aviation
- Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
- Global Id: T0603701691
- Contact Type: Local Agency Caseworker
- Contact Name: CARMEN PIRO
- Organization Name: LONG BEACH, CITY OF
- Address: 2525 GRAND AVE.
- City: LONG BEACH
- Email: carmen.piro@longbeach.gov
- Phone Number: 5625704137

- Global Id: T0603701691
- Contact Type: Regional Board Caseworker
- Contact Name: YUE RONG
- Organization Name: LOS ANGELES RWQCB (REGION 4)
- Address: 320 W. 4TH ST., SUITE 200
- City: Los Angeles
- Email: yrong@waterboards.ca.gov
- Phone Number: Not reported

Status History:
- Global Id: T0603701691
- Status: Completed - Case Closed
- Status Date: 08/22/1990

- Global Id: T0603701691
- Status: Open - Case Begin Date
- Status Date: 03/19/1985

- Global Id: T0603701691
- Status: Open - Site Assessment

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Status Date: 03/31/1988

Regulatory Activities:
Global Id: T0603701691
Action Type: Other
Date: 03/19/1985
Action: Leak Reported

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 908020061
Status: Case Closed
Substance: 1
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: Not reported
Global ID: T0603701691
W Global ID: Not reported
Staff: UNK
Local Agency: 19060
Cross Street: BROADWAY
Enforcement Type: Not reported
Date Leak Discovered: Not reported
Date Leak First Reported: 3/19/1985
Date Leak Record Entered: 12/31/1986
Date Confirmation Began: Not reported
Date Leak Stopped: Not reported
Date Case Last Changed on Database: 1/10/1989
Date the Case was Closed: 8/22/1990
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: UNK
Leak Source: UNK
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 18204.847247693554864870709839
Source of Cleanup Funding: UNK
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: Not reported
Pollution Characterization Began: 3/31/1988
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Owner Contact: Not reported
Responsible Party: BLANK RP
RP Address: Not reported
Program: LUST
Lat/Long: 33.7645339 / -1
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: *LEAK DETECTION PLAN IS INADEQUATE JDC'S CASE

LONG BEACH UST:

DATA AS OF 02/25/2014:
Region: LONG BEACH
Tanks: 1T
Tank Test: Dual Walled
Leak Test: Not reported
Tank Status: Not reported

SWEEPS UST:
Status: Active
Comp Number: 55478
Number: 9
Board Of Equalization: 44-013612
Referral Date: 07-24-92
Action Date: 04-21-94
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 19-060-055478-000001
Tank Status: A
Capacity: 1000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 4

Status: Active
Comp Number: 55478
Number: 9
Board Of Equalization: 44-013612
Referral Date: 07-24-92
Action Date: 04-21-94
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 19-060-055478-000002
Tank Status: A
Capacity: 1000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Status: Active
Comp Number: 55478
Number: 9
Board Of Equalization: 44-013612
Referral Date: 07-24-92
Action Date: 04-21-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-060-055478-000003
Tank Status: A
Capacity: 1000
Active Date: 07-24-92
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 55478
Number: 9
Board Of Equalization: 44-013612
Referral Date: 07-24-92
Action Date: 04-21-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-060-055478-000004
Tank Status: A
Capacity: 1000
Active Date: 07-24-92
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

HIST UST:
File Number: 00026F0A
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00026F0A.pdf
Region: STATE
Facility ID: 00000004908
Facility Type: Other
Other Type: HOTEL
Contact Name: JAMES A. BURR
Telephone: 2134911234
Owner Name: HYATT LONG BEACH CORPERATION
Owner Address: 200 S. PINE AVE.
Owner City,St,Zip: LONG BEACH, CA 90802
Total Tanks: 0001

Tank Num: 001
Container Num: 001
Year Installed: 1982
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Tank Num:	001
Container Num:	001
Year Installed:	1982
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	19007630
Regulated By:	UTNKA
Regulated ID:	00055478
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2134911234
Mail To:	Not reported
Mailing Address:	200 S PINE AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	LONG BEACH 90802
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

FINDS:

Registry ID: 110002423253

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

HYATT REGENCY LONG BEACH (Continued) **1000421536**

ECHO:

Envid:	1000421536
Registry ID:	110002423253
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002423253

EMI:

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1993
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1995
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Year:	1996
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1997
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1998
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1999
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2000
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2001
County Code:	19
Air Basin:	SC
Facility ID:	43798
Air District Name:	SC
SIC Code:	7011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HAZNET:

envid:	1000421536
Year:	2012
GEPAID:	CAD981584212
Contact:	CHUCK MCINNISH, DIR OF ENGR'G
Telephone:	5624911234
Mailing Name:	Not reported
Mailing Address:	200 S PINE AVE
Mailing City,St,Zip:	LONG BEACH, CA 908024553
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Waste Category:	Not reported
Disposal Method:	Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)
Tons:	1.2093
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1000421536
Year:	2011
GEPAID:	CAD981584212
Contact:	RON MCGILL, DIR OF ENGINEERING
Telephone:	5624911234
Mailing Name:	Not reported
Mailing Address:	200 S PINE AVE
Mailing City,St,Zip:	LONG BEACH, CA 908024553
Gen County:	Not reported
TSD EPA ID:	CAT000613893
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.125
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1000421536
Year:	2010
GEPAID:	CAD981584212
Contact:	CHUCK MCINNISH, DIR OF ENGR'G
Telephone:	5624911234
Mailing Name:	Not reported
Mailing Address:	200 S PINE AVE
Mailing City,St,Zip:	LONG BEACH, CA 908024553
Gen County:	Not reported
TSD EPA ID:	CAT000613893
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0882
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1000421536
Year:	2009
GEPAID:	CAD981584212
Contact:	CHUCK MCINNISH, DIR OF ENGR'G
Telephone:	5624911234
Mailing Name:	Not reported
Mailing Address:	200 S PINE AVE
Mailing City,St,Zip:	LONG BEACH, CA 908024553
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported

HYATT REGENCY LONG BEACH (Continued) **1000421536**

Waste Category:	Unspecified oil-containing waste
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.834
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1000421536
Year:	2009
GEPAID:	CAD981584212
Contact:	CHUCK MCINNISH, DIR OF ENGR'G
Telephone:	5624911234
Mailing Name:	Not reported
Mailing Address:	200 S PINE AVE
Mailing City,St,Zip:	LONG BEACH, CA 908024553
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.1725
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

Click this hyperlink while viewing on your computer to access
41 additional CA_HAZNET: record(s) in the EDR Site Report.

55
ENE
1/4-1/2
0.493 mi.
2601 ft.

PORT OF LONG BEACH
1400 BROADWAY BLVD W
LONG BEACH, CA 90802

LUST **1000592211**
N/A

Relative:
Higher

Actual:
47 ft.

LUST:

Region:	STATE
Global Id:	T0603701690
Latitude:	33.768237
Longitude:	-118.2115694
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/06/1999
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	DK
Local Agency:	LONG BEACH, CITY OF
RB Case Number:	908020043
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603701690

PORT OF LONG BEACH (Continued) **1000592211**

Contact Type:	Local Agency Caseworker
Contact Name:	CARMEN PIRO
Organization Name:	LONG BEACH, CITY OF
Address:	2525 GRAND AVE.
City:	LONG BEACH
Email:	carmen.piro@longbeach.gov
Phone Number:	5625704137

Global Id:	T0603701690
Contact Type:	Regional Board Caseworker
Contact Name:	DAVID KOO
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	david.koo@waterboards.ca.gov
Phone Number:	2136206155

Status History:

Global Id:	T0603701690
Status:	Completed - Case Closed
Status Date:	05/06/1999

Global Id:	T0603701690
Status:	Open - Case Begin Date
Status Date:	02/28/1986

Global Id:	T0603701690
Status:	Open - Remediation
Status Date:	04/25/1988

Global Id:	T0603701690
Status:	Open - Verification Monitoring
Status Date:	08/27/1997

Regulatory Activities:

Global Id:	T0603701690
Action Type:	Other
Date:	02/28/1986
Action:	Leak Discovery

Global Id:	T0603701690
Action Type:	Other
Date:	02/28/1986
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	908020043
Status:	Case Closed
Substance:	Gasoline
Substance Quantity:	Not reported
Local Case No:	Not reported
Case Type:	Groundwater

PORT OF LONG BEACH (Continued) **1000592211**

Abatement Method Used at the Site:		FPET
Global ID:	T0603701690	
W Global ID:	Not reported	
Staff:	DK	
Local Agency:	19060	
Cross Street:	PICO	
Enforcement Type:	Not reported	
Date Leak Discovered:	2/28/1986	
Date Leak First Reported:		2/28/1986
Date Leak Record Entered:	12/31/1986	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		1/3/2000
Date the Case was Closed:		5/6/1999
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	HOLLE, BILL	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		20312.429447148110138665543979
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		4/25/1988
Post Remedial Action Monitoring Began:		8/27/1997
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Yes
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	LONG BEACH HARBOR DEPT.	
RP Address:	925 HARBOR PLAZA, 4TH FL., LONG BEACH, CA 90802	
Program:	LUST	
Lat/Long:	33.768237 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	LOP/MODERATE - POTENTIAL WATER IMPACT	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	TANKS AND CONTAMINATED SOIL REMOVED. PRODUCT RECOVERY UNDER WAY. SAR UNDER REVIEW.; 2/11/99 - 4TH QTR 1998 GW MON & SAMPL RPT; 12/1/99 WELL ABANDONMENT RPT	

56
NNW
1/2-1
0.725 mi.
3826 ft.

532 E. 7TH
LONG BEACH, CA 90813

Database(s): **Notify 65**
EDR ID Number: **S100178496**
EPA ID Number: **N/A**

Relative:
Higher

Actual:
39 ft.

NOTIFY 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported

57
NNW
1/2-1
0.908 mi.
4795 ft.

LONG BEACH UNI SCH DIST/REID H
235 E 8TH ST
LONG BEACH, CA 90813

Database(s): **ENVIROSTOR**, **SCH**, **EMI**, **NPDES**
EDR ID Number: **S106834677**
EPA ID Number: **N/A**

Relative:
Higher

Actual:
39 ft.

ENVIROSTOR:

Facility ID:	60002434
Status:	Active
Status Date:	10/18/2016
Site Code:	404938
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	3.44
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Ivy Osornio
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	, 70
Senate:	, 33
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	33.77682
Longitude:	-118.1904
APN:	7273-016-091
Past Use:	SCHOOL - HIGH SCHOOL
Potential COC:	Under Investigation
Confirmed COC:	NONE SPECIFIED
Potential Description:	UE
Alias Name:	7273-016-091
Alias Type:	APN
Alias Name:	404938
Alias Type:	Project Code (Site Code)
Alias Name:	60002434
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	10/20/2016

LONG BEACH UNI SCH DIST/REID H (Continued) **S106834677**

Comments:	This Site is included in the List of Sites, Exhibit A, of the Master VCA for Long Beach USD.
Completed Area Name:	Areas, A, B, and C
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	12/22/2016
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Areas, A, B, and C
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Preliminary Endangerment Assessment Report
Schedule Due Date:	02/02/2017
Schedule Revised Date:	Not reported
Schedule Area Name:	Areas, A, B, and C
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Supplemental Site Investigation Report
Schedule Due Date:	05/08/2017
Schedule Revised Date:	Not reported

SCH:

Facility ID:	60002434
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	3.44
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Ivy Osornio
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404938
Assembly:	, 70
Senate:	, 33
Special Program Status:	Not reported
Status:	Active
Status Date:	10/18/2016
Restricted Use:	NO
Funding:	School District
Latitude:	33.77682
Longitude:	-118.1904
APN:	7273-016-091
Past Use:	SCHOOL - HIGH SCHOOL
Potential COC:	Under Investigation
Confirmed COC:	NONE SPECIFIED
Potential Description:	UE
Alias Name:	7273-016-091
Alias Type:	APN
Alias Name:	404938
Alias Type:	Project Code (Site Code)

LONG BEACH UNI SCH DIST/REID H (Continued) **S106834677**

Alias Name: 60002434
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 10/20/2016
Comments: This Site is included in the List of Sites, Exhibit A, of the Master VCA for Long Beach USD.

Completed Area Name: Areas, A, B, and C
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 12/22/2016
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Areas, A, B, and C
Schedule Sub Area Name: Not reported
Schedule Document Type: Preliminary Endangerment Assessment Report
Schedule Due Date: 02/02/2017
Schedule Revised Date: Not reported
Schedule Area Name: Areas, A, B, and C
Schedule Sub Area Name: Not reported
Schedule Document Type: Supplemental Site Investigation Report
Schedule Due Date: 05/08/2017
Schedule Revised Date: Not reported

EMI:
Year: 1990
County Code: 19
Air Basin: SC
Facility ID: 71080
Air District Name: SC
SIC Code: 8211
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

NPDES:
Npdes Number: Not reported
Facility Status: Not reported
Agency Id: Not reported
Region: 4
Regulatory Measure Id: 471785
Order No: Not reported

LONG BEACH UNI SCH DIST/REID H (Continued) **S106834677**

Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	4 19C376806
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	6/29/2016
PROCESSED DATE:	7/12/2016
STATUS CODE NAME:	Active
STATUS DATE:	7/12/2016
PLACE SIZE:	3.44
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Les Leahy
FACILITY CONTACT TITLE:	Business Services Administrator
FACILITY CONTACT PHONE:	562-997-7550
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	lleahy@lbschools.net
OPERATOR NAME:	Long Beach Unified School District
OPERATOR ADDRESS:	2425 Webster Avenue
OPERATOR CITY:	Long Beach
OPERATOR STATE:	California
OPERATOR ZIP:	90810
OPERATOR CONTACT NAME:	Les Leahy
OPERATOR CONTACT TITLE:	Business Services Administrator
OPERATOR CONTACT PHONE:	562-997-7550
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	lleahy@lbschools.net
OPERATOR TYPE:	Special District
DEVELOPER NAME:	Long Beach Unified School District
DEVELOPER ADDRESS:	2425 Webster Avenue
DEVELOPER CITY:	Long Beach
DEVELOPER STATE:	California
DEVELOPER ZIP:	90810
DEVELOPER CONTACT NAME:	Les Leahy
DEVELOPER CONTACT TITLE:	Business Services Administrator
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	N
CONSTYPE BELOW GROUND IND:	N
CONSTYPE CABLE LINE IND:	N
CONSTYPE COMM LINE IND:	N
CONSTYPE COMMERTIAL IND:	N
CONSTYPE ELECTRICAL LINE IND:	N
CONSTYPE GAS LINE IND:	N
CONSTYPE INDUSTRIAL IND:	N
CONSTYPE OTHER DESRIPTION:	Public High School
CONSTYPE OTHER IND:	Y
CONSTYPE RECONS IND:	N
CONSTYPE RESIDENTIAL IND:	N

LONG BEACH UNI SCH DIST/REID H (Continued) **S106834677**

CONSTYPE TRANSPORT IND:	N
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	N
CONSTYPE WATER SEWER IND:	N
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	City of Long Beach
CERTIFIER NAME:	Les Leahy
CERTIFIER TITLE:	Business Services Administrator
CERTIFICATION DATE:	29-JUN-16
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	471785
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19C376806
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/12/2016
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Long Beach Unified School District
Discharge Address:	2425 Webster Avenue
Discharge City:	Long Beach
Discharge State:	California
Discharge Zip:	90810
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported

LONG BEACH UNI SCH DIST/REID H (Continued) **S106834677**

DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

58
NE
1/2-1
0.949 mi.
5012 ft.

THE PROCTER AND GAMBLE MGR CO
1601 WEST 7TH ST
LONG BEACH, CA 90813

ENVIROSTOR **S101480609**
HIST UST **N/A**

Relative:
Higher

Actual:
43 ft.

ENVIROSTOR:

Facility ID:	19280309
Status:	Refer: RWQCB
Status Date:	06/01/1995
Site Code:	Not reported
Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Cypress
Assembly:	70
Senate:	33
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported

THE PROCTER AND GAMBLE MGR CO (Continued) **S101480609**

Latitude: 33.77305
Longitude: -118.2155
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: * DETERGENT & SOAP * OTHER SPENT CATALYST * PAPER SLUDGE/PULP
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD008353427
Alias Type: EPA Identification Number
Alias Name: 19280309
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 05/05/1995
Comments: 5-20-94 TSD CAD 008353427 listed on Water Board. UGT program case #021089-9, Groundwater contaminated with TCE Inactive - RP installing monitoring wells. NFA for DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 12/28/1981
Comments: FACILITY IDENTIFIED L.A. CHAM. OF COM. BUS. DIR. 1958

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HIST UST:
File Number: 00028BD4
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00028BD4.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported

THE PROCTER AND GAMBLE MGR CO (Continued) **S101480609**

Container Construction Thickness: Not reported
Leak Detection: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

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59 West 1/2-1 0.956 mi. 5046 ft. **LONG BEACH NAVAL SHIPYARD** **CA BOND EXP. PLAN** **S100833525 N/A**

LONG BEACH, CA 90822

Relative: Lower

Actual: 0 ft.

CA BOND EXP. PLAN:
Reponsible Party: BACKLOG SITE CLEANUP PLANNING REPORT
Project Revenue Source Company: Not reported
Project Revenue Source Addr: Not reported
Project Revenue Source City,St,Zip: Not reported
Project Revenue Source Desc: This site is projected for cleanup funded by responsible parties with reimbursement to DHS for staff and related costs. However, if the responsible parties fail to provide funding for cleanup another source of funds will need to be established.
Site Description: The Naval Complex, Long Beach, located at the Long Beach Naval Shipyard, was established in 1942. This site is built on a man-made island constructed of fill. A total of 12 potentially contaminated areas were identified at the Naval Complex which contain various industrial wastes.
Hazardous Waste Desc: The history of waste disposal at the site indicates that contaminants consisted of waste oil, solvents, paint thinner and old batteries. Exact quantities are unknown.
Threat To Public Health & Env: A study concluded that none of the 12 areas found at the Naval Complex, Long Beach, pose a sufficient threat to human health or to the environment to warrant a confirmation study. Due to the physical location and features of the Naval Complex, the potential for offsite contaminant migration is low. However, precautionary measures (documentation and mitigation actions), are recommended to ensure proper safety measures are taken before any disturbance of these sites occurs.
Site Activity Status: The installation restoration program (IRP) has been initiated at this base.

Count: 5 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LONG BEACH	S105628511	ANAHEIM STREET SCHOOL	ANAHEIM STREET/PACIFIC AVENUE	90813	ENVIROSTOR, SCH
LONG BEACH	1023221903	LONG BEACH NSY - LONG BEACH NSY	OCEAN BLVD.	90802	FINDS
LONG BEACH	U003700058	CHEVRON #9-5649 (FORMER)	300 OCEAN BLVD W	90802	LUST
LONG BEACH	1023277227	LONG BEACH NAVAL COMPLEX - LONG BE	OFF OCEAN BLVD. AND NAVY WAY	90802	FINDS
LONG BEACH	S105911395	DOD - LONG BEACH NAVAL SHIPYARD	SEASIDE	90802	SLIC

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 06/08/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/08/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/08/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 57
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 57
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/20/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 01/17/2017
Date Made Active in Reports: 05/31/2017
Number of Days to Update: 134
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 105

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/26/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/06/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 79
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 64
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 42
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 09/23/2016
Date Made Active in Reports: 10/24/2016
Number of Days to Update: 31
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/23/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 118

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2017
Date Data Arrived at EDR: 02/17/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 97

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2017
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 04/26/2017
Number of Days to Update: 13
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/13/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 107
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 87
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 31

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 21

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 37

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 94

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/23/2017
Date Data Arrived at EDR: 02/24/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 77

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/17/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/26/2017
Number of Days to Update: 65

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/24/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 73

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/06/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 40

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 57

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 36

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 77

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/18/2017
Date Data Arrived at EDR: 01/20/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 41

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 66
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
Date Data Arrived at EDR: 04/18/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 14
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
Date Data Arrived at EDR: 01/18/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 112
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
Date Data Arrived at EDR: 01/13/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 110

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/03/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 76

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 54

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 96

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/09/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 1

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 98

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/08/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 105

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/09/2016
Date Data Arrived at EDR: 12/13/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 10/05/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/28/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 62
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/21/2017
Date Data Arrived at EDR: 03/23/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 47
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 02/21/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 91
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 33
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 14
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 89
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/10/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 75

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 1

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2017
Date Data Arrived at EDR: 03/30/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 54

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 01/24/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 114

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 35

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List

Cupa facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 113

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/25/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 34

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 103

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2017
Date Data Arrived at EDR: 03/15/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 01/03/2017
Number of Days to Update: 96
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/12/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ALAMITOS BEACH CONCESSION STAND
EAST OCEAN BLVD AND EAST SHORELINE DR
LONG BEACH, CA 90802

TARGET PROPERTY COORDINATES

Latitude (North):	33.764107 - 33° 45' 50.79''
Longitude (West):	118.182715 - 118° 10' 57.77''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	390472.4
UTM Y (Meters):	3736435.8
Elevation:	4 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5652670 LONG BEACH, CA
Version Date:	2012
South Map:	5633769 LONG BEACH OE S, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

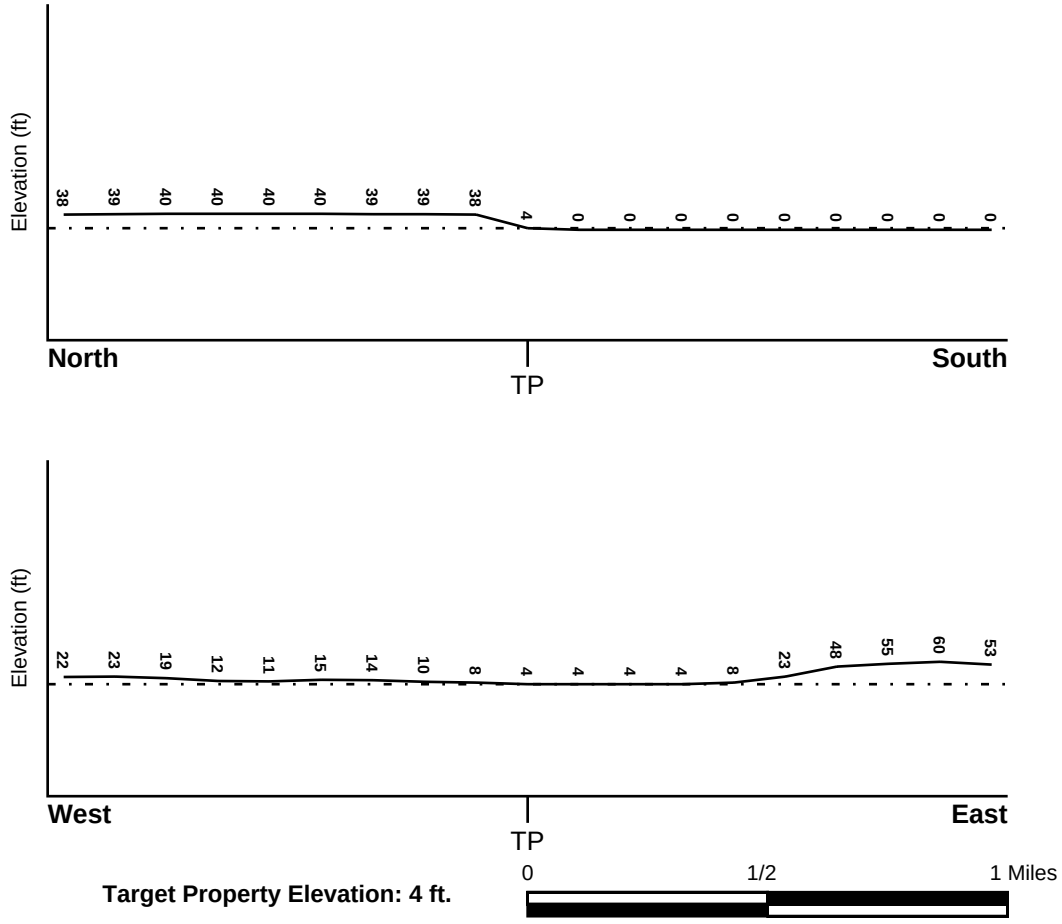
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 4 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06037C1970F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06037C1964F	FEMA FIRM Flood data
06037C2060F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NORTH LONG BEACH (OE)	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/2 - 1 Mile North	NW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Surficial Soil Types:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Shallow Soil Types:
fine sandy loam
gravelly - loam
sand
silty clay

Deeper Soil Types:
stratified
clay loam
silty clay loam
gravelly - sandy loam
coarse sand
sand
weathered bedrock
very fine sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

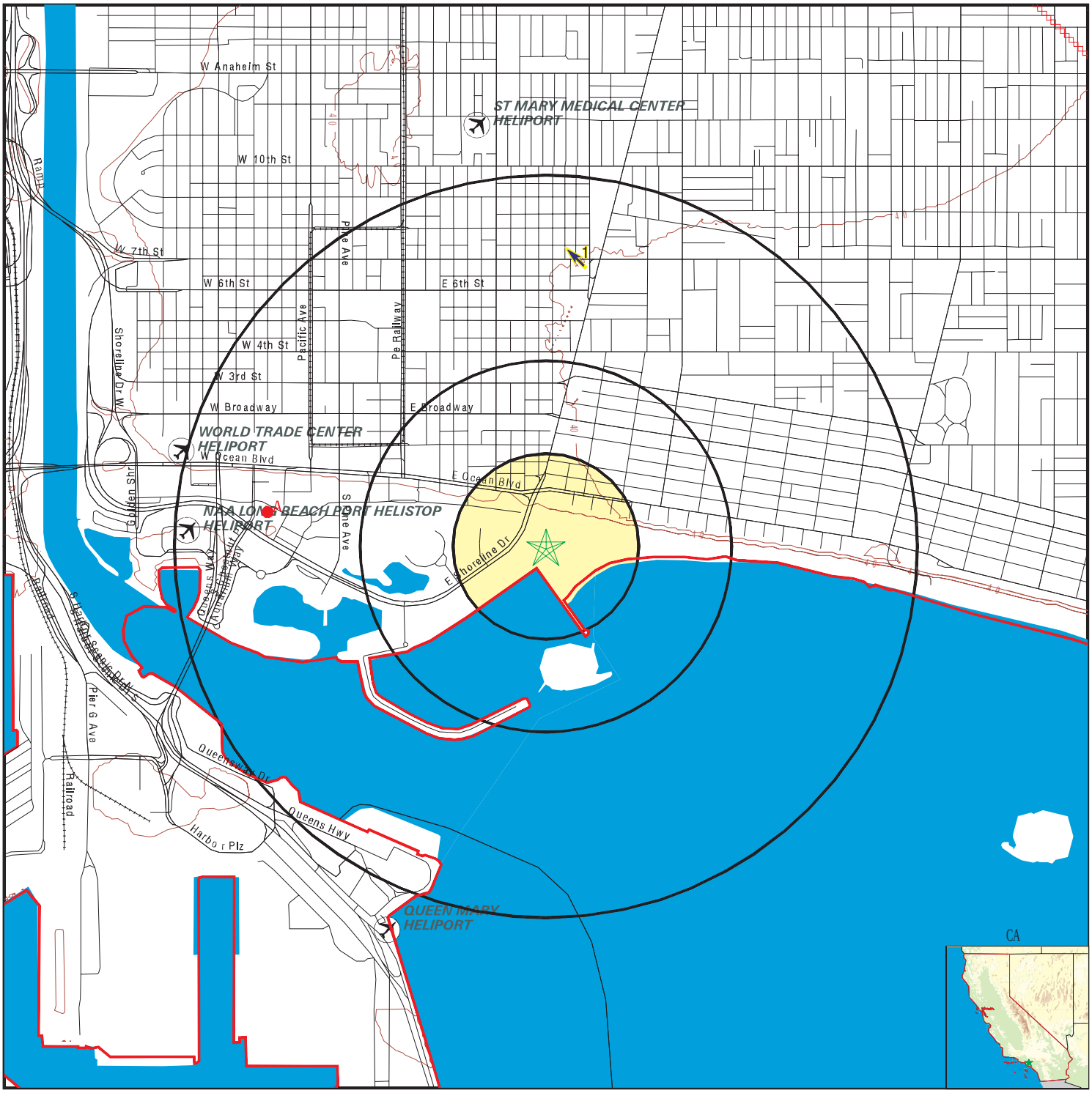
MAP ID	WELL ID	LOCATION FROM TP
A1	CAOG11000223374	1/2 - 1 Mile West
A2	CAOG11000223373	1/2 - 1 Mile West
A3	CAOG11000223371	1/2 - 1 Mile West
A4	CAOG11000223372	1/2 - 1 Mile West
A5	CAOG11000223128	1/2 - 1 Mile West
A6	CAOG11000223370	1/2 - 1 Mile West
A8	CAOG11000223369	1/2 - 1 Mile West
A7	CAOG11000223368	1/2 - 1 Mile West
A9	CAOG11000223367	1/2 - 1 Mile West
A10	CAOG11000223365	1/2 - 1 Mile West
A11	CAOG11000223366	1/2 - 1 Mile West
A12	CAOG11000223344	1/2 - 1 Mile West
A13	CAOG11000223345	1/2 - 1 Mile West
A14	CAOG11000223127	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A15	CAOG11000223126	1/2 - 1 Mile West
A16	CAOG11000200902	1/2 - 1 Mile West
A17	CAOG11000200647	1/2 - 1 Mile West
A18	CAOG11000203155	1/2 - 1 Mile West
A19	CAOG11000200899	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 4981366.2s



0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Alamitos Beach Concession Stand	CLIENT:	LSA Associates
ADDRESS:	East Ocean Blvd and East Shoreline Dr Long Beach CA 90802	CONTACT:	Carmen Lo
LAT/LONG:	33.764107 / 118.182715	INQUIRY #:	4981366.2s
		DATE:	June 29, 2017 7:11 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **North** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	908130334 NW 34 36 Not Reported 07/30/1999	**AQUIFLOW**	**70495**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

A1
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223374**

District nun:	1	Api number:	23701432
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-412
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223374		

A2
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223373**

District nun:	1	Api number:	23701431
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-410
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223373		

A3
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223371**

District nun:	1	Api number:	23701430
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block V	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-409
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223371		

A4
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223372**

District nun:	1	Api number:	23701430
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block V	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-409
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223372		

A5
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223128**

District nun:	1	Api number:	23700437
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block V	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		

Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-408
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223128		

A6
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223370**

District nun:	1	Api number:	23701429
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-407
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223370		

A8
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223369**

District nun:	1	Api number:	23701428
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block V	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-406
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223369		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

A7
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223368**

District nun:	1	Api number:	23701428
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block V	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-406
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223368		

A9
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223367**

District nun:	1	Api number:	23701427
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-405
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223367		

A10
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223365**

District nun:	1	Api number:	23701426
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-404
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223365		

A11
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223366**

District nun:	1	Api number:	23701426
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-404
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223366		

A12
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223344**

District nun:	1	Api number:	23701297
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		

Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-403
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223344		

A13
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223345**

District nun:	1	Api number:	23701297
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-403
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223345		

A14
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223127**

District nun:	1	Api number:	23700436
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block V	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-402
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223127		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

A15
West
1/2 - 1 Mile

OIL_GAS **CAOG11000223126**

District nun:	1	Api number:	23700435
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Tidelands Oil Prod. Co.		
County name:	Los Angeles Offshore	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	FR-401
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PWF
Site id:	CAOG11000223126		

A16
West
1/2 - 1 Mile

OIL_GAS **CAOG11000200902**

District nun:	1	Api number:	03700598
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	WI-9
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PWF
Site id:	CAOG11000200902		

A17
West
1/2 - 1 Mile

OIL_GAS **CAOG11000200647**

District nun:	1	Api number:	03700007
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	WI-3
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PWF
Site id:	CAOG11000200647		

A18
West
1/2 - 1 Mile

OIL_GAS **CAOG11000203155**

District nun:	1	Api number:	03703972
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	WI-2
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PWF
Site id:	CAOG11000203155		

A19
West
1/2 - 1 Mile

OIL_GAS **CAOG11000200899**

District nun:	1	Api number:	03700595
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Wilmington
Area name:	Fault Block VI	Section:	1
Township:	05S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	WI-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PWF
Site id:	CAOG11000200899		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
90802	37	0

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for LOS ANGELES COUNTY, CA

Number of sites tested: 63

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.711 pCi/L	98%	2%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.933 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX G

HYDROLOGY REPORT AND LOW IMPACT DEVELOPMENT PLAN

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DESIGN DEVELOPMENT

HYDROLOGY REPORT & LOW IMPACT DEVELOPMENT PLAN (LID PLAN)

ALAMITOS BEACH CONCESSION BUILDING

780 E. SHORELINE DRIVE
LONG BEACH, CALIFORNIA

Prepared For:

Long Beach Public Works

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JN: 153541

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Exhibit 2: Proposed Hydrology Exhibit
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SECTION 1 - INTRODUCTION

1.1 PURPOSE AND PROJECT DESCRIPTION

Michael Baker International has prepared a preliminary analysis for the Alamitos Concession Building project, located in the City of Long Beach. The project proposes to demolition of an existing concession/rental building and adjacent patio hardscape. Proposed development shall include commercial concession building, new public restroom, new playground, improvements to the adjacent parking lot, and a new bike path that runs northeast to west, just south of the proposed concession building. The project covers approximately 1.3 acres of disturbed area.

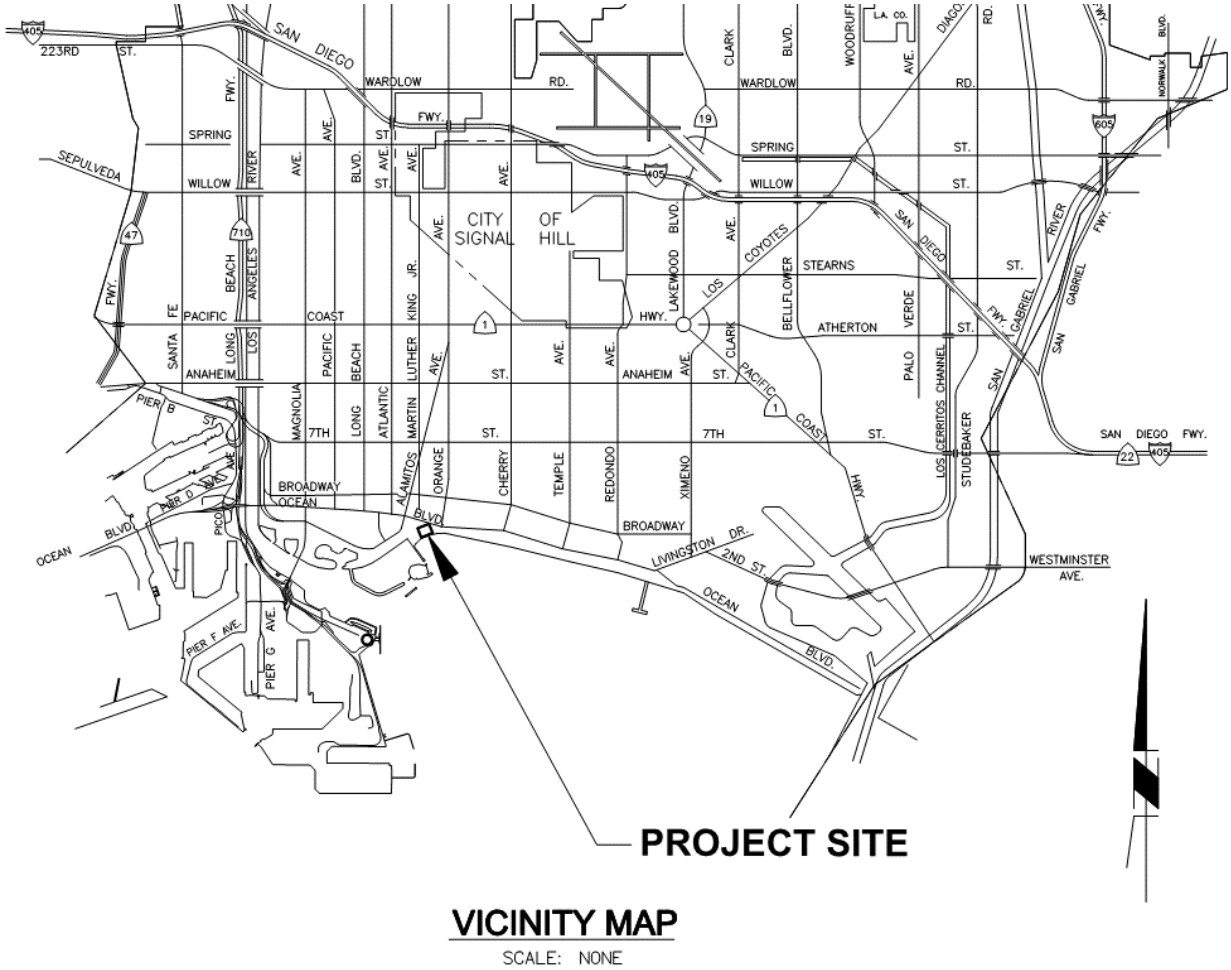
1.2 EXISTING CONDITION

The existing site consists of a concession/rental building surrounding by hardscape patio. Pervious areas consists of turf on the westerly side of the concession building, numerous tree wells on the norther and easterly sides, and beach sand to the south Existing impervious to pervious ratio of the proposed disturbed area is approximately 0.75 to 1. In general, the runoff flows in two main flow paths. One of the main flow paths starts at the south end of the existing concession building and flows north to an existing storm drain inlet at the north side of the parking lot. The other main flow path starts west of the existing concession building and flows southeast down the slope until it reaches the sand. These flow paths can be seen in the Existing Hydrology Exhibit in Exhibit 1.

1.3 PROPOSED CONDITION

Proposed development shall include commercial concession building, new public restroom, new playground, improvements to the adjacent parking lot, and a new bike path that runs northeast to west, just south of the proposed concession building. The proposed development shall increase the imperviousness of the site, changing the impervious to pervious ratio of the disturbed area to approximately 3.5 to 1. The proposed drainage plan was designed in such a way as to respect the flow paths of the existing hydrology as close as possible. In the proposed condition there are three main flow paths. One flow path starts west of the proposed building and restroom and flows southeast down the slope until it is captured in a vegetative swale that directions the runoff south to avoid the improvements and then continues southeast until it is captured in a drainage basin. The second flow path starts on the northwest side of the buildings and playground and sheet flows southeast across the existing pedestrian and bike paths before draining into the existing sand. The last main flow path starts on the north side of the concession building and flows north to the existing drain inlet on the north side of the parking lot. These flow paths can be seen in the Proposed Hydrology Exhibit in Exhibit 2.

Figure 1: Vicinity Map



SECTION 2 - HYDROLOGY

2.1 RATIONAL METHOD HYDROLOGY ANALYSIS

The existing and proposed hydrology was prepared based on the Los Angeles County Hydrocalc software. This software incorporates the many aspects of the runoff calculations previously specified in the Los Angeles County Hydrology Manual. This program utilizes all the isohyetal maps and soil maps provided in the Los Angeles County Hydrology Manual and combines them into a GIS application that can be found online. Using this GIS application one can enter the location of the project site and find the soil type, and 50 year Rainfall of the project site. See Appendix 1 for the LA County GIS Hydrology Map for soil and rainfall information used for this project. These values can then be entered into the Hydrocalc program along with the area, percent impervious, flow path length, and flow path slope of the desired area. This program was used on this project in order to calculate the 25 year, 50 year, and 100 year storm runoff values for both pre-project and post-project conditions. It is important to note that the site was split into multiple drainage areas in order to more accurately calculate the site runoff. All of these subareas can be seen in the Existing Hydrology Exhibit and the Proposed Hydrology Exhibit in Exhibits 1 & 2 respectively. The resulting peak runoff values for both the pre-project and post-project conditions can be summarized in tables 1 and 2 below and all calculations can be found in Appendices 1, 2 & 3.

Table 1 - Summary of Existing Subarea Runoff Values

	A1	A2	A3	A4	Total
25-yr Storm Peak Flow Rate (cfs)	2.64	1.99	0.23	0.18	5.04
50-yr Storm Peak Flow Rate (cfs)	3.28	2.34	0.28	0.21	6.11
100-yr Storm Peak Flow Rate (cfs)	3.71	2.7	0.32	0.24	6.97

Table 2 - Summary of Proposed Subarea Runoff Values

	A1	A2	A3	A4	A5	Total
25-yr Storm Peak Flow Rate (cfs)	2.19	1.48	1.24	0.29	0.22	5.42
50-yr Storm Peak Flow Rate (cfs)	2.71	1.7	1.47	0.33	0.25	6.46
100-yr Storm Peak Flow Rate (cfs)	3.34	1.92	1.72	0.37	0.28	7.63

SECTION 3 – WATER QUALITY

3.1 LOW IMPACT DEVELOPMENT PLAN

The development's water quality requirements is addressed in the Low Impact Development Plan and Water Quality Exhibit located in Appendix D and Exhibit 3 respectively.

APPENDIX A

LA County GIS Hydrology Map

Department of Public Works
dpw.lacounty.gov

search our site..

Hydrology Map

A GIS viewer application to view the data for the hydrology manual.

LAYERS

- [x] 50yr Two Tenths (Rainfall)
- [ ] DPA Zones
- [x] Soils 2004
- [ ] Final 85th Percentile, 24-hr Rainfall
- [x] Final 95th Percentile, 24-hr Rainfall
- [ ] 1-year, 1-hour Rainfall Intensity

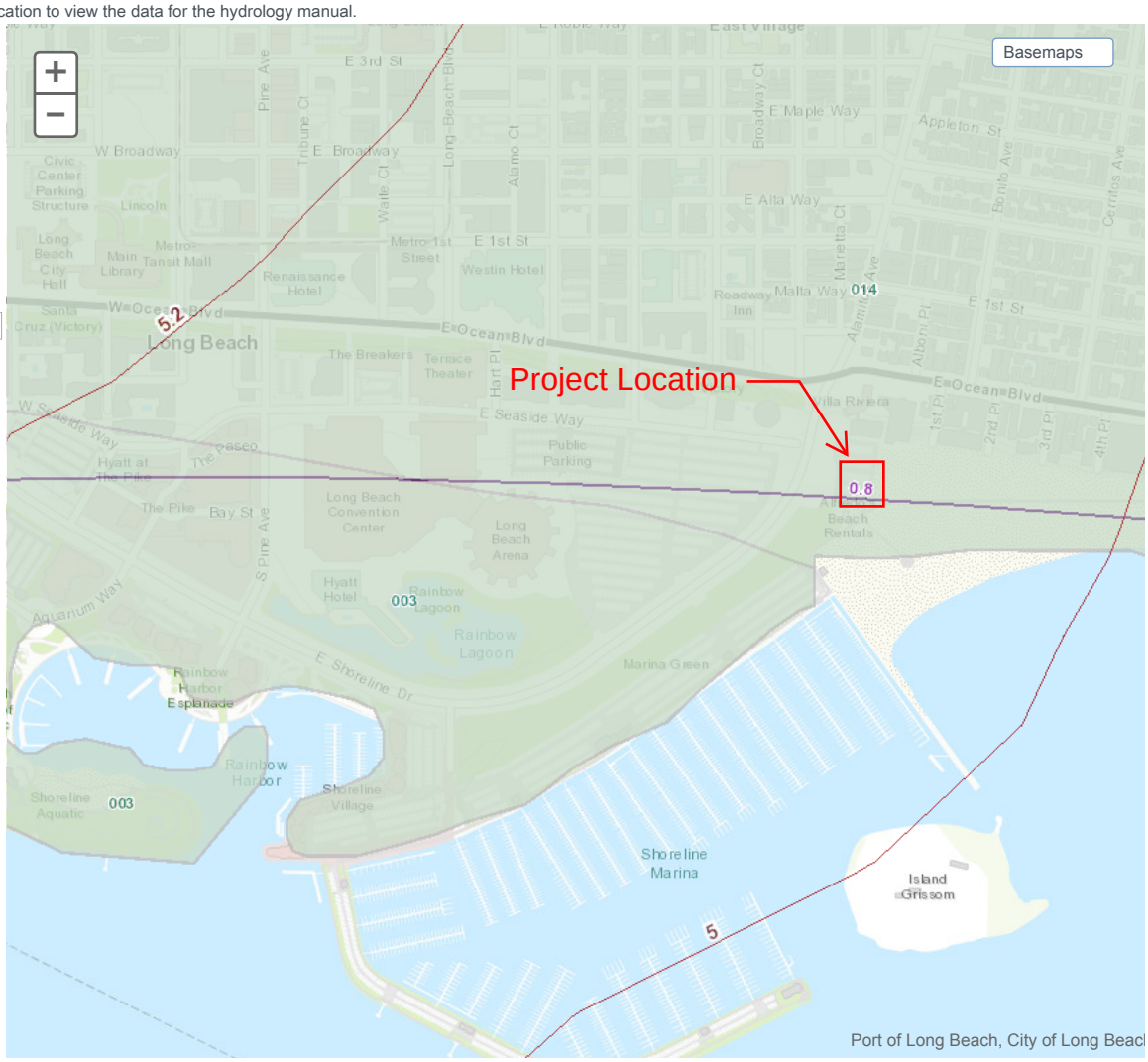
SEARCH

Enter Address, Cross Street, or Parcel No.:
(ex: 900 S. Fremont Ave., Fremont@Valley, 5342005904)

Search

Address Search Results:

226 grand ave long beach



Map Tips

APPENDIX B

Existing Condition Hydrology Calculations

Peak Flow Hydrologic Analysis

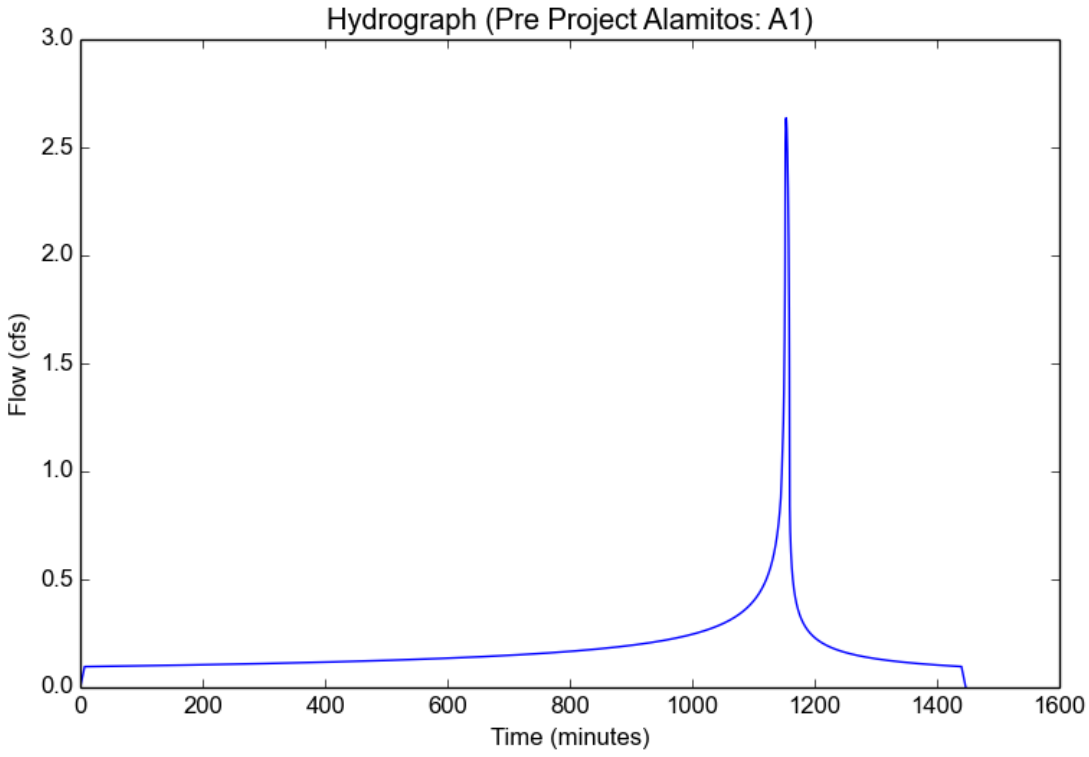
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A1
Area (ac)	1.37
Flow Path Length (ft)	415.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.76
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.2808
Undeveloped Runoff Coefficient (Cu)	0.6656
Developed Runoff Coefficient (Cd)	0.8438
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.6365
Burned Peak Flow Rate (cfs)	2.6365
24-Hr Clear Runoff Volume (ac-ft)	0.3634
24-Hr Clear Runoff Volume (cu-ft)	15827.7311



Peak Flow Hydrologic Analysis

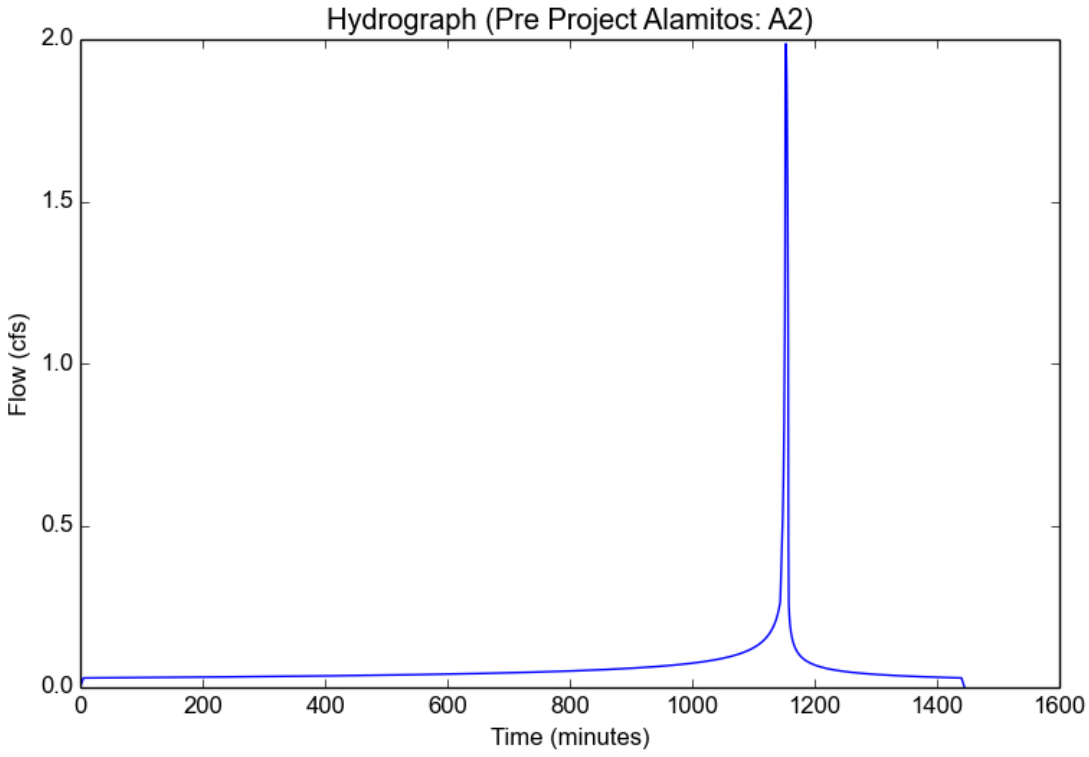
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A2
Area (ac)	0.98
Flow Path Length (ft)	245.0
Flow Path Slope (vft/hft)	0.049
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.25
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.6716
Undeveloped Runoff Coefficient (Cu)	0.7117
Developed Runoff Coefficient (Cd)	0.7588
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.9866
Burned Peak Flow Rate (cfs)	1.9866
24-Hr Clear Runoff Volume (ac-ft)	0.1188
24-Hr Clear Runoff Volume (cu-ft)	5173.3704



Peak Flow Hydrologic Analysis

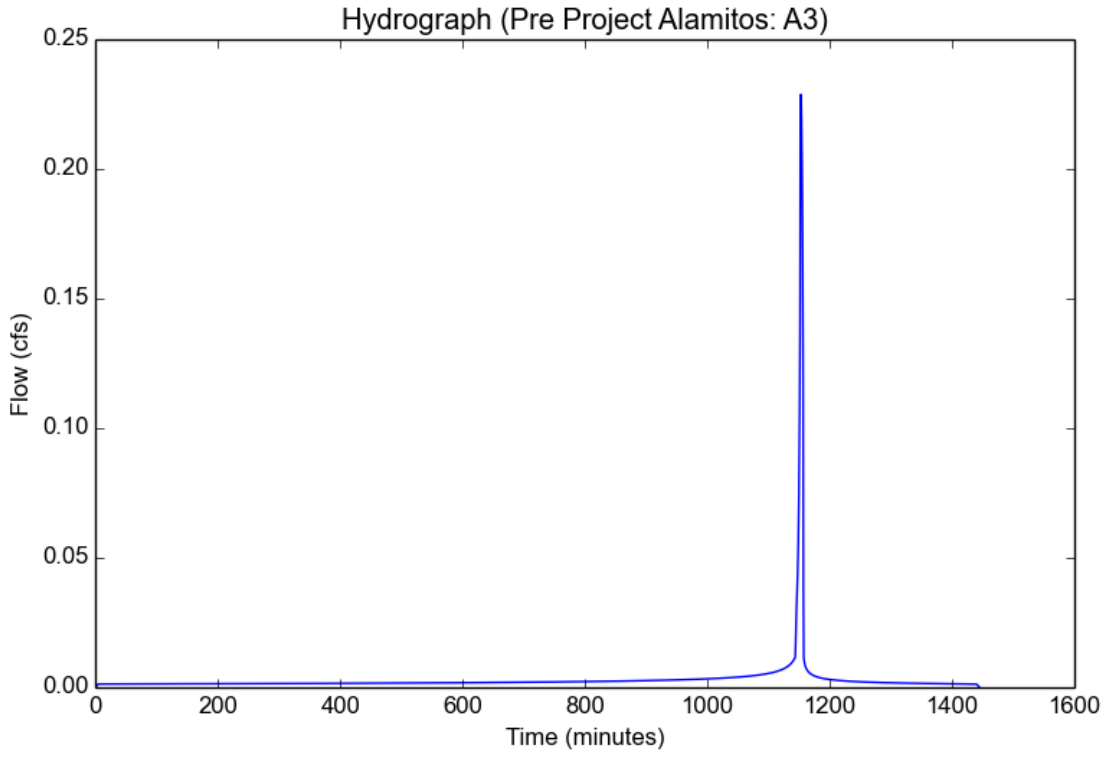
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A3
Area (ac)	0.12
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.01
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.6716
Undeveloped Runoff Coefficient (Cu)	0.7117
Developed Runoff Coefficient (Cd)	0.7136
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.2288
Burned Peak Flow Rate (cfs)	0.2288
24-Hr Clear Runoff Volume (ac-ft)	0.0064
24-Hr Clear Runoff Volume (cu-ft)	279.0754



Peak Flow Hydrologic Analysis

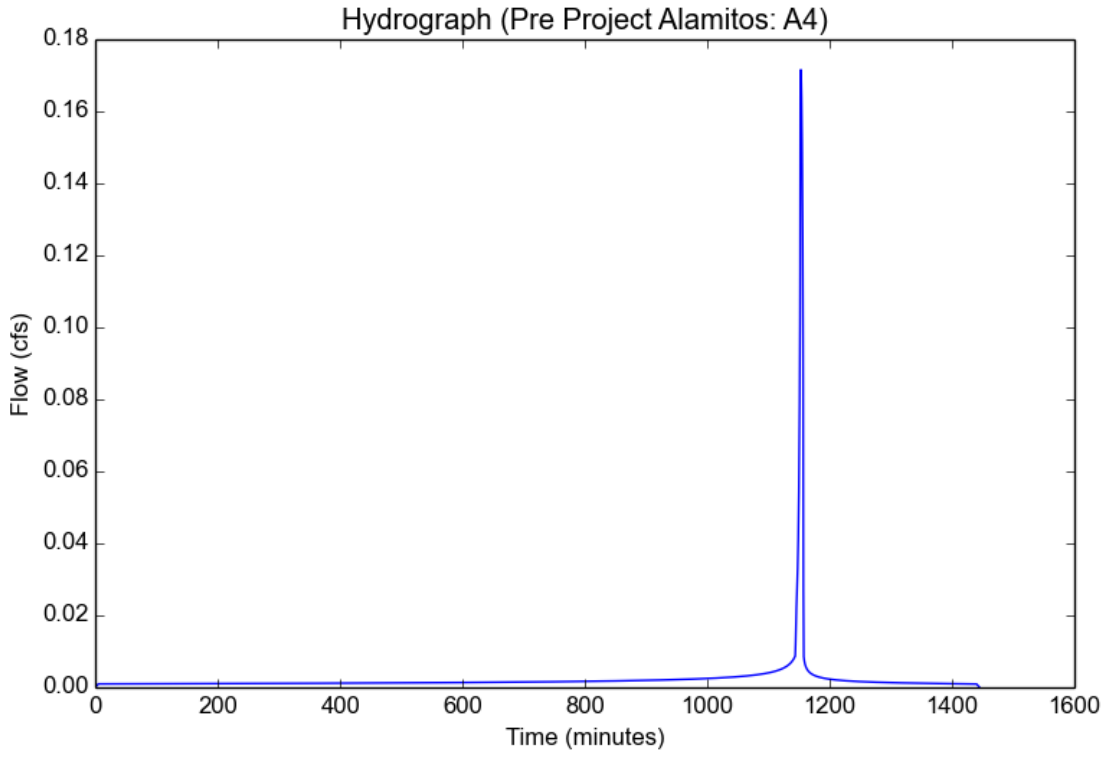
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Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A4
Area (ac)	0.09
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.01
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.6716
Undeveloped Runoff Coefficient (Cu)	0.7117
Developed Runoff Coefficient (Cd)	0.7136
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.1716
Burned Peak Flow Rate (cfs)	0.1716
24-Hr Clear Runoff Volume (ac-ft)	0.0048
24-Hr Clear Runoff Volume (cu-ft)	209.3066



Peak Flow Hydrologic Analysis

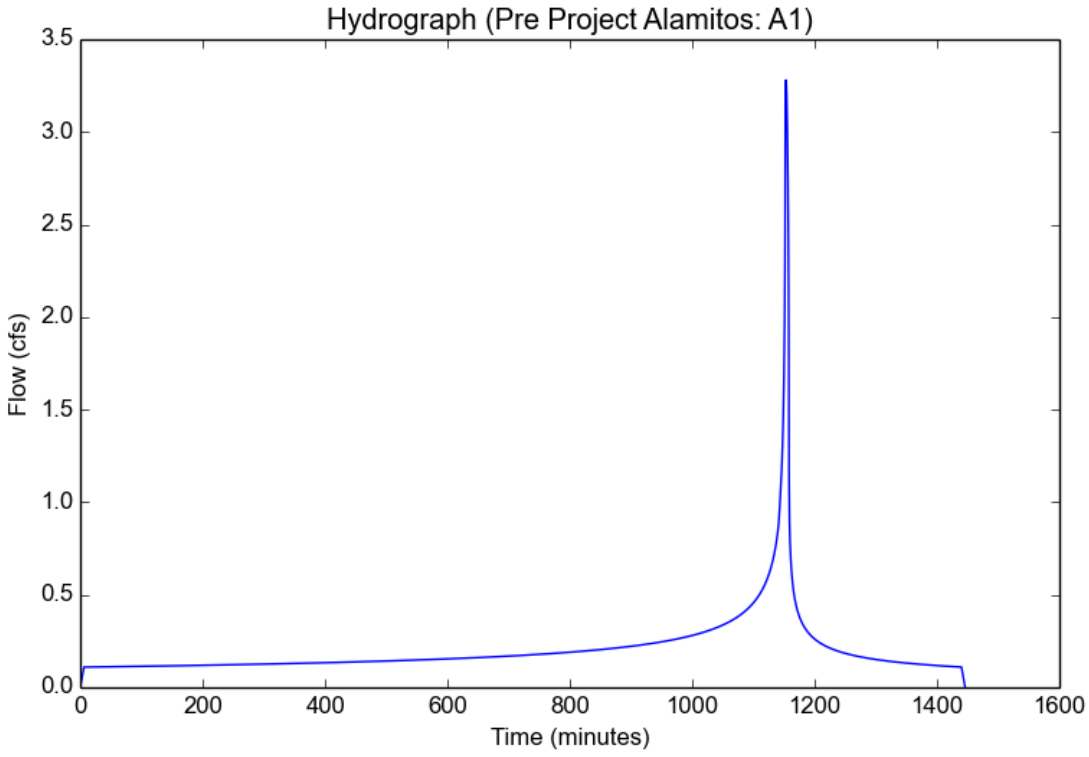
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A1
Area (ac)	1.37
Flow Path Length (ft)	415.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.76
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	2.7929
Undeveloped Runoff Coefficient (Cu)	0.7221
Developed Runoff Coefficient (Cd)	0.8573
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	3.2803
Burned Peak Flow Rate (cfs)	3.2803
24-Hr Clear Runoff Volume (ac-ft)	0.4147
24-Hr Clear Runoff Volume (cu-ft)	18064.8432



Peak Flow Hydrologic Analysis

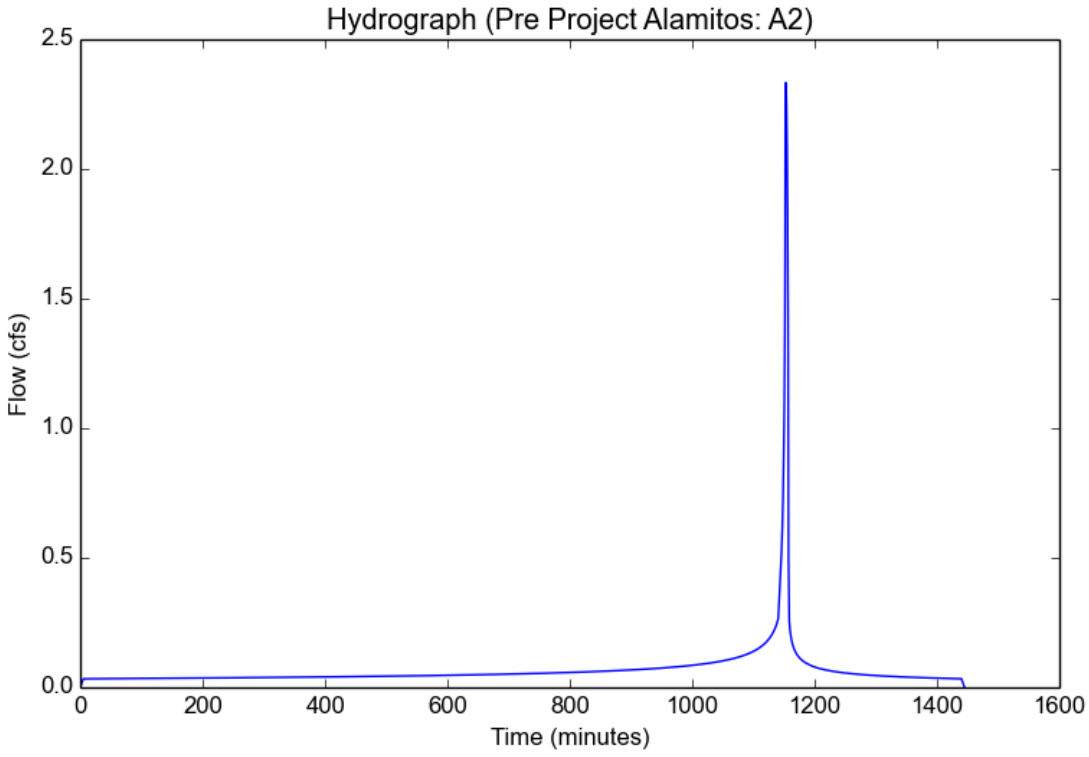
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A2
Area (ac)	0.98
Flow Path Length (ft)	245.0
Flow Path Slope (vft/hft)	0.049
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.25
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	3.0428
Undeveloped Runoff Coefficient (Cu)	0.7435
Developed Runoff Coefficient (Cd)	0.7827
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.3338
Burned Peak Flow Rate (cfs)	2.3338
24-Hr Clear Runoff Volume (ac-ft)	0.1371
24-Hr Clear Runoff Volume (cu-ft)	5972.0093



Peak Flow Hydrologic Analysis

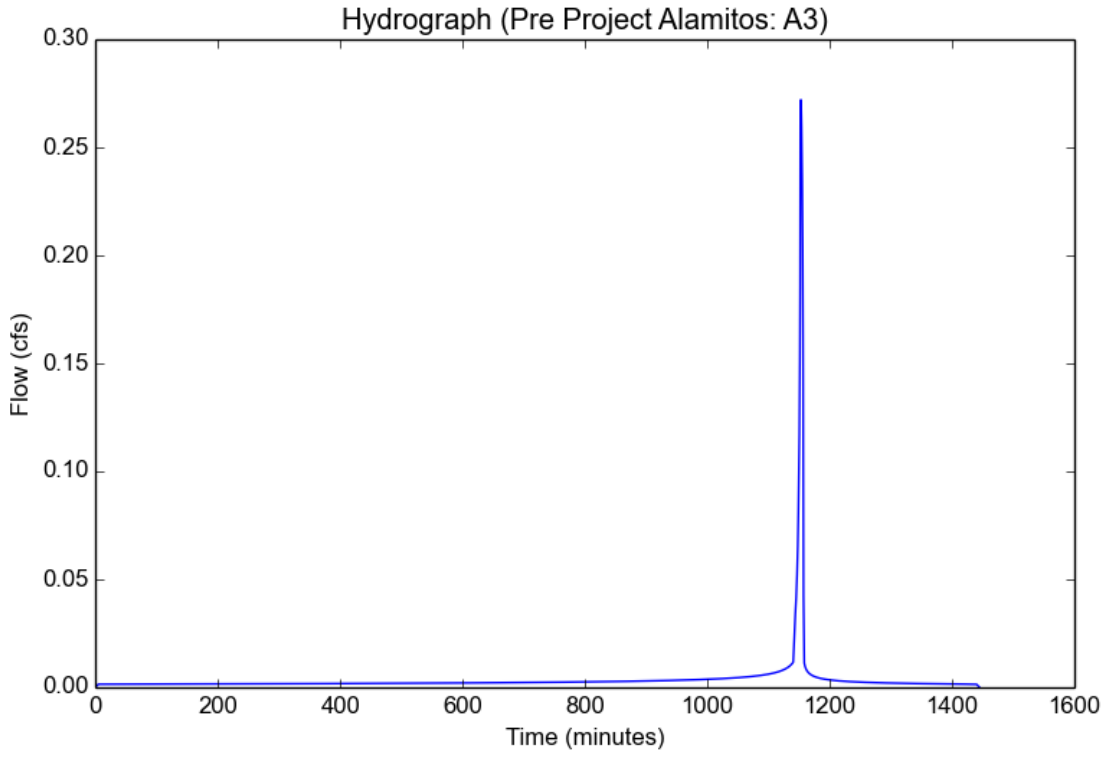
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Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A3
Area (ac)	0.12
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.01
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	3.0428
Undeveloped Runoff Coefficient (Cu)	0.7435
Developed Runoff Coefficient (Cd)	0.7451
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.2721
Burned Peak Flow Rate (cfs)	0.2721
24-Hr Clear Runoff Volume (ac-ft)	0.0076
24-Hr Clear Runoff Volume (cu-ft)	330.7499



Peak Flow Hydrologic Analysis

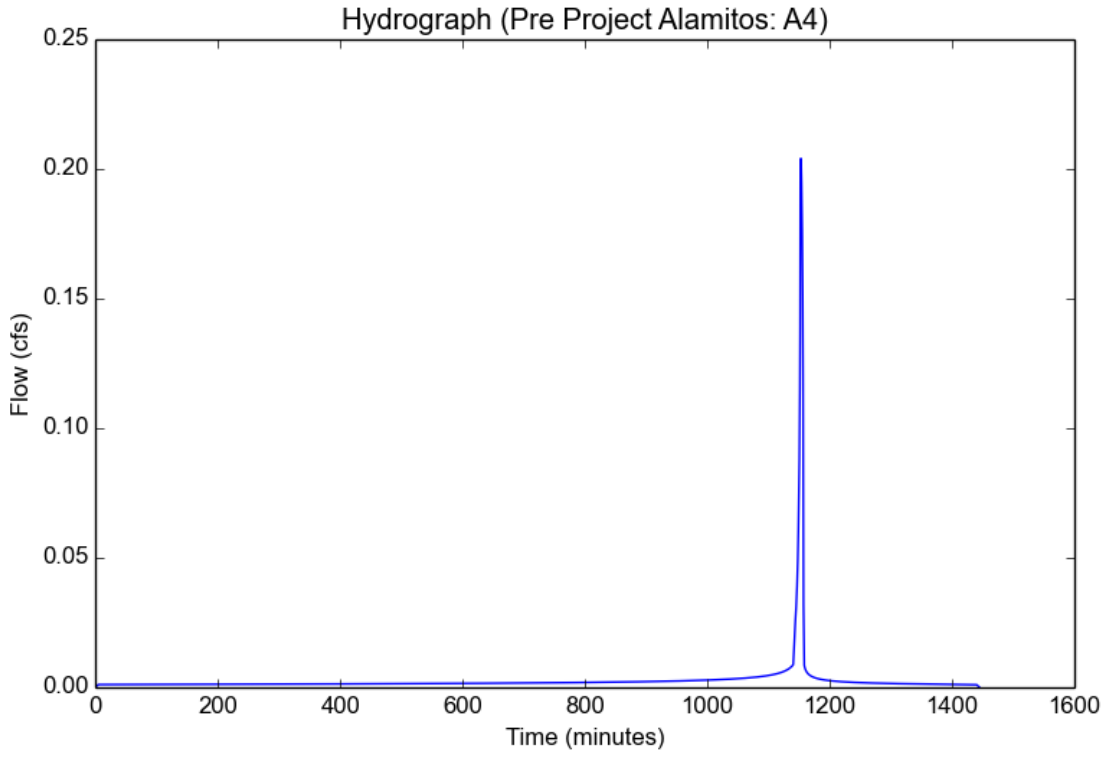
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Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A4
Area (ac)	0.09
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.01
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	3.0428
Undeveloped Runoff Coefficient (Cu)	0.7435
Developed Runoff Coefficient (Cd)	0.7451
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.204
Burned Peak Flow Rate (cfs)	0.204
24-Hr Clear Runoff Volume (ac-ft)	0.0057
24-Hr Clear Runoff Volume (cu-ft)	248.0624



Peak Flow Hydrologic Analysis

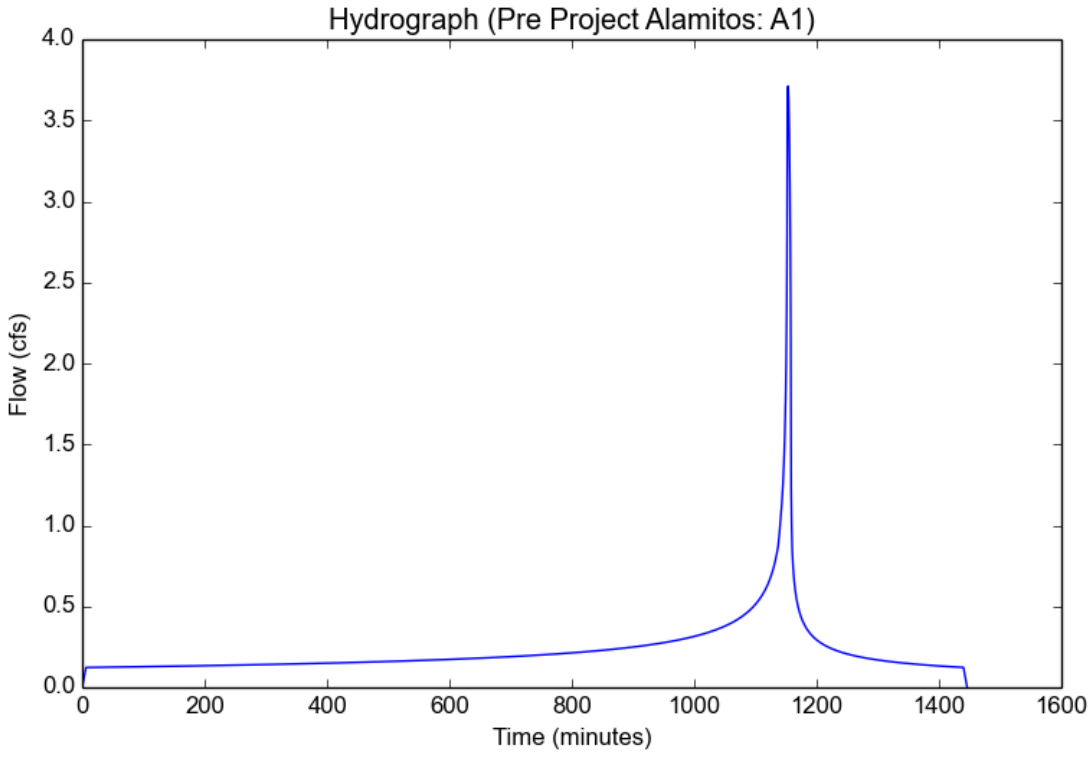
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Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A1
Area (ac)	1.37
Flow Path Length (ft)	415.0
Flow Path Slope (vft/hft)	0.016
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.76
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.1337
Undeveloped Runoff Coefficient (Cu)	0.7513
Developed Runoff Coefficient (Cd)	0.8643
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	3.7106
Burned Peak Flow Rate (cfs)	3.7106
24-Hr Clear Runoff Volume (ac-ft)	0.4662
24-Hr Clear Runoff Volume (cu-ft)	20309.5851



Peak Flow Hydrologic Analysis

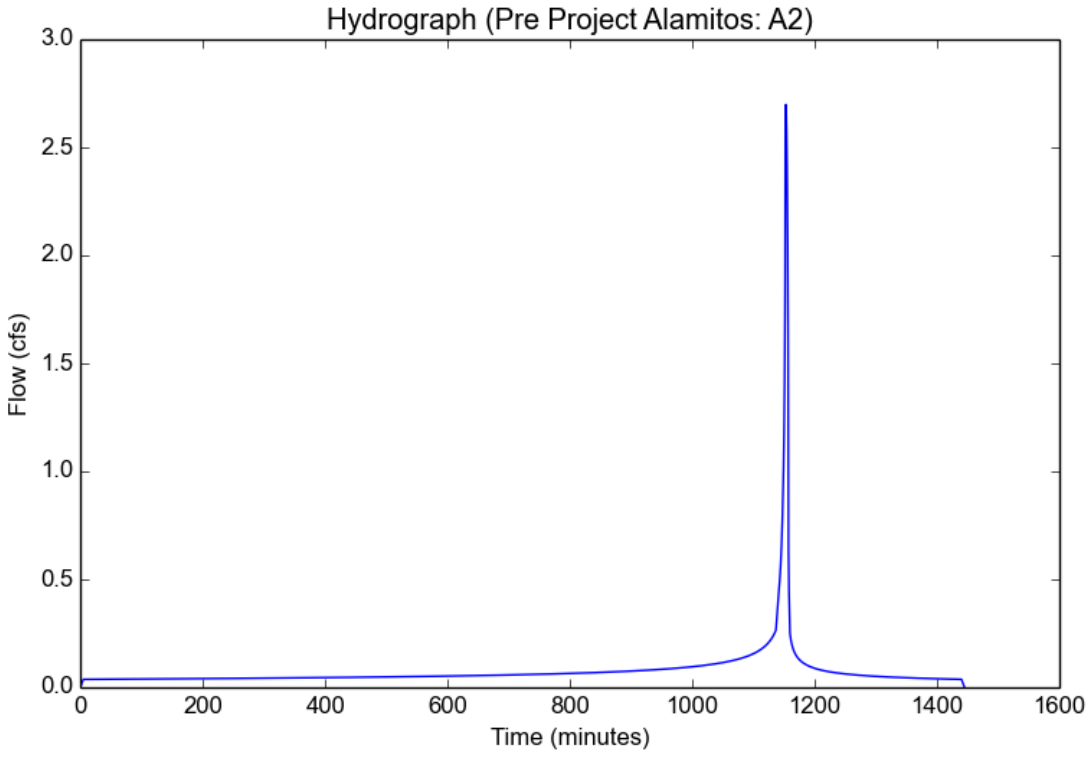
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Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A2
Area (ac)	0.98
Flow Path Length (ft)	245.0
Flow Path Slope (vft/hft)	0.049
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.25
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.8065
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	2.6984
Burned Peak Flow Rate (cfs)	2.6984
24-Hr Clear Runoff Volume (ac-ft)	0.156
24-Hr Clear Runoff Volume (cu-ft)	6793.3847



Peak Flow Hydrologic Analysis

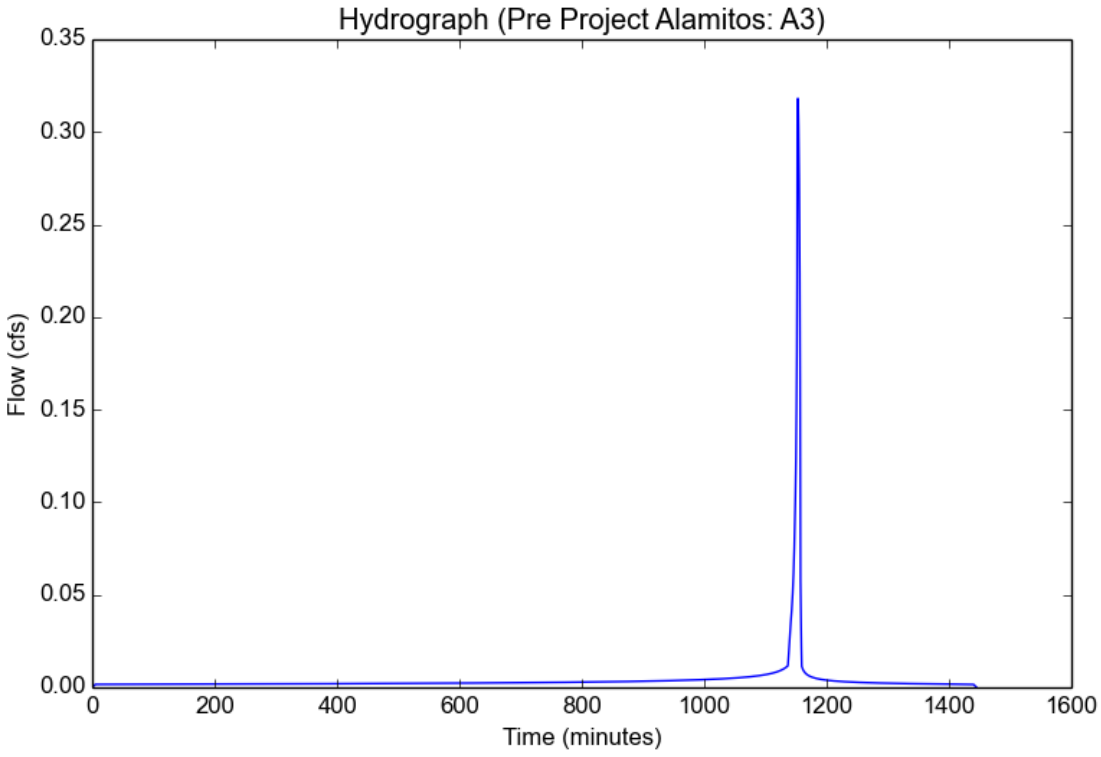
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Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A3
Area (ac)	0.12
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.01
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.7766
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.3182
Burned Peak Flow Rate (cfs)	0.3182
24-Hr Clear Runoff Volume (ac-ft)	0.0089
24-Hr Clear Runoff Volume (cu-ft)	386.0993



Peak Flow Hydrologic Analysis

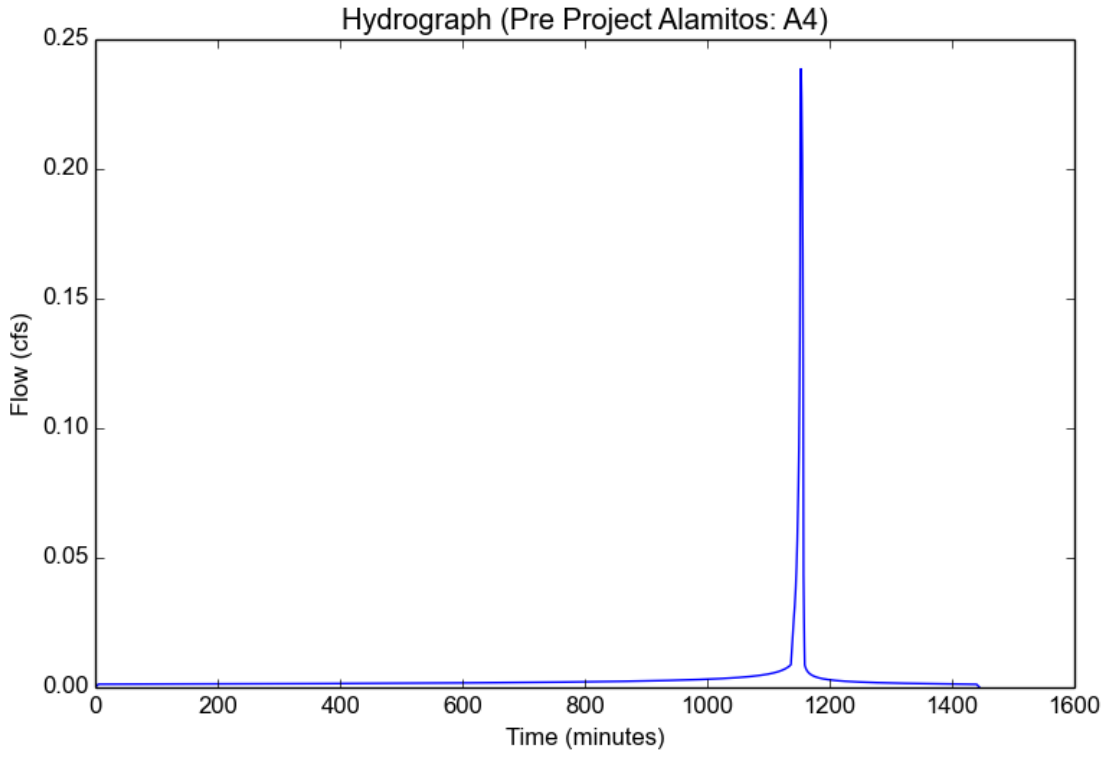
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Input Parameters

Project Name	Pre Project Alamitos
Subarea ID	A4
Area (ac)	0.09
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.01
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.7766
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.2386
Burned Peak Flow Rate (cfs)	0.2386
24-Hr Clear Runoff Volume (ac-ft)	0.0066
24-Hr Clear Runoff Volume (cu-ft)	289.5745



APPENDIX C

Proposed Condition Hydrology Calculations

Peak Flow Hydrologic Analysis

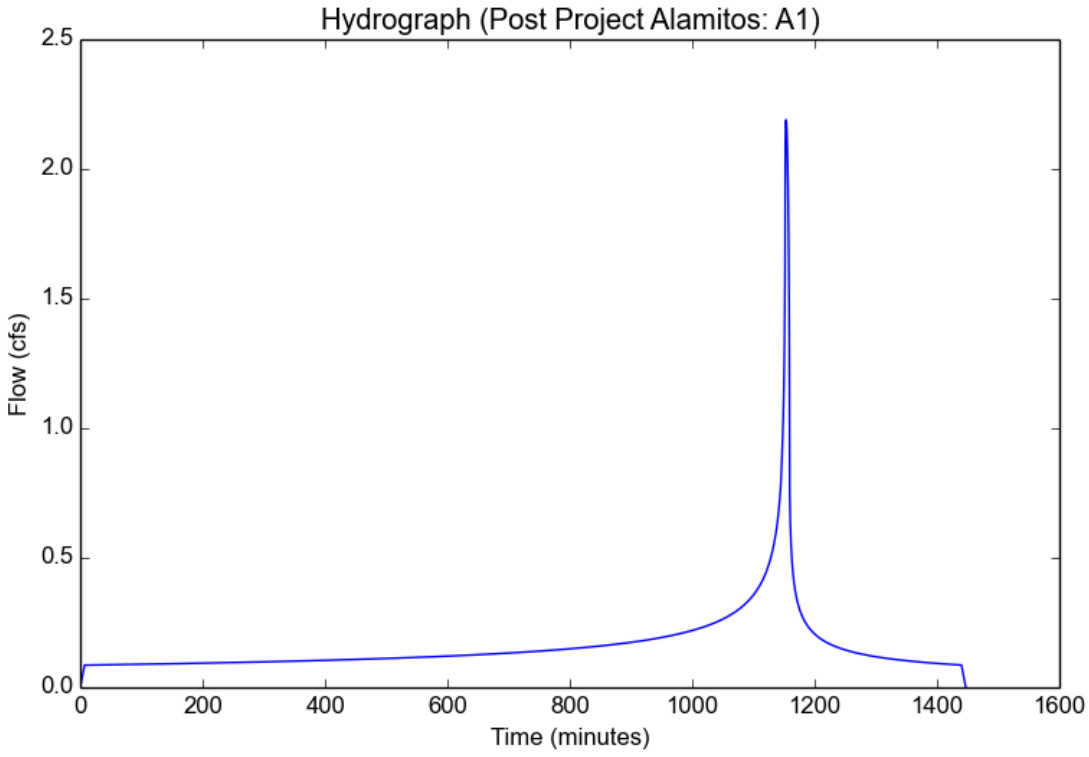
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Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A1
Area (ac)	1.11
Flow Path Length (ft)	395.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.85
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.2808
Undeveloped Runoff Coefficient (Cu)	0.6656
Developed Runoff Coefficient (Cd)	0.8648
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	2.1895
Burned Peak Flow Rate (cfs)	2.1895
24-Hr Clear Runoff Volume (ac-ft)	0.3226
24-Hr Clear Runoff Volume (cu-ft)	14053.9438



Peak Flow Hydrologic Analysis

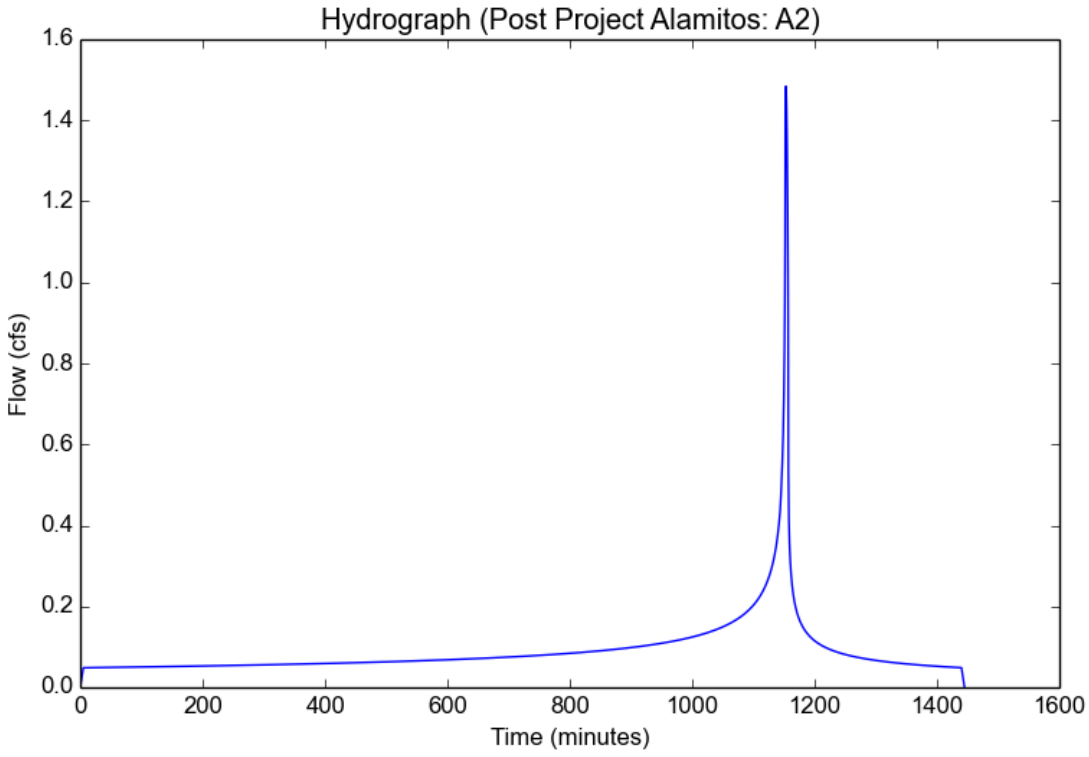
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Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A2
Area (ac)	0.64
Flow Path Length (ft)	85.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.83
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.6716
Undeveloped Runoff Coefficient (Cu)	0.7117
Developed Runoff Coefficient (Cd)	0.868
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.4841
Burned Peak Flow Rate (cfs)	1.4841
24-Hr Clear Runoff Volume (ac-ft)	0.1824
24-Hr Clear Runoff Volume (cu-ft)	7946.3303



Peak Flow Hydrologic Analysis

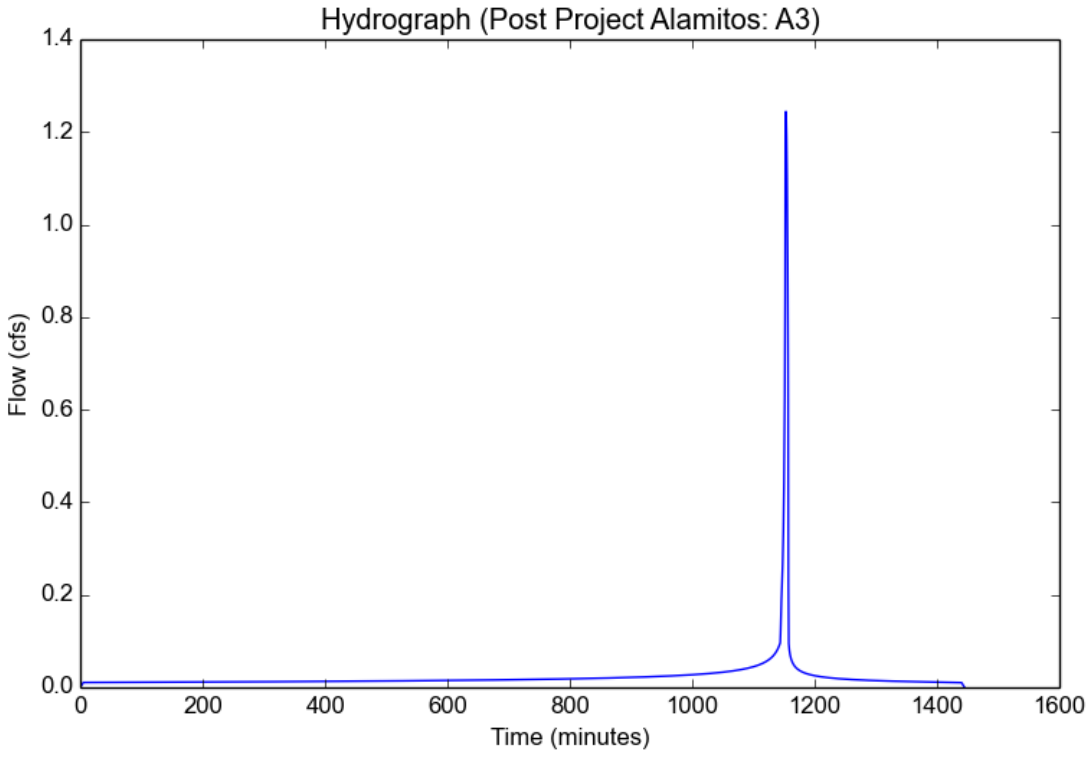
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A3
Area (ac)	0.64
Flow Path Length (ft)	211.0
Flow Path Slope (vft/hft)	0.06
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.085
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.6716
Undeveloped Runoff Coefficient (Cu)	0.7117
Developed Runoff Coefficient (Cd)	0.7277
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.2443
Burned Peak Flow Rate (cfs)	1.2443
24-Hr Clear Runoff Volume (ac-ft)	0.0477
24-Hr Clear Runoff Volume (cu-ft)	2079.0665



Peak Flow Hydrologic Analysis

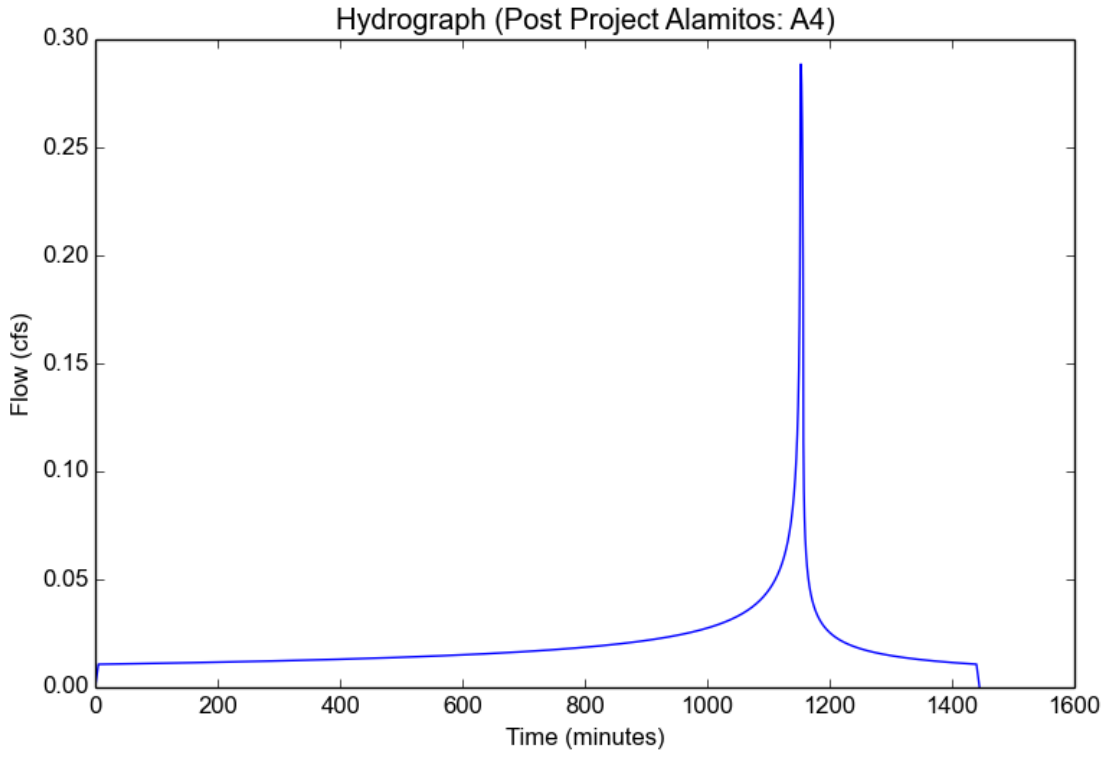
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A4
Area (ac)	0.12
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	1.0
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.6716
Undeveloped Runoff Coefficient (Cu)	0.7117
Developed Runoff Coefficient (Cd)	0.9
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.2885
Burned Peak Flow Rate (cfs)	0.2885
24-Hr Clear Runoff Volume (ac-ft)	0.04
24-Hr Clear Runoff Volume (cu-ft)	1740.9692



Peak Flow Hydrologic Analysis

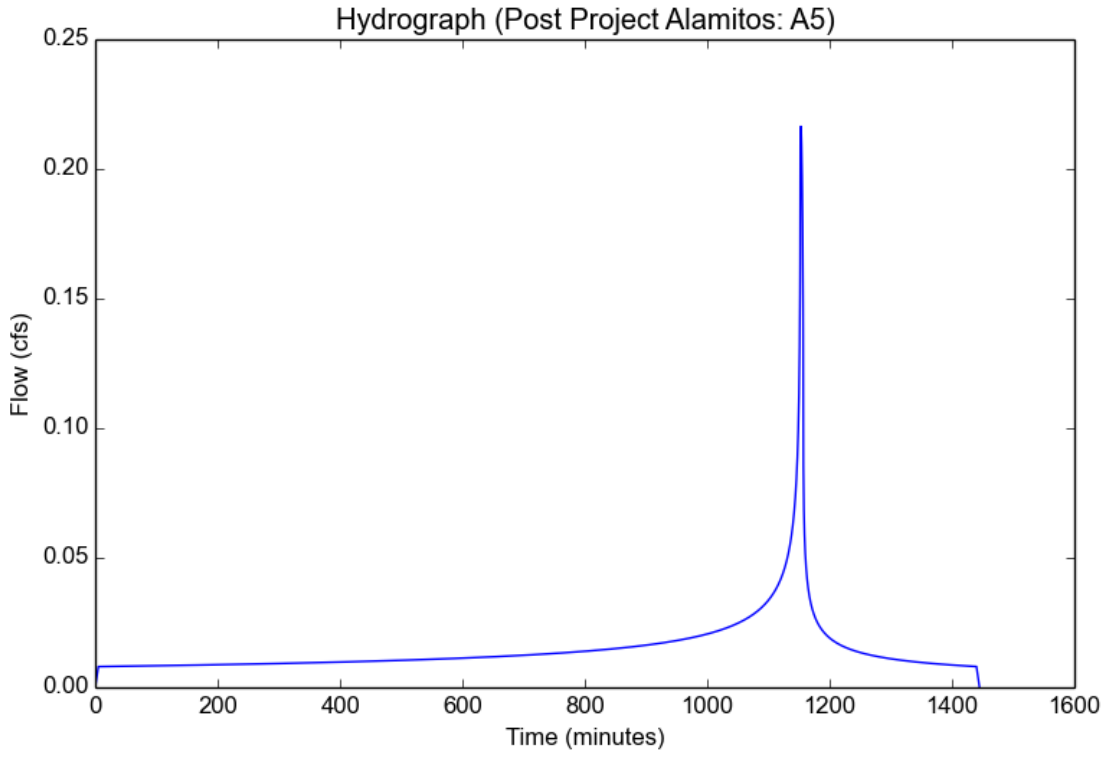
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A5
Area (ac)	0.09
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	1.0
Soil Type	14
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	4.4778
Peak Intensity (in/hr)	2.6716
Undeveloped Runoff Coefficient (Cu)	0.7117
Developed Runoff Coefficient (Cd)	0.9
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.2164
Burned Peak Flow Rate (cfs)	0.2164
24-Hr Clear Runoff Volume (ac-ft)	0.03
24-Hr Clear Runoff Volume (cu-ft)	1305.7269



Peak Flow Hydrologic Analysis

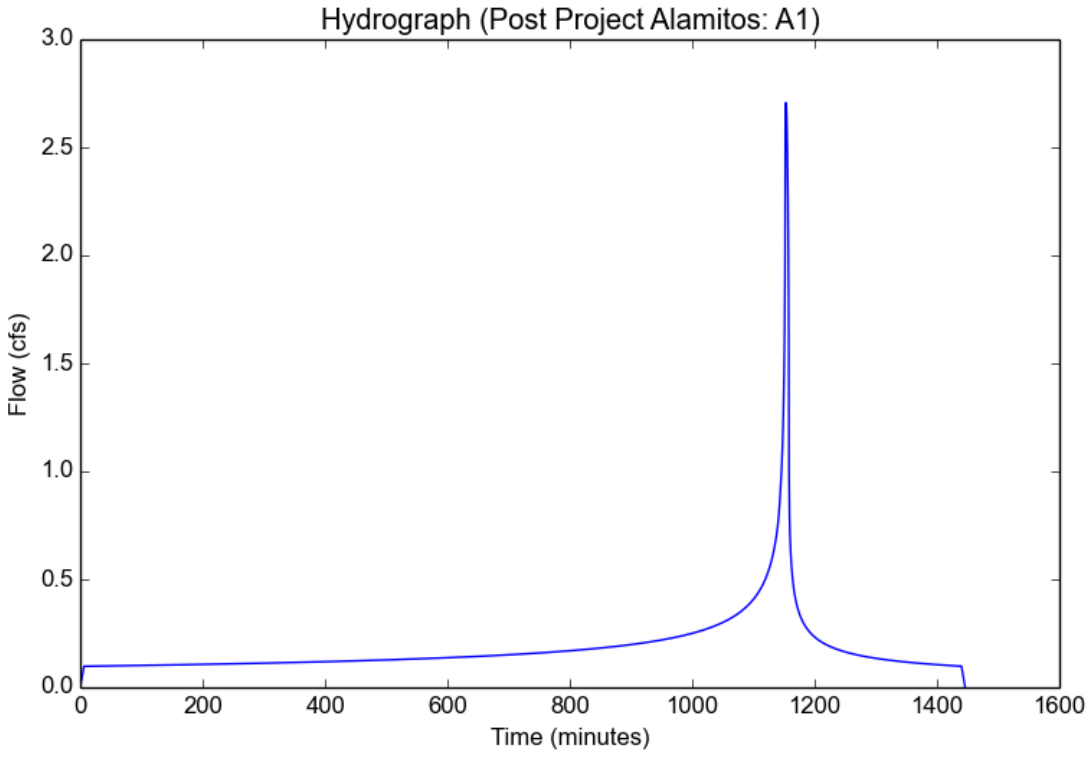
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A1
Area (ac)	1.11
Flow Path Length (ft)	395.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.85
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	2.7929
Undeveloped Runoff Coefficient (Cu)	0.7221
Developed Runoff Coefficient (Cd)	0.8733
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	2.7074
Burned Peak Flow Rate (cfs)	2.7074
24-Hr Clear Runoff Volume (ac-ft)	0.3679
24-Hr Clear Runoff Volume (cu-ft)	16025.9174



Peak Flow Hydrologic Analysis

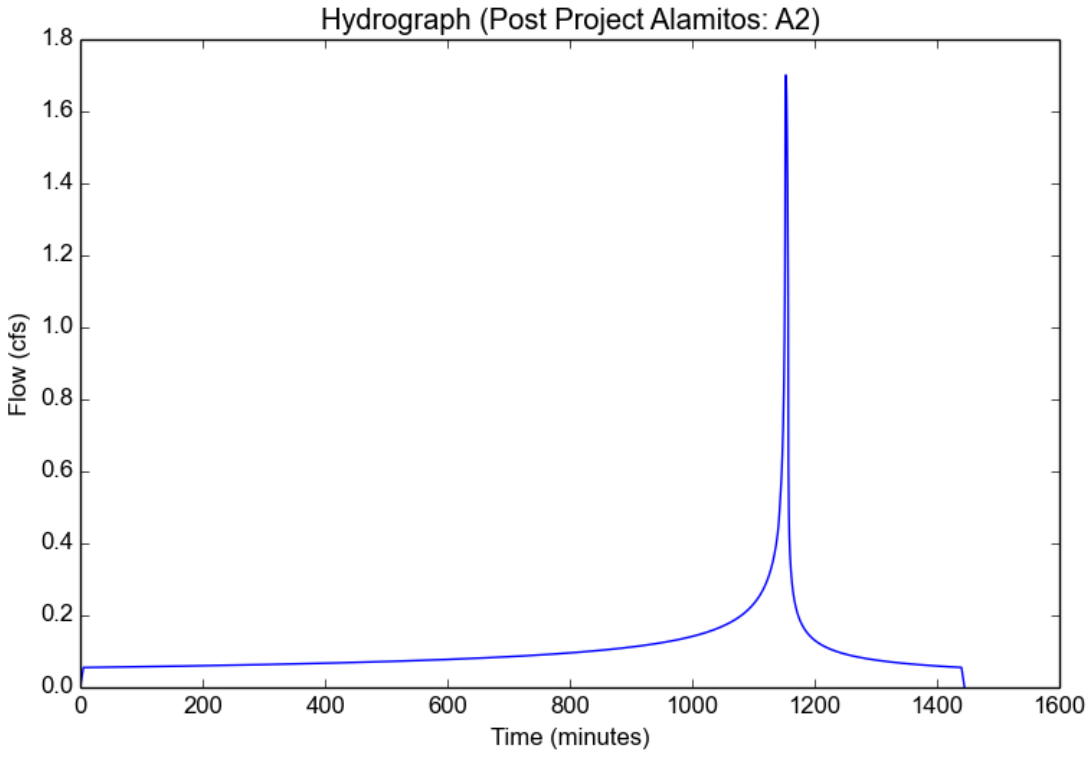
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A2
Area (ac)	0.64
Flow Path Length (ft)	85.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.83
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	3.0428
Undeveloped Runoff Coefficient (Cu)	0.7435
Developed Runoff Coefficient (Cd)	0.8734
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.7009
Burned Peak Flow Rate (cfs)	1.7009
24-Hr Clear Runoff Volume (ac-ft)	0.208
24-Hr Clear Runoff Volume (cu-ft)	9062.3008



Peak Flow Hydrologic Analysis

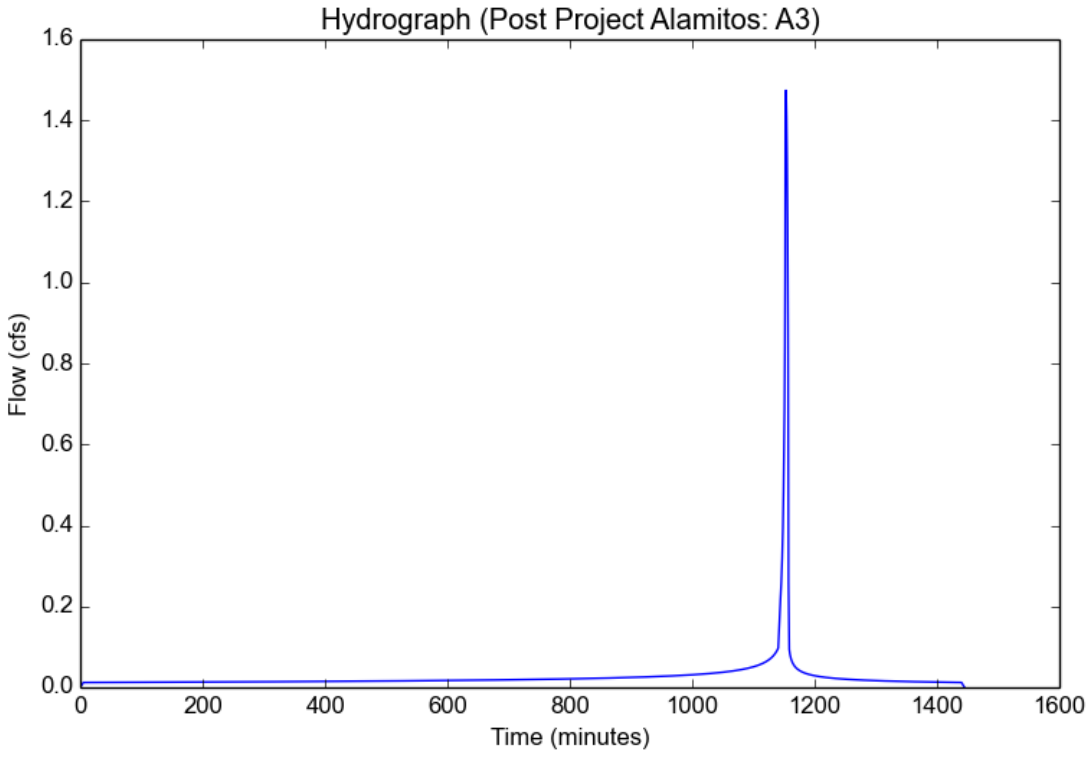
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A3
Area (ac)	0.64
Flow Path Length (ft)	211.0
Flow Path Slope (vft/hft)	0.06
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.085
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	3.0428
Undeveloped Runoff Coefficient (Cu)	0.7435
Developed Runoff Coefficient (Cd)	0.7568
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.4739
Burned Peak Flow Rate (cfs)	1.4739
24-Hr Clear Runoff Volume (ac-ft)	0.0558
24-Hr Clear Runoff Volume (cu-ft)	2431.5271



Peak Flow Hydrologic Analysis

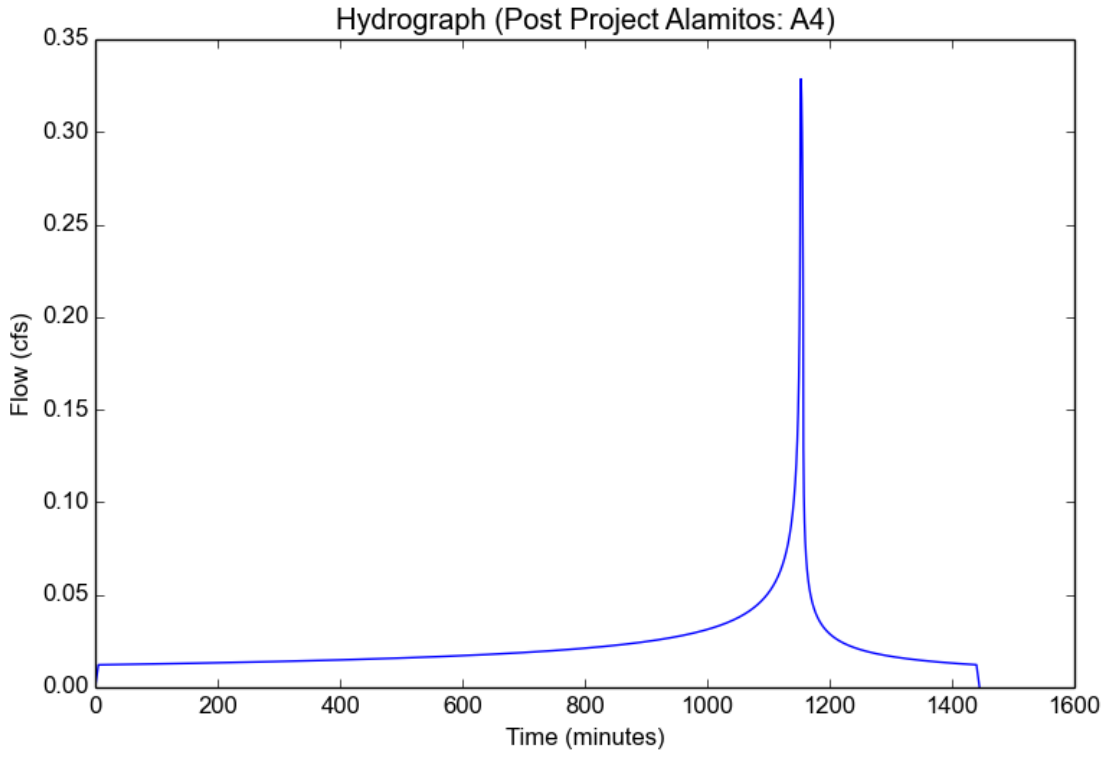
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A4
Area (ac)	0.12
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	1.0
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	3.0428
Undeveloped Runoff Coefficient (Cu)	0.7435
Developed Runoff Coefficient (Cd)	0.9
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.3286
Burned Peak Flow Rate (cfs)	0.3286
24-Hr Clear Runoff Volume (ac-ft)	0.0455
24-Hr Clear Runoff Volume (cu-ft)	1982.8806



Peak Flow Hydrologic Analysis

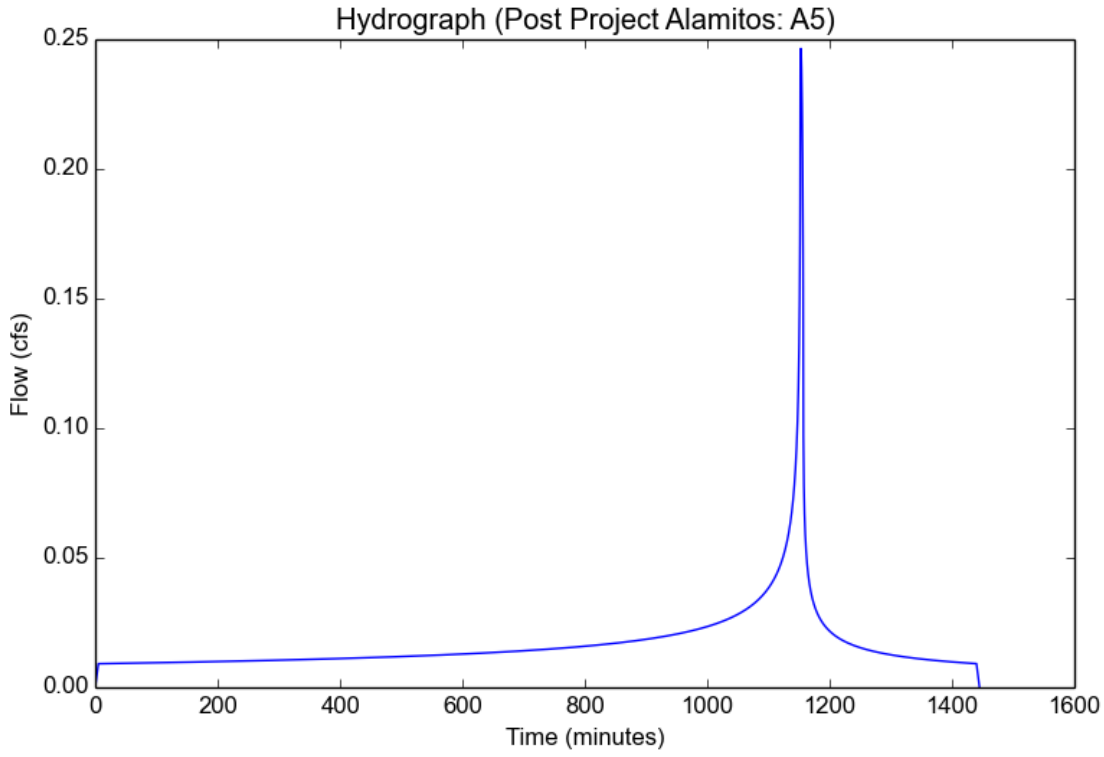
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A5
Area (ac)	0.09
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	1.0
Soil Type	14
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	5.1
Peak Intensity (in/hr)	3.0428
Undeveloped Runoff Coefficient (Cu)	0.7435
Developed Runoff Coefficient (Cd)	0.9
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.2465
Burned Peak Flow Rate (cfs)	0.2465
24-Hr Clear Runoff Volume (ac-ft)	0.0341
24-Hr Clear Runoff Volume (cu-ft)	1487.1605



Peak Flow Hydrologic Analysis

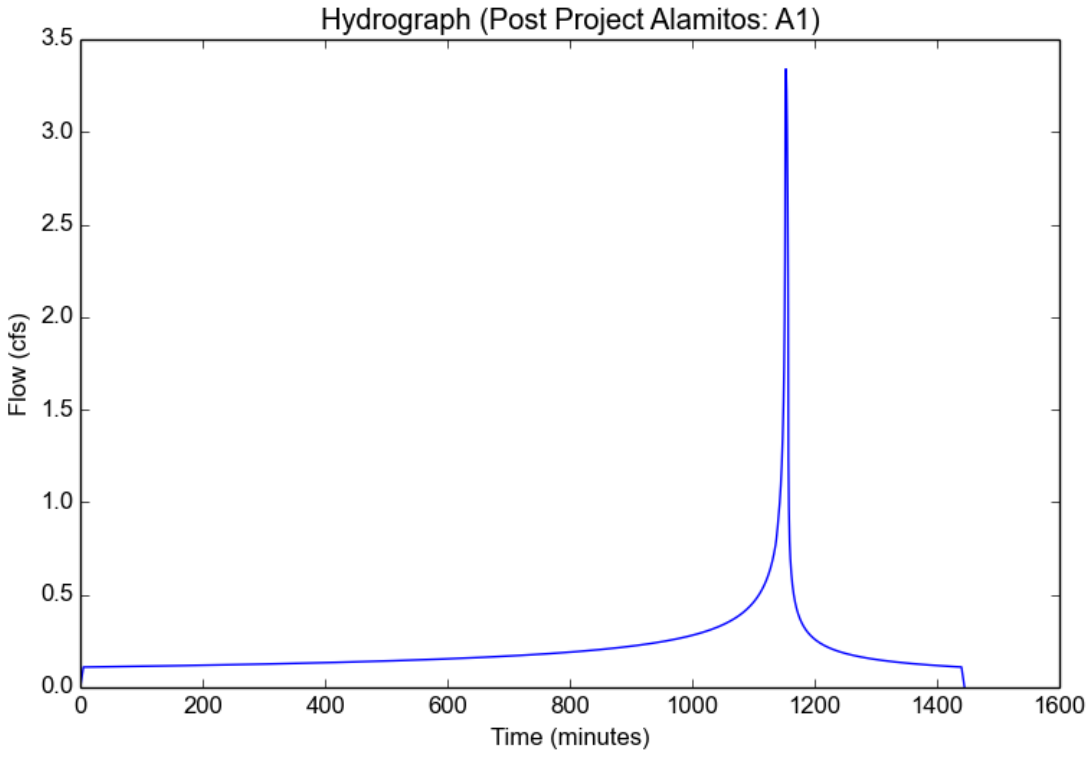
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A1
Area (ac)	1.11
Flow Path Length (ft)	395.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.85
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.8813
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	3.3398
Burned Peak Flow Rate (cfs)	3.3398
24-Hr Clear Runoff Volume (ac-ft)	0.4133
24-Hr Clear Runoff Volume (cu-ft)	18002.3708



Peak Flow Hydrologic Analysis

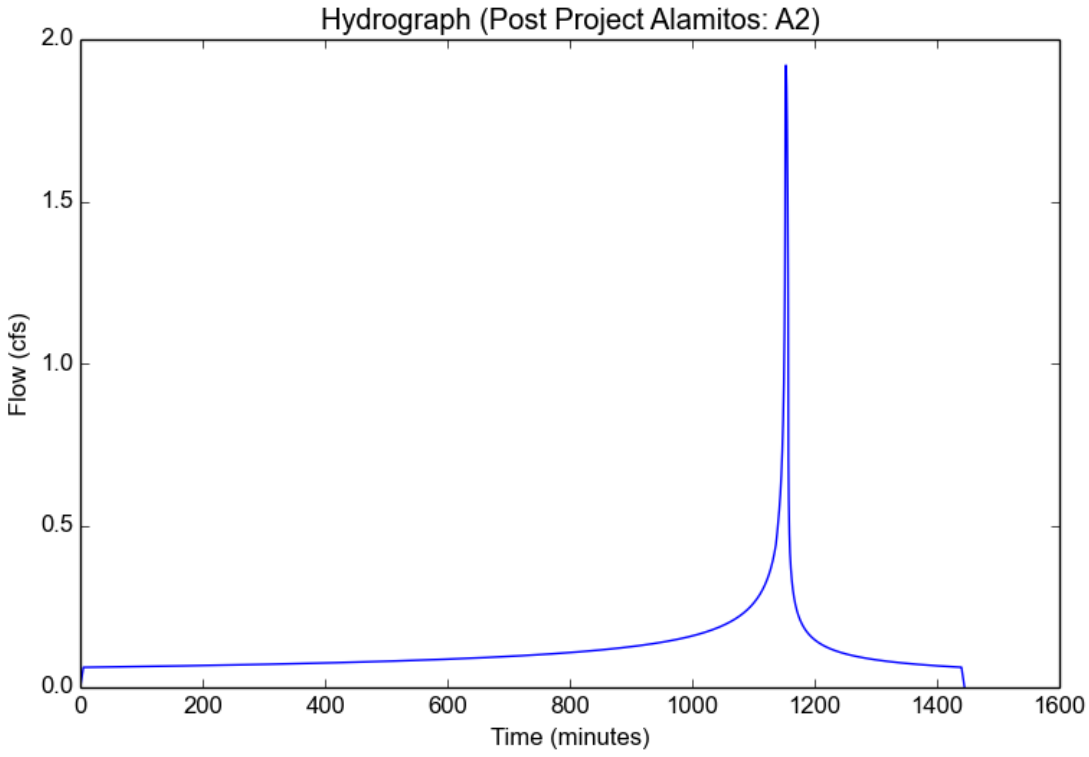
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A2
Area (ac)	0.64
Flow Path Length (ft)	85.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.83
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.8788
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.9202
Burned Peak Flow Rate (cfs)	1.9202
24-Hr Clear Runoff Volume (ac-ft)	0.2337
24-Hr Clear Runoff Volume (cu-ft)	10181.637



Peak Flow Hydrologic Analysis

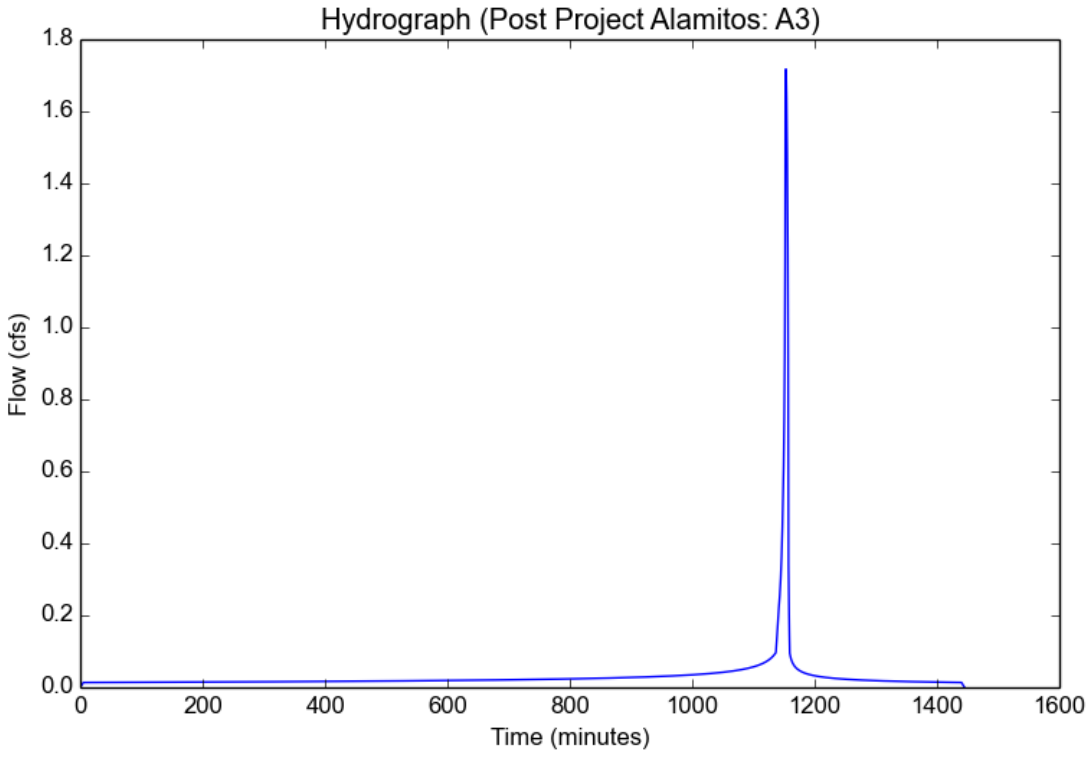
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A3
Area (ac)	0.64
Flow Path Length (ft)	211.0
Flow Path Slope (vft/hft)	0.06
50-yr Rainfall Depth (in)	5.1
Percent Impervious	0.085
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.786
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.7173
Burned Peak Flow Rate (cfs)	1.7173
24-Hr Clear Runoff Volume (ac-ft)	0.0643
24-Hr Clear Runoff Volume (cu-ft)	2802.1026



Peak Flow Hydrologic Analysis

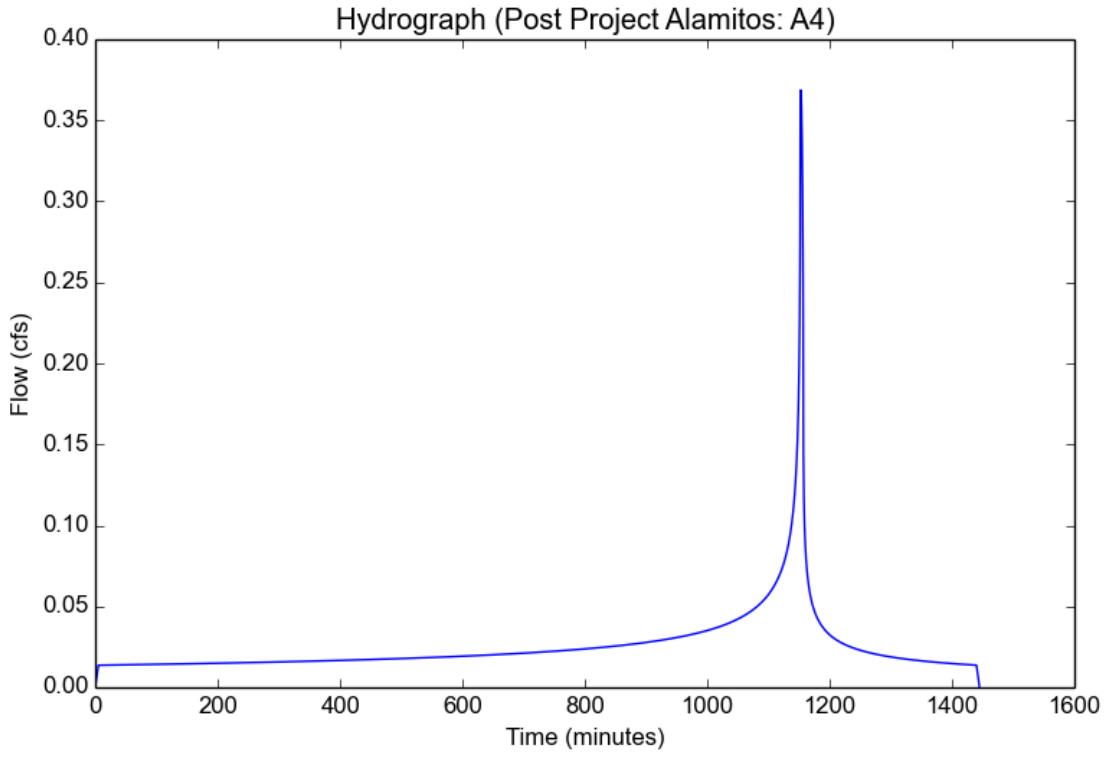
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A4
Area (ac)	0.12
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	1.0
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.9
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.3687
Burned Peak Flow Rate (cfs)	0.3687
24-Hr Clear Runoff Volume (ac-ft)	0.0511
24-Hr Clear Runoff Volume (cu-ft)	2224.7921



Peak Flow Hydrologic Analysis

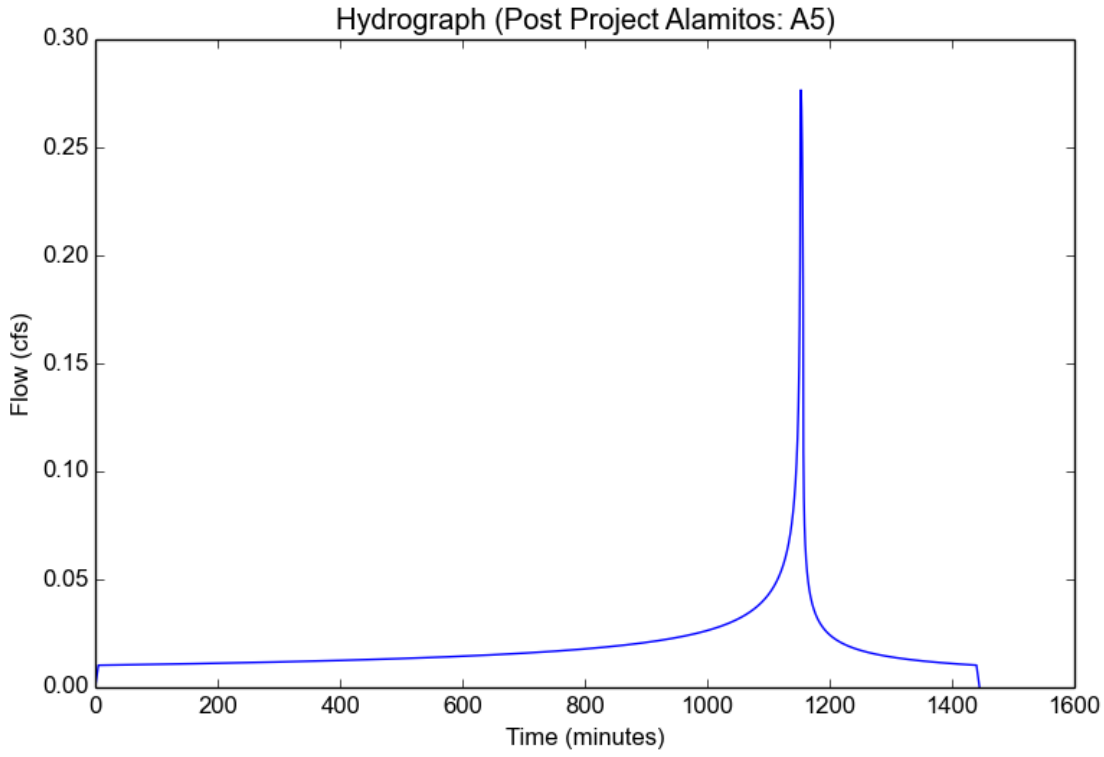
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Version: HydroCalc 1.0.2

Input Parameters

Project Name	Post Project Alamitos
Subarea ID	A5
Area (ac)	0.09
Flow Path Length (ft)	15.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	5.1
Percent Impervious	1.0
Soil Type	14
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	5.7222
Peak Intensity (in/hr)	3.414
Undeveloped Runoff Coefficient (Cu)	0.7754
Developed Runoff Coefficient (Cd)	0.9
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.2765
Burned Peak Flow Rate (cfs)	0.2765
24-Hr Clear Runoff Volume (ac-ft)	0.0383
24-Hr Clear Runoff Volume (cu-ft)	1668.594



APPENDIX D

Low Impact Development Plan

LOW IMPACT DEVELOPMENT PLAN (LID PLAN)

Project Name:

Alamitos Beach Concession Building

780 E. SHORELINE DRIVE, LONG BEACH, CA

Prepared for:

City of Long Beach Public Works

333 W Ocean Blvd.

Long Beach, CA, 90802

(562) 570-6383

Prepared by:

Michael Baker International

5 Hutton Centre Drive

Santa Ana, CA 92707

(949) 472-3505

Date Prepared: 7/28/17

Discretionary Permit(s) and Water Quality Conditions

The City of Long Beach is subject to waste discharge requirements for its Municipal Separate Storm Sewer System (MS4) discharges originating within its jurisdictional boundaries composed of storm water and non-storm water as set forth in Order No. R4-2014-0024.

Low Impact Development (LID) Plan

Development and redevelopment projects are required to incorporate three performance measures and practices into the design plan: conserve natural areas, protect slopes and channels, and provide storm drain system stenciling and signage.

Conserve Natural Areas

The area of disturbed soil was minimized to keep Marina Green Park in its existing condition. The existing trees located through the project site is to be protected in place wherever possible.

Protect Slopes and Channels

Slopes protection and stabilization will be put in place.

Provide Storm Drain System Stenciling and Signage

Storm drain system stenciling and signage is not applicable for this project.

Pollutants of Concern

The anticipated pollutants of concern for this project are suspended solids, total phosphorus, total nitrogen, total Kjedahl nitrogen, copper, lead, zinc, trash and debris, and oil and grease.

LID Stormwater Quality Design Volume

The City of Long Beach shall require the project to retain on-site the Stormwater Quality Design Volume (SWQDV). The storm depth used to calculate the SWQDV is determined as the greater of 0.75 inches or the 85th percentile, 24 hour rain event as determined from the Los Angeles County 85th percentile precipitation isohyetal map.

The SWQDV was calculated for each tributary area and summarized in the following table.

Tributary Area	Impervious Area (sq ft)	Pervious Area (sq ft)	Undeveloped Area (sq ft)	Catchment Area (sq ft)*	SWQDV (cu ft)
A-1	8,135	624		7,384	461
A-2	14,879	1,452		13,536	846
A-3	10,775	2,138	14,858	11,397	712
A-4	5,370			4,833	302
A-5	3,911			3,520	220

*Catchment Area = (Impervious Area x 0.9) + [(Pervious Area + Undeveloped Area) x 0.1]

Best Management Practices (BMPs)

BMPs shall be designed to manage and capture stormwater runoff to the maximum extent feasible with the use of infiltration, capture and use, biofiltration BMPs, or a combination. Per the Long Beach Low

Impact Development Best Management Practices Design Manual, infiltration BMPs shall be the first priority type of BMPs followed by capture and use then biofiltration BMPs. Biofiltration BMPs shall be sized to capture 1.5 times the volume that is not managed through infiltration or capture and use BMPs.

Infiltration BMPs

The use of infiltration BMPs is the preferred method of compliance and all attempts will be made to incorporate them where possible. The average infiltration rate for the material will be approximately 5 in/hr. Although average groundwater depth for the project site is approximately 10 feet, the geotechnical engineer determined that infiltration is feasible. The geotechnical engineer determined that the proposed infiltration BMPs will not negatively impact an existing unconfirmed aquifer and the groundwater is not known to be polluted. Infiltration BMPs will include depressed sand areas and utilize the beach as natural infiltration.

Subarea A-1 is composed of new parking stalls. The work in the parking lot excludes the area west of the new parking stalls as the activity there is considered maintenance under the MS4 permit. The parking lot area will drain in the northerly direction and into depressed sand areas within the median. Due to site constraints, the BMP cannot be sized to treat the full SWQDV of the tributary area. Fortunately, there are additional existing BMPs, also depressed sand areas, within the parking lot. The other BMPs were sized to provide treatment for this area already. There is capacity in those BMPs to capture the excess volume from this work area.

Subarea A-2 consist of the southern portion of the new concession building, playground and restroom. Downspouts will be added to the roof the buildings to ensure discharge is toward the beach.

Subareas A-4 and A-5 consist of a new bike path on the beach between the development and ocean. Runoff from these subareas will infiltrate in the sand.

A vegetated swale will be located behind A-3: the northern portion of the buildings. The swale will continue to wrap around the west side of the restroom. The swale will provide some biotreatment as runoff filters through the vegetation but its primary purpose is to convey flows to the basin located by the sidewalk. Any remaining volume that cannot be infiltrated by the basin will pond up and sheet flow across and infiltrate into the beach.

EXHIBIT 1

Existing Hydrology Map



PREPARED BY:

Michael Baker INTERNATIONAL

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Santa Ana, CA 92707
Phone: (949) 472-3505
MBAKERINTL.COM

EXISTING HYDROLOGY EXHIBIT
(ALAMITOS)

SCALE:	1"=40'
PROJECT NO.	153541
DATE:	7-27-2017

H:\PDATA\153541\CADD\LAND\DLV\HYDRO\ALAMITOS\MAPS\153541-EX HYDROLOGY EXHIBIT.DWG WELLS, RYAN A 7/27/2017 2:21 PM

EXHIBIT 2

Proposed Hydrology Map

(7.0± FG)

(23.5 FG)

L=211'
S=6%

L=265'
S=1%

13.50 FG

A3
0.64

L=395'
S=2%

A1
1.11

10.85 FG

L=85'
S=2%

A2
0.64

A5
0.09

FLOW
PATH

15'

2%

A4
0.12

FLOW
PATH

15'

2%

SCALE 1"=40'

40 20 0 40 80 120

SCALE: 1"=40'

PREPARED BY:

Michael Baker INTERNATIONAL
5 Hutton Centre Drive, Suite 500
Santa Ana, CA 92707
Phone: (949) 472-3505
MBAKERINTL.COM

PROPOSED HYDROLOGY EXHIBIT
(ALAMITOS)

SCALE: 1"=40'

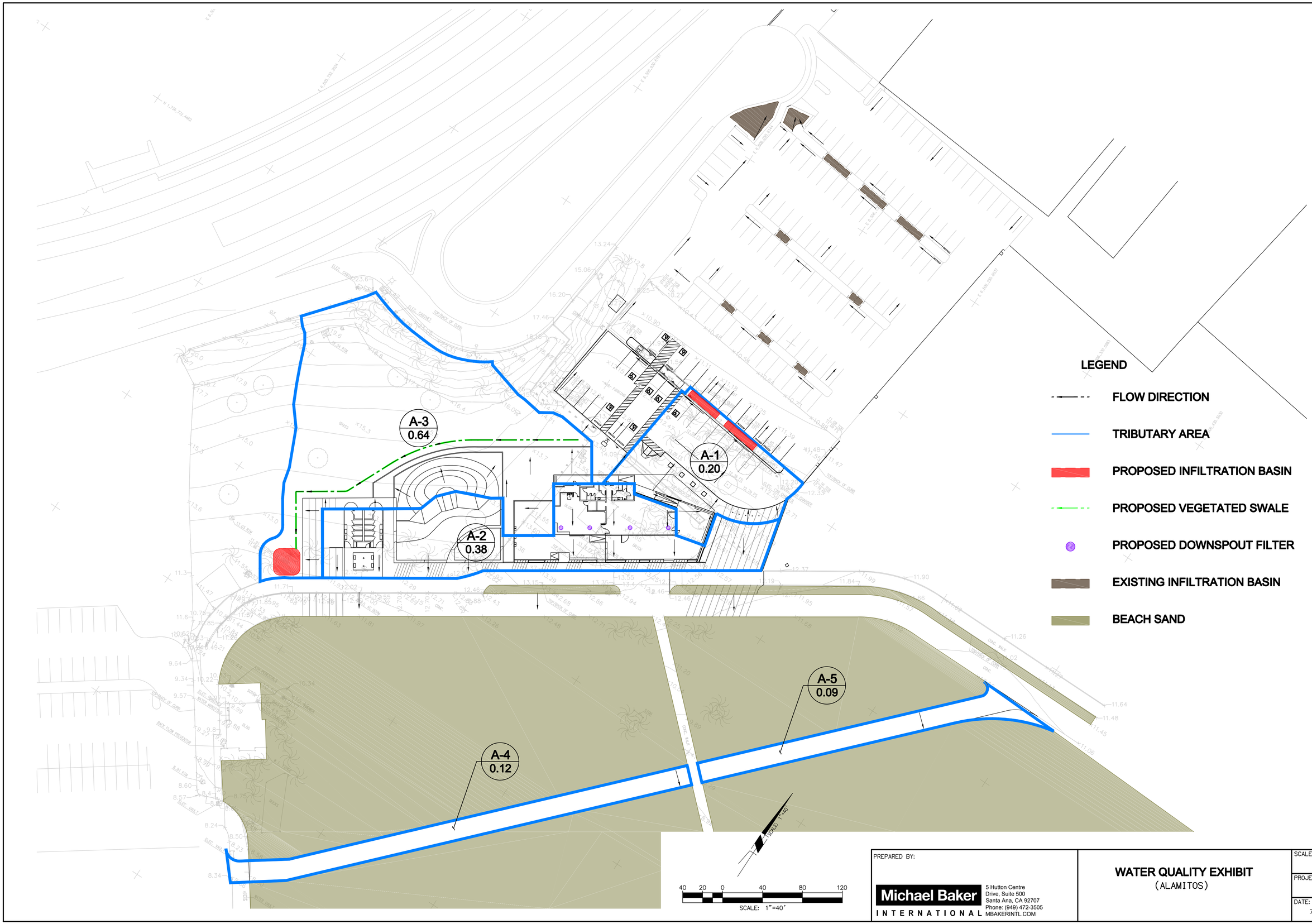
PROJECT NO. 153541

DATE: 7-27-2017

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EXHIBIT 3

Water Quality Exhibit



PREPARED BY:

Michael Baker INTERNATIONAL
5 Hutton Centre Drive, Suite 500
Santa Ana, CA 92707
Phone: (949) 472-3505
MBAKERINTL.COM

WATER QUALITY EXHIBIT
(ALAMITOS)

SCALE: 1"=40'

PROJECT NO. 153541

DATE: 7-27-2017

H:\PDATA\153541\CADD\STRMWATER\EXHIBITS\153541-WATER QUALITY.DWG PHAN, CONNIE 7/28/2017 11:28 AM

APPENDIX H

PARKING CALCULATIONS

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Prepared by National Data & Surveying Services

Parking Study

Locations: South of Shoreline Dr/Alamitos Ave & Ocean Blvd
City: Alamitos Beach

Day: Saturday
Date: 6/24/2017

Time	Lot 001			Lot 002 Paid Parking		Grand Total
	Regular	HC	Electric Vehicle	Regular	HC	
Spaces	**136**	**8**	**2**	**88**	**4**	**238**
11:00 AM	52	2	1	7	0	**62**
12:00 PM	72	3	0	9	1	**85**
1:00 PM	90	2	0	12	1	**105**
2:00 PM	110	2	0	16	1	**129**
3:00 PM	133	7	0	15	0	**155**
4:00 PM	136	5	0	16	0	**157**
5:00 PM	133	5	1	17	0	**156**
6:00 PM	136	4	0	18	1	**159**
7:00 PM	136	4	0	17	1	**158**

Prepared by National Data & Surveying Services

Parking Study

Locations: South of Shoreline Dr/Alamitos Ave & Ocean Blvd
City: Alamitos Beach

Day: Tuesday
Date: 6/27/2017

Time	Lot 001			Lot 002 Paid Parking		Grand Total
	Regular	HC	Electric Vehicle	Regular	HC	
Spaces	**136**	**8**	**2**	**88**	**4**	**238**
11:00 AM	57	1	0	5	0	**63**
12:00 PM	62	0	0	8	0	**70**
1:00 PM	67	2	0	10	0	**79**
2:00 PM	82	1	0	16	0	**99**
3:00 PM	90	0	1	17	1	**109**
4:00 PM	93	0	1	18	4	**116**
5:00 PM	83	1	1	17	0	**102**
6:00 PM	92	2	1	14	0	**109**
7:00 PM	101	5	1	15	0	**122**

Notes :- **Lot 002 :** One city vehicle took two spaces at 11 am in marina segment (Included in the count)
One city vehicle was parked illegally at 1 pm and 2 pm in marina segment.

APPENDIX I

ASSEMBLY BILL 52 CONSULTATION RESULTS

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CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

333 West Ocean Blvd., 5th Floor, Long Beach, CA 90802 Phone: 570-6194 Fax: 570-6068

PLANNING BUREAU

June 14, 2017

Andrew Salas
Gabrieleno Band of Mission Indians – Kizh Nation
P. O. Box 393
Covina, CA 91723

Re: AB-52 Consultation with the Gabrieleno Band of Mission Indians – Kizh Nation for the Alamitos Beach Concession Rebuild Project

Dear Mr. Salas:

The City of Long Beach is conducting its AB-52 consultation process for the Alamitos Beach Concession Rebuild Project. Please consider this letter and preliminary Project information as the initiation of the California Environmental Quality Act, specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB-52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this Project.

PROJECT TITLE: Alamitos Beach Concession Rebuild Project

PROJECT LOCATION: The 1.07-acre project site (Assessor's Parcel No. 7265-021-901) is located at the western end of Alamitos Beach and is adjacent to the waterfront area of downtown Long Beach. The project site is currently developed with a one-story 2,234 square-foot concession building (Alamitos Café) and a small outdoor patio area.

PROJECT DESCRIPTION: The project involves rebuilding the existing concession stand and café area with three buildings, an outdoor recreational area, and improvements to the existing on-site surface parking lot. Building A would be a two-story (27-foot maximum height), 3,516 square-foot restaurant building. The first story would include a restaurant and café, kitchen, restroom facilities, and an indoor dining area with adjacent outdoor deck. The second story would provide a rooftop deck area with outdoor seating. Building B would be a one-story (12-foot height), 771 square-foot restroom and storage facility. Building C would be a one-story (12-foot height) 430 square-foot building for rental of recreational equipment. In addition to these three buildings, the project would provide a playground and recreational area on the southern portion of the project site. The project would also involve a realignment of the existing beach bikeway path to improve pedestrian safety.

A Mitigated Negative Declaration (MND) will be prepared for this project. Historic aerial photographs from 1953 and 1963 indicate that the majority of the project site was originally submerged in the ocean (underwater). By 1972, sand had been bulldozed to elevate the project site, and by 1980 a rock jetty had been built with the resultant sand accumulation elevating the project site above sea level. The MND will include an analysis of both cultural and tribal resources.

Your comments and concerns are important to the City of Long Beach in moving forward with this Project. If you have any questions or concerns with the Project, please contact me at:

Craig Chalfant
Senior Planner | City of Long Beach
333 West Ocean Boulevard, 5th floor | Long Beach, CA 90802
craig.chalfant@longbeach.gov | 562.570.6368

Please be advised that the Gabrieleno Band of Mission Indians – Kizh Nation has 30 days upon receipt of this letter to provide input regarding this Project.

Sincerely,

Craig Chalfant
City of Long Beach

Attachments: Project Location Map
Project Site Plan
Project Elevations



LSA

FIGURE 2.1

N

0 500 1000

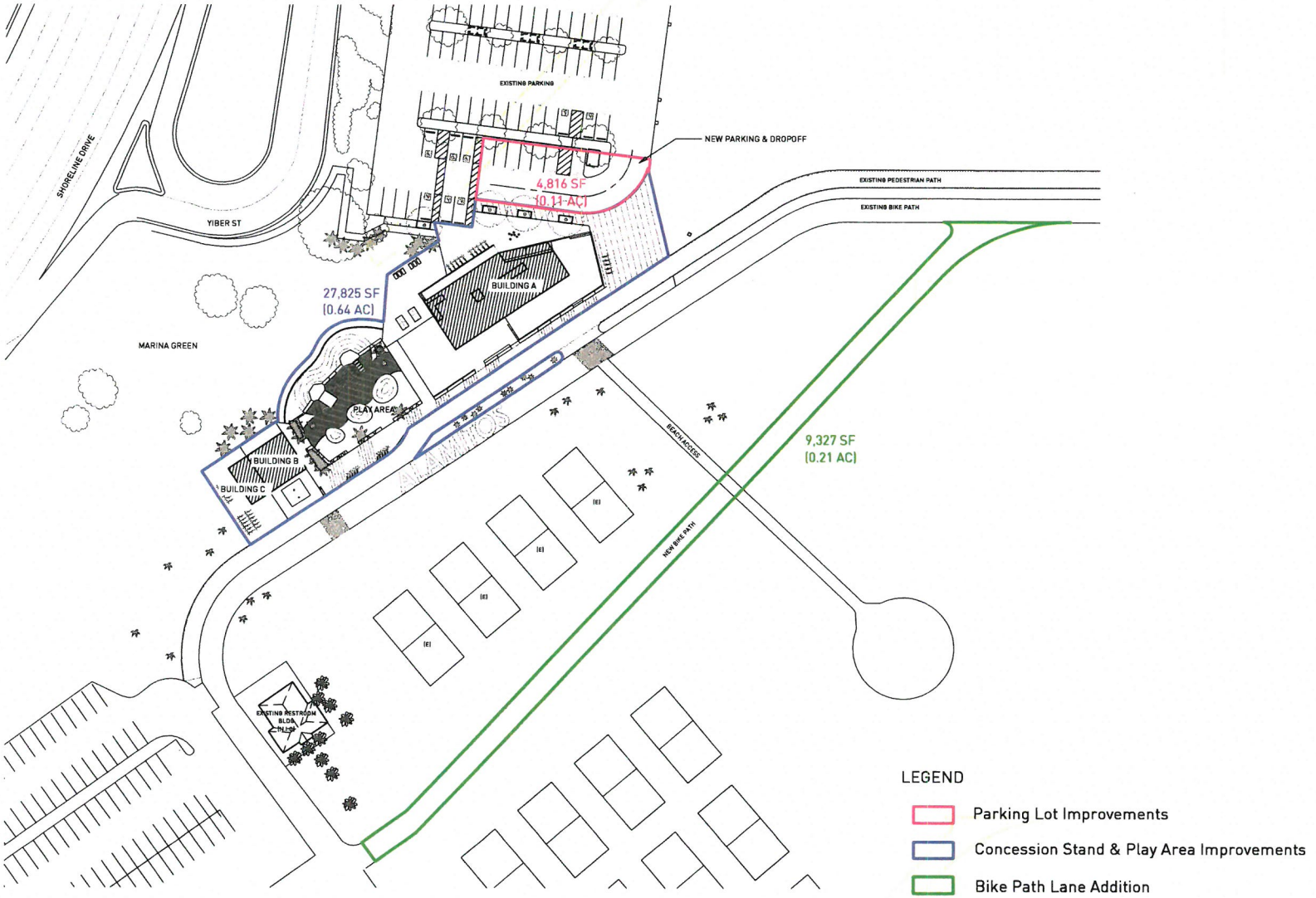
FEET

SOURCE: Bing Maps

I:\CLB1702\G\Regional Project Location.cdr (4/19/2017)

Alamitos Beach Concession Stand

Regional Project Location



A16 | A0.20 | OVERALL SITE PLAN - NORTH

SCALE: 1/32"=1'-0" | Ref: -

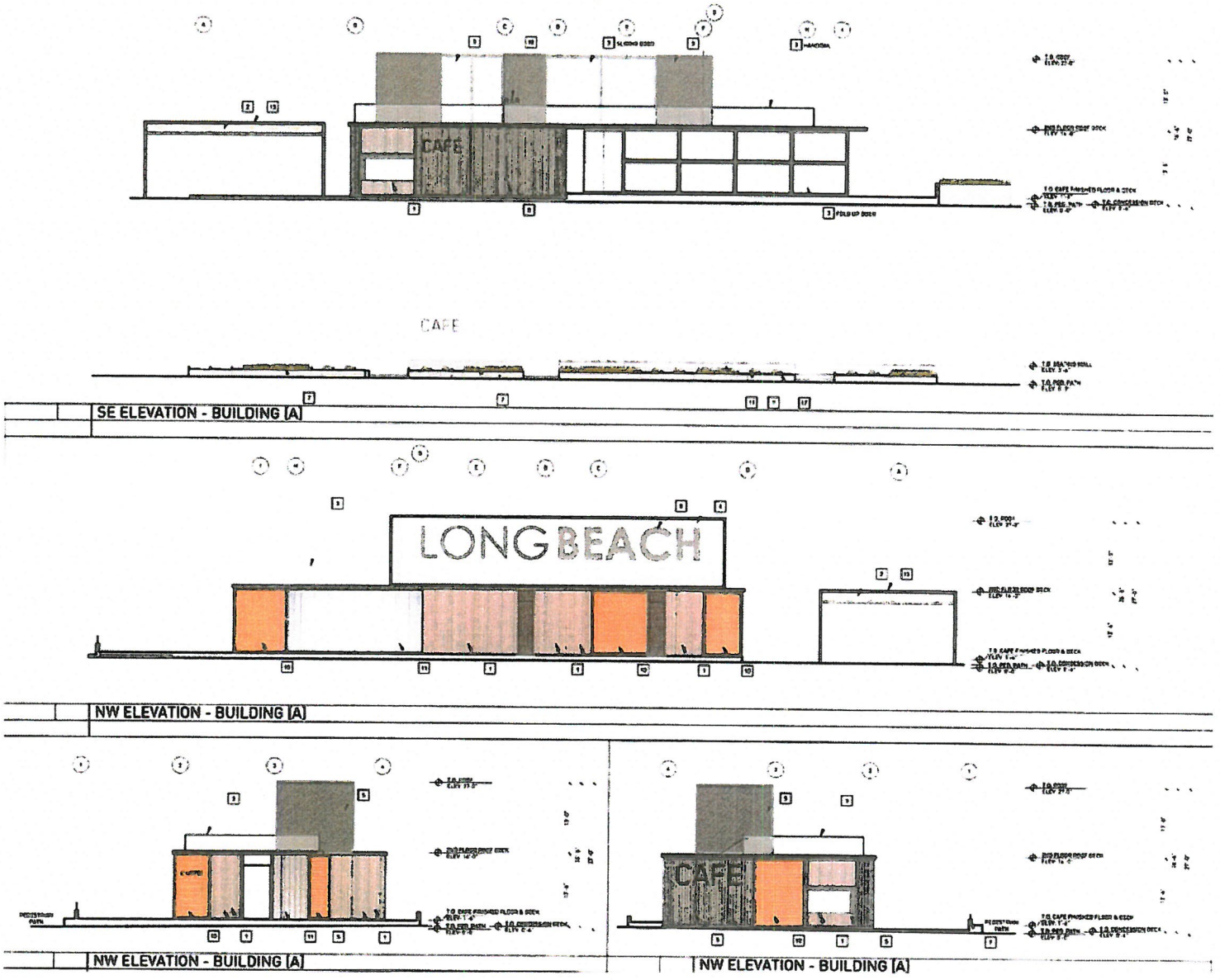
ALAMITOS BEACH CONCESSION BUILDING
OVERALL SITE PLAN

RA-DA
7523 NORTON AVENUE
WEST HOLLYWOOD,
CA 90046
T. 323-851-4040

JOB NO. 201605
NO. R-
SHEET 7 OF 21
DRAWING NO. A0.20

REVISIONS: NO. | DATE | SHEET | APPROVAL | DESCRIPTION
DESIGNED BY: RA
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FIELD BOOK | PAGE
GRAPHIC SCALE 0 5 25 50 100

LAST SAVED BY: rtrudo
PLOT DATE: Jun. 12, 17 SAVED PATH: \\server1\public\00_projects\201605_long beach\ARCH\LBAL



LSA

FIGURE 2.6

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

I:\CLB1702\G\Elevations.cdr (4/14/2017)

CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

333 West Ocean Blvd., 5th Floor, Long Beach, CA 90802 Phone: 570-6194 Fax: 570-6068

PLANNING BUREAU

June 14, 2017

John Tommy Rosas
Tongva Ancestral Territorial Tribal Nation
Private Address
tattnlaw@gmail.com

Re: AB-52 Consultation with the Tongva Ancestral Territorial Tribal Nation for the Alamitos Beach Concession Rebuild Project

Dear Mr. Rosas:

The City of Long Beach is conducting its AB-52 consultation process for the Alamitos Beach Concession Rebuild Project. Please consider this letter and preliminary project information as the initiation of the California Environmental Quality Act, specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB-52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.

PROJECT TITLE: Alamitos Beach Concession Rebuild Project

PROJECT LOCATION: The 1.07-acre project site (Assessor's Parcel No. 7265-021-901) is located at the western end of Alamitos Beach and is adjacent to the waterfront area of downtown Long Beach. The project site is currently developed with a one-story 2,234 square-foot concession building (Alamitos Café) and a small outdoor patio area.

PROJECT DESCRIPTION: The project involves rebuilding the existing concession stand and café area with three buildings, an outdoor recreational area, and improvements to the existing on-site surface parking lot. Building A would be a two-story (27-foot maximum height), 3,516 square-foot restaurant building. The first story would include a restaurant and café, kitchen, restroom facilities, and an indoor dining area with adjacent outdoor deck. The second story would provide a rooftop deck area with outdoor seating. Building B would be a one-story (12-foot height), 771 square-foot restroom and storage facility. Building C would be a one-story (12-foot height) 430 square-foot building for rental of recreational equipment. In addition to these three buildings, the project would provide a playground and recreational area on the southern portion of the project site. The project would also involve a realignment of the existing beach bikeway path to improve pedestrian safety.

A Mitigated Negative Declaration (MND) will be prepared for this project. Historic aerial photographs from 1953 and 1963 indicate that the majority of the project site was originally submerged in the ocean (underwater). By 1972, sand had been bulldozed to elevate the project site, and by 1980 a rock jetty had been built with the resultant sand accumulation elevating the project site above sea level. The MND will include an analysis of both cultural and tribal resources.

Your comments and concerns are important to the City of Long Beach in moving forward with this project. If you have any questions or concerns with this project, please contact me at:

Craig Chalfant
Senior Planner | City of Long Beach
333 West Ocean Boulevard, 5th floor | Long Beach, CA 90802
craig.chalfant@longbeach.gov | 562.570.6368

Please be advised that the Tongva Ancestral Territorial Tribal Nation has 30 days upon receipt of this letter to provide input regarding this project.

Sincerely,

Craig Chalfant
City of Long Beach

Attachments: Project Location Map
Project Site Plan
Project Elevations



LSA

FIGURE 2.1

N

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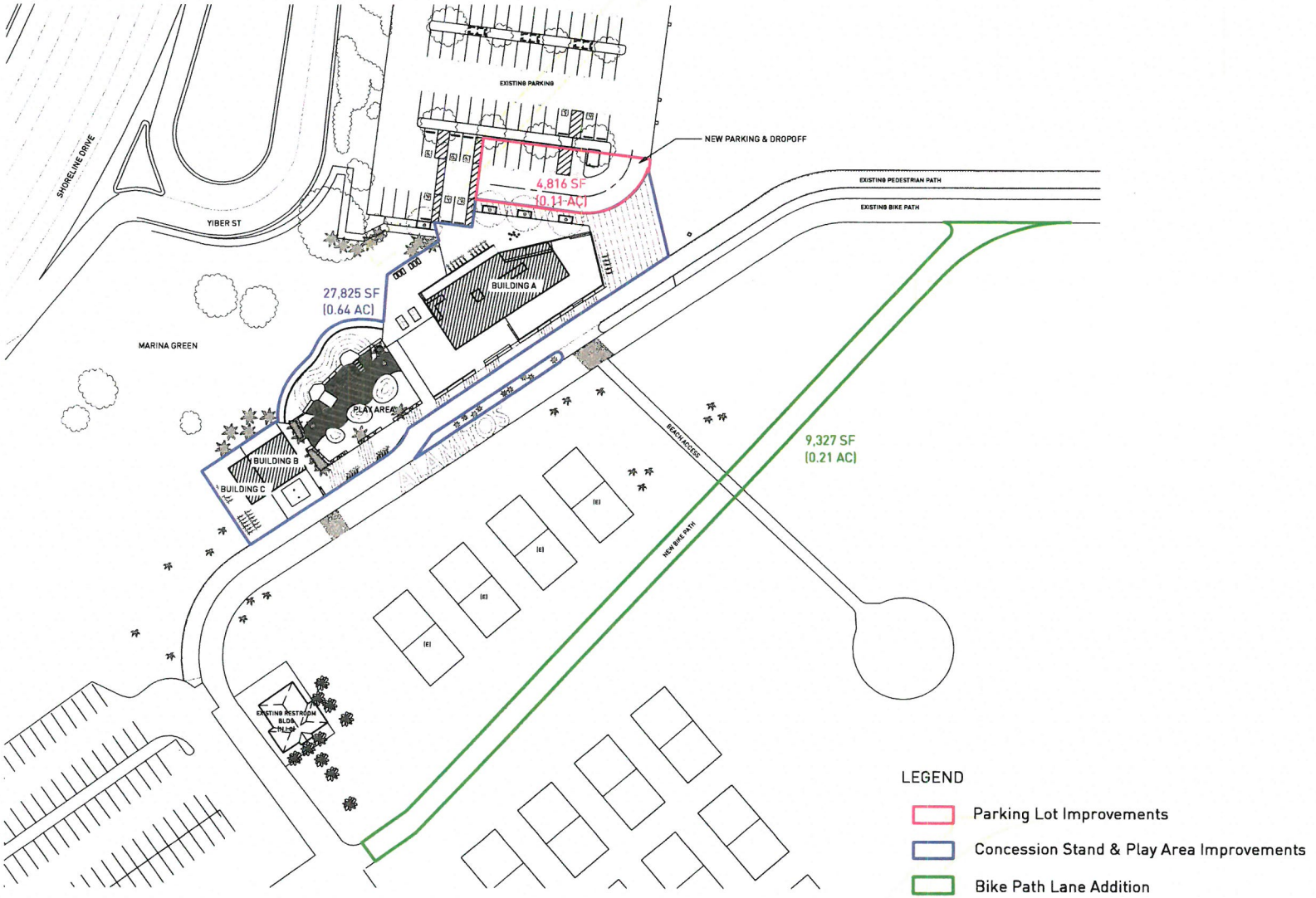
FEET

SOURCE: Bing Maps

I:\CLB1702\G\Regional Project Location.cdr (4/19/2017)

Alamitos Beach Concession Stand

Regional Project Location



A16 | A0.20 | OVERALL SITE PLAN - NORTH

SCALE: 1/32"=1'-0" | Ref: -

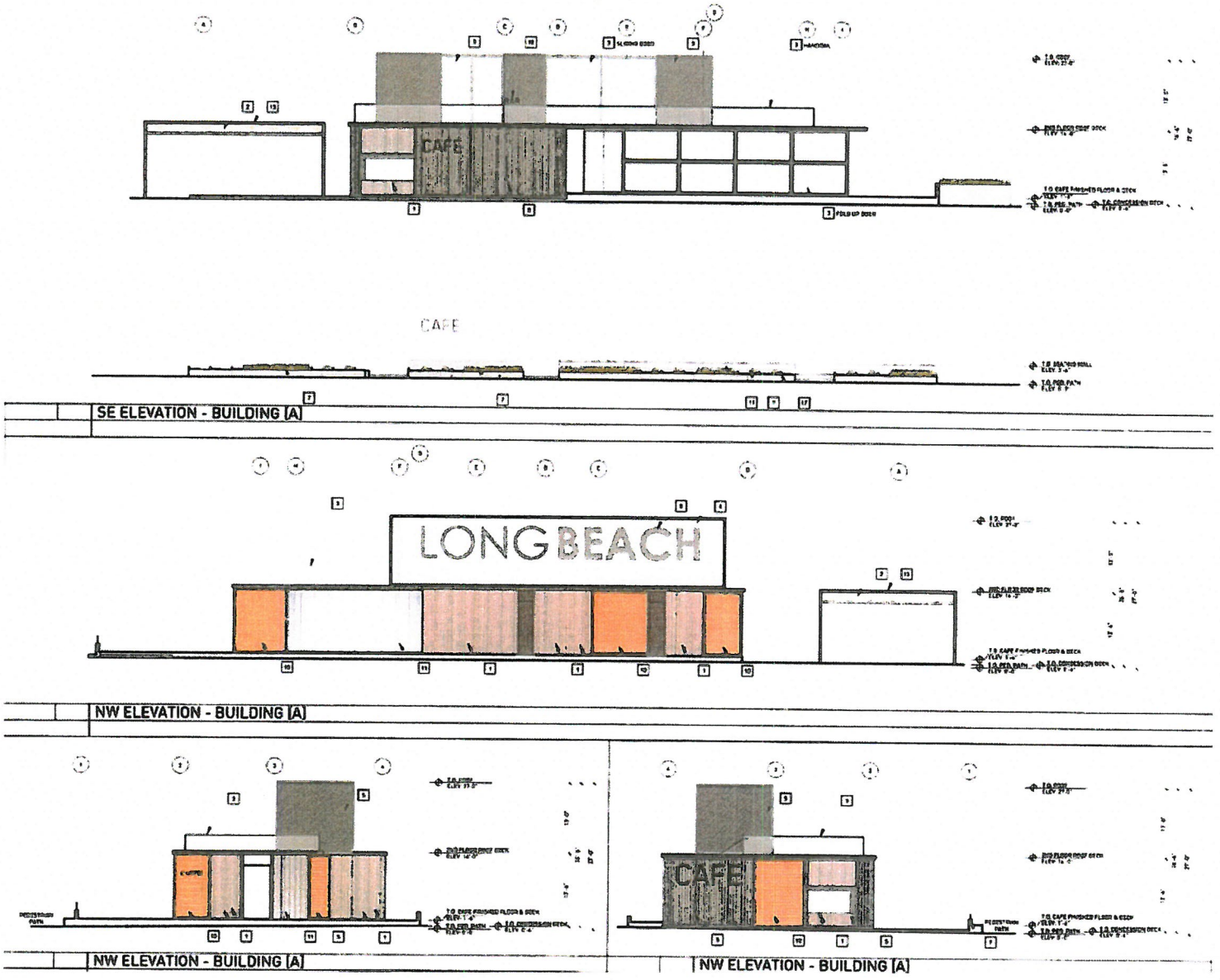
ALAMITOS BEACH CONCESSION BUILDING
OVERALL SITE PLAN

RA-DA
7523 NORTON AVENUE
WEST HOLLYWOOD,
CA 90046
T. 323-851-4040

JOB NO. 201605
NO. R-
SHEET 7 OF 21
DRAWING NO. A0.20

REVISIONS: NO. | DATE | SHEET | APPROVAL | DESCRIPTION
DESIGNED BY: RA
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FIELD BOOK | PAGE
GRAPHIC SCALE 0 5 25 50 100

LAST SAVED BY: rtrudo
PLOT DATE: Jun. 12, 17 SAVED PATH: \\server1\public\00_projects\201605_long beach\ARCH\LBAL



LSA

FIGURE 2.6

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

I:\CLB1702\G\Elevations.cdr (4/14/2017)

CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

333 West Ocean Blvd., 5th Floor, Long Beach, CA 90802 Phone: 570-6194 Fax: 570-6068

PLANNING BUREAU

June 14, 2017

Rosemary Morillo
Soboba Band of Luiseno Indians
P. O. Box 487
San Jacinto, CA 92583

Re: AB-52 Consultation with the Soboba Band of Luiseno Indians for the Alamitos Beach Concession Rebuild Project

Dear Ms. Morillo:

The City of Long Beach is conducting its AB-52 consultation process for the Alamitos Beach Concession Rebuild Project. Please consider this letter and preliminary project information as the initiation of the California Environmental Quality Act, specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB-52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.

PROJECT TITLE: Alamitos Beach Concession Rebuild Project

PROJECT LOCATION: The 1.07-acre project site (Assessor's Parcel No. 7265-021-901) is located at the western end of Alamitos Beach and is adjacent to the waterfront area of downtown Long Beach. The project site is currently developed with a one-story 2,234 square-foot concession building (Alamitos Café) and a small outdoor patio area.

PROJECT DESCRIPTION: The project involves rebuilding the existing concession stand and café area with three buildings, an outdoor recreational area, and improvements to the existing on-site surface parking lot. Building A would be a two-story (27-foot maximum height), 3,516 square-foot restaurant building. The first story would include a restaurant and café, kitchen, restroom facilities, and an indoor dining area with adjacent outdoor deck. The second story would provide a rooftop deck area with outdoor seating. Building B would be a one-story (12-foot height), 771 square-foot restroom and storage facility. Building C would be a one-story (12-foot height) 430 square-foot building for rental of recreational equipment. In addition to these three buildings, the project would provide a playground and recreational area on the southern portion of the project site. The project would also involve a realignment of the existing beach bikeway path to improve pedestrian safety.

A Mitigated Negative Declaration (MND) will be prepared for this project. Historic aerial photographs from 1953 and 1963 indicate that the majority of the project site was originally submerged in the ocean (underwater). By 1972, sand had been bulldozed to elevate the project site, and by 1980 a rock jetty had been built with the resultant sand accumulation elevating the project site above sea level. The MND will include an analysis of both cultural and tribal resources.

Your comments and concerns are important to the City of Long Beach in moving forward with this project. If you have any questions or concerns with this project, please contact me at:

Craig Chalfant
Senior Planner | City of Long Beach
333 West Ocean Boulevard, 5th floor | Long Beach, CA 90802
craig.chalfant@longbeach.gov | 562.570.6368

Please be advised that the Soboba Band of Luiseno Indians have 30 days upon receipt of this letter to provide input regarding this project.

Sincerely,

Craig Chalfant
City of Long Beach

Attachments: Project Location Map
Project Site Plan
Project Elevations



LSA

FIGURE 2.1

N

0 500 1000

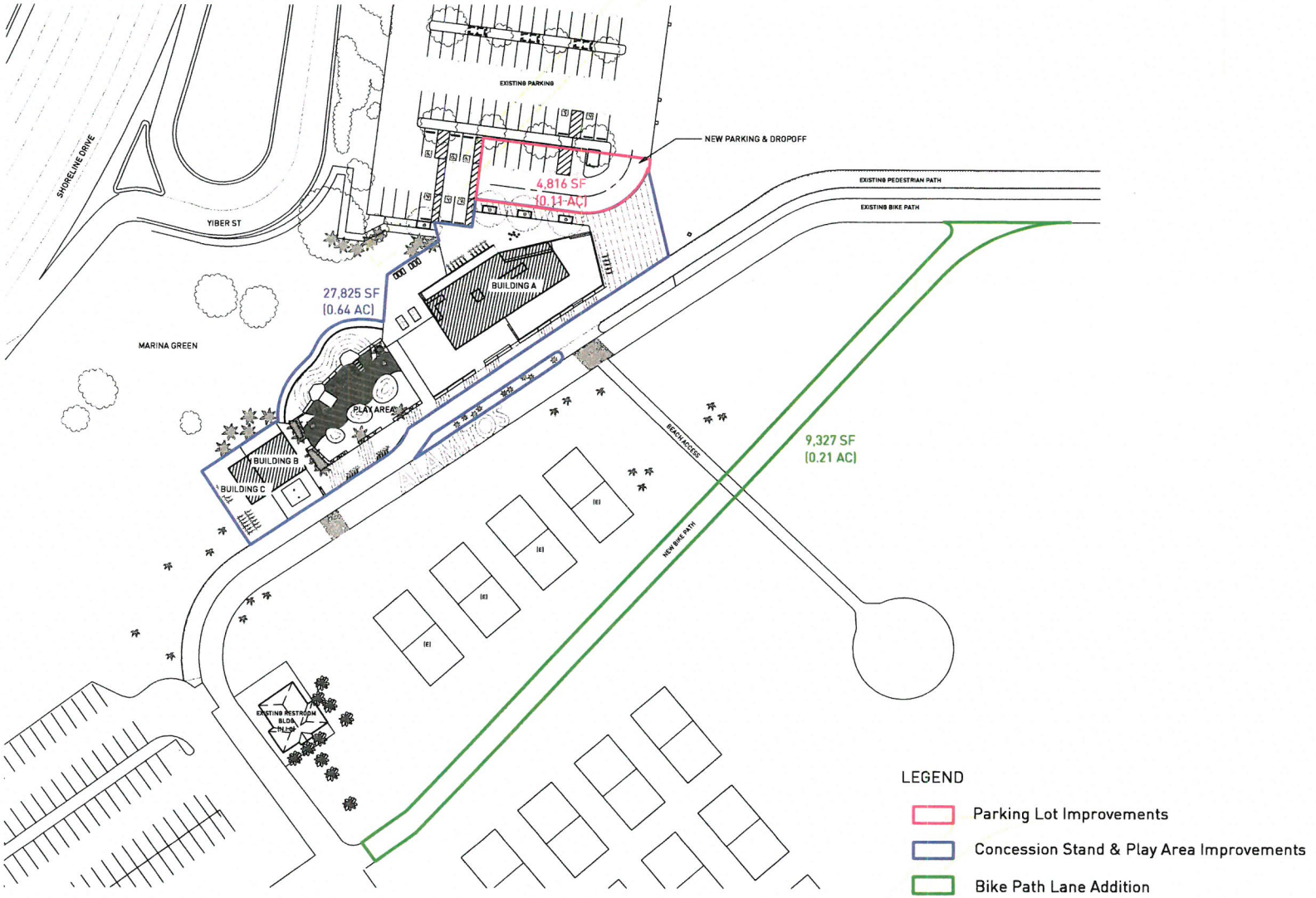
FEET

SOURCE: Bing Maps

I:\CLB1702\G\Regional Project Location.cdr (4/19/2017)

Alamitos Beach Concession Stand

Regional Project Location



A16 | A0.20 | OVERALL SITE PLAN - NORTH

SCALE: 1/32"=1'-0" | Ref: -

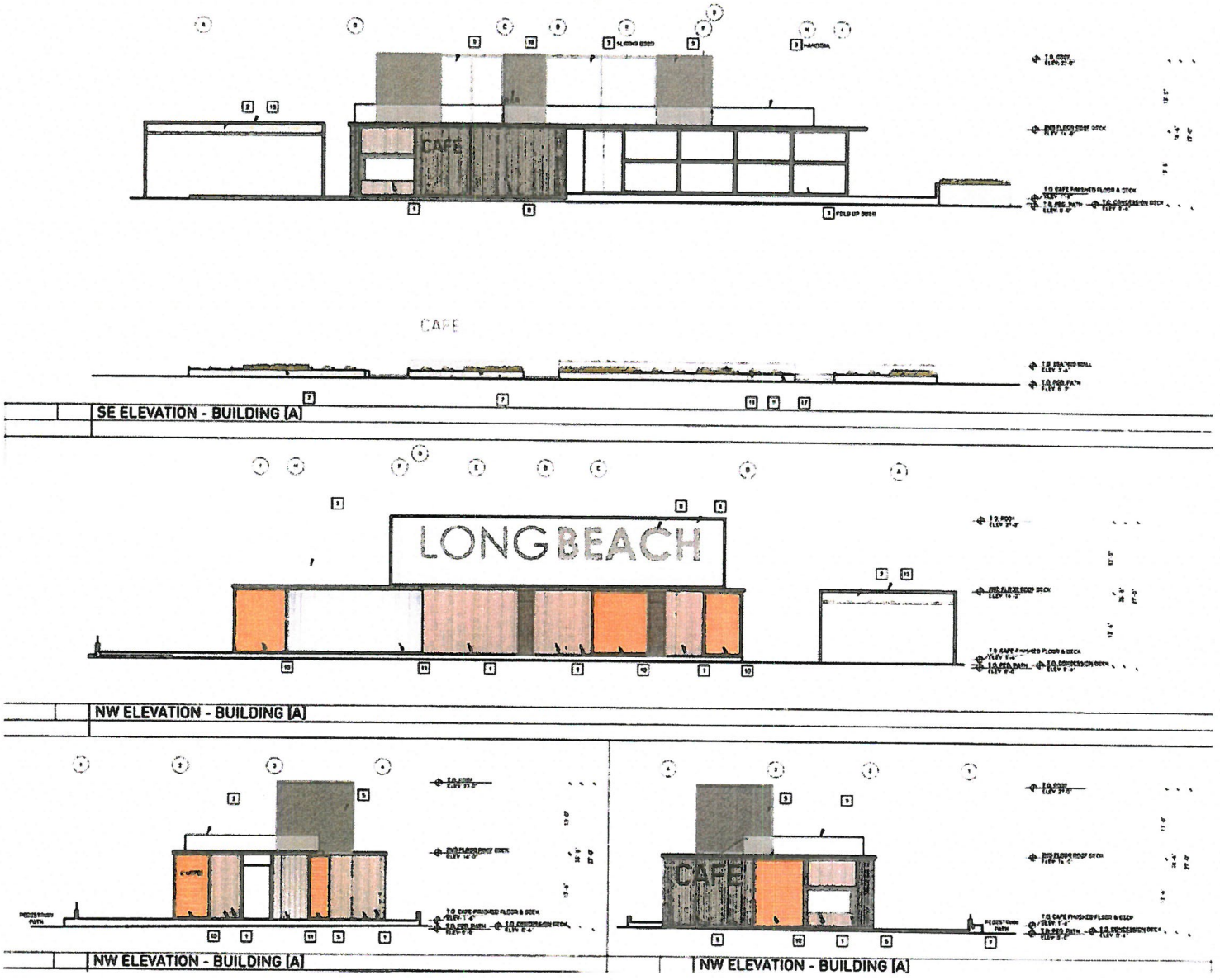
ALAMITOS BEACH CONCESSION BUILDING
OVERALL SITE PLAN

RA-DA
7523 NORTON AVENUE
WEST HOLLYWOOD,
CA 90046
T. 323-851-4040

JOB NO. 201605
NO. R-
SHEET 7 OF 21
DRAWING NO. A0.20

REVISIONS: NO. | DATE | SHEET | APPROVAL | DESCRIPTION
DESIGNED BY: RA
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GRAPHIC SCALE 0 5 25 50 100

LAST SAVED BY: rtrudo
PLOT DATE: Jun. 12, 17 SAVED PATH: \\server1\public\00_projects\201605_long beach\ARCH\LBAL



LSA

FIGURE 2.6

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

I:\CLB1702\G\Elevations.cdr (4/14/2017)

CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

333 West Ocean Blvd., 5th Floor, Long Beach, CA 90802 Phone: 570-6194 Fax: 570-6068

PLANNING BUREAU

June 14, 2017

Anthony Morales
Gabrieleno/Tongva San Gabriel Band of Mission Indians
P. O. Box 693
San Gabriel, CA 91778

Re: AB-52 Consultation with the Gabrieleno/Tongva San Gabriel Band of Mission Indians for the Alamitos Beach Concession Rebuild Project

Dear Mr. Morales:

The City of Long Beach is conducting its AB-52 consultation process for the Alamitos Beach Concession Rebuild Project. Please consider this letter and preliminary project information as the initiation of the California Environmental Quality Act, specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB-52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.

PROJECT TITLE: Alamitos Beach Concession Rebuild Project

PROJECT LOCATION: The 1.07-acre project site (Assessor's Parcel No. 7265-021-901) is located at the western end of Alamitos Beach and is adjacent to the waterfront area of downtown Long Beach. The project site is currently developed with a one-story 2,234 square-foot concession building (Alamitos Café) and a small outdoor patio area.

PROJECT DESCRIPTION: The project involves rebuilding the existing concession stand and café area with three buildings, an outdoor recreational area, and improvements to the existing on-site surface parking lot. Building A would be a two-story (27-foot maximum height), 3,516 square-foot restaurant building. The first story would include a restaurant and café, kitchen, restroom facilities, and an indoor dining area with adjacent outdoor deck. The second story would provide a rooftop deck area with outdoor seating. Building B would be a one-story (12-foot height), 771 square-foot restroom and storage facility. Building C would be a one-story (12-foot height) 430 square-foot building for rental of recreational equipment. In addition to these three buildings, the project would provide a playground and recreational area on the southern portion of the project site. The project would also involve a realignment of the existing beach bikeway path to improve pedestrian safety.

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Your comments and concerns are important to the City of Long Beach in moving forward with this project. If you have any questions or concerns with this project, please contact me at:

Craig Chalfant
Senior Planner | City of Long Beach
333 West Ocean Boulevard, 5th floor | Long Beach, CA 90802
craig.chalfant@longbeach.gov | 562.570.6368

Please be advised that the Gabrieleno/Tongva San Gabriel Band of Mission Indians have 30 days upon receipt of this letter to provide input regarding this project.

Sincerely,

Craig Chalfant
City of Long Beach

Attachments: Project Location Map
Project Site Plan
Project Elevations



LSA

FIGURE 2.1

N

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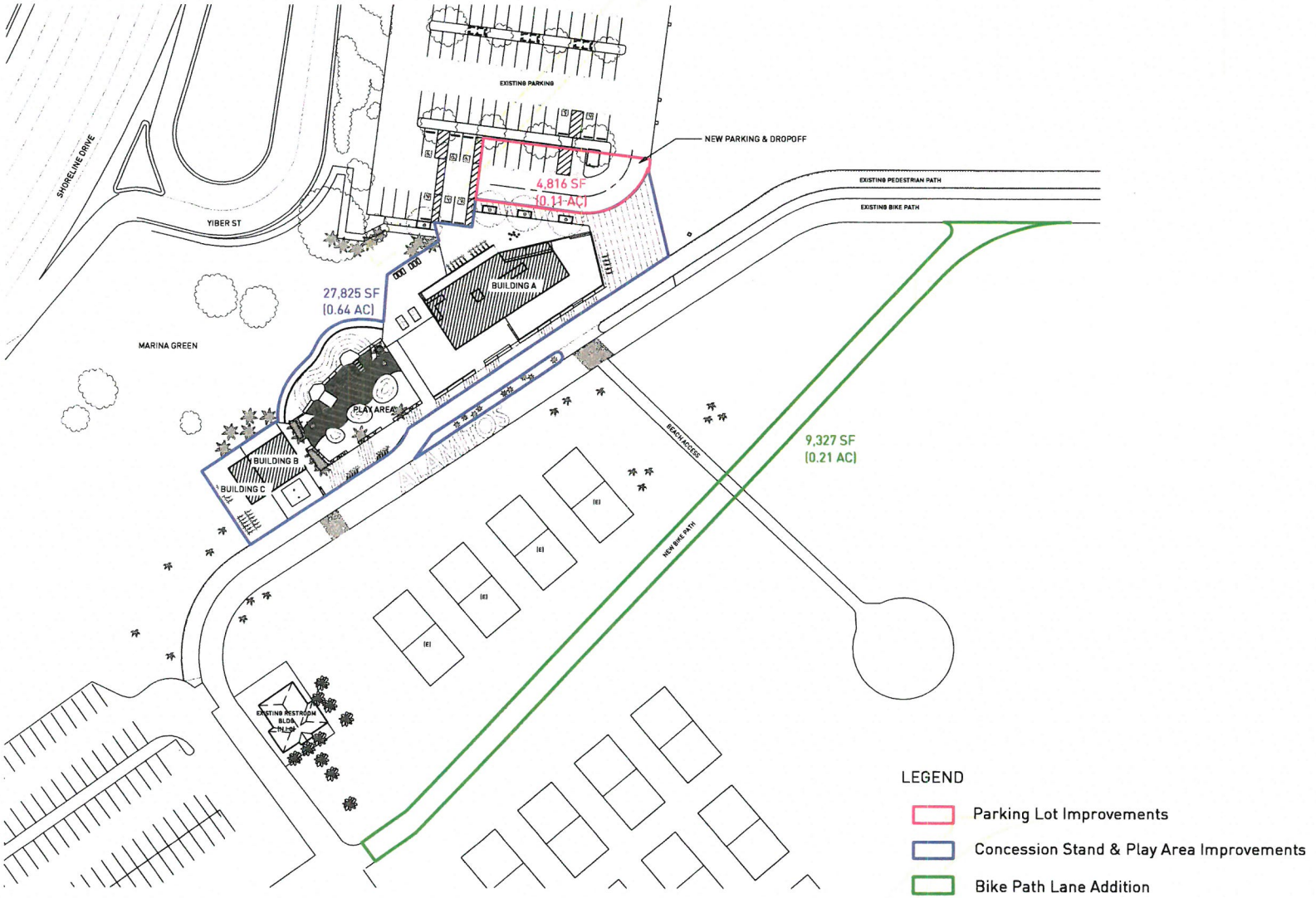
FEET

SOURCE: Bing Maps

I:\CLB1702\G\Regional Project Location.cdr (4/19/2017)

Alamitos Beach Concession Stand

Regional Project Location



A16 | A0.20 | OVERALL SITE PLAN - NORTH

SCALE: 1/32"=1'-0" | Ref: -

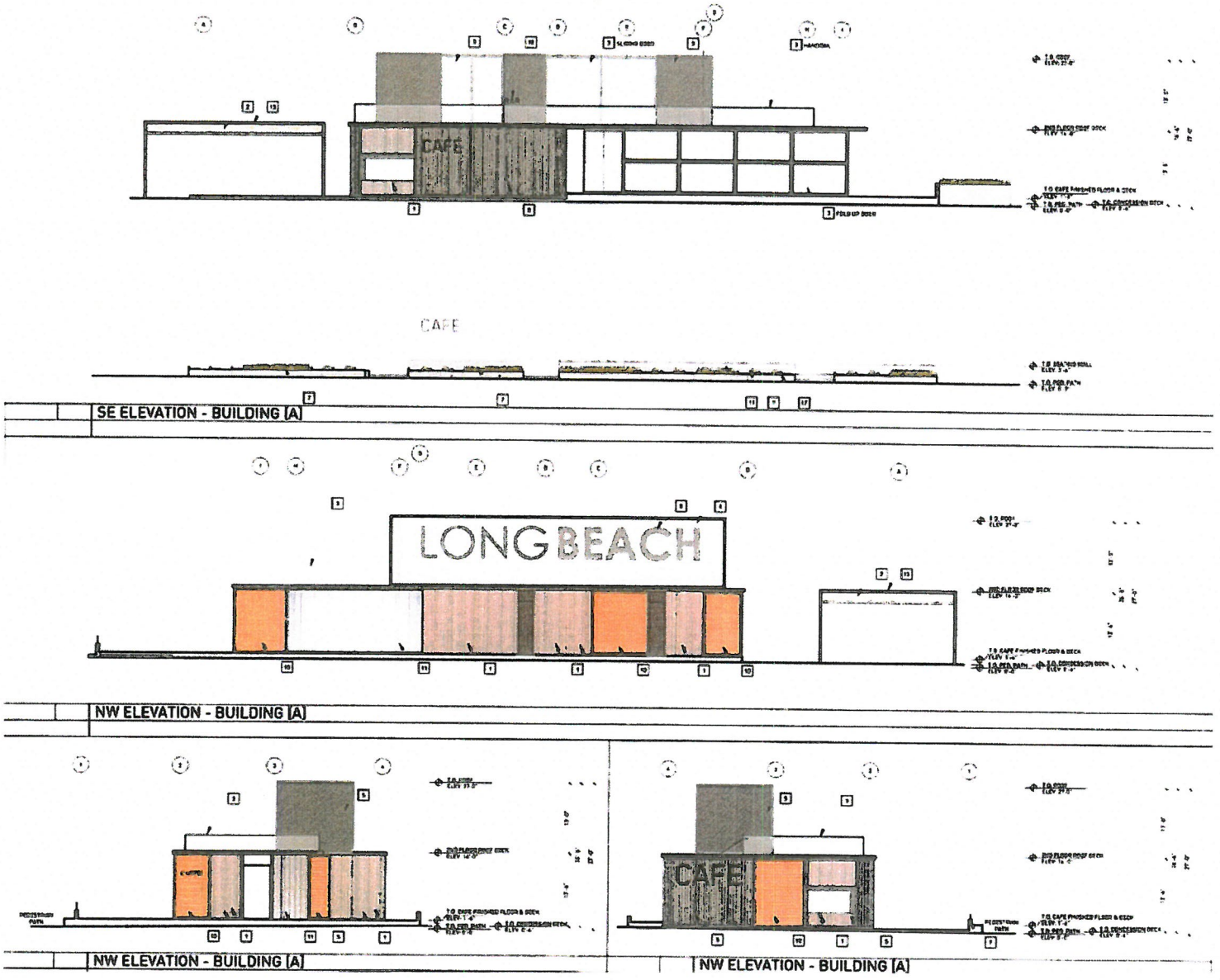
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OVERALL SITE PLAN

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WEST HOLLYWOOD,
CA 90046
T. 323-851-4040

JOB NO. 201605
NO. R-
SHEET 7 OF 21
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REVISIONS: NO. | DATE | SHEET | APPROVAL | DESCRIPTION
DESIGNED BY: RA
DRAWN BY: CW
DESIGN CHECK BY:
DRAFTING CHECK BY:
AS-BUILT | REF.
FIELD BOOK | PAGE
GRAPHIC SCALE 0 5 25 50 100

LAST SAVED BY: rtrudo
PLOT DATE: Jun. 12, 17 SAVED PATH: \\server1\public\00_projects\201605_long beach\ARCH\LBAL



LSA

FIGURE 2.6

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

I:\CLB1702\G\Elevations.cdr (4/14/2017)

CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

333 West Ocean Blvd., 5th Floor, Long Beach, CA 90802 Phone: 570-6194 Fax: 570-6068

PLANNING BUREAU

June 14, 2017

Robert Dorame
Gabrieleno Tongva Indians of California Tribal Council
P. O. Box 490
Bellflower, CA 90707

Re: AB-52 Consultation with the Gabrieleno Tongva Indians of California Tribal Council for the Alamitos Beach Concession Rebuild Project

Dear Mr. Dorame:

The City of Long Beach is conducting its AB-52 consultation process for the Alamitos Beach Concession Rebuild Project. Please consider this letter and preliminary project information as the initiation of the California Environmental Quality Act, specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB-52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.

PROJECT TITLE: Alamitos Beach Concession Rebuild Project

PROJECT LOCATION: The 1.07-acre project site (Assessor's Parcel No. 7265-021-901) is located at the western end of Alamitos Beach and is adjacent to the waterfront area of downtown Long Beach. The project site is currently developed with a one-story 2,234 square-foot concession building (Alamitos Café) and a small outdoor patio area.

PROJECT DESCRIPTION: The project involves rebuilding the existing concession stand and café area with three buildings, an outdoor recreational area, and improvements to the existing on-site surface parking lot. Building A would be a two-story (27-foot maximum height), 3,516 square-foot restaurant building. The first story would include a restaurant and café, kitchen, restroom facilities, and an indoor dining area with adjacent outdoor deck. The second story would provide a rooftop deck area with outdoor seating. Building B would be a one-story (12-foot height), 771 square-foot restroom and storage facility. Building C would be a one-story (12-foot height) 430 square-foot building for rental of recreational equipment. In addition to these three buildings, the project would provide a playground and recreational area on the southern portion of the project site. The project would also involve a realignment of the existing beach bikeway path to improve pedestrian safety.

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Craig Chalfant
Senior Planner | City of Long Beach
333 West Ocean Boulevard, 5th floor | Long Beach, CA 90802
craig.chalfant@longbeach.gov | 562.570.6368

Please be advised that the Gabrieleno Tongva Indians of California Tribal Council has 30 days upon receipt of this letter to provide input regarding this project.

Sincerely,

Craig Chalfant
City of Long Beach

Attachments: Project Location Map
Project Site Plan
Project Elevations



LSA

FIGURE 2.1

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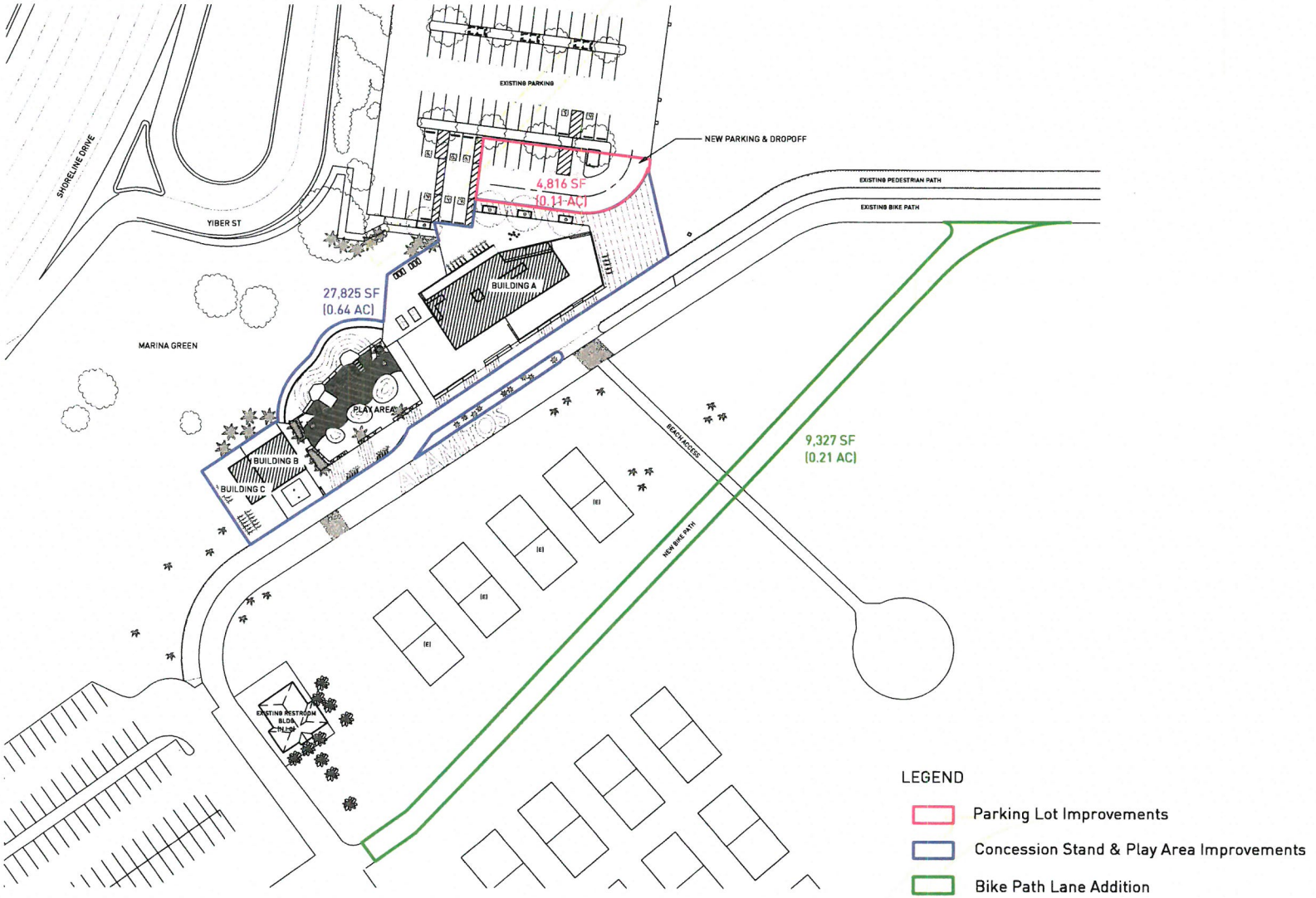
FEET

SOURCE: Bing Maps

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Alamitos Beach Concession Stand

Regional Project Location



A16 | A0.20 | OVERALL SITE PLAN - NORTH

SCALE: 1/32"=1'-0" | Ref: -

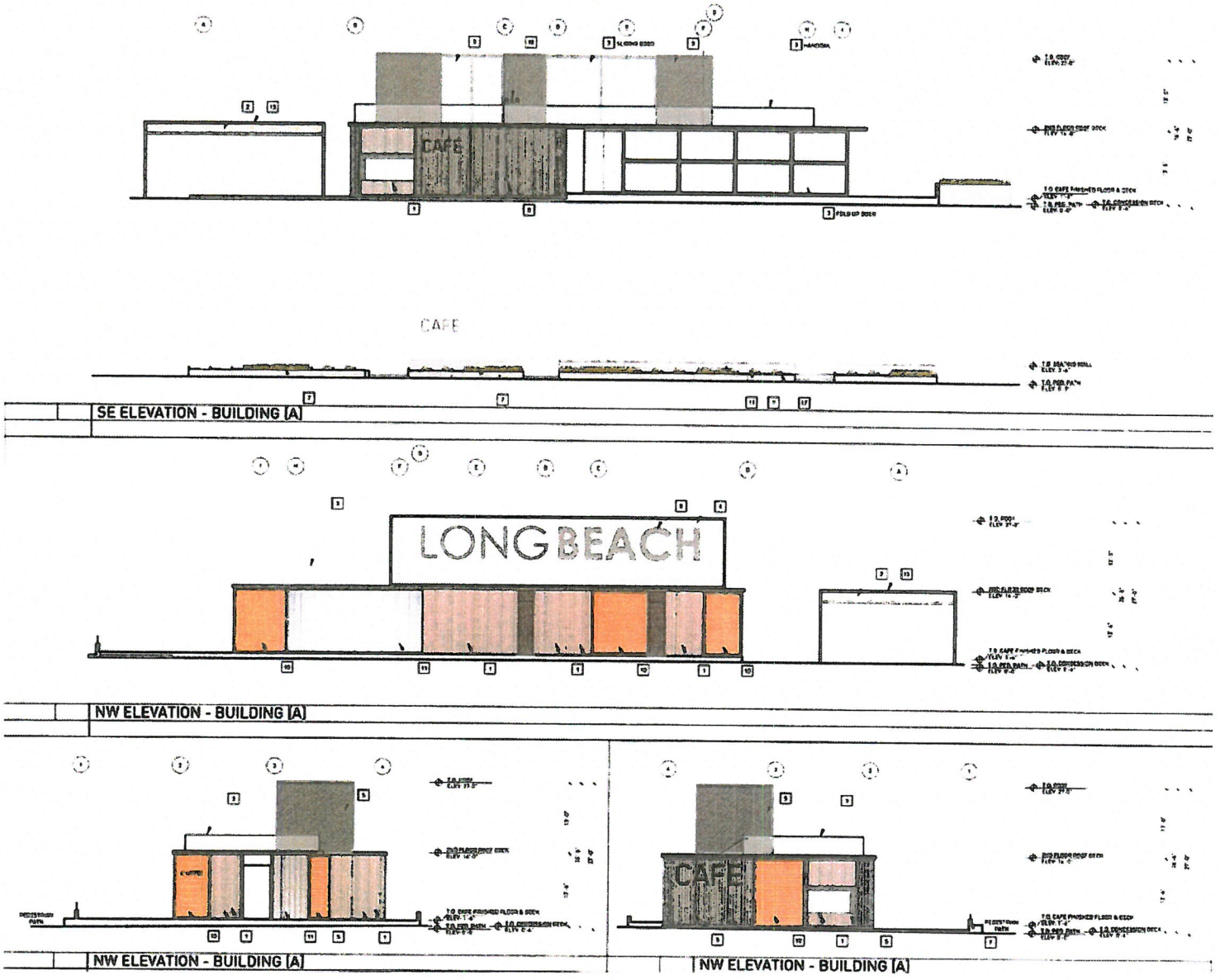
ALAMITOS BEACH CONCESSION BUILDING
OVERALL SITE PLAN

RA-DA
7523 NORTON AVENUE
WEST HOLLYWOOD,
CA 90046
T. 323-851-4040

JOB NO. 201605
NO. R-
SHEET 7 OF 21
DRAWING NO. A0.20

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FIGURE 2.6

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

I:\CLB1702\G\Elevations.cdr (4/14/2017)

CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

333 West Ocean Blvd., 5th Floor, Long Beach, CA 90802 Phone: 570-6194 Fax: 570-6068

PLANNING BUREAU

June 14, 2017

Linda Candelaria
Gabrieleno-Tongva Tribe
1999 Avenue of the Stars, Suite 1100
Los Angeles, CA 90067

Re: AB-52 Consultation with the Gabrieleno-Tongva Tribe for the Alamitos Beach Concession Rebuild Project

Dear Ms. Candelaria:

The City of Long Beach is conducting its AB-52 consultation process for the Alamitos Beach Concession Rebuild Project. Please consider this letter and preliminary project information as the initiation of the California Environmental Quality Act, specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB-52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.

PROJECT TITLE: Alamitos Beach Concession Rebuild Project

PROJECT LOCATION: The 1.07-acre project site (Assessor's Parcel No. 7265-021-901) is located at the western end of Alamitos Beach and is adjacent to the waterfront area of downtown Long Beach. The project site is currently developed with a one-story 2,234 square-foot concession building (Alamitos Café) and a small outdoor patio area.

PROJECT DESCRIPTION: The project involves rebuilding the existing concession stand and café area with three buildings, an outdoor recreational area, and improvements to the existing on-site surface parking lot. Building A would be a two-story (27-foot maximum height), 3,516 square-foot restaurant building. The first story would include a restaurant and café, kitchen, restroom facilities, and an indoor dining area with adjacent outdoor deck. The second story would provide a rooftop deck area with outdoor seating. Building B would be a one-story (12-foot height), 771 square-foot restroom and storage facility. Building C would be a one-story (12-foot height) 430 square-foot building for rental of recreational equipment. In addition to these three buildings, the project would provide a playground and recreational area on the southern portion of the project site. The project would also involve a realignment of the existing beach bikeway path to improve pedestrian safety.

A Mitigated Negative Declaration (MND) will be prepared for this project. Historic aerial photographs from 1953 and 1963 indicate that the majority of the project site was originally submerged in the ocean (underwater). By 1972, sand had been bulldozed to elevate the project site, and by 1980 a rock jetty had been built with the resultant sand accumulation elevating the project site above sea level. The MND will include an analysis of both cultural and tribal resources.

Your comments and concerns are important to the City of Long Beach in moving forward with this project. If you have any questions or concerns with this project, please contact me at:

Craig Chalfant
Senior Planner | City of Long Beach
333 West Ocean Boulevard, 5th floor | Long Beach, CA 90802
craig.chalfant@longbeach.gov | 562.570.6368

Please be advised that the Gabrieleno-Tongva Tribe has 30 days upon receipt of this letter to provide input regarding this project.

Sincerely,

Craig Chalfant
City of Long Beach

Attachments: Project Location Map
Project Site Plan
Project Elevations



LSA

FIGURE 2.1

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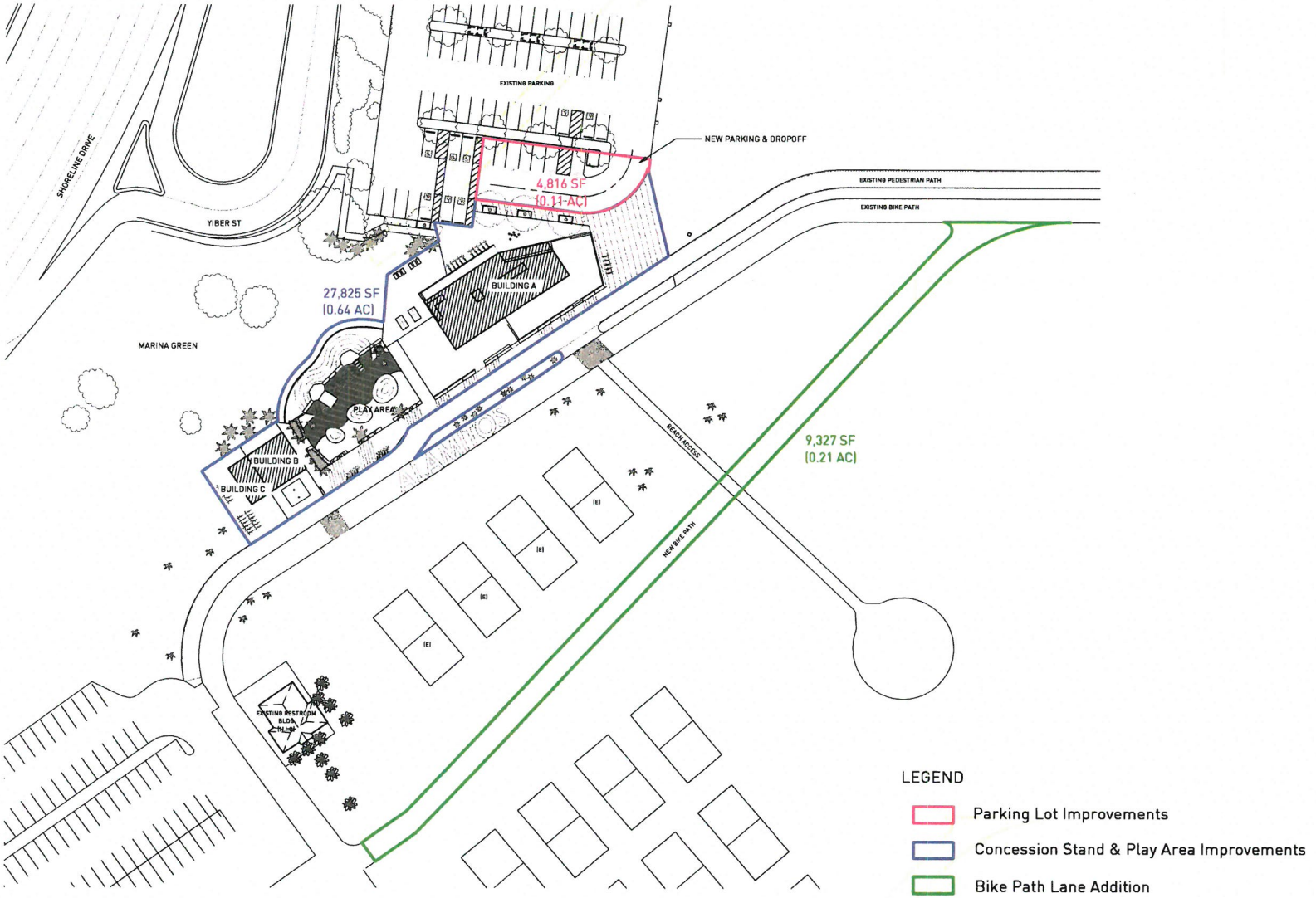
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Alamitos Beach Concession Stand

Regional Project Location



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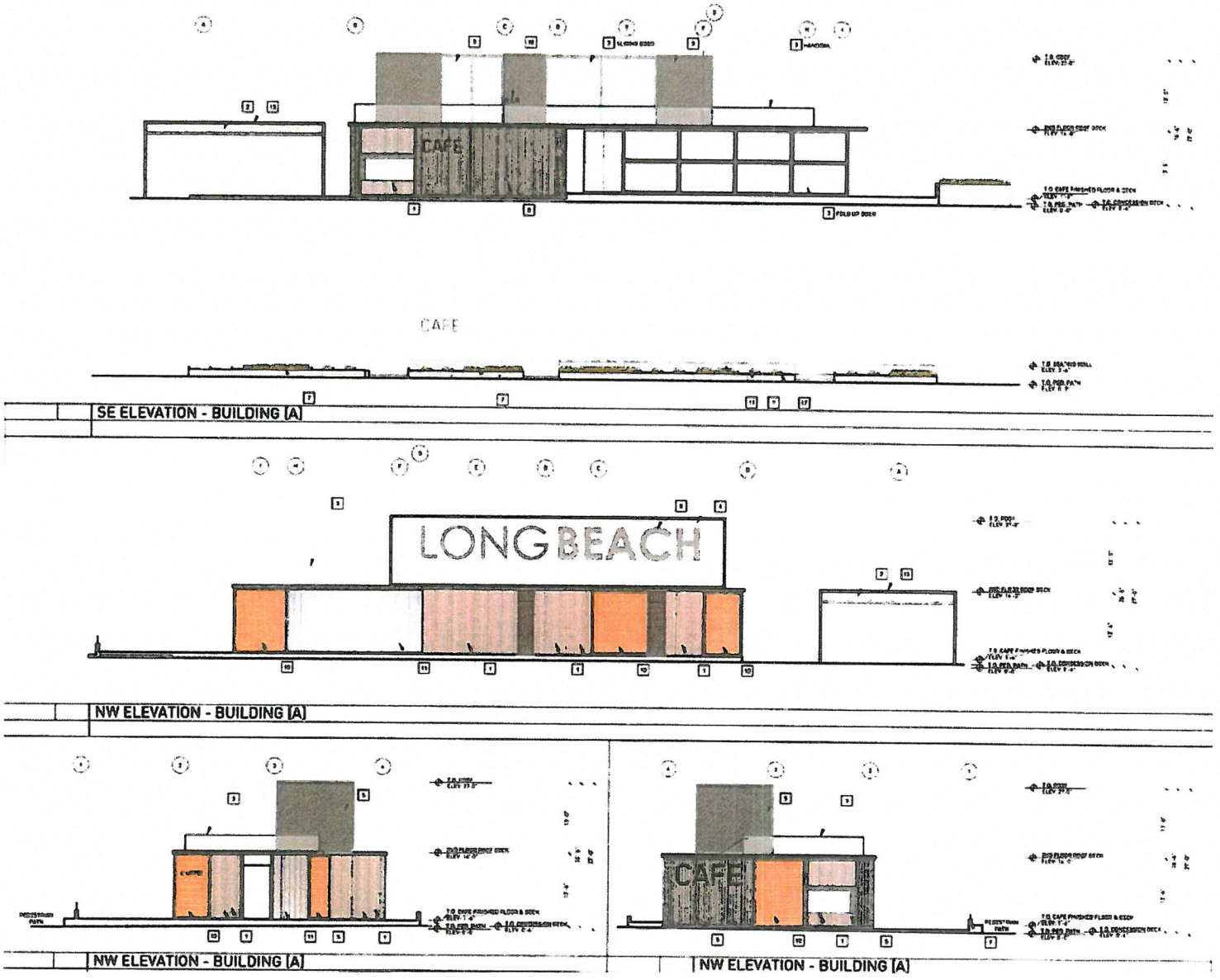
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LSA

FIGURE 2.6

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

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CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

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PLANNING BUREAU

June 14, 2017

Sandonne Goad
Gabrielino/Tongva Nation
106 ½ Judge John Aiso Street, #231
Los Angeles, CA 90012

Re: AB-52 Consultation with the Gabrielino/Tongva Nation for the Alamitos Beach Concession Rebuild Project

Dear Mr. Goad:

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Sincerely,

Craig Chalfant
City of Long Beach

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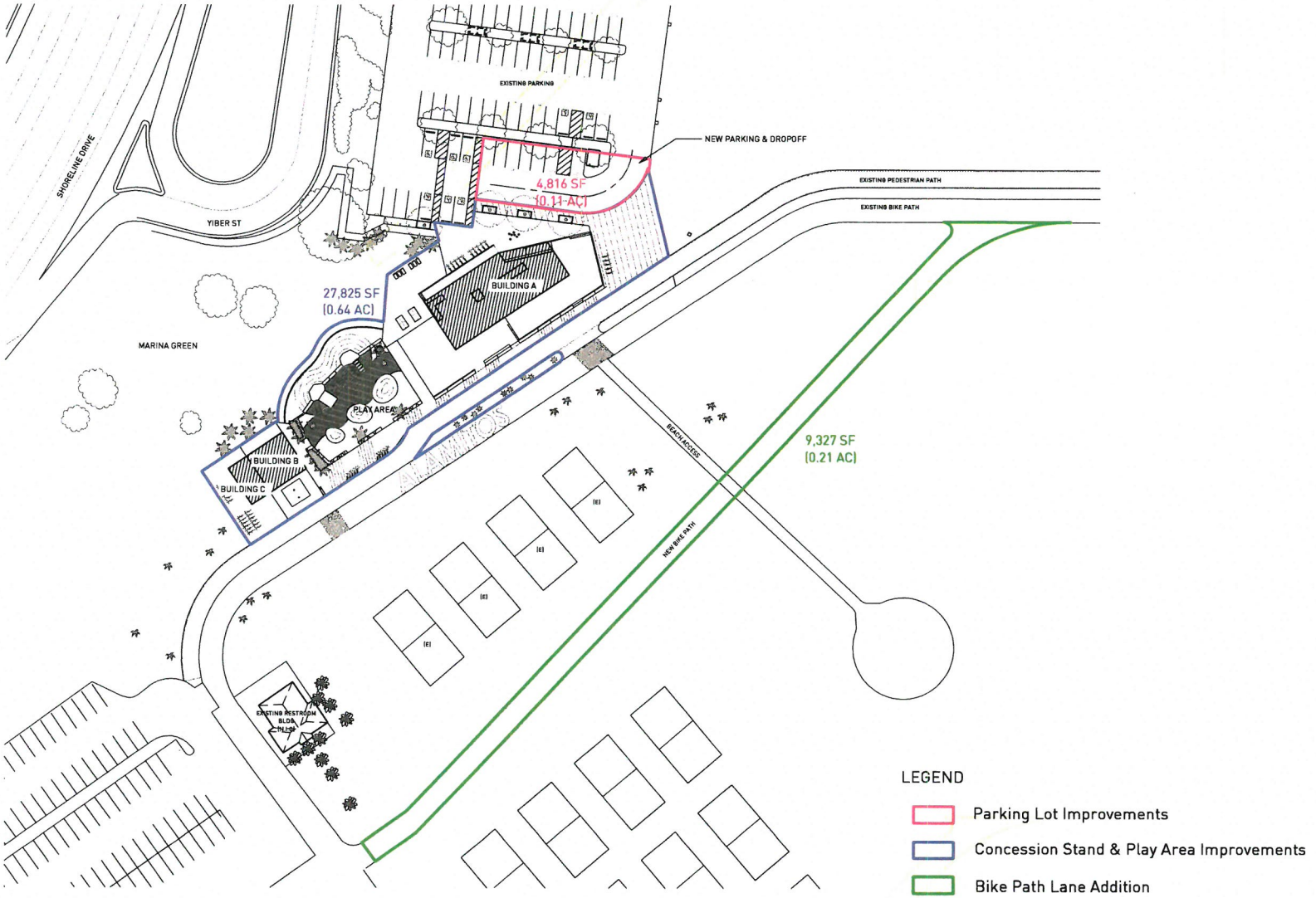
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SOURCE: Bing Maps

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Alamitos Beach Concession Stand

Regional Project Location



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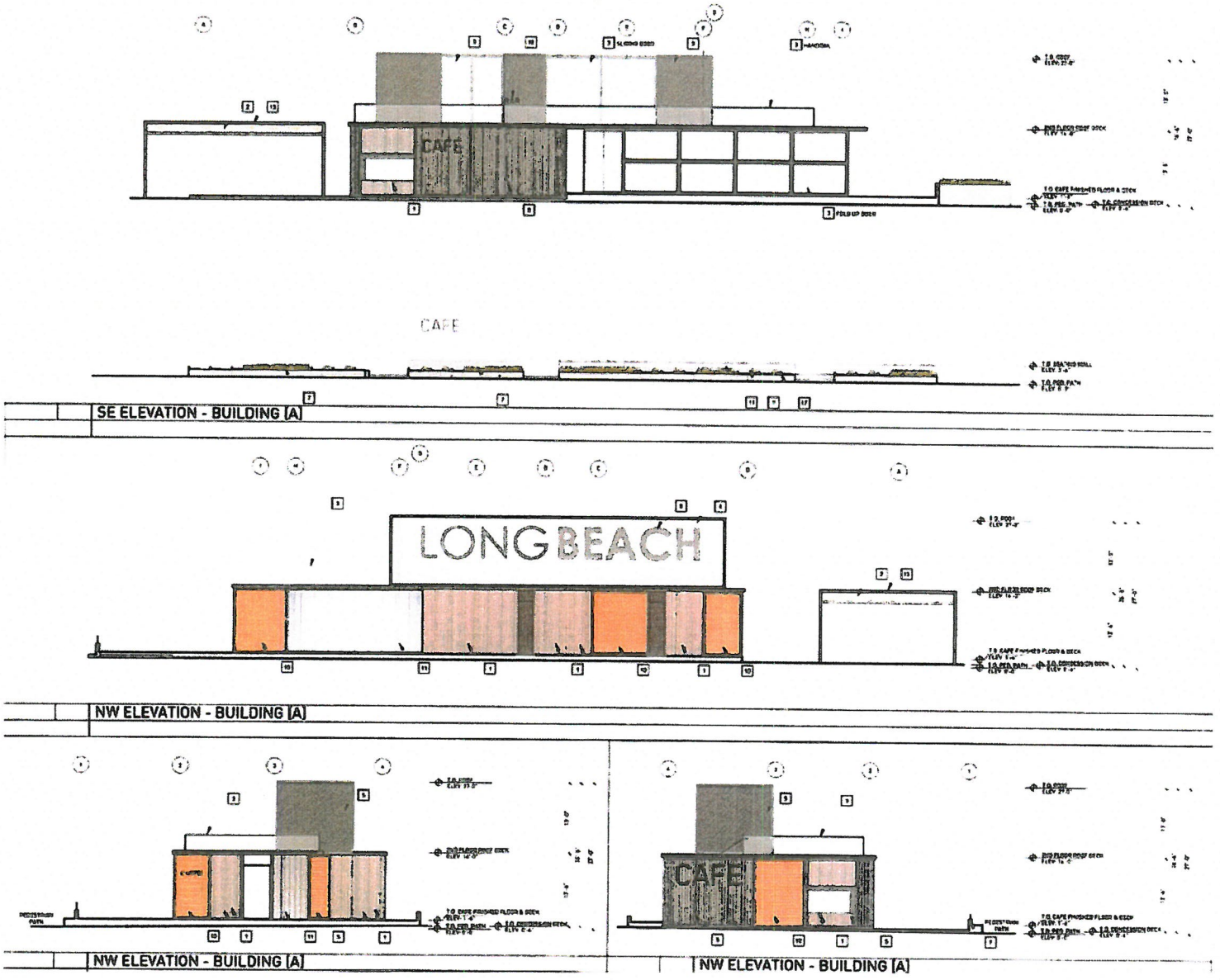
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LSA

FIGURE 2.6

Alamitos Beach Concession Stand

Building Elevations

SOURCE: City of Long Beach

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