

**DRAFT**  
**INITIAL STUDY AND NEGATIVE DECLARATION**

Reeves Avenue Marine Services Support Yard

APP#151117-129

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*Prepared By:*

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*with assistance from:*

Dudek  
September 2017





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## 1.0 INTRODUCTION

The Los Angeles Harbor Department (LAHD) has prepared this Initial Study/Negative Declaration (IS/ND) to address the environmental effects of the proposed Reeves Avenue Marine Services Support Yard Project (proposed Project) located at 801 Reeves Avenue, San Pedro, in the Port of Los Angeles (POLA). LAHD is the lead agency under the California Environmental Quality Act (CEQA).

The primary objective of the proposed Project is to issue an LAHD 30-day Revocable Permit (RP) for the operation of a marine services support facility servicing container terminals in the Ports of Los Angeles and Long Beach. The RP is a month-to-month lease that would enable marine services support operations on an existing 12-acre site. The proposed Project site is mostly paved, and construction would be limited to pavement repairs and minor additional paving. Construction activities would take less than one week to complete.

### 1.1 CEQA PROCESS

This document was prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.), the CEQA Guidelines (14 CCR 15000 et seq.), and the City of Los Angeles CEQA Guidelines (2006). One of the main objectives of CEQA is to disclose the potential environmental effects of proposed activities to the public and decision-makers. CEQA requires that the potential environmental effects of a project be evaluated prior to implementation. This IS/ND includes a discussion of the proposed Project's effects on the existing environment, including the identification of avoidance, minimization, and mitigation measures. This document is an IS/ND because there are no impacts associated with the proposed Project that must be mitigated to be below significance thresholds.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of a proposed Project. Pursuant to Section 15367 of the CEQA Guidelines (14 CCR 15000 et seq.), LAHD is the lead agency for the proposed Project. LAHD has directed the preparation of an environmental document that complies with CEQA. LAHD will consider the information in this document when determining whether to approve the proposed Project.

The preparation of an IS is guided by Section 15063 of the CEQA Guidelines, while Sections 15070–15075 of the CEQA Guidelines direct the process for the preparation of an ND or mitigated negative declaration (14 CCR 15000, et seq.). Where appropriate and supportive, references will be made to CEQA, the CEQA Guidelines, or appropriate case law.

This IS/ND meets CEQA content requirements by including a project description; a description of the environmental setting, potential environmental impacts, and mitigation measures for any significant effects; discussion of consistency with plans and policies; and names of the document preparers.

In accordance with CEQA and the CEQA Guidelines, this IS/ND will be circulated for a period of 30 days for public review and comment. The public review period for this IS/ND is scheduled to begin on September 22, 2017, and will conclude on October 23, 2017. This IS/ND has specifically been distributed

to interested or involved public agencies, organizations, and private individuals for review. The IS/ND has been made available for general public review at the following locations:

- LAHD Environmental Management Division at 222 West 6th Street, San Pedro, California 90731
- Los Angeles City Library, San Pedro Branch at 931 South Gaffey Street, San Pedro, California 90731
- Los Angeles City Library, Wilmington Branch at 1300 North Avalon, Wilmington, California 90744

The document is also available online at [https://www.portoflosangeles.org/environment/public\\_notices.asp](https://www.portoflosangeles.org/environment/public_notices.asp).

Approximately 81 notices were sent to community residents, stakeholders, and local agencies.

During the 30-day public review period, the public has an opportunity to provide written comments on the information contained within this IS/ND. The public comments on the IS/ND and responses to public comments will be included in the record and considered by LAHD during deliberation as to whether or not necessary approvals should be granted for the proposed Project. A project will only be approved when LAHD finds “that there is no substantial evidence that the proposed Project will have a significant effect on the environment and that the negative declaration or mitigated negative declaration reflects the lead agency’s independent judgment and analysis” (14 CCR 15070).

In reviewing the IS/ND, affected public agencies and interested members of the public should focus on the sufficiency of the document in identifying and analyzing potential project impacts on the environment and ways in which the potential significant effects of the proposed Project are proposed to be avoided or mitigated. Comments on the IS/ND should be submitted in writing prior to the end of the 30-day public review period and must be postmarked by October 23, 2017.

Please submit written comments to:

Chris Cannon, Director  
City of Los Angeles Harbor Department  
Environmental Management Division  
425 S. Palos Verdes Street  
San Pedro, California 90731

Written comments may also be sent via email to [ceqacomments@portla.org](mailto:ceqacomments@portla.org). Comments sent via email should include the project title in the subject line.

For additional information, please contact the LAHD Environmental Management Division at 310.732.3675.

## 1.2 DOCUMENT FORMAT

This IS/ND contains the following eight sections:

**Section 1. Introduction.** This section provides an overview of the proposed Project and the CEQA environmental documentation process.

**Section 2. Project Description.** This section provides a detailed description of the proposed Project's objectives and components.

**Section 3. Initial Study Checklist.** This section presents the CEQA checklist for all impact areas and mandatory findings of significance.

**Section 4. Impacts and Mitigation Measures.** This section presents the environmental analysis for each issue area identified on the environmental checklist. If the proposed Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the proposed Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts and the appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less-than-significant level.

**Section 5. Proposed Finding.** This section presents the proposed finding regarding environmental impacts.

**Section 6. Preparers and Contributors.** This section provides a list of key personnel involved in the preparation of the IS/ND.

**Section 7. Acronyms and Abbreviations.** This section provides a list of acronyms and abbreviations used throughout the IS/ND.

**Section 8. References.** This section provides a list of reference materials used during the preparation of the IS/ND.

The environmental analysis included in Section 4, Impacts and Mitigation Measures, is consistent with the CEQA Initial Study format presented in Section 3, Initial Study Checklist. Impacts are separated into the following categories:

**Potentially Significant Impact.** This category is only applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less-than-significant level. Given that this is an IS/ND, no impacts were identified that fall into this category.

**Less-than-Significant Impact After Mitigation Incorporated.** This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less-than-Significant Impact." The lead agency must describe the mitigation measure(s) and briefly

explain how they would reduce the effect to a less-than-significant level (mitigation measures from earlier analyses may be cross-referenced). Given that this is an IS/ND, no impacts were identified that fall into this category.

**Less-than-Significant Impact.** This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

**No Impact.** This category applies when a proposed Project would not create an impact in the specific environmental issue area. “No Impact” answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency that show that the impact does not apply to the specific project (e.g., the project falls outside of a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors and general standards (e.g., the proposed Project would not expose sensitive receptors to pollutants based on a project-specific screening analysis).



## 2.0 PROJECT DESCRIPTION

This IS/ND is being prepared to evaluate the potential environmental impacts that may result from the proposed Project. The proposed Project consists of issuing an RP for the operation of a marine services support yard. The RP will enable marine related support activities and operations (e.g. peel-off yard (POY)<sup>1</sup>, container storage, chassis storage) on an approximately 12-acre site at 801 Reeves Avenue, San Pedro, California 90744. The site is already mostly paved and construction activities would be limited to improving a small area of damaged asphalt (approximately 1,000 square feet) and paving a small area (approximately 5,000 square feet) that is currently compacted dirt to maximize ease of use for staging and other related activities and operations. Operation of a POY at the proposed Project site would be the most intensive marine support use contemplated and as such, the discussion and analysis contained in this document assumes the operation of a POY at the site.

This chapter discusses the location, description, background, and objectives of the proposed Project. This document has been prepared in accordance with CEQA (Public Resources Code (California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.).

### 2.1 PROJECT LOCATION

#### 2.1.1 Regional Setting

The Port is located in San Pedro Bay, 20 miles south of downtown Los Angeles. The Port encompasses 7,500 acres and 43 miles of waterfront and features approximately 270 commercial berths and 27 passenger and cargo terminals. Port operations are predominantly centered on shipping activities, including containerized, breakbulk, dry bulk, liquid bulk, automotive, and intermodal rail shipping. In addition to the large shipping industry, the Port also supports a cruise ship industry and a commercial fishing fleet. The Port also accommodates boat repair yards and provides slips for approximately 3,800 recreational vessels, 150 commercial fishing boats, 35 miscellaneous small-service crafts, and 15 charter vessels that handle sport fishing and harbor cruises. The Port has retail shops and restaurants primarily located along the west side of the Main Channel. It also accommodates recreation, community, and educational facilities, such as a public swimming beach, Cabrillo Beach Youth Waterfront Sports Center,

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<sup>1</sup> A peel-off yard is an off-terminal facility that provides short-term storage for priority containers on chassis ready for expedient collection from distribution centers. These containers are separated during offloading from a vessel and stacked in a block for prompt collection. Bobtail trucks (i.e., trucks with no chassis or loads) leave the peel-off yard to collect those containers. At the terminal, the bobtail truck collects a chassis and the container from the terminal and passes through U.S. Customs and Border Protection (Customs). The container is then taken to the peel-off yard, where it remains on the chassis. Within 48 hours, a truck from a distribution center collects the container, taking only a few minutes to hook up to the chassis, and distributes the container. The use of peel-off yards has been beneficial at reducing congestion on terminals and handling the volume of containers from increasing vessel size. Distributors generally assign priority or premier containers to peel-off yards because the collection from the peel-off back to the distribution center is both faster and more time certain than the procedure for collecting directly from a terminal. Peel-off yards can be used to support any terminal and are not directly associated with the operation of any individual terminal.

the Cabrillo Marine Aquarium, the Los Angeles Maritime Museum, 22nd Street Park, and the Wilmington Waterfront Park.

The LAHD is a proprietary (self-funded) department of the City of Los Angeles (City) charged with the operation, maintenance, and protection of the Port. The LAHD is a landlord port that leases properties to more than 300 tenants, including private terminal, tug, and marine cargo and cruise industry entities. The LAHD administers the Port under the California Tidelands Trust Act of 1911 and the Los Angeles City Charter. The LAHD is chartered to develop and operate the Port to benefit maritime uses.

### **2.1.2 Project Setting**

The proposed Project is located at 801 Reeves Avenue on Terminal Island in Master Plan Area 3 within the Port (Figures 1 and 2). The proposed Project site is bounded to the north by State Route (SR) 47, rail lines to the east, Reeves Avenue to the south, and Navy Way to the west. Access to the proposed Project is provided through SR-47, the Harbor Freeway (Interstate (I) 110), the Long Beach Freeway (I-710), and the San Diego Freeway (I-405). Figures 1 and 2 show the regional location and local vicinity, respectively.

### **2.1.3 Land Use and Zoning**

The proposed Project is located in the Port of Los Angeles, City of Los Angeles Community Plan Area. The proposed Project site has a General Plan designation of Port of Los Angeles (Maritime Support) (POLA 2014). The Port Master Plan (PMP, POLA 2014) establishes policies and guidelines to direct the future development of the Port. The original plan became effective in April 1980 after it was approved by the Board of Harbor Commissioners and certified by the California Coastal Commission. The 2014 PMP is a comprehensive update and is the 28th Amendment to the 1980 Port Master Plan.

The updated Port Master Plan (POLA 2014) includes five planning areas. The proposed Project is located in Planning Area 3, Terminal Island. Planning Area 3 is the largest planning area, consisting of approximately 1,940 acres and more than 9.5 miles of usable waterfront. It consists of all of Terminal Island except Fish Harbor. Of the Port's nine container terminals, six are located in Planning Area 3. This planning area focuses on container operations.

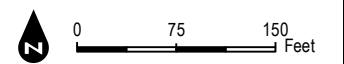
The proposed Project site is identified as Los Angeles County Assessor's Parcel Numbers 7440-022-916 and 7440-021-913, which are designated as a Heavy Industrial Zone (M3) and ZI-2130 Harbor Gateway State Enterprise Zone (City of Los Angeles 2016a). Figure 3 shows the zoning designations of the proposed Project site and the surrounding area.



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- Project Boundaries
- Project Parcel
- Concrete Repair Area
- Paving Area



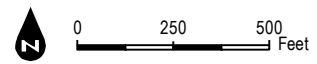
SOURCE: Google Maps 2017

**DUDEK**

Reeves Avenue Marine Services Support Yard IS/ND

**FIGURE 2**  
Project Vicinity Map

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- Project Parcel
- City of Los Angeles Zoning**
- Heavy Industrial Zone (M3)
- City of Long Beach Zoning**
- Industrial

**FIGURE 3**  
Zoning Map

SOURCE: City of Los Angeles 2015; City of Long Beach; Google Maps 2016

**DUDEK**

Reeves Avenue Marine Services Support Yard IS/ND

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## **2.2 PROJECT BACKGROUND AND OBJECTIVES**

### **2.2.1 Project Background**

POYs have arisen to ease the recent congestion problems at all west coast ports, helping to clear the backlog of cargo in the POLA and Port of Long Beach (POLB) complex (Port Complex) (POLA 2015).

POYs provide an expedited movement of primarily import containers from marine terminals to consignees, via a temporary staging yard within the Port Complex. At the POY, containers are stored on chassis. The POY ultimately reduces dwell time of containers inside marine terminals, and thus improves velocity, reliability, and predictability of the movement of imports. An additional POY benefit is that all trucks moving containers between the terminals and the POY are subject to the Port's Clean Truck Program requirements.

### **2.2.2 Existing Conditions**

The majority of the proposed Project site is paved, with ornamental trees and vegetation located throughout the property. SR-47 is located immediately north of the proposed Project site. A rail line borders the eastern portion of the site. A containerized cargo area within the POLB is located immediately east of the railway tracks. Reeves Avenue is located south of the proposed Project site. A vacant dirt lot is located south beyond Reeves Avenue. Navy Way is located west of the proposed Project site.

Currently, a portion of the proposed Project site (approximately 4 acres) is temporarily being used as a substitute storage area for Pasha Stevedoring and Terminals (PST). Container staging operations have been undertaken on the remainder of paved areas at the proposed Project site under a temporary space assignment to PST since February 2015. This temporary use was deemed necessary to address the immediate and overwhelming congestion issues that arose in July 2014 and peaked towards the end of the year. Since these activities have been limited to temporary use, they are not included in the existing conditions baseline analysis for this IS/ND. Rather, for the purpose of this analysis only, the baseline assumes there are no existing ongoing activities at the site.

### **2.2.3 Project Objectives**

The shipping industry is moving toward ever-larger vessels. These larger vessels put a strain on container terminals because they require the offloading and processing of large volumes of containers over a short period of time into a terminal of limited size. There is a need for off-terminal support facilities that assist in supporting efficient movement of primarily import containers from terminals, via a temporary staging yard within the port complex before moving to their destinations.

The proposed Project objectives are as follows:

- Optimize the use of existing land at the proposed Project site; and
- Increase the efficiency of container terminals by providing a secondary staging area for maritime support to help meet the demands of current and anticipated containerized cargo from the various San Pedro Bay port marine terminals associated with larger vessels.

## **2.3 PROJECT DESCRIPTION**

### **2.3.1 Construction**

The proposed Project site has been used for a variety of purposes over the years, including car storage and container storage by the Navy Reserve. The majority of the site is already paved. Construction activities would be limited to improving a small area of damaged asphalt (approximately 1,000 square feet) and paving a small area (approximately 5,000 square feet) that is currently compacted dirt to maximize ease of use for storage and truck maneuvers. Construction would last less than one week, operating between 7:00 a.m. and 7:00 p.m., and involve the removal of approximately 1,000 square feet of damaged asphalt and installation of 1,000 square feet of replacement asphalt. In addition, construction would include preparation of approximately 5,000 square feet of dirt for the application of new asphalt and tack coat to that area. The construction equipment and crew would consist of one tool truck, one dump truck with a backhoe and roller, and up to six construction workers. Up to five truckloads of asphalt would be delivered to the site, and one to two truckloads would be hauled away.

### **2.3.2 Operation**

The LAHD would issue a 30-day RP for operation of the proposed marine services support yard. The operational life of the proposed Project is being analyzed for a term of 5 years absent information on the long-term need for such facilities. Continued operation of the proposed Project beyond 5 years would be subject to additional environmental review under CEQA.

The 12-acre marine services support yard (e.g. POY, container storage yard, chassis storage yard) would be open 5 days a week from 7:00 a.m. to 3:00 a.m., and occasional Saturday operation is possible when a workweek is shortened by a holiday. The lease area consists of mainly three distinct parcels: the Main Lot at 366,899 square feet, the Commissary Elevated Pad at 40,858 square feet, and the Southeast Office Building Employee Parking Lot at 7,240 square feet. A POY is the most intensive use contemplated for the proposed Project site. To be conservative for the purposes of this study, we have analyzed a POY operation as the highest intensity potential use, which also takes into account a higher turnover rate and higher trip generation.

The POY would only generate a small number of additional short-distance bobtail trips to/from Port Complex terminals and the POY, along with the slightly diverted trips to/from locations outside the ports, as detailed below. The proposed Project would not affect growth at the Port Complex and would be

limited by the 5-year operation term and the 450-slot capacity of the POY, which it would realize immediately upon opening.

The POY operation entails the movement of primarily (80%) import containers from marine terminals throughout the Port Complex. More specifically, the operation would involve the following container movements described below:

- An import container is moved to the POY, stored there on the chassis for approximately 2 days and then delivered to an ultimate destination outside the Port Complex.
  - Without the POY, an outbound import container would go directly from the marine terminal to its ultimate destination outside the Port Complex. Hence, the trip to the POY is a slight diversion rather than a completely new trip.
- After the truck parks the import container (on chassis) inside the POY, about 20% of the time that same truck would conduct a dual transaction by either picking up another import container and delivering it to its intended ultimate destination outside the Port Complex or returning an empty container from the POY back to a marine terminal.
  - The 20% dual transaction assumption is very conservative, as the estimated amount at the existing PST POY, as reported by PST, is about 70-80%.
- The trucks that move import containers to the POY from the terminal and don't make a dual transaction would then bobtail (without a chassis/container) back to the terminal to either retrieve another import container to deliver to the POY or conduct a different type of transaction. These POY outbound bobtail trips to the marine terminal are considered new, short-distance trips within the Port Complex.
- For the import containers that need to be delivered from the POY to locations outside the Port Complex and are not part of a dual transaction, a bobtail would arrive at the POY to pick up the container and deliver it to its ultimate destination.
  - Without the POY, these bobtails would have traveled directly to a container terminal to pick up a container. Hence, the trip to the POY is a slight diversion rather than a completely new trip.
- Approximately 20% of the slots within the POY will be utilized for empty or export containers waiting to be moved to the terminals for subsequent loading onto a vessel. When a truck delivers an empty or export container to the POY from outside the Port Complex, that same truck would pick up an import container at the POY and deliver it to its ultimate destination outside the Port Complex.

### Marine Terminal Capacity

A POY located within the Port Complex has the potential to decrease container terminal dwell time within the Port Complex for a small number of containers, based upon the available capacity of the POY and the dwell time within the POY. The available capacity of the POY is based upon the number of wheeled storage slots and dwell time. Consequently, POYs have the potential to increase overall capacity of the Port Complex by a nominal amount. However, they provide additional capacity only under the following conditions:

- When a terminal's capacity is constrained by its container yard and not its berth. For those terminals in which capacity is constrained by their berths, the operation of a POY would not increase overall terminal capacity.
- When a terminal's capacity is actually reached, whether currently or under future conditions.

Based upon a comparison of the latest capacity estimates in the Ports' 2016 Cargo Forecast for all container terminals in the Port Complex, the Port Complex as a whole (and considering individual terminals) would reach capacity of 35,217,000 TEUs sometime between the year 2030 and year 2035. Hence, operation of the proposed POY for five years would not increase overall Port Complex terminal capacity and corresponding container volumes within the next five years. As stated above, the POY yard would only generate a small number of additional bobtail trips, and nominal changes in VMT to/from the POY.

For estimating the proposed Project's annual throughput and truck volumes, a dwell time of two and three days for empty and import containers was assumed, respectively. This assumption yields fairly conservative results, as data provided by PST indicated longer dwell times. The approximate maximum throughput, or number of containers moved in/out of the POY on an annual basis is approximately 63,000 TEU. On an average weekday, 750 one-way truck movements (375 inbound/375 outbound) would occur. Of these, only 110 bobtail trips would actually be new trips, while the other 640 would be diverted trips that would occur even without the POY.

## **2.4 PROJECT PERMITS AND APPROVALS**

Under CEQA, the lead agency is the public agency with primary responsibility over approval of a proposed Project. Pursuant to the CEQA Guidelines (14 CCR 15367), the CEQA lead agency for the proposed Project is LAHD.

Anticipated permits and approvals that may be required to implement the proposed Project are listed below:

- LAHD Revocable Permit
- LAHD Harbor Engineer Permit
- LAHD Coastal Development Permit

### 3.0 INITIAL STUDY CHECKLIST

|    |  |  |
|----|--|--|
| 1. | <b>Project Title:</b>                                    | Reeves Avenue Marine Services Support Yard   |
| 2. | <b>Lead Agency:</b>                                      | Los Angeles Harbor Department (LAHD)   |
| 3. | <b>Contact Person:</b>                                   | Elisabeth Suh, Environmental Management Division, LAHD   |
| 4. | <b>Project Location:</b>                                 | 801 Reeves Avenue (Northeast of Navy Way and Reeves Avenue, Terminal Island, Port of Los Angeles)  |
| 5. | <b>General Plan Designation:</b>                         | Port of Los Angeles (Maritime Support)   |
| 6. | <b>Zoning:</b>   | Heavy Industrial Zone (M3)<br>ZI-2130 Harbor Gateway State Enterprise Zone   |
| 7. | <b>Description of Project:</b>                           | Operation of an off-terminal marine services support yard (e.g. peel-off yard, container storage yard , chassis storage yard )   |
| 8. | <b>Surrounding Land Uses/Setting:</b>                    | SR-47 is located immediately north of the proposed Project site. A rail line borders the eastern portion of the site. A containerized cargo area within the Port of Long Beach is located immediately east of the railway tracks. Reeves Avenue is located south of the proposed Project site. A vacant dirt lot is located south beyond Reeves Avenue. A two-story building and surface parking are located west of the proposed Project site. Navy Way is located west of the proposed Project site. |
| 9. | <b>Other Public Agencies Whose Approval Is Required:</b> | N/A  |

### 3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                   |
| <input type="checkbox"/> Biological Resources               | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology and Soils             |
| <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards and Hazardous Materials    | <input type="checkbox"/> Hydrology and Water Quality   |
| <input type="checkbox"/> Land Use and Planning              | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                         |
| <input type="checkbox"/> Population and Housing             | <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                    |
| <input type="checkbox"/> Transportation and Traffic         | <input type="checkbox"/> Tribal Cultural Resources          | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance |   |  |

**3.2 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)**

On the basis of this initial evaluation:

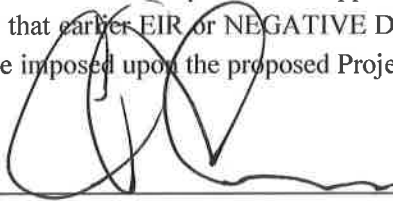
I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.



Signature  
Chris Cannon, Director  
Environmental Management Division  
City of Los Angeles Harbor Department

09-14-17  
Date

## Environmental Checklist

|  | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|------------------|
| <b>1. AESTHETICS. Would the project:</b>   |                                       |   |                                     |                  |
| a. Have a substantial adverse effect on a scenic vista?  |                                       |   |                                     | x                |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?   |                                       |   |                                     | x                |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings?  |                                       |   |                                     | x                |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?  |                                       |   | x                                   |                  |
| e. Create a new source of substantial shade or shadow that would adversely affect daytime views in the area?   |                                       |   | x                                   |                  |
| <b>2. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</b> |                                       |   |                                     |                  |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?   |                                       |   |                                     | x                |
| b. Conflict with existing zoning for agricultural use, or a Williamson act contract?   |                                       |   |                                     | x                |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?   |                                       |   |                                     | x                |



|  | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|------------------|
| d. Result in the loss of forest land or conversion of forest land to non-forest use?   |                                       |   |                                     | x                |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?   |                                       |   |                                     | x                |
| <b>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:</b>   |                                       |   |                                     |                  |
| a. Conflict with or obstruct implementation of the applicable air quality plan or clean air programs?  |                                       |   | x                                   |                  |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?   |                                       |   | x                                   |                  |
| 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)?                 |                                       |   | x                                   |                  |
| d. Expose sensitive receptors to substantial pollutant concentrations?   |                                       |   | x                                   |                  |
| e. Create objectionable odors affecting a substantial number of people?  |                                       |   | x                                   |                  |
| <b>4. BIOLOGICAL RESOURCES. Would the project:</b>   |                                       |   |                                     |                  |
| 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, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? |                                       |   | x                                   |                  |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?   |                                       |   |                                     | x                |
| 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?   |                                       |   |                                     | x                |

|  | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|------------------|
| 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?   |                                       |   | x                                   |                  |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  |                                       |   |                                     | x                |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?   |                                       |   |                                     | x                |
| <b>5. CULTURAL RESOURCES. Would the project:</b>   |                                       |   |                                     |                  |
| a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?  |                                       |   |                                     | x                |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?   |                                       |   |                                     | x                |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  |                                       |   |                                     | x                |
| d. Disturb any human remains, including those interred outside of dedicated cemeteries?  |                                       |   |                                     | x                |
| <b>6. GEOLOGY AND SOILS. Would the project:</b>  |                                       |   |                                     |                  |
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:   |                                       |   | x                                   |                  |
| 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. |                                       |   | x                                   |                  |
| ii) Strong seismic ground shaking?   |                                       |   | x                                   |                  |
| iii) Seismic-related ground failure, including liquefaction?   |                                       |   | x                                   |                  |
| iv) Landslides?  |                                       |   | x                                   |                  |
| b. Result in substantial soil erosion or the loss of topsoil?  |                                       |   | x                                   |                  |

|  | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|------------------|
| c. Be located on a geological 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?                            |                                       |   | x                                   |                  |
| 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?   |                                       |   | x                                   |                  |
| 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?   |                                       |   |                                     | x                |
| <b>7. GREENHOUSE GAS EMISSIONS: Would the project:</b>   |                                       |   |                                     |                  |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?  |                                       |   | x                                   |                  |
| <b>8. HAZARDS AND HAZARDOUS MATERIALS: Would the project:</b>  |                                       |   |                                     |                  |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  |                                       |   | x                                   |                  |
| 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?  |                                       |   | x                                   |                  |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  |                                       |   |                                     | x                |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                                   |                                       |   |                                     | x                |
| 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? |                                       |   |                                     | x                |

|   | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|------------------|
| 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?   |                                       |   |                                     | x                |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?   |                                       |   | x                                   |                  |
| 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?  |                                       |   |                                     | x                |
| <b>9. HYDROLOGY AND WATER QUALITY. Would the project:</b>   |                                       |   |                                     |                  |
| a. Violate any water quality standards or waste discharge requirements?   |                                       |   | x                                   |                  |
| b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? |                                       |   | x                                   |                  |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?  |                                       |   |                                     | x                |
| 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?   |                                       |   |                                     | x                |
| e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?   |                                       |   | x                                   |                  |
| f. Otherwise substantially degrade water quality?   |                                       |   | x                                   |                  |
| 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?  |                                       |   |                                     | x                |

|   | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|------------------|
| h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?  |                                       |   |                                     | x                |
| 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?  |                                       |   | x                                   |                  |
| j. Inundation by seiche, tsunami, or mudflow?   |                                       |   | x                                   |                  |
| <b>10. LAND USE AND PLANNING. Would the project:</b>  |                                       |   |                                     |                  |
| a. Physically divide an established community?  |                                       |   |                                     | x                |
| 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? |                                       |   |                                     | x                |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan?   |                                       |   |                                     | x                |
| <b>11. MINERAL RESOURCES. Would the project:</b>  |                                       |   |                                     |                  |
| 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?  |                                       |   |                                     | x                |
| 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?  |                                       |   |                                     | x                |
| <b>12. NOISE. Would the project result in:</b>  |                                       |   |                                     |                  |
| 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?   |                                       |   | x                                   |                  |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?   |                                       |   | x                                   |                  |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  |                                       |   | x                                   |                  |

|   | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|------------------|
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  |                                       |   | x                                   |                  |
| 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?   |                                       |   |                                     | x                |
| 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?  |                                       |   |                                     | x                |
| <b>13. POPULATION AND HOUSING. Would the project:</b>   |                                       |   |                                     |                  |
| 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)?   |                                       |   |                                     | x                |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?   |                                       |   |                                     | x                |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?   |                                       |   |                                     | x                |
| <b>14. PUBLIC SERVICES.</b>   |                                       |   |                                     |                  |
| a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: |                                       |   |                                     |                  |
| i) Fire protection?   |                                       |   | x                                   |                  |
| ii) Police protection?  |                                       |   | x                                   |                  |
| iii) Schools?   |                                       |   |                                     | x                |
| iv) Parks?  |                                       |   |                                     | x                |
| v) Other public facilities?   |                                       |   |                                     | x                |

|   | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|---|---------------------------------------|---|-------------------------------------|------------------|
| <b>15. RECREATION.</b>  |                                       |   |                                     |                  |
| 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?  |                                       |   |                                     | x                |
| 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?   |                                       |   |                                     | x                |
| <b>16. TRANSPORTATION AND TRAFFIC. Would the project:</b>   |                                       |   |                                     |                  |
| a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? |                                       |   | x                                   |                  |
| b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?  |                                       |   |                                     | x                |
| 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?   |                                       |   |                                     | x                |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  |                                       |   |                                     | x                |
| e. Result in inadequate emergency access?   |                                       |   |                                     | x                |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?  |                                       |   |                                     | x                |

|  | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|------------------|
| <b>17. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</b>   |                                       |   |                                     |                  |
| 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   |                                       |   |                                     | x                |
| 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 Resources Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. |                                       |   |                                     | x                |
| <b>17. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>   |                                       |   |                                     |                  |
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  |                                       |   | x                                   |                  |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?   |                                       |   | x                                   |                  |
| 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?  |                                       |   |                                     | x                |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?   |                                       |   | x                                   |                  |
| 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?  |                                       |   | x                                   |                  |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?   |                                       |   | x                                   |                  |



|  | <i>Potentially Significant Impact</i> | <i>Less-than-Significant Impact After Mitigation Incorporated</i> | <i>Less-than-Significant Impact</i> | <i>No Impact</i> |
|--|---------------------------------------|---|-------------------------------------|------------------|
| g. Comply with federal, state, and local statutes and regulations related to solid waste?  |                                       |   | x                                   |                  |
| <b>18. MANDATORY FINDINGS OF SIGNIFICANCE.</b>   |                                       |   |                                     |                  |
| 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? |                                       |   | x                                   |                  |
| 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.   |                                       |   | x                                   |                  |
| c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  |                                       |   | x                                   |                  |

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## 4.0 IMPACTS AND MITIGATION MEASURES

### 4.1 AESTHETICS

#### Would the Project:

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

**No Impact.** The proposed Project site is not within a scenic vista. The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards on Terminal Island within the Port. The proposed Project would not block views of the Port available from public and private vantages, including panoramic views from hillside residential areas of San Pedro. The proposed Project would be similar in nature to the existing aesthetic of the site, which is industrial in nature. Therefore, no impacts to a scenic vista would result from the proposed Project. No mitigation is required.

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

**No Impact.** According to the California Department of Transportation, the nearest officially designated state scenic highway is located approximately 34 miles north of the proposed Project (State Highway 2 from approximately 3 miles north of I-210 in La Cañada to the San Bernardino County line). The nearest eligible state scenic highway is approximately 10 miles southeast of the proposed Project site (State Highway 1 from State Highway 19 near Long Beach to I-5 south of San Juan Capistrano) (Caltrans 2011).

In addition to California Department of Transportation's officially designated and eligible state scenic highways, the City has city-designated scenic highways that are considered for local planning and development decisions (City of Los Angeles 1999). The proposed Project site is approximately 0.25-mile south of the Vincent Thomas Bridge and is not visible from any city-designated scenic highways. There are no other scenic resources, such as trees, rock outcroppings, or historic buildings, within a scenic highway that could be affected by the proposed Project. Therefore, no impacts related to scenic resources within a state scenic highway would occur. No mitigation is required.

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

**No Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards. Implementation of the proposed Project would include repairs to existing pavement and new pavement on currently dirt-graded areas. Operations would utilize marine-related container staging equipment and would be aesthetically consistent with prior uses on this site, as well as the industrial visual landscape and character of

the surrounding area. Therefore, no impacts to existing visual character or quality would result from the proposed Project. No mitigation is required.

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

**Less-than-Significant Impact.** Current lighting on the proposed Project site consists of limited lighting for a security station and the parking lot. The nighttime lighting environment within the proposed Project vicinity consists mainly of ambient light produced from container-handling operations and other facility lighting in the Port. The major source of illumination at the Port is the extensive system of down lights and floodlights attached to the tops of the tall light standards throughout the terminals. High intensity boom lights are attached on top of shipping cranes along the edge of the many channels that feed into the Los Angeles Harbor.

The proposed Project would include new improved lighting that would increase the nighttime lighting on the site. Because the nature of the proposed Project is similar to the surrounding land uses, all lighting sources as a result of the proposed Project would be similar and consistent with existing nighttime lighting in the project area. While the amount and level of lighting would be increased from existing conditions, it would not be such as to adversely affect nighttime views because of the dominance of existing surrounding similar lighting. The proposed Project would not include any components that might create any new sources of glare affecting daytime views. Therefore, impacts to nighttime or daytime views from light or glare from the proposed Project would be less than significant. No mitigation is required.

**e) Create a new source of substantial shade or shadow that would adversely affect daytime views in the area?**

**Less-than-Significant Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47. Implementation of the proposed Project would include repairs to existing pavement and new pavement on currently dirt-graded areas. Operations would utilize marine-related container staging equipment. No buildings or structures would be constructed and levels of shade or shadow would not be substantially changed. Therefore, impacts to daytime shade or shadow from the proposed Project would be less than significant. No mitigation is required.

## 4.2 AGRICULTURE AND FORESTRY RESOURCES

### Would the Project:

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

**No Impact.** The proposed Project site is located within the urban setting of the Port. The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards. Although the California Department of Conservation's Farmland Mapping and Monitoring Program has not mapped the proposed Project site, the developed, urban character of the surrounding area suggests that the appropriate Farmland Mapping and Monitoring Program mapping designation would be Urban and Built-Up Land. Therefore, the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. No impacts would occur, and no mitigation is required.

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

**No Impact.** The Williamson Act, also known as the California Land Conversion Act of 1969 (California Government Code Section 51200 et seq.), preserves agricultural and open space lands from the conversion to urban land uses by establishing a contract between local governments and private landowners to voluntarily restrict their land holdings to agricultural or open space use. The proposed Project site is not located on any lands with Williamson Act contracts. The proposed Project site is currently designated as Heavy Industrial Zone (M3) and ZI-2130 Harbor Gateway State Enterprise Zone and does not support agricultural uses (City of Los Angeles 2016a). As such, the proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impacts would occur and no mitigation is required.

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

**No Impact.** The proposed Project site is currently designated as Heavy Industrial Zone (M3) and ZI-2130 Harbor Gateway State Enterprise Zone. The proposed Project site does not support timberland or forest land. Therefore, the proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impact would occur, and no mitigation is required.

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

**No Impact.** As discussed in Section 4.2(c), the proposed Project site does not support forest land. Therefore, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur and no mitigation is required.

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

**No Impact.** As discussed in Section 4.2(a) through 4.2(d), the proposed Project site is developed and does not currently support farmland or forest land. Therefore, the proposed Project would not result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use. No impact would occur and no mitigation is required.

### 4.3 AIR QUALITY

#### Would the Project:

- a) **Conflict with or obstruct implementation of the applicable air quality plan or clean air programs?**

**Less-than-Significant Impact.** The federal Clean Air Act (CAA) of 1969 and its subsequent amendments form the basis for the nation's air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the CAA. A key element of the CAA is the national ambient air quality standards (AAQS) for major air pollutants. The CAA delegates enforcement of the AAQS to the states. In California, the California Air Resources Board (CARB) is responsible for enforcing air pollution regulations. CARB, in turn, delegates to local air agencies the responsibility of regulating stationary emission sources.

The South Coast Air Quality Management District (SCAQMD) monitors air quality within the proposed Project site and the South Coast Air Basin (Basin), which includes Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. The Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and the San Diego County line to the south.

For regions that do not attain the national AAQS, the CAA requires the preparation of a State Implementation Plan (SIP), detailing how the state will attain the national AAQS within mandated timeframes. In response to this requirement, SCAQMD develops an Air Quality Management Plan (AQMP), which is incorporated by CARB into the SIP. The AQMP is updated every few years in response to national AAQS revisions, EPA SIP disapprovals, and attainment demonstration changes. Each AQMP builds on the prior AQMP. The AQMP is usually a collaborative effort between the SCAQMD, CARB, and the Southern California Association of Governments (SCAG).

The 2016 AQMP focuses on attainment of the ozone and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) national AAQS through the reduction of ozone and PM<sub>2.5</sub> precursor nitrogen oxides (NO<sub>x</sub>), as well as through direct control of PM<sub>2.5</sub>. The 2016 AQMP also identifies control measures and strategies to demonstrate the region's attainment of the revoked 1997 8-hour ozone national AAQS (80 parts per million) by 2024, the 2008 8-hour ozone standard (75 parts per million) by 2032, the 2012 annual PM<sub>2.5</sub> standard (12 micrograms per cubic meter) by 2025, the 2006 24-hour PM<sub>2.5</sub> standard (35 micrograms per cubic meter) by 2019, and the revoked 1979 1-hour ozone standard (120 parts per million) by 2023.

The 2016 AQMP reported that although the population in the SCAG region has increased by more than 20% since 1990, air quality has improved due to air quality control programs at the local, state, and federal levels. In particular, 8-hour ozone levels have been reduced by more than 40%, 1-hour ozone levels by close to 60%, and annual PM<sub>2.5</sub> levels by close to 55% since

1990 (SCAQMD 2016). The EPA often approves portions and disproves other portions of each SIP. The 2016 AQMP contains a detailed description of which portions of past AQMPs have been approved by the EPA.

The AQMP proposes emission-reduction measures that are designed to bring the Basin into attainment of the national and state AAQS. Because AQMP attainment strategies include mobile source control measures and clean fuel programs that are enforced at the state and federal levels on engine manufacturers and petroleum refiners and retailers, the proposed Project construction and operational activities would comply with these control measures. SCAQMD also adopts AQMP control measures into the SCAQMD rules and regulations, which are then used to regulate sources of air pollution in the Basin. Compliance with these requirements would further ensure that the proposed Project’s activities would not obstruct implementation of the AQMP. Therefore, the proposed Project would not conflict with or obstruct implementation of the AQMP, the SIP, and the CAA. Impacts would be less than significant and 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.** SCAQMD, the local air quality regulatory agency, developed significance thresholds for use in CEQA documents. Table 4.3-1 presents the SCAQMD thresholds of significance for potential air quality impacts.

**Table 4.3-1  
SCAQMD Air Quality Significance Thresholds**

| Regional – Day Emission Thresholds |  |                                     |
|------------------------------------|--|-------------------------------------|
| <i>AIR POLLUTANT</i>               | <i>CONSTRUCTION THRESHOLD (LB/DAY)</i> | <i>OPERATION THRESHOLD (LB/DAY)</i> |
| NO <sub>x</sub>                    | 100                                    | 55                                  |
| VOC                                | 75                                     | 55                                  |
| PM <sub>10</sub>                   | 150                                    | 150                                 |
| PM <sub>2.5</sub>                  | 55                                     | 55                                  |
| SO <sub>x</sub>                    | 150                                    | 150                                 |
| CO                                 | 550                                    | 550                                 |



**Table 4.3-1  
SCAQMD Air Quality Significance Thresholds**

| <b>Localized – Ambient Pollutant Concentration Thresholds</b>            |   |
|--|---|
| <i><b>AIR POLLUTANT</b></i>  | <i><b>AMBIENT CONCENTRATION THRESHOLD</b></i>   |
| NO <sub>2</sub><br>1-hour average<br>1-hour average<br>Annual average    | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:<br>0.18 ppm (339 µg/m <sup>3</sup> ) (state)<br>0.100 ppm (188 µg/m <sup>3</sup> ) <sup>b</sup> (federal)<br>0.03 ppm (57 µg/m <sup>3</sup> ) (state) |
| PM <sub>10</sub><br>24-hour average<br>24-hour average<br>Annual average | 10.4 µg/m <sup>3</sup> (construction)<br>2.5 µg/m <sup>3</sup> (operation)<br>1.0 µg/m <sup>3</sup>   |
| PM <sub>2.5</sub><br>24-hour average                                     | 10.4 µg/m <sup>3</sup> (construction)<br>2.5 µg/m <sup>3</sup> (operation)  |
| SO <sub>2</sub><br>1-hour average<br>24-hour average                     | 0.25 ppm (state) & 0.075 ppm (federal – 99th percentile)<br>0.04 ppm (state)  |
| CO<br>1-hour average<br>8-hour average                                   | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:<br>20 ppm (23,000 µg/m <sup>3</sup> ) (state) and 35 ppm (federal)<br>9.0 ppm (10,000 µg/m <sup>3</sup> ) (state/federal)                             |
| <i><b>TAC AND ODOR THRESHOLDS</b></i>                                    |   |
| TACs (including carcinogens and non-carcinogens)                         | Maximum Incremental Risk ≥ 10 in 1 million<br>Hazard Index ≥ 1.0 (project increment)  |
| Odor   | Project creates an odor nuisance pursuant to SCAQMD Rule 402  |
| <i><b>CUMULATIVE THRESHOLD<sup>1</sup></b></i>                           |   |
| Criteria Pollutants  | Cumulative thresholds are the same as the project-level thresholds.   |
| Health Impacts   | Cumulative thresholds are the same as the project-level thresholds, excepting the Hazard Index threshold, which is 3.0.   |

**Notes:** µg/m<sup>3</sup> = micrograms per cubic meter; CO = carbon monoxide; lb/day = pounds per day; NO<sub>2</sub> = nitrogen oxide; NO<sub>x</sub> = nitrogen oxide; PM<sub>10</sub> = directly emitted particulate matter less than 10 microns; PM<sub>2.5</sub> = directly emitted particulate matter less than 2.5 microns; ppm = parts per million; SCAQMD = South Coast Air Quality Management District; SO<sub>2</sub> = sulfur dioxide; SO<sub>x</sub> = sulfur oxides; TAC = toxic air contaminant; VOC = volatile organic compound

<sup>1</sup> SCAQMD 2003.

**Construction**

Construction activities would be limited to minor repair of damaged pavement (approximately 1,000 square feet) and minor additional paving (5,000 square feet). Criteria air pollutant emissions from proposed construction activities would result from mobile, off-road, and construction equipment exhaust, fugitive dust, and fugitive volatile organic compound (VOC) emissions associated with paving activities. Construction activities would take less than one week to complete.

California Air Pollution Control Officers Association’s California Emissions Estimator Model (CalEEMod), Version 2013.2.2, was used to quantify peak day emissions from anticipated construction activities (CAPCOA 2013). The CalEEMod model is approved by the SCAQMD and is well suited to typical land development projects. CalEEMod uses emission factors for off-road equipment and on-road vehicles using the CARB OFFROAD model and EMFAC2011 model. CalEEMod calculates emissions associated with each construction phase; overlapping phases are added in calculating peak day emissions for each pollutant. The CalEEMod output is provided in Appendix A.

This analysis conservatively assumed that concrete demolition and repair would occur on the same day. Peak daily construction emissions were compared to the construction regional mass emission thresholds in Table 4.3-1. Table 4.3-2 summarizes construction emissions results. The table shows that all pollutant emissions would be below the significance thresholds without mitigation.

**Table 4.3-2  
Peak Daily Regional Construction Emissions**

| Construction Year      | PM <sub>10</sub><br>total<br>(lb/day) | PM <sub>2.5</sub><br>total<br>(lb/day) | NO <sub>x</sub><br>(lb/day) | SO <sub>x</sub><br>(lb/day) | CO<br>(lb/day) | VOC<br>(lb/day) |
|------------------------|---------------------------------------|--|-----------------------------|-----------------------------|----------------|-----------------|
| Construction Year 1    | 2                                     | 1                                      | 18                          | 0                           | 15             | 2               |
| Significance Threshold | 150                                   | 55                                     | 100                         | 150                         | 550            | 75              |
| <b>Significant?</b>    | <b>No</b>                             | <b>No</b>                              | <b>No</b>                   | <b>No</b>                   | <b>No</b>      | <b>No</b>       |

*Notes: CO = carbon monoxide; lb/day = pounds per day; NO<sub>x</sub> = nitrogen oxide; PM<sub>10</sub> = directly emitted particulate matter less than 10 microns; PM<sub>2.5</sub> = directly emitted particulate matter less than 2.5 microns; SO<sub>x</sub> = sulfur oxides; VOC = volatile organic compound  
Emissions might not add precisely due to rounding.*

Localized impacts were assessed through a comparison to SCAQMD’s Localized Significance Threshold (LST). The SCAQMD developed the LST methodology to assist CEQA lead agencies in analyzing localized air quality impacts from proposed projects. The LSTs are only for emissions of NO<sub>x</sub>, carbon monoxide (CO), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and PM<sub>2.5</sub>. LSTs represent the maximum emissions from a project, are not expected to cause or contribute to an exceedance of the most stringent applicable national or state AAQS, and are developed based on the ambient concentrations of that pollutant for each source receptor area

and distance to the nearest sensitive receptor. Per SCAQMD guidance, the LST methodology can be used in lieu of performing air dispersion modeling.

The following conservative assumptions were made in the LST analysis:

- Construction activities would be limited to a 1-acre area. This is a conservative assumption because emissions occurring over a larger construction area would be dispersed over the larger area, resulting in lower impacts.
- In total, 500 meters was used as the LST default separation distance from the proposed Project site to the closest residential receptor. The use of 500 meters is a conservative assumption because the closest residential receptor to the proposed Project site would be liveaboards in a marina more than half a mile to the north of the proposed Project site, which is nearly twice the distance assumed in this LST analysis.
- The LST analysis assumed that the closest off-site worker receptor would be located at a distance of 25 meters from the construction area. The use of 25 meters is a conservative assumption because it is the closest receptor distance on the mass rate LST methodology tables from the boundary to the closest worker receptor to the proposed Project site and the actual distance from the boundary to the closest worker receptor is greater than 25 meters.

Table 4.3-3 summarizes localized construction impact results. The table shows that all pollutant emissions would be below the LST significance thresholds without mitigation.

**Table 4.3-3  
Peak Daily Localized Construction Emissions**

| Construction Year                      | Residential Impacts                                       |  |  |                              | Off-Site Occupational Impacts                             |  |  |                              |
|--|---|--|--|------------------------------|---|--|--|------------------------------|
|  | <i>PM<sub>10</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>PM<sub>2.5</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>NO<sub>2</sub></i><br><i>(LB/DAY)</i> | <i>CO</i><br><i>(LB/DAY)</i> | <i>PM<sub>10</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>PM<sub>2.5</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>NO<sub>2</sub></i><br><i>(LB/DAY)</i> | <i>CO</i><br><i>(LB/DAY)</i> |
| Construction Year 1                    | 2   | 1  | 18                                       | 15                           | 2   | 1  | 18                                       | 15                           |
| Localized Significance Threshold (LST) | 158   | 93   | 142                                      | 7,558                        | 4   | 3  | 57                                       | 585                          |
| <b>Significant?</b>                    | <b>No</b>   | <b>No</b>  | <b>No</b>                                | <b>No</b>                    | <b>No</b>   | <b>No</b>  | <b>No</b>                                | <b>No</b>                    |

*Notes: CO = carbon monoxide; lb/day = pounds per day; NO<sub>2</sub> = nitrogen oxide; PM<sub>10</sub> = directly emitted particulate matter less than 10 microns; PM<sub>2.5</sub> = directly emitted particulate matter less than 2.5 microns Emissions might not add precisely due to rounding.*

*Conservatively assumes all emissions are on site.*

*LST thresholds assume:*

**State Responsibility Area 4: South Coastal Los Angeles County**

*1-acre site disturbance.*

*500 meters distance to nearest residential receptor*

*25 meters distance to nearest off-site occupational receptor*

## Operational Impacts

Air emissions would result from operation of the maritime services support yard. The yard could potentially support one of several different specific uses such as secondary wheeled container staging, chassis storage, POY or another maritime support use. To be conservative for the purposes of this analysis, we have analyzed a POY operation as the highest intensity potential use (highest turnover rate and trip generation). For a typical container yard, turnover is four days. A 48-hour turnover was assumed in this analysis.

The following information was used to calculate operational emissions:

- Daily activity data was provided in the Traffic Analysis Technical Memorandum prepared by Iteris in August 2016 (Appendix B). Data consisted of VMT for all vehicles in the ports complex for calendar year 2021 with and without the POY.
- Truck combustion exhaust emission factors were developed and provided by Starcrest for 5-mile-per-hour speed increments for the calendar year 2021. Average traffic speeds along four types of roadways (collector roads, local freeways, local roadways, and major roadways) provided by the traffic study were used to select the corresponding emission factor.
- Emissions from entrained road dust were calculated using VMT and EPA *AP 42 Compilation of Air Pollutant Emission Factors* emission factors for paved road dust.
- Emissions associated with tire and brake wear were calculated using VMT and CARB's EMFAC 2014 emission factors. Emission factors used in this analysis are provided in Appendix A.
- In total, 10 minutes of idling time per truck visit and 375 truck visits per day were assumed at the maritime support. The 375 truck visits per day reflects 48-hour turnover of 450 slots at the maritime support yard.

Operational peak day emissions were compared to the operational regional mass emission thresholds in Table 4.3-1. Table 4.3-4 presents operational emissions results for the with and without proposed Project scenarios. The proposed Project would not affect growth at the Port Complex and the source of impacts is limited to onsite idling and the diversion of containers to the POY. The impacts from diversion and onsite idling is limited by the capacity of the POY, which is 450 slots. The table shows that all pollutant emissions would be below the significance thresholds without mitigation.

**Table 4.3-4  
Peak Daily Regional Operational Emissions**

| Source Category                        | PM <sub>10</sub><br>total<br>(lb/day) | PM <sub>2.5</sub><br>total<br>(lb/day) | NO <sub>x</sub><br>(lb/day) | SO <sub>x</sub><br>(lb/day) | CO<br>(lb/day) | VOC<br>(lb/day) |
|--|---------------------------------------|--|-----------------------------|-----------------------------|----------------|-----------------|
| <b>OPERATING YEAR 2021 WITH POY</b>    |                                       |  |                             |                             |                |                 |
| Mobile exhaust                         | 50                                    | 48                                     | 8,590                       | 15                          | 775            | 200             |
| Mobile road dust                       | 188                                   | 47                                     | —                           | —                           | —              | —               |
| Mobile brake and tire wear             | 99                                    | 36                                     | —                           | —                           | —              | —               |
| Worker vehicle emissions               | 0.03                                  | 0.01                                   | 0.06                        | 0.00                        | 0.74           | 0.08            |
| On-site Idling Emissions               | 0.01                                  | 0.01                                   | 5.70                        | 0.01                        | 0.54           | 0.19            |
| <i>Total with POY</i>                  | 337                                   | 131                                    | 8,596                       | 15                          | 776            | 200             |
| <b>OPERATING YEAR 2021 WITHOUT POY</b> |                                       |  |                             |                             |                |                 |
| Mobile exhaust                         | 50                                    | 47                                     | 8,574                       | 15                          | 773            | 200             |
| Mobile road dust                       | 188                                   | 47                                     | —                           | —                           | —              | —               |
| Mobile brake and tire wear             | 99                                    | 36                                     | —                           | —                           | —              | —               |
| Worker vehicle emissions               | —                                     | —                                      | —                           | —                           | —              | —               |
| On-site Idling Emissions               | —                                     | —                                      | —                           | —                           | —              | —               |
| <i>Total without POY</i>               | 336                                   | 130                                    | 8,574                       | 15                          | 773            | 200             |
| Project Increment                      | 1                                     | 1                                      | 22                          | 0                           | 3              | <1              |
| Significance threshold                 | 150                                   | 55                                     | 55                          | 150                         | 550            | 55              |
| <b>Significant?</b>                    | <b>No</b>                             | <b>No</b>                              | <b>No</b>                   | <b>No</b>                   | <b>No</b>      | <b>No</b>       |

*Notes: CO = carbon monoxide; lb/day = pounds per day; NO<sub>x</sub> = nitrogen oxide; PM<sub>10</sub> = directly emitted particulate matter less than 10 microns; PM<sub>2.5</sub> = directly emitted particulate matter less than 2.5 microns; SO<sub>x</sub> = sulfur oxides  
Emissions might not add precisely due to rounding.*

SCAQMD’s LST methodology was used to assess localized ambient air impacts associated with anticipated operational activities. LST thresholds represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the AAQS. The following conservative assumptions were made in the LST analysis:

- Localized emissions would be the same as the regional emissions. This is a conservative assumption because it assumes that all additional VMTs estimated in the traffic study to occur in the entire ports complex would conservatively occur at the proposed Project site.
- Operational activities would be limited to a 5-acre area. This is a conservative assumption because the proposed Project site is actually 12 acres, and emissions occurring over a larger area would be dispersed over the larger area, resulting in lower impacts.

- In total, 500 meters was used as the LST default separation distance from the proposed Project site to the closest residential receptor. The use of 500 meters is conservative because the closest residential receptor to the proposed Project site would be liveaboards in a marina more than half a mile to the north of the proposed Project site, which is nearly twice the distance assumed in this LST analysis.
- The LST analysis assumed that the closest off-site worker receptor would be located at a distance of 25 meters from the proposed Project site. The use of 25 meters is a conservative assumption because it is the minimum distance for allowable emissions from the boundary to the closest worker receptor to the proposed Project site

Table 4.3-5 summarizes localized operational impact results. The table shows that all pollutant emissions would be below the LST significance thresholds without mitigation.

**Table 4.3-5  
Peak Daily Localized Operational Emissions**

| Source Category        | Residential Impacts                                       |  |  |                              | Off-Site Occupational Impacts                             |  |  |                              |
|------------------------|---|--|--|------------------------------|---|--|--|------------------------------|
|                        | <i>PM<sub>10</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>PM<sub>2.5</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>NO<sub>2</sub></i><br><i>(LB/DAY)</i> | <i>CO</i><br><i>(LB/DAY)</i> | <i>PM<sub>10</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>PM<sub>2.5</sub></i><br><i>TOTAL</i><br><i>(LB/DAY)</i> | <i>NO<sub>2</sub></i><br><i>(LB/DAY)</i> | <i>CO</i><br><i>(LB/DAY)</i> |
| Operating Year 2021    | 1   | 0  | 23                                       | 3                            | 1   | 0  | 23                                       | 3                            |
| Significance Threshold | 46  | 29   | 179                                      | 10,198                       | 4   | 2  | 123                                      | 1,530                        |
| <b>Significant?</b>    | <b>No</b>   | <b>No</b>  | <b>No</b>                                | <b>No</b>                    | <b>No</b>   | <b>No</b>  | <b>No</b>                                | <b>No</b>                    |

*Notes: CO = carbon monoxide; lb/day = pounds per day; NO<sub>2</sub> = nitrogen oxide; PM<sub>10</sub> = directly emitted particulate matter less than 10 microns; PM<sub>2.5</sub> = directly emitted particulate matter less than 2.5 microns Emissions might not add precisely due to rounding.*

*This estimate conservatively assumes all emissions are on site.*

*LST thresholds assume the following:*

- *State Responsibility Area 4: South Coastal Los Angeles County*
- *5-acre site*
- *500 meters distance to nearest residential receptor*
- *25 meters distance to nearest off-site occupational receptor*

Impacts associated with a violation of an air quality standard would be less than significant 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.** Federal and state AAQS have been established for the following criteria pollutants: CO, ozone, sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. Areas are classified under the federal CAA areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the national AAQS have been achieved. Attainment relative to the California CAA and state AAQS is determined by CARB. The proposed Project site is located in the Los Angeles County (County) portion of the Basin. The County is designated as a federal nonattainment area for ozone and PM<sub>2.5</sub> and state nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>.<sup>2</sup>

Air quality in the Basin has improved in the last several decades. The improvement in air quality is attributed to emissions reduction from industrial sources, introduction of low emission fuels used in on-road motor vehicles (e.g., low-sulfur fuels, reformulated gasoline, and low-carbon fuel standards), and implementation of the AQMPs, which identify emissions reduction strategies and which are subsequently promulgated as enforceable regulations.

Cumulative impacts may result from individually minor but collectively significant projects. CEQA Guidelines Section 15355 define cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” CEQA Guidelines Section 15064(h)(4) also state that “the mere existence of cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed Project’s incremental effects are cumulatively considerable.”

SCAQMD has developed a policy to address the cumulative impacts of CEQA projects (SCAQMD 2003). The policy identifies the cumulative threshold to be the same as the project-level threshold and indicates that project impacts are cumulatively considerable if they exceed the project-specific air quality significance thresholds.

### **Construction**

Tables 4.3-2 and 4.3-3 show that construction activities would not exceed SCAQMD project-specific significance thresholds. Therefore, construction activities would not result in a cumulatively considerable contribution to the existing pollution burden in the Basin.

<sup>2</sup> The Los Angeles area is in nonattainment for the lead AAQS, mainly due to two lead-acid battery recyclers. Lead would not be expected to result from anticipated proposed Project activities and is not considered to be a pollutant of concern for this proposed Project.

**Operation**

Tables 4.3-4 and 4.3-5 show that operational activities would not exceed SCAQMD project-specific significance thresholds. Therefore, operational activities would not result in a cumulatively considerable contribution to the existing pollution burden in the Basin.

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

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

**Less-than-Significant Impact.** Sensitive receptors include residences, hospitals, or convalescent facilities. LAHD also includes off-site workers who can be affected by project activities in CEQA analyses. The nearest sensitive receptors would be liveboards in a marina more than half a mile to the north of the proposed Project site. These receptors represent the nearest land uses with the potential to be impacted as a result of the proposed Project.

Impacts to sensitive receptors are typically evaluated in terms of exposure to toxic air contaminants (TACs), in accordance with the 2015 Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) Guidelines (2015). Cancer risk is considered to accrue over years of exposure. OEHHA Guidelines (2015) combine construction and operational TAC impacts and recommend that cancer risk be analyzed for a 20-year off-site occupational exposure and a 30-year residential exposure. The proposed Project construction would be limited to improving approximately 1,000 square feet of damaged asphalt and paving an additional 5,000 square feet over a period of less than one week. The proposed Project operations would be limited to a 5-year RP lease. Proposed Project construction and operational activities would be much shorter in duration than exposure durations recommended for off-site occupational and residential exposure in the OEHHA Guidelines (2015) and would therefore be unlikely to result in a significant cancer risk.

The OEHHA Guidelines (2015) also recommend the consideration of non-cancer chronic and acute health impacts. OEHHA recommends that non-cancer chronic impacts be evaluated over a maximum 1-year exposure period and acute health impacts be evaluated over a maximum 1-hour exposure period. LAHD large terminal projects have historically not resulted in an exceedance of non-cancer chronic or acute health impacts. Truck trips associated with the proposed Project would be a small fraction of those associated with large terminal projects. In addition, these truck trips would not be localized, but would be spread out over a network of roadways. Since large LAHD terminal projects have not historically resulted in significant health impacts, a small project from which truck trips are spread out over a network of roadways would also not result in significant health impacts.

Therefore, proposed Project construction and operational activities would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant and no mitigation is required.



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

**Less-than-Significant Impact.** Construction and operational activities of the proposed Project would increase air pollutants primarily due to the combustion of diesel fuel and limited paving activities. Some individuals might find diesel combustion emissions to be objectionable in nature, although quantifying the odorous impacts of these emissions to the public is difficult due to the complex mixture of chemicals in diesel exhaust and the differing odor thresholds of these constituent species. It is difficult to quantify the potential for changes in perceived odors even when air contaminant concentrations are known.

The mobile nature of most proposed Project emission sources would serve to disperse proposed Project emissions. Additionally, the distance between proposed Project emission sources and the nearest sensitive receptor is expected to be far enough to allow for adequate dispersion of these emissions to below objectionable odor levels. Furthermore, the existing industrial setting of the proposed Project represents an already complex odor environment. For example, existing nearby container terminals include freight and goods movement activities that use diesel trucks and diesel cargo-handling equipment that generate similar diesel exhaust odors as would the proposed Project. Within this context, the proposed Project would not likely result in changes to the overall odor environment in the vicinity. Therefore, the proposed Project would not create objectionable odors affecting a substantial number of people. Impacts would be less than significant and no mitigation is required.

#### 4.4 BIOLOGICAL RESOURCES

Over the years, LAHD, in conjunction with the Port of Long Beach have worked with the state and federal resource agencies to conduct periodic evaluations of the biological resources within the Port Complex to assess biological conditions of the various harbor habitats; the most recent evaluation was conducted in 2013-2014 (MBC 2016).

##### Would the Project:

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

**Less-than-Significant Impact.** As discussed within the Port Master Plan (POLA 2014), most of the terrestrial area within the Port contains facilities and infrastructure such as buildings, roads, and paved container storage areas with limited vegetated habitats. Wildlife use of developed and most undeveloped areas within the area is limited. The majority of species that are known or have the potential to occur are adapted to human-disturbed landscapes. Biologically sensitive areas within the Port are shown on Figure 10 of the Port Master Plan (POLA 2014). These include wetlands, marine habitats of particular concern (eelgrass (*Zostera* spp.), kelp (*Laminariales* spp.)), and the designated California least tern (*Sternula antillarum browni*) nesting site. No biological resources are identified within the proposed Project site. The open water areas of the Port provide important nursery and foraging habitat for coastal marine fish and nesting and foraging habitat for many resident and migratory birds. The Port also provides habitat for marine mammals, which are protected under the Marine Mammal Protection Act (POLA 2014). The proposed Project site is away from the water, and the proposed Project would not include in-water or over-water construction or operations and would not affect marine vessel traffic.

A few mature ornamental landscape trees are located on the proposed Project site. Although unlikely because of the disturbed nature of the proposed Project site and frequency of activities, these trees could potentially provide nesting opportunities for bird species protected under the California Fish and Game Code and the Migratory Bird Treaty Act of 1918. No vegetation removal is proposed as part of the proposed Project.

Additionally, wildlife on site is limited to common species typically found in urban environments. Therefore, impacts associated with candidate, sensitive, or special-status species as identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS would be considered less than significant, and no mitigation is required.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?**

**No Impact.** Refer to Section 4.4(a). The proposed Project site is currently designated as Heavy Industrial Zone (M3) and ZI-2130 Harbor Gateway State Enterprise Zone (City of Los Angeles 2016a). The site is developed with an existing surface parking lot and a one-story building. No riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS exist on the proposed Project site because of the disturbed and urban nature of the proposed Project site. Eelgrass beds, which are considered a special aquatic site (vegetated shallows) pursuant to the Clean Water Act and a habitat area of particular concern, are located 0.12 mile southwest of the proposed Project site (Port of Long Beach and POLA 2016).

The proposed Project site is away from the water and would not include in-water or over-water construction or operations or affect marine vessel traffic. Therefore, no impacts associated with riparian habitat or any other sensitive natural community would result from implementation of the proposed Project, and no mitigation is required.

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

**No Impact.** Refer to Section 4.4(b). The nearest wetland to the proposed Project site is the Salinas de San Pedro (also referred to as Cabrillo Marsh). It is a 3.3-acre salt marsh located near Cabrillo Beach in the Outer Harbor and is located approximately 3 miles southwest of the proposed Project site (POLA 2014).

The proposed Project site is away from the water, and the proposed Project would not affect marine vessel traffic or otherwise affect any in-water operations. Proposed project construction would be confined to the immediate Project site and no in- or over-water construction or operations are proposed. No activities would occur within or near wetlands. Therefore, no impacts would be associated with federally protected wetlands as defined by Section 404 of the CWA. No mitigation is required.

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

**Less-than-Significant Impact.** A few mature ornamental landscape trees are located on the proposed Project site; however, there are no plans to remove them as part of the proposed Project. Additionally, wildlife on site is limited to common species typically found in urban

environments. As discussed in the Port Master Plan, the ports complex occurs between dense, urban development and ocean waters; therefore, natural corridors (topographic or habitat pathways) supporting terrestrial wildlife movement do not occur (POLA 2014).

Although unlikely because of the disturbed nature of the proposed Project site and frequency of activities, the mature ornamental landscape trees could potentially provide nesting opportunities for bird species protected under the California Fish and Game Code and the Migratory Bird Treaty Act of 1918. However, vegetation clearance would not be required as part of the proposed Project. Therefore, impacts associated with the movement of any native resident, migratory fish, or wildlife species would be considered less than significant, and no mitigation is required.

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

**No Impact.** The only biological resources protected by the City ordinance (Ordinance No. 177404) pertain to certain tree species.

A few mature ornamental landscape trees are located within the proposed Project site; however, none are protected by City Ordinance and there are no plans to remove them as part of the proposed Project. Therefore, no conflict with the City's native tree protection and relocation ordinance would occur. No impacts would occur to protected biological resources and no mitigation is required.

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

**No Impact.** No adopted habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat conservation plan overlay the proposed Project site. The nearest conservation plan area is the Rancho Palos Verdes Natural Community Conservation Plan, which is located 4.7 miles west of the proposed Project site (City of Rancho Palos Verdes 2016). The County of Los Angeles (County) has established officially designated areas, referred to as significant ecological areas (SEAs), within the County that contain rare or unique biological resources. The Terminal Island (Pier 400) California least tern nesting site is the only SEA in the Port. The proposed Project is located 2.4 miles northeast of the SEA (County of Los Angeles 2015). Since the proposed Project is not in the vicinity of the SEA, no impact would occur, and no mitigation is required.

## 4.5 CULTURAL RESOURCES

This section addresses potential impacts on cultural resources that could result from implementation of the proposed Project. Cultural resources customarily include archaeological resources, ethnographic resources, and those of the built environment (architectural resources). Though not specifically a cultural resource, paleontological resources (fossils predating human occupation) are also considered in this evaluation, as they are discussed in Appendix G of the State CEQA Guidelines (Environmental Checklist Form).

### Would the Project:

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

**No Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards and is within the Port. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. No demolition or excavation would be associated with the proposed Project; therefore, an encounter with or adverse change to a historical resource would not occur, and no mitigation is required.

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

**No Impact.** The proposed Project is located on Terminal Island, which is composed of artificial fill material and was created in the twentieth century. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. No demolition or excavation would be associated with the proposed Project; therefore, an encounter with or adverse change to an archaeological resource would not occur, and no mitigation is required.

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

**No Impact.** The proposed Project is located on Terminal Island, which is composed of artificial fill material and was created in the twentieth century. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. No grading or excavation would be associated with the proposed Project; therefore, an encounter with or adverse change to a paleontological resource, paleontological site, or unique geologic feature would not occur, and no mitigation is required.

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

**No Impact.** Discovery of human remains is governed by the California Health and Safety Code, and PRC Sections 5097.94 and 5097.98, and can fall within the jurisdiction of the Native American Heritage Commission (NAHC). Section 7052 of the Health and Safety Code establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives. Under Section 7050.5 of the Health and Safety Code, if human remains are discovered no further excavation or disturbance at the site shall stop and the county coroner contacted. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

The proposed Project is located on Terminal Island, which is composed of artificial fill material and was created in the twentieth century. The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards and is within the Port. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. No grading or excavation would be associated with the proposed Project. There are no human remains known to exist within the Port boundary. The proposed Project would not disrupt human remains. No mitigation is required.

## 4.6 GEOLOGY AND SOILS

### Would the Project:

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

**Less-than-Significant Impact.** The proposed Project site is located in a region with several active fault lines. The Palos Verdes Fault Zone traverses the Port in a general northwest to southeast manner from the West Turning Basin to Pier 400 and beyond, and is located approximately 1 mile west of the proposed Project site (POLA 2014). No faults underlie the proposed Project site. Thus, although the proposed Project could experience strong seismic ground shaking (see Section 4.6(a)(ii)), the proposed Project site is not susceptible to surface rupture. In addition, the proposed Project would not include the construction of any new habitable structures. Therefore, impacts associated with the risk of surface rupture due to faulting would be less than significant, and no mitigation is required.

- ii) **Strong seismic ground shaking?**

**Less-than-Significant Impact.** As discussed in 4.6(a), the proposed Project site is located in a region with several active fault lines, which upon rupture could result in strong seismic ground shaking. However, the proposed Project would not include the construction of any new habitable structures. Therefore, impacts associated with the risk of strong seismic ground shaking due to faulting would be less than significant, and no mitigation is required.

- iii) **Seismic-related ground failure, including liquefaction?**

**Less-than-Significant Impact.** Liquefaction is the loss of soils strength or stiffness due to a buildup of pore-water pressure during strong ground-shaking activity and is typically associated with loose, granular, and saturated soils. According to Exhibit B of the City of Los Angeles General Plan Safety Element, the proposed Project is located in a liquefiable area where there have been recent alluvial deposits, and groundwater is less than 30 feet deep (City of Los Angeles 1996). The proposed Project would not include the construction of any new habitable structures. Therefore, impacts associated with the risk of seismic-related ground failure would be less than significant, and no mitigation is required.

**iv) Landslides?**

**Less-than-Significant Impact.** Landslides occur when masses of rock, earth, or debris move down a slope. Landslides are caused by disturbances in the natural stability of a slope. They can accompany heavy rains or follow droughts, earthquakes, or volcanic eruptions. Construction activities, such as grading, can accelerate landslide activity.

The proposed Project site is relatively flat with no significant natural or graded slopes. Based on a visual assessment of the site, the surrounding area does not contain geographic features (e.g., hills) that would encourage landslides to occur. Exhibit C of the City of Los Angeles General Plan Safety Element does not identify the proposed Project site as a location that is subject to landslide (City of Los Angeles 1996). In addition, the proposed Project would not include grading or the construction of any new habitable structures. Therefore, impacts associated with landslides would be less than significant and no mitigation is required.

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

**Less-than-Significant Impact.** Common causes of soil erosion from construction include stormwater, wind, and soil being tracked off site by vehicles. The proposed Project would not involve earthwork, demolition, or construction activities that would disturb surface soils or temporarily leave exposed soil on the ground's surface. The proposed Project site is currently paved, and site improvements would be limited to repairs to existing pavement and new pavement on currently dirt-graded areas. No demolition or excavation would be associated with the proposed Project. Therefore, short-term construction impacts and long-term operational impacts associated with soil erosion and topsoil loss would be less than significant, and no mitigation is required.

**c) Be located on a geological 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.** As addressed in Section 4.6(a)(iv), the proposed Project site is not located within an area susceptible to landslides. As addressed in Section 4.6(a)(iii), the proposed Project is located in a liquefiable area. The proposed Project would not include the construction of any new habitable structures. Therefore, impacts associated with the risk of unstable soil would be less than significant, and no mitigation is required.



- 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?**

**Less-than-Significant Impact.** Expansive soils are characterized by their potential shrink-swell behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in certain fine-grained clay sediments from the process of wetting and drying. Clay minerals are known to expand with changes in moisture content. The higher the percentage of expansive minerals present in near surface soils, the higher the potential for substantial expansion.

Although the proposed Project could be located on expansive soil, the proposed Project would not include the construction of any new habitable structures. Therefore, impacts associated with the risk of expansive soil would be less than significant, and no mitigation is required.

- 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?**

**No Impact.** The proposed Project would not require a septic or alternative wastewater disposal system. Therefore, no impacts associated with the ability of soils to support septic tanks would occur, and no mitigation is required.

## 4.7 GREENHOUSE GAS EMISSIONS

This section includes a description of the potential effects of greenhouse gases (GHGs) and analyses of potential GHG emissions and impacts of the proposed Project. The methods of analysis for Project emissions is consistent with the guidelines of the SCAQMD and LAHD's standard protocols.

GHG emissions were estimated for the proposed Project. The proposed Project consists of the operation of a POY including any marine related support activities and operations (e.g. container storage, chassis storage). Sources contributing to GHG emissions during construction include the following construction equipment and vehicles: tool truck, dump truck, backhoe and a roller. The construction contractor shall be required to comply with applicable BMPs and LAHD Sustainable Construction Guidelines (see Section 2.3). CO<sub>2</sub>e emissions analysis utilized the CalEEMod model.

The proposed Project would operate a marine services support yard (e.g. POY, container storage, chassis storage). A POY is the most intensive use contemplated for the proposed Project site. To be conservative for the purposes of this study, we have analyzed a POY operation as the highest intensity potential use which also takes into account a higher turnover rate and higher trip generation. Sources contributing to GHG emissions during operation include trucks and worker vehicles.

### Thresholds of Significance

#### CEQA Significance Thresholds

State CEQA Guidelines Section 15064.4(b) sets forth the factors that should be considered by a lead agency when assessing the significance of impacts from GHG emissions on the environment. These factors include:

- the extent to which a project may increase or reduce GHG emissions compared with the existing environmental setting;
- whether project emissions exceed a threshold of significance that the lead agency determines applicable to a project; and
- the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions.

The guidelines do not specify significance thresholds and allow the lead agencies discretion in how to address and evaluate significance based on these criteria.

The SCAQMD has adopted an interim CEQA significance threshold of 10,000 metric tons per year (mty) of carbon dioxide equivalent (CO<sub>2</sub>e) for industrial projects where SCAQMD is the lead agency.<sup>3</sup> The 10,000 mty CO<sub>2</sub>e threshold was used to evaluate the proposed Project's GHG emissions under CEQA.

LAHD has determined the SCAQMD-adopted interim industrial threshold of 10,000 mty CO<sub>2</sub>e to be suitable for the proposed Project following reasons:

- The SCAQMD interim threshold used as the basis for its development, Governor Schwarzenegger's June 1, 2005 Executive Order S-3-05 (EO S-3-05) which set emission reduction targets of reducing GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.<sup>4</sup> The 2020 target is the core of the California Global Warming Solutions Act of 2006, widely known as Assembly Bill 32(AB 32).<sup>5</sup>
- The proposed Project's primary GHG sources are construction equipment and vehicle mobile sources. The SCAQMD industrial source threshold is appropriate for projects with mobile emission sources. CAPCOA guidance considers industrial projects to include substantial GHG emissions associated with mobile sources.<sup>6</sup> SCAQMD, on industrial projects for which it is the lead agency, uses the 10,000 mty threshold to determine CEQA significance by combining a project's stationary source and mobile source emissions. Although the threshold was originally developed for stationary sources, SCAQMD staff views the threshold as conservative for projects with both stationary and mobile source because it is applied to a larger set of emissions and therefore captures a greater percentage of projects than would be captured if the threshold was only used for stationary sources.<sup>7</sup>
- The SCAQMD industrial source threshold is appropriate for projects with sources that use primarily diesel fuel. Although most of the sources that were considered by the SCAQMD in the development of the 10,000 mty threshold are natural gas-fueled, both natural gas and diesel combustion produce CO<sub>2</sub> as the dominant GHG.<sup>8</sup> Furthermore, the conversion of all GHG species into a CO<sub>2</sub>e ensures that the GHG emissions from any source, regardless of fuel type, can be evaluated equitably.

After considering these guidelines, LAHD has set the following threshold for use in this IS/ND to determine the significance of proposed Project-related GHG impacts.

<sup>3</sup> SCAQMD, Draft Guidance Document, Interim CEQA Greenhouse Gas (GHG) Significance Threshold, Attachment E. October 2008. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf?sfvrsn=2)

<sup>4</sup> SCAQMD, Draft Guidance Document, Interim CEQA Greenhouse Gas (GHG) Significance Threshold, Attachment E. October 2008. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf?sfvrsn=2)

<sup>5</sup> SCAQMD, personal communication between L. Granovsky/iLanco Environmental and Mike Krause/SCAQMD regarding the SCAQMD GHG significance threshold for industrial projects. July 29, 2016

<sup>6</sup> CAPCOA Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January, 2008.

<sup>7</sup> SCAQMD, personal communication between L. Granovsky/iLanco Environmental and Mike Krause/SCAQMD regarding the SCAQMD GHG significance threshold for industrial projects. July 29, 2016.

<sup>8</sup> The Climate Registry, 2016 Climate Registry Default Emission Factors. April 19, 2016.

**Would the Project:**

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

**Less-than-Significant Impact.** Based on criteria set by the SCAQMD, a proposed project would have the potential to violate an air quality standard or contribute substantially to an existing violation if construction emissions would exceed thresholds of significance in Table 4.7-1. Impacts are determined by comparing the combined amortized construction<sup>9</sup> and future operational emissions with and without the proposed POY. The proposed Project would not affect growth at the Port Complex and the source of impacts is limited to onsite idling and the diversion of containers to the POY. The impacts from diversion and onsite idling is limited by the capacity of the POY, which is 450 slots. Table 4.7-1 below shows the proposed Project’s Annual GHG Emissions without Mitigation.

**Table 4.7-1  
Annual GHG Emissions**

| Source Category                        | CO <sub>2</sub> E<br>(mty) |
|--|----------------------------|
| Amortized construction emissions       | 86                         |
| <i>OPERATING YEAR 2021 WITH POY</i>    |                            |
| Mobile exhaust                         | 272,507                    |
| <i>OPERATING YEAR 2021 WITHOUT POY</i> |                            |
| Mobile exhaust                         | 271,834                    |
| Project increment                      | 759                        |
| Significance threshold                 | 10,000                     |
| <b>Significant?</b>                    | <b>No</b>                  |

*Notes: CEQA = California Environmental Quality Act; CO<sub>2</sub>E = carbon dioxide equivalent; GHG = greenhouse gas; mty = metric tons per year  
Emissions might not add precisely due to rounding.*

The table presents annual GHG emissions associated with construction and operation of the proposed Project. The table shows that GHG emissions would not exceed the significance threshold. Therefore, the proposed Project would not generate GHG emissions that may have a significant impact on the environment and no mitigation is required.

**Informational assessment: Consider whether the Project is consistent with certain statewide, regional and local plans and policies.**

<sup>9</sup> Construction emissions were amortized over the life of the project (5 years) per SCAQMD guidance.

As noted above, CEQA Guidelines Section 15064.4(b) provides that one factor to be considered in assessing the significance of GHG emissions on the environment is “the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of GHG emissions.”

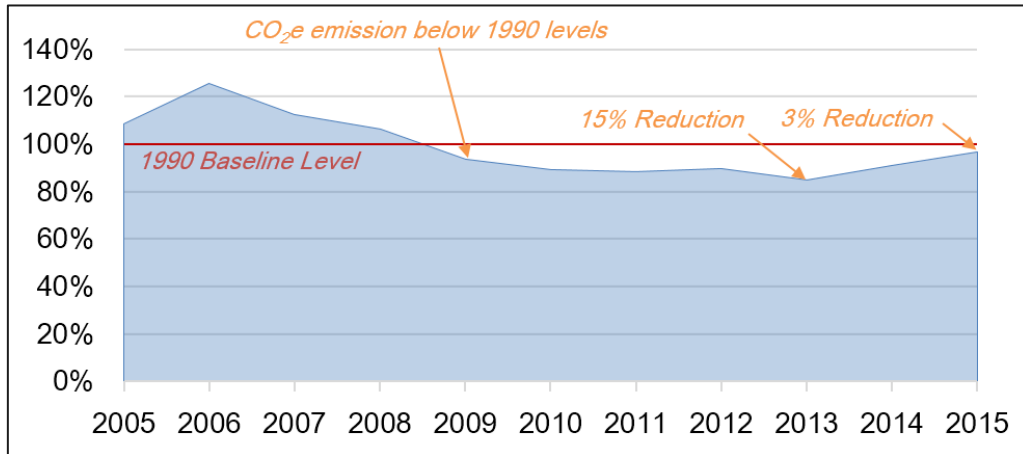
Several state, regional and local plans have been developed that set goals for the reduction of GHG emissions over the next few years and decades. Some of these plans and policies (notably, EO S-3-05 and AB 32) were taken into account by the SCAQMD in developing the 10,000 mty CO<sub>2</sub>e threshold. However, no regulations or requirements have been adopted by relevant public agencies to implement those plans for specific projects, within the meaning of CEQA Guidelines Section 15064.4(b) (3). (See *Center for Biological Diversity v. Cal. Dept. of Fish and Wildlife (Newhall Ranch)* (2015) 62 Cal.4th 204, 223.) Consequently, no CEQA significance assessment based upon compliance with such regulations or requirements can be made for the proposed Project. Nevertheless, for the purpose of disclosure, LAHD has considered for informational purposes only, whether the proposed Project activities and features, are consistent with federal, state or local plans, policies or regulations for the reduction of GHG emissions, as set forth below.

The State of California is leading the way in the United States, related to GHG reductions. Several legislative and municipal targets for reducing GHG emissions, below 1990 levels have been established. Key examples include:

- Senate Bill 32 (SB32)  
1990 levels by 2020  
40 percent below 1990 levels by 2030
- Assembly Bill 32 (AB 32)  
80 percent below 1990 levels by 2050
- City of Los Angeles Sustainable City pLAn  
45 percent below 1990 levels by 2025  
60 percent below 1990 levels by 2035  
80 percent below 1990 levels by 2050

LAHD has been tracking GHG emissions, in terms of carbon dioxide equivalents (CO<sub>2</sub>e) since 2005 through the LAHD municipal GHG inventory and the annual inventory of air emissions (see Figure 4.7-1). As illustrated below in Figure 4.7-2, Port-related GHG emissions (all three scopes) started making significant reductions since 2006, reaching a maximum reduction in CO<sub>2</sub>e of 15 percent from 1990 levels in 2013. Subsequently, 2014 and 2015 saw GHG levels rise due to a period of port congestion that arose from circumstances outside of the control of either the LAHD or its tenants. This event illustrates a major challenge related to managing GHG-related emissions, as events outside the control of LAHD or its individual tenants will continue to have a varying degree of impact on the progress of reduction efforts.

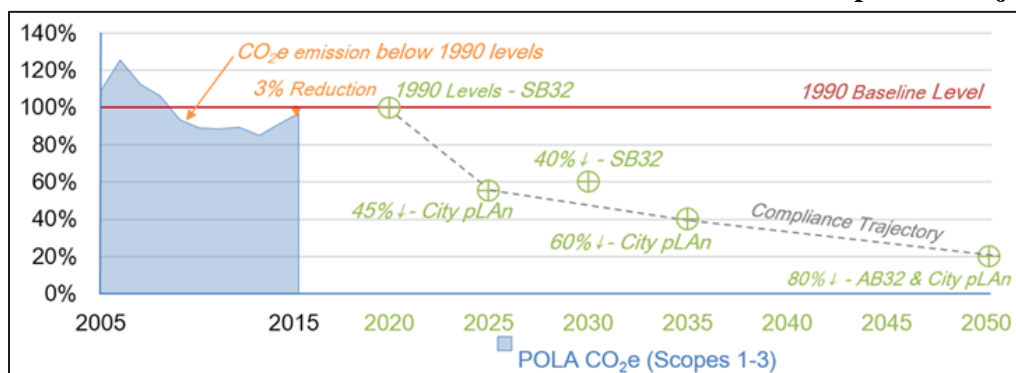
**Figure 4.7-1: GHG Emissions 2005-2015**



LAHD and its tenants have initiated a number of wide-ranging strategies to reduce all port-related GHGs, which includes the benefits associated with the Clean Air Action Plan (CAAP), Zero Emission Roadmap, Energy Management Action Plan (EMAP), operational efficiency improvements, and land use and planning initiatives. Looking toward 2050, there are several unknowns that will affect future GHG emission levels. These unknowns include grid power portfolios; maritime industry preferences of power sources and fuel types for ships, harbor craft, terminal equipment, locomotives, and trucks; advances in cargo movement efficiencies; the locations of manufacturing centers for products and commodities moved; and increasing consumer demand for goods. The key relationships that have led to operational efficiency improvements to date are the cost of energy, current and upcoming regulatory programs, and the competitive nature of the goods movement industry. We anticipate these relationships will continue to produce benefits with regards to GHG emissions for the foreseeable future.

Figure 4.7-2 below shows the key GHG targets listed above with a postulated ‘compliance trajectory’ set to meet the most stringent targets. It is important to note that the targets shown in Figure 4.7-2 are not project specific targets and that no specific project level regulations or requirements have been developed by agencies for implementation of these plans. Instead, these targets are goals meant to apply to all applicable GHG sources in aggregate, which means some sources will need to go beyond these targets, while others may not be able to meet the target level.

**Figure 4.7-2: Actual GHG Emissions 2005-2015 & 2015-2050 GHG Compliance Trajectory**



Nevertheless, with the very aggressive targets shown in Figure 4.7-2 above, it is not possible at this time to determine whether Port-wide emissions or any particular Project applicant will be able to meet the compliance trajectories shown. Compliance will depend on future regulations or requirements that may be adopted, future technologies that have not been identified or fully developed at this time, or any other Port-wide GHG reduction strategies that may be established. As a result, while LAHD will continue to work with its tenants to implement aggressive GHG reduction measures to meet the compliance trajectory that is shown, LAHD cannot with certainty confirm compliance with these future plans and policies at this time.

## 4.8 HAZARDS AND HAZARDOUS MATERIALS

### Would the Project:

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

**Less-than-Significant Impact.** The Project would enable container sorting, storage, and transfer operations on a site that is already mostly paved and construction activities would be limited to improving a small area of damaged asphalt (approximately 1,000 square feet) and paving a small area (approximately 5,000 square feet) that is currently compacted dirt. Hazardous substances and wastes could be transported to and stored, used, and generated on the proposed Project site during paving or repairs to existing pavement on the proposed Project site. These would include fuels for machinery and vehicles, new and used motor oils, cleaning solvents, paints, and storage containers and applicators containing such materials. However, these materials would be transported, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. For example, hazardous materials would not be disposed of or released onto the ground or any surface water during paving and pavement repair of the proposed Project site, and completely enclosed containment would be provided for all refuse generated on the proposed Project site. Furthermore, all waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to a permitted waste facility for treatment, storage, or disposal. Use of these materials during paving and pavement repair activities for their intended purpose would not pose a significant risk to the public or the environment.

Upon operation of the proposed Project, the handling and storage of hazardous materials is not anticipated during project operation. As such, impacts would be 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.** As discussed under Section 4.8(a), hazardous substances and wastes could be stored and used on the proposed Project site during paving and pavement repair. Accidental spills, leaks, fires, explosions, or pressure releases involving hazardous materials represent a potential threat to human health and the environment if not properly treated. Accident prevention and containment would be the responsibility of the construction contractors, and provisions to properly manage hazardous substances and wastes are typically included in construction specifications. The most likely spills or releases of hazardous materials during construction would involve petroleum products, such as diesel fuel, oils, and lubricants. All



storage, handling, and disposal of these materials are regulated by the Department of Toxic Substances Control, EPA, Occupational Safety and Health Administration, and the Los Angeles City and County Fire Departments. As such, impacts related to the release of hazardous materials into the environment during construction would be less than significant with adherence to required regulations and standards. No mitigation is required.

The handling and release of hazardous materials into the environment is not anticipated during project operation. As such, impacts would be less than significant 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?**

**No Impact.** There are no schools located within 0.25 mile of the proposed Project. The nearest schools are Barton Hill Elementary School (423 North Pacific Avenue), which is approximately 2.2 miles west of the proposed Project site; Fries Avenue Elementary School (1301 North Fries Avenue), which is approximately 2.5 miles north of the proposed Project site; and Taper Elementary School (1824 North Taper Avenue), which is approximately 2.7 miles northwest of the proposed Project site. Therefore, no impact would occur, 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 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Impact.** A review of all Cortese List data resources was conducted to determine if the proposed Project was located on a hazardous materials site (CalEPA 2016a, 2016b, 2016c; DTSC 2016; SWRCB 2016). The proposed Project site is not included on any list of hazardous materials sites compiled pursuant to California Government Code, Section 65962.5. Therefore, implementation of the proposed Project would not create a significant hazard to the public or the environment, and 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, result in a safety hazard for people residing or working in the project area?**

**No Impact.** The proposed Project site is not located within 2 miles of a public airport or within an airport land use plan. The nearest airports are the Long Beach Airport, which is located 6.2 miles northeast of the proposed Project; the Compton/Woodley Airport, which is located 9.2 miles north of the proposed Project; and the Torrance Municipal Airport – Zamperini Field, which is located 5.3 miles northwest of the proposed Project (County of Los Angeles 2016). Therefore, the proposed Project would not be within the vicinity of a public airport, impacts would not occur, and no mitigation is required.

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

**No Impact.** There are no private airstrips in the vicinity of the proposed Project. The nearest helipads are located at 1175 Queens Freeway located 3.3 miles east of the proposed Project and the Catalina Air and Sea Terminal helipad located 1.5 miles west of the proposed Project. As the proposed Project is not located in the vicinity of a private airstrip, and operation of the proposed Project would not result in a safety hazard for people residing or working in the area, no impact would occur as a result of the proposed Project, 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 proposed Project site would be fully located within a previously developed site, not containing any public roadways. However, SR-47, located to the north of the proposed Project site is listed as a primary disaster route in the Los Angeles County Operational Area Disaster Routes (DPW 2017). Additionally, Navy Way, along the western boundary of the proposed Project, and SR-47 are utilized in the Los Angeles tsunami evacuation routes (LAPD/LAPP 2017). Paving and pavement repair would occur, which would not require the closure of roads and would not restrict access to or around the proposed Project site. The proposed Project would not result in any physical changes to Navy Way or SR-47. Therefore, construction and operation of the proposed Project is not anticipated to interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant, and no mitigation is required.

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

**No Impact.** The proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. According to the City of Los Angeles General Plan Safety Element, Selected Wildfire Hazard Area Map (City of Los Angeles 1996), the proposed Project is not located in a wildland fire hazard area. Therefore, no impacts would occur as a result of the proposed Project, and no mitigation is required.

## 4.9 HYDROLOGY AND WATER QUALITY

### Would the Project:

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

**Less-than-Significant Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards and is within the Port. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. The proposed Project would not have a significant impact on the rate, volume, or pollutant load of stormwater runoff in the long term because the proposed Project would involve only a modest increase in impervious area consisting of the 5,000 square feet of paving over compacted dirt. Therefore, impacts related to water quality standards and waste discharge requirements would be less than significant, and no mitigation is required.

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

**Less-than-Significant Impact.** The proposed Project site does not currently allow for groundwater recharge because it is currently mostly paved or occupied by structures and would remain so following paving and pavement repair activities. Although there are a few small graded areas that would be paved as part of the proposed Project, the proposed Project is located on an artificial island, and therefore, does not support groundwater recharge. Therefore, implementation of the proposed Project would not affect the location or rate of groundwater recharge. Furthermore, the proposed Project involves the short-term storage and movement of containers on site and does not involve consumptive uses of water and does not propose use of groundwater for any reason. For these reasons, the proposed Project would have a less-than-significant impact with respect to groundwater, and no mitigation is required.

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

**No Impact.** There are no streams or rivers located nearby that would be affected by the proposed Project. Furthermore, no significant increase or decrease of impervious surface is proposed because the proposed Project site is currently paved or occupied by structures and would remain so following paving and pavement repair activities. Although there are a few small graded areas that would be paved, these areas are such that the increase in impervious surfaces would be

nominal (5,000 square feet). The proposed Project would have no impact with respect to drainage patterns or alteration of the course of a stream or river, which would result in erosion or siltation on or off site, and no mitigation is required.

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

**No Impact.** As discussed in Section 4.9(c), there are no streams or rivers located nearby that would be affected by the proposed Project. Furthermore, no significant increase or decrease of impervious surface is proposed because the proposed Project site is currently paved or occupied by structures and would remain so following paving and pavement repair activities. Although there is an approximately 5,000-square-foot graded area that would be paved, this increase in impervious surfaces would be a small portion of the 12-acre site overall. The proposed Project would have no impact with respect to drainage patterns or alteration of the course of a stream or river, which would result in flooding on or off site, and no mitigation is required.

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

**Less-than-Significant Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards and is within the Port. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. There would be no significant increase or decrease of impervious surface associated with the proposed Project because the proposed Project site is currently paved or occupied by structures and would remain so following paving and pavement repair activities. Although there is an approximately 5,000-square-foot graded area that would be paved, this increase in impervious surfaces would be a small portion of the 12-acre site overall. The operation of the proposed Project would generate similar amounts of runoff and would be directed to existing drainages similar to existing conditions. The proposed Project would have a less-than-significant impact with respect to runoff water, and no mitigation is required.

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

**Less-than-Significant Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards and is within the Port. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. The operation of the proposed Project is not anticipated to create a new source of pollution or degrade water quality because the proposed Project would generate similar amounts of runoff and would be treated and directed to existing drainages similar to existing conditions. The proposed

Project would have a less-than-significant impact with respect to the degradation of water quality, and no mitigation is required.

**g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

**No Impact.** The proposed Project footprint is not located within a Federal Emergency Management Agency 100-year or 500-year flood zone. The proposed Project is located north of a floodway that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights (Zone AE) (FEMA 2009). The proposed Project would not occur within this identified 100-year flood area. Additionally, the proposed Project would not place housing within a flood hazard area. Therefore, there would be no impact, and no mitigation is required.

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

**No Impact.** Refer to Section 4.9(g). Since the proposed Project would not cross a Federal Emergency Management Agency 100-year or 500-year flood zone, and the proposed Project does not propose any structures that would impede or redirect flood flows, there would be no impact, and no mitigation is required.

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

**Less-than-Significant Impact.** According to the Los Angeles General Plan Safety Element, the proposed Project site is within a potential inundation area (City of Los Angeles 1996). However, the proposed Project would not construct any habitable structures. Therefore, there would be a less-than-significant impact associated with risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam, and no mitigation is required.

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

**Less-than-Significant Impact.** Due to the lack of an adjacent lake or other water body, the proposed Project site would not be susceptible to seiche. The lack of nearby topographical features typically associated with mudflow (e.g., hillside, riverbanks) would result in a very low probability for mudflow to affect the proposed Project site. According to the Los Angeles General Plan Safety Element, the proposed Project site is within a potential tsunami impact area (City of Los Angeles 1996). However, the proposed Project would not construct any habitable structures. Therefore, there would be a less-than-significant impact associated with inundation by seiche, tsunami, or mudflow, and no mitigation is required.

#### 4.10 LAND USE AND PLANNING

This section contains a description and analysis of the land use and planning considerations that would result from the proposed Project implementation.

##### Would the Project:

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

**No Impact.** The proposed Project is located in a heavy industrial area that does not contain any established communities. The physical division of an established community typically refers to the construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access, such as a local road or bridge, that would impair mobility within an existing community or between a community and outlying area. Under the existing conditions, the proposed Project site is not used as a connection between established communities. Instead, connectivity in the surrounding area is facilitated via local roadways. Therefore, no impacts associated with physical division of an established community would occur, and no mitigation is required.

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

**No Impact.** The proposed Project does not conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project adopted for the purpose of avoiding or mitigating an environmental impact. The proposed Project site is designated ZI-2130 Harbor Gateway State Enterprise Zone. The proposed Project site is zoned for heavy industrial uses, and the proposed Project would be consistent with that land use designation.

The City General Plan Land Use Element is comprised of the City's 35 community plans. The proposed project falls under the Port of Los Angeles Community Plan Area, which designates the proposed Project site as Port of Los Angeles. The proposed Project site is located in Planning Area 3 of the Port Master Plan (PMP). Of the Port's nine container terminals, six are located in Planning Area 3 and this planning area focuses on container operations (POLA 2014). The proposed Project site is designated for Maritime Support in the PMP.

Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis, which would be consistent with existing uses in Planning Area 3 and with the Maritime Support land use designation. Therefore, the proposed Project would not conflict with an applicable land use plan, policy, or regulation. Therefore, no impacts would occur, and no mitigation is required.

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

**No Impact.** As discussed in response to question 4.4(f), there is no adopted habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat conservation plan that overlays the proposed Project site. Thus, the proposed Project would not be subject to the provisions of any such conservation plans. Therefore, no impacts associated with conservation plans would occur, and no mitigation is required.

## 4.11 MINERAL RESOURCES

### Would the Project:

- a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**No Impact.** According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, there are no gas, geothermal, or other known wells located on the proposed Project site. There are several oil and gas production wells north and east of the proposed Project site, although the majority are plugged. The closest well is located approximately 0.2-miles north of the proposed Project site and is operated by Exxon Mobil Corporation (DOC 2016). The proposed Project would neither result in a land use conflict with the existing oil extraction nor would it preclude future oil extraction on underlying deposits. According to Exhibit A of the City of Los Angeles General Plan Conservation Element, the proposed Project site is not located within a mineral resource zone (City of Los Angeles 2001). Therefore, the proposed Project would not 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 would occur, and no mitigation is required.

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

**No Impact.** According to Exhibit A of the City of Los Angeles General Plan Conservation Element, the proposed Project site is not located within a mineral resource zone (City of Los Angeles 2001). Further, as discussed in Section 4.11(a), there are no gas, geothermal, or other known wells located on the proposed Project site, and the proposed Project would neither result in a land use conflict with the existing oil extraction nor would it preclude future oil extraction on underlying deposits. Therefore, implementation of the proposed Project would not result in the loss of availability of a locally important mineral resource recovery site, no impact would occur, and no mitigation is required.



## 4.12 NOISE

The purpose of this chapter is to identify sensitive noise receptors in the proposed Project area and to determine the degree of noise impacts that would be attributable to the proposed Project.

### Would the Project Result In:

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

**Less-than-Significant Impact.** Ambient noise in the proposed Project vicinity is primarily generated from traffic along various roads, including SR-47, Navy Way, Terminal Way, Reeves Avenue, and Nimitz Road. The rail line, which borders the eastern portion of the site, is a source of noise as well. A containerized cargo area within the Port of Long Beach is located immediately east of the railway tracks and generates noise associated with stacking and moving containers.

Since the proposed Project site is located in the City, the established construction noise guidelines of the City's Municipal Code apply to the proposed Project. The City's Municipal Code permits construction activities between 7 a.m. and 9 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on any Saturday or national holiday. No construction activity is allowed on Sundays (City of Los Angeles 2016c).

Construction noise levels can be expressed in terms of the equivalent continuous noise level ( $L_{eq}$ ), also referred to as the average sound level. In general terms,  $L_{eq}$  is the average noise level during the specified time period.

### **Ambient Noise Monitoring**

Noise measurements were conducted within the Port for the Berths 226-236 [Everport] Container Project Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) in January 2015 (POLA 2017). These measurements present a conservative representation of the Port ambient noise environment since these sound level measurements occurred at sensitive receptor locations that are more than 1 mile from the proposed Project site and where ambient noise is generally lower. The measured daytime average sound levels ranged from 63 to 69 decibels (dB), as depicted in Table 4.12-1. Measurement results are in terms of the time-averaged sound level ( $L_{eq}$ ).

**Table 4.12-1  
Ambient Measured Noise Levels**

| Site | Location   | Noise Level (dB Leq) | Noise Sources  |
|------|--|----------------------|--|
| ST-1 | Anchorage Road Frontage of the Island Yacht Anchorage. | 66                   | Railroad and truck traffic over the Cerritos channel bridges. Pile Driving Noise from new construction |
| ST-4 | Southwest corner of Cannery and Barracuda Streets      | 63                   | Trucks in and out of the container storage and staging area and passing traffic.                       |
| ST-8 | Apartment complex at 661 Harbor Blvd                   | 69                   | Truck and motorcycle traffic on SR-47 and Harbor Blvd.   |

*dB Leq = decibel of equivalent sound level.*

*Source: POLA 2017. Berths 226-236 [Everport] Container Project Draft EIR/EIS.*

**Paving and Pavement Repair Noise**

Paving of graded areas and pavement repair would take less than one week. These activities would be limited to the City’s allowable construction hours and days, which are between 7:00 a.m. and 9:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday or national holidays. No construction activity would occur on Sundays. Equipment would consist of one tool truck, one dump truck with a backhoe and roller, and up to six construction workers. For the purposes of the noise analysis, a paver was evaluated as the loudest potential item of equipment during construction.

Noise levels from construction activities generally decrease at a rate of 6 dB per doubling of distance away from the activity. Thus, at a distance of 100 feet from the center of construction activities, construction noise levels would range from 69 to 80 dBA  $L_{eq}$ . At a distance of 1,000 feet, construction noise could range up to 49 to 60 dBA  $L_{eq}$  but would likely be lower due to additional attenuation from ground effects, air absorption, and shielding from intervening structures or topography.

The proposed Project is surrounded by industrial uses, and therefore, would not be in the vicinity of sensitive receptors. The closest sensitive receptors are liveboards located in a marina more than half a mile to the north of the proposed Project. Due to the short-term duration of the paving and pavement repair activities, because these activities would occur during the City’s allowable time periods, and because the proposed Project would not be in the vicinity of sensitive receptors, the proposed Project would result in a less-than-significant noise impact and no mitigation is required.

## Operational Noise

Implementation of the proposed Project would include the operation of a maritime support yard. The analysis assumes operation of a POY because that is the most intensive potential use. The maritime support yard would initially be open 6 days a week from 7:00 a.m. to 3:00 a.m. and ultimately become a 24/7 operation.

Based on the City of Los Angeles CEQA Thresholds Guide (City of Los Angeles 2006), a significant noise impact would occur if project operations cause the ambient noise level measured at the property line of affected uses (i.e., sensitive receptors) to increase by 3 dBA in CNEL to or within the ‘normally unacceptable’ or ‘clearly unacceptable’ categories (generally over 70 dB), or any increase in CNEL by 5 dBA or greater. As stated in the project description, the POY would only generate a small number of additional bobtail trips (and associated VMT), along with the slightly diverted trips within the Port Complex which is already surrounded by industrial uses.

As discussed in more detail in Section 4.16(a), the change in VMT attributable to the diverted truck trips and new bobtail trips would be minor compared to the total VMT of all truck trips to/from the Port Complex. Although POY operations would only result in slightly diverted trips and minimal new bobtail trips within the Port Complex which would be similar to existing noise levels from adjacent industrial uses, the proposed project would result in the concentration of trucks and truck activities within the POY. An assessment of these activities is provided below.

As stated previously, the proposed Project is surrounded by industrial uses, and therefore, would not be in the vicinity of sensitive receptors. The closest potential sensitive receptors are liveaboards in a marina more than half a mile to the north the proposed Project. Based upon reference noise measurement data of heavy truck activities (e.g. backing up, pulling out, and driving by) at a distribution center (Wilder, 2000), the resultant noise levels at the nearest potential sensitive receptors would be approximately 35 dBA<sup>10</sup>. Consequently, project-related operational activities would produce noise levels less well below those documented at the measurement sites. Considering that the average existing daytime noise level at the noise measurement sites ranges from 63 to 69 dBA, the addition of such noise would result in no increase in noise levels at the measurement sites or potential liveaboard sensitive receptors. Noise levels at adjacent noise sensitive receptors would thus not increase by 3 dBA or greater. Because the proposed Project would not be in the vicinity of sensitive receptors, the proposed Project would result in a less-than-significant noise impact, and no mitigation is required.

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<sup>10</sup> The composite noise levels for the 43 non-passenger car equivalent peak-hour (AM) heavy truck trips was calculated using conservative estimates for the duration of each activity. The calculations did not include any additional noise reduction, which may result from intervening structures as an additional conservative measure. The calculation spreadsheet is provided in Appendix C.

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

**Less-than-Significant Impact.** Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground that diminishes (attenuates) fairly rapidly over distance. Vibrations could occur as a result of the use of paving equipment. The proposed Project construction would be limited to improving approximately 1,000 square feet of damaged asphalt and paving an additional 5,000 square feet over a period of less than one week and noise impacts from construction would be short-term and would be considered less than significant. As stated above in response to question 4.12(a), operational noise impacts would be less than significant. The closest potential sensitive receptors to the proposed Project are liveaboards in a marina more than half a mile to the north of the proposed Project. Vibration levels would not be perceptible at these distances. Therefore, vibration or groundborne noise level impacts would be less than significant, 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.** Refer to Section 4.12(a). Operation of the proposed Project would not result in any significant permanent noise impacts; therefore, this impact would be less than significant, and no mitigation is required.

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

**Less-than-Significant Impact.** Refer to Section 4.12(a). Paving and pavement repair would not result in any significant temporary or periodic noise impacts; therefore, this impact would be less than significant, and 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 expose people residing or working in the project area to excessive noise levels?**

**No Impact.** The proposed Project site is not located within 2 miles of a public airport or located within an airport land use plan. The nearest airports are the Long Beach Airport, which is located 6.2 miles northeast of the proposed Project; the Compton/Woodley Airport, which is located 9.2 miles north of the proposed Project; and the Torrance Municipal Airport – Zamperini Field, which is located 5.3 miles northwest of the proposed Project (County of Los Angeles 2016). Therefore, the proposed Project would not expose people residing or working on the proposed Project site to excessive noise levels. No impacts would result, and no mitigation is required.

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

**No Impact.** There are no private airstrips in the vicinity of the proposed Project. The nearest helipads are located at 1175 Queens Freeway located 3.3 miles east of the proposed Project, and the Catalina Air and Sea Terminal helipad located 1.5 miles west of the proposed Project. Because the proposed Project is not located in the vicinity of a private airstrip, operation of the proposed Project would not expose people residing or working in the proposed Project site to excessive noise levels. No impacts would result, and no mitigation is required.

#### 4.13 POPULATION AND HOUSING

##### Would the Project:

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**No Impact.** The proposed Project involves the operation of a maritime support yard. No residential uses or other land uses typically associated with directly inducing population growth are included as part of the proposed Project. As such, it is not anticipated that people would relocate into the area as a result of the proposed Project.

The proposed Project would not construct new or extend existing utilities or infrastructure into areas not currently served by such improvements. Thus, the proposed Project would not indirectly induce population growth. Therefore, no impacts associated with population growth inducement would occur, and no mitigation is required.

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

**No Impact.** The proposed Project would establish a maritime support yard within the proposed Project site which does not contain any housing. As such, the proposed Project would not displace existing housing and would not necessitate the construction of replacement housing elsewhere since none exists on the proposed Project site. No impact would occur, and no mitigation is required.

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

**No Impact.** As discussed in Section 4.13(b), the proposed Project site currently does not support housing; therefore, people would not be displaced. The proposed Project would establish a maritime support yard within the proposed Project site. As such, the proposed Project would not necessitate the construction of replacement housing elsewhere since none exists on the proposed Project site. No impact would occur, and no mitigation is required.

#### 4.14 PUBLIC SERVICES

##### Would the Project:

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered 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 following public services:**

i) **Fire Protection?**

**Less-than-Significant Impact.** The Los Angeles Fire Department (LAFD) provides fire protection and emergency medical response services to the proposed Project site. The LAFD operates 114 stations located throughout the City (LAFD 2016). The closest station is Fire Station No. 111 (954 South Seaside Avenue), which is located approximately 1.17 miles southwest of the site.

The proposed Project site is already within the service area of the LAFD. Once operational, the proposed Project would continue to be served by the LAFD. Additionally, as previously discussed in Section 4.13(a), the proposed Project would not directly or indirectly induce population growth in the City. While the proposed Project could potentially result in a slight increase in calls for service to the proposed Project site in comparison to the existing conditions, this increase is expected to be nominal since the proposed use is generally consistent with the historic use of the property (storage). The proposed Project would not increase the demand for fire services and would neither require the expansion of existing facilities nor the construction of new fire facilities. Overall, it is anticipated that the proposed Project would be adequately served by existing LAFD facilities, equipment, and personnel. Therefore, impacts associated with the construction or expansion of LAFD facilities would be less than significant, and no mitigation is required.

ii) **Police protection?**

**Less-than-Significant Impact.**

The Los Angeles Port Police (Port Police) is the primary law enforcement agency within the Port of Los Angeles. The Port Police are responsible for patrol and surveillance of Port property including 12 square miles of landside property and 43 miles of waterfront. Port Police headquarters are located at 330 S. Centre Street (between 3rd and 5th Streets), which is approximately 3.2 miles west of the proposed Project site. Dive Unit facility boats and offices/lockers are located on 954 South Seaside Avenue, which is approximately 2.4 miles southwest of the proposed Project site on Terminal Island.

Marine Unit boats and a small office are located at Berth 84, with additional offices in the Crowley Building near a Port Police training facility located at 300 Ferry Street, approximately 1.2 miles west of the proposed Project site on Terminal Island. In addition, there is a Wilmington substation at 300 Water Street, approximately 4.5 miles north of the proposed Project site.

Because the Port is within the City of Los Angeles, police protection services are also provided by the Los Angeles Police Department (LAPD). The proposed Project site is located within the LAPD Harbor Division Area, which includes a 27.5-square-mile area including Harbor City, Harbor Gateway, San Pedro, Wilmington, and Terminal Island. The LAPD Harbor Community Police Station is located at 2175 John S. Gibson Boulevard, which is approximately 2.3 miles northwest of the proposed Project site.

Similar to fire protection services, the proposed Project site is already within the service area of the Port Police and LAPD, and once operational, the proposed Project would continue to be served by them. Additionally, the proposed Project would not directly or indirectly induce population growth in the City. The proposed Project site operations and the proposed use is consistent with the historic use of the property (storage). The proposed Project would not increase the demand for police services and would require neither the expansion of existing facilities nor the construction of new fire facilities. Therefore, impacts associated with the construction or expansion of police facilities would be less than significant, and no mitigation is required.

**iii) Schools?**

**No Impact.** Public kindergarten through high school education in the City is provided by the Los Angeles Unified School District. As previously discussed in Section 4.13(a), the proposed Project would not directly or indirectly induce population growth in the City. The employees hired for operation of the proposed Project would come from the region, and it is not anticipated that people would relocate as a result of the proposed Project. As such, an increase in school-age children requiring public education is not expected to occur as a result of the proposed Project. Therefore, no impacts associated with the construction or expansion of Los Angeles Unified School District facilities would occur, and no mitigation is required.

**iv) Parks?**

**No Impact.** As further discussed in Section 4.15, Recreation, no residential uses or other land uses typically associated with directly inducing population growth are included as part of the proposed Project. An increase in patronage at park facilities is not expected. Therefore, no impacts associated with the construction or expansion of park facilities would occur and no mitigation is required.



v) **Other public facilities?**

**No Impact.** No residential uses or other land uses typically associated with directly inducing population growth are included as part of the proposed Project. A substantial increase in patronage at libraries, community centers, or other public facilities is not expected. Therefore, no impacts associated with the construction or expansion of public facilities would occur, and no mitigation is required.

## 4.15 RECREATION

### Would the Project:

- a) **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?**

**No Impact.** Demand for neighborhood or regional parks or other recreational facilities is primarily generated by an increase in the permanent residential population. The proposed Project does not propose any residential uses that may increase the use of existing neighborhood parks in the vicinity such that substantial physical deterioration of the facility or an increase in park facilities would occur or be accelerated. Therefore, impacts associated with parks or other recreational facilities would not occur, and no mitigation is required.

- b) **Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**No Impact.** As discussed in Section 4.15(a), the proposed Project site does not operate as a recreational facility, and the proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, no impacts to recreational facilities would result that might have an adverse physical effect on the environment, and no mitigation is required.

## 4.16 TRANSPORTATION AND TRAFFIC

This analysis provides a summary of the Traffic Analysis Technical Memorandum prepared by Iteris in August 2016 (Appendix B).

### Would the Project:

- a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

**Less-than-Significant Impact.** A network of freeways and arterial routes provides regional access to the proposed Project site. The freeway network consists of the Terminal Island Freeway (SR-47/SR-103), (also called the Seaside Freeway) adjacent to the site as well as the Harbor Freeway (Interstate 110) to the west and the Long Beach Freeway (I-710) to the east. The closest highway interchange serving the proposed Project site is the Seaside Avenue (SR-47)/Navy Way intersection. The arterial street network that serves the proposed Project site includes Navy Way and Reeves Avenue. Below is a description of the proposed Project site roadways.

**Seaside/Terminal Island Freeway (SR-47).** This is a four- to six-lane roadway that bisects Terminal Island and connects San Pedro to Long Beach through the Vincent Thomas and Gerald Desmond bridges. Ocean Boulevard is designated SR-710 between I-710 and the Terminal Island Freeway, and Seaside Freeway is designated SR-47 between I-110 and the Terminal Island Freeway.

**Navy Way.** This is an internal Port roadway that provides local access to Pier 300 and Pier 400 from Seaside Avenue/Ocean Boulevard and the Terminal Island Freeway (SR-47/SR-103). Navy Way is generally a four-lane north-south roadway, although south of the Terminal Way intersection, the southbound lanes turn into a single lane until the Seaside Way/Ocean Boulevard westbound off-ramp merges to form two southbound lanes. Navy Way is unclassified in the City of Los Angeles General Plan.

**Reeves Avenue.** This is a two- to three-lane roadway (two eastbound lanes and one westbound lane) that serves as the eastbound extension of Terminal Way between Navy Way and Nimitz Road. Reeves Avenue is unclassified in the City of Los Angeles General Plan.

### **Existing Area Traffic Conditions**

Existing truck and automobile traffic along study roadways and intersections, including automobiles, Port trucks, and other truck and regional traffic not related to the Port, was determined by collecting vehicle turning movement counts classified by vehicle type at the study

locations. These typical weekday AM (7:00 a.m. to 9:00 a.m.), midday (1:00 p.m. to 3:00 p.m.), and PM (4:00 p.m. to 6:00 p.m.) traffic counts were collected in February 2015.

Level of service (LOS) is a qualitative indication of an intersection’s operating conditions as represented by the volume to capacity (V/C) ratio traffic congestion. For intersections, it is measured from LOS A (excellent conditions) to LOS F (very poor conditions), with LOS D (V/C of less than 0.900, fair conditions, for signalized intersections; delay of less than 35.0 seconds, fair conditions, for unsignalized intersections) typically considered to be the threshold of acceptability. The relationship between V/C ratio and LOS for signalized intersections is shown in Table 4.16-1.

**Table 4.16-1  
The Relationship Between V/C Ratio and LOS**

| Signalized Intersections (V/C Ratio) | LOS | Traffic Conditions  |
|--------------------------------------|-----|---|
| 0 to 0.600                           | A   | Excellent. Little or no delay/congestion. No vehicle waits longer than one red light, and no approach phase is fully used.  |
| >0.601 to 0.700                      | B   | Very good. Slight congestion/delay. An occasional approach phase is fully used; many drivers begin to feel somewhat restricted within groups of vehicles.   |
| >0.701 to 0.800                      | C   | Good. Moderate delay/congestion. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.   |
| >0.801 to 0.900                      | D   | Fair. Significant delay/congestion. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.                          |
| >0.901 to 1.000                      | E   | Poor. Extreme congestion/delay. Represents the most vehicles that the intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.   |
| > 1.000                              | F   | Failure. Intersection failure/gridlock. Backups from nearby locations or cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths. |

*Notes: V/C ratio = volume to capacity ratio; LOS = level of service*

Intersection LOSs were assessed using the Los Angeles Department of Transportation Critical Movement Analysis method published in the *Los Angeles Department of Transportation Traffic Study Policies and Procedures* (LADOT 2014). For signalized intersections, LOS values were determined by using the Critical Movement Analysis methodology contained in the *Transportation Research Board’s Circular No. 212 – Interim Materials on Highway Capacity* (TRB 1980).

In the City, proposed Project operations would have a significant impact under CEQA on transportation/circulation if it increases an intersection's V/C ratio in accordance with the following guidelines:

- V/C ratio increase greater than or equal to 0.04 if final LOS is C
- V/C ratio increase greater than or equal to 0.02 if final LOS is D
- V/C ratio increase greater than or equal to 0.01 if final LOS is E or F

For this analysis, it is assumed that trucks use more roadway capacity than automobiles because of their size, weight, and acceleration capabilities when compared to automobiles. The concept of passenger car equivalent (PCE)<sup>11</sup> is used in the study to adjust for the effect of trucks in the traffic stream. A PCE factor of 1.1 was applied to trucks (bobtails), and a PCE factor of 2.0 was applied to chassis and the container truck volumes for the LOS calculations. This means trucks are calculated as using 10% more roadway capacity than automobiles, and chassis and container trucks are calculated as using 100% more roadway capacity than automobiles. These factors are consistent with factors applied in previous Port studies, including the *Draft Port of Los Angeles Baseline Transportation Study (Baseline Transportation Study)* (POLA 2004) as well as various environmental assessments in the Port area.

Many of the methodologies employed in this analysis are based on, and consistent with, the methodologies developed for the Baseline Transportation Study (POLA 2004). This includes a computerized traffic analysis tool called the PortTAM Model, the trip generation methodology, and the intersection analysis methodologies. However, the Baseline Transportation Study (POLA 2004) was not conducted specifically for the proposed Project, and the precise assumptions and figures used in preparation of this analysis are project specific. The PortTAM Model was updated to integrate with the SCAG 2012–2035 Regional Transportation Plan (RTP)/Sustainable Communities Strategy model and was used to develop non-project traffic volume for the Future Year 2021 analysis.

### Construction

**No Impact.** The proposed Project would involve the paving of a dirt area, repair of pavement, and possible lighting replacement. Since the construction trips would occur throughout the day and for less than one week, the number of construction trips occurring in the peak hours would be negligible and would not meet the Los Angeles Department of Transportation minimum threshold of intersection analysis—25 trips in 1 peak hour.

<sup>11</sup> PCE is defined as the amount of capacity in terms of passenger cars used by a single heavy vehicle of a particular type under specified roadway, traffic, and control conditions.

## Operation

### *LOS Analysis*

As stated in the project description, the POY yard would only generate a small number of additional bobtail trips (and associated VMT), along with a slight diversion of other trips that would have occurred without the proposed Project. Although the POY would predominantly hold import loads, to yield conservative results, the temporary storage of empty containers was assumed. In doing so, the number of dual transactions needed to be reduced to balance inbound and outbound trips. Based on these assumptions, 750, one-way truck movements (375 inbound/375 outbound) would occur at the POY per day. Of these, only 110 bobtail trips would actually be new trips, while the other 640 would be diverted trips to/from terminals within the Port Complex, via the POY.

The Port Complex PortTAM model was used to quantify the change in VMT attributable to the diverted truck trips and new bobtail trips. The PortTAM model is used in all traffic studies and environmental documents for both Ports. The new bobtail and diverted truck trips would increase VMT within the ports vicinity by about 900 on a daily basis. This is insignificant compared to the total VMT of all truck trips to/from the Port Complex. Under projected 2021 conditions, the total combined Port Complex daily VMT (including autos) is about 3,329,000. Thus, the VMT change attributable to the POY is 0.0003%.

Although the POY would only generate a minimal number of new bobtail trips within the Port Complex and divert a small number of trips, an analysis was conducted to examine the potential localized impact of the POY site trips at the intersections of Navy Way with Seaside Avenue and Reeves Avenue. Traffic conditions were estimated by adding the POY site traffic to both the CEQA baseline (2015) and Future Year 2021 conditions. Table 4.16-2 summarizes the peak-hour trip generation assumptions for the proposed Project at buildout. It includes both automobile (employee) and truck trips. These volumes were distributed through the transportation network at the analysis intersections (Navy Way at Seaside Avenue and Navy Way at Reeves Avenue).

**Less-than-Significant Impact.** Tables 4.16-3 and 4.16-4 include the LOS and impact determination for the peak hour of each analyzed scenario at the two study locations. As shown, no significant intersection operation impacts are forecasted as a result of the proposed Project. Impacts would be less than significant and no mitigation is required.

**Table 4.16-2  
Project Trip Generation**

| Time Period  | Vehicle Type | Project Peak Hour Trips |     |       |
|--------------|--------------|-------------------------|-----|-------|
|              |              | IN                      | OUT | TOTAL |
| AM peak hour | Automobile   | 5                       | 0   | 5     |
|              | Truck (PCE)  | 39                      | 39  | 78    |
| MD peak hour | Automobile   | 0                       | 0   | 0     |
|              | Truck (PCE)  | 23                      | 22  | 45    |
| PM peak hour | Automobile   | 5                       | 5   | 10    |
|              | Truck (PCE)  | 22                      | 23  | 45    |

*Notes: PCE =passenger car equivalent; AM = 7:00 a.m. to 9:00 a.m.; MD = midday (1:00 p.m. to 3:00 p.m.); PM = 4:00 p.m. to 6:00 p.m.*

**Table 4.16-3  
LOS Analysis Summary for Intersection No. 1 Navy Way at Seaside Avenue**

| Navy Way at Seaside Avenue        | AM Peak Hour |       | MD Peak Hour |       | PM Peak Hour |       |
|-----------------------------------|--------------|-------|--------------|-------|--------------|-------|
|                                   | LOS          | V/C   | LOS          | V/C   | LOS          | V/C   |
| CEQA Baseline (2015)              | A            | 0.379 | A            | 0.352 | A            | 0.541 |
| CEQA Baseline (2015) Plus Project | A            | 0.383 | A            | 0.359 | A            | 0.543 |
| V/C Difference                    | —            | 0.004 | —            | 0.007 | —            | 0.001 |
| Significant Impact                | No           |       | No           |       | No           |       |
| Future Year 2021 No Project       | B            | 0.667 | B            | 0.631 | D            | 0.841 |
| Future Year 2021 With Project     | B            | 0.670 | B            | 0.636 | D            | 0.843 |
| V/C Difference                    | —            | 0.003 | —            | 0.005 | —            | 0.002 |
| Significant Impact                | No           |       | No           |       | No           |       |

*Notes: LOS = level of service; V/C = volume to capacity ratio; AM = 7:00 a.m. to 9:00 a.m.; MD = midday (1:00 p.m. to 3:00 p.m.); PM = 4:00 p.m. to 6:00 p.m.*

**Table 4.16-4  
LOS Analysis Summary for Intersection No. 2 Navy Way at Reeves Avenue**

| Navy Way at Reeves Avenue         | AM Peak Hour |       | MD Peak Hour |       | PM Peak Hour |       |
|-----------------------------------|--------------|-------|--------------|-------|--------------|-------|
|                                   | LOS          | V/C   | LOS          | V/C   | LOS          | V/C   |
| CEQA Baseline (2015)              | A            | 0.108 | A            | 0.261 | A            | 0.400 |
| CEQA Baseline (2015) Plus Project | A            | 0.131 | A            | 0.280 | A            | 0.421 |
| V/C Difference                    | —            | 0.023 | —            | 0.019 | —            | 0.021 |
| Significant Impact                | No           |       | No           |       | No           |       |
| Future Year 2021 No Project       | A            | 0.387 | A            | 0.503 | C            | 0.725 |
| Future Year 2021 With Project     | A            | 0.399 | A            | 0.523 | C            | 0.748 |
| V/C Difference                    | —            | 0.012 | —            | 0.020 | —            | 0.023 |
| Significant Impact                | No           |       | No           |       | No           |       |

*Notes:* LOS = level of service; V/C = volume to capacity ratio; AM = 7:00 a.m. to 9:00 a.m.; MD = midday (1:00 p.m. to 3:00 p.m.); PM = 4:00 p.m. to 6:00 p.m.

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

**No Impact.** The proposed Project does not meet the minimum geographic study requirements for the County Metropolitan Transportation Authority Congestion Management Program as described in Appendix D of the Congestion Management Program guidelines (Metro 2010). The proposed Project does not generate more than 50 trips during the AM or PM peak hours on a Congestion Management Program arterial monitoring intersection or segment. The proposed Project will not add 150 or more trips in either direction during either the AM or PM weekday peak hours. Therefore, this analysis does not include analysis or conflict with any Congestion Management Program. No impacts would occur and no mitigation is required.

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

**No Impact.** The proposed Project site is not located within 2 miles of a public airport or within an airport land use plan. The nearest airports are the Long Beach Airport, which is located 6.2 miles northeast of the proposed Project; the Compton/Woodley Airport, which is located 9.2 miles north of the proposed Project; and the Torrance Municipal Airport – Zamperini Field, which is located 5.3 miles northwest of the proposed Project (County of Los Angeles 2016). The nearest helipads are located at 1175 Queens Freeway located 3.3 miles east of the proposed Project and the Catalina Air and Sea Terminal helipad located 1.5 miles west of the proposed Project. Therefore, given the distance from the nearest airports and helipads, the proposed Project



would not result in a change in air traffic patterns that could increase traffic levels or result in substantial safety risks. No impacts would occur and no mitigation is required.

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

**No Impact.** The proposed Project would not create a substantial transportation hazard such as creating sharp turns in roadways or dangerous intersections since the proposed Project would only involve the paving of a dirt area, repair of pavement, and a possible lighting replacement at the proposed Project site. Therefore, the proposed Project would not have a significant impact associated with an increase in transportation hazards due to a design feature and no mitigation is required.

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

**No Impact.** The County of Los Angeles has designated disaster routes throughout the County. Disaster routes are freeway, highway, or arterial routes pre-identified for use during times of crisis. These routes are used to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property, and minimize impact to the environment (County of Los Angeles 2015b). During a disaster, these routes have priority for clearing, repairing, and restoration over all other roads. The nearest disaster routes to the proposed Project site include Harbor Freeway (I-110), Terminal Island Freeway (SR-103), Seaside Avenue/Ocean Boulevard (CA-47), Harry Bridges Boulevard, Henry Ford Avenue, and Ocean Boulevard. The proposed Project would not alter or change existing emergency access; therefore, the proposed Project would not result in inadequate emergency access. No impacts would occur and no mitigation is required.

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

**No Impact.** The proposed Project does not include any modifications to existing roadways on Terminal Island that support current or future bike lanes or bus stops. The proposed Project itself would not include visitor-serving uses that would benefit from alternative modes of transportation. Therefore, the proposed Project would not conflict with policies, plans, or programs supporting alternative transportation (e.g. public transit, bicycles, pedestrian facilities, etc.). No impacts would occur and no mitigation is required.

#### 4.17 TRIBAL CULTURAL RESOURCES

This section evaluates impacts related to tribal cultural resources associated with the implementation of the proposed Project. Pursuant to Assembly Bill No. 52, a lead agency is required to consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area. To date, the LAHD has not received any such requests.

**Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**

- 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).**

**No Impact.** As discussed in Section 4.5, Cultural Resources, the potential to discover an unknown tribal cultural resource within the Project site is very low as the site is underlain by artificial fill. Implementation of the proposed Project would include repairs to existing pavement, new pavement on currently dirt-graded areas, and the storage and movement of containers on wheeled chassis. No demolition or excavation would be associated with the proposed Project; therefore, an encounter with or adverse change to tribal cultural resources are not anticipated. No evidence of tribal cultural resources has been identified within or adjacent to the project site. Therefore, the proposed Project would not result in any impacts to known tribal cultural resources.

- 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.**

**No Impact.** Please see the response to 4.17(a), above.

## 4.18 UTILITIES AND SERVICE SYSTEMS

### Would the Project:

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

**Less-than-Significant Impact.** The City of LA Bureau of Sanitation operates more than 6,700 miles of public sewers that convey about 400 million gallons per day of flow from residences and businesses to the City's four wastewater treatment and water reclamation plants (City of Los Angeles 2016e). The proposed Project is served by the Terminal Island Water Reclamation Plant. The proposed Project would involve secondary staging and marine terminal support operations. No additional wastewater would be generated by the proposed Project. Additionally, as previously discussed in Section 4.13(a), the proposed Project would not directly or indirectly induce population growth. Therefore, impacts associated with wastewater treatment requirements are less than significant, and no mitigation is required.

- b) **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Less-than-Significant Impact.** As discussed in Section 4.17(a), wastewater treatment for the proposed Project site is served by the Terminal Island Water Reclamation Plant. The Los Angeles Department of Water and Power provides potable water services to the proposed Project site. The proposed Project would not involve the development of any habitable structures, and therefore, would not result in the generation of wastewater or consumption of potable water. Additionally, as previously discussed in Section 4.13(a), the proposed Project would not directly or indirectly induce population growth. Therefore, impacts associated with the construction of new water and wastewater facilities would be less than significant, and no mitigation is required.

- c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**No Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards. Implementation of the proposed Project would include repairs to existing pavement and new pavement on currently dirt-graded areas. Operations would include secondary staging and marine terminal support. The proposed Project would not have a significant impact on the rate, volume, or pollutant load of stormwater runoff in the long term because the proposed Project would not involve the development of on-site structures and would not result in a significant change from the existing condition. Existing storm drain facilities would be sufficient to direct and treat runoff from the proposed Project as only approximately 5,000 square-feet of additional impervious surface would result, and that area is

currently compacted dirt. Therefore, impacts related to construction of new stormwater drainage facilities would not occur, and no mitigation is required.

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

**Less-than-Significant Impact.** As discussed in Section 4.17(b), the Los Angeles Department of Water and Power provides potable water services to the proposed Project site. The proposed Project would not involve the development of any habitable structures or other uses that would result in an increase in the consumption of potable water. Additionally, as previously discussed in Section 4.13(a), the proposed Project would not directly or indirectly induce population growth. Therefore, impacts associated with water supply demand would be less than significant, and no mitigation is required.

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

**Less-than-Significant Impact.** As discussed in Section 4.17(b), wastewater treatment for the proposed Project site is served by the Terminal Island Water Reclamation Plant. The proposed Project would not involve the development of any habitable structures, and therefore, would not result in the generation of wastewater. Additionally, as previously discussed in Section 4.13(a), the proposed Project would not directly or indirectly induce population growth. Therefore, impacts associated with wastewater treatment capacity would be less than significant, and no mitigation is required.

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

**Less-than-Significant Impact.** The site is currently a paved and disturbed site used for miscellaneous storage and port-related activities adjacent to SR-47 and railyards. Implementation of the proposed Project would include repairs to existing pavement and new pavement on currently dirt-graded areas. Once pavement repair and paving activities are completed, the proposed Project would not require solid waste material disposal. The small amount of construction waste generated during paving and pavement repair would be disposed of off-site in accordance with federal, state, and local statutes and regulations related to solid waste. Operations of the proposed Project would not require solid waste material disposal. Therefore, this impact would be less than significant, and no mitigation is required.

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

**Less-than-Significant Impact.** See Section 4.17(f). Paving and pavement repair would require minimal solid waste material disposal. Once pavement repair and paving activities are completed, the proposed Project would not require solid waste material disposal. Therefore, the impact would be less than significant, and no mitigation is required.

**4.19 MANDATORY FINDINGS OF SIGNIFICANCE**

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

**Less-than-Significant Impact.** As discussed in Section 4.4, Biological Resources, and Section 4.5, Cultural Resources, impacts are less than significant, and no mitigation is required.

- 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.** As discussed under each issue area in Sections 4.1 through 4.17 of this IS/ND, the proposed Project would not result in significant impacts to aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, or utilities and services systems. No mitigation would be required. In the absence of significant project-level impacts, the incremental contribution of the proposed Project would not be cumulatively considerable. Impacts are less than significant and no mitigation is required.

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

**Less-than-Significant Impact.** Based on the analysis in this IS/ND, substantial adverse impacts on human beings would not occur as a result of the proposed Project. All impacts related to the proposed Project are less than significant and no mitigation is required.

## **5.0 PROPOSED FINDING**

LAHD has prepared this IS/ND to address the environmental effects of the proposed Project. Based on the analysis provided in this IS/ND, LAHD finds that the proposed Project would not have a significant effect on the environment.

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## **6.0 PREPARERS AND CONTRIBUTORS**

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## 7.0 ACRONYMS AND ABBREVIATIONS

|                          |  |
|--------------------------|--|
| $\mu\text{g}/\text{m}^3$ | micrograms per cubic meter   |
| AAQS                     | ambient air quality standards  |
| AB                       | Assembly Bill  |
| AQMP                     | Air Quality Management Plan  |
| Basin                    | South Coast Air Basin  |
| CAA                      | Clean Air Act  |
| CAAP                     | Clean Air Action Plan  |
| CalEEMod                 | California Emissions Estimator Model   |
| CARB                     | California Air Resources Board   |
| CEQA                     | California Environmental Quality Act   |
| City                     | City of Los Angeles  |
| CO                       | carbon monoxide  |
| CO <sub>2</sub> E        | carbon dioxide equivalent  |
| County                   | County of Los Angeles  |
| Customs                  | U.S. Customs and Border Protection   |
| dB                       | decibel  |
| dBA                      | A-weighted sound level   |
| EIR                      | environmental impact report  |
| EO                       | Executive Order  |
| GHG                      | greenhouse gas   |
| I-                       | Interstate   |
| IS/ND                    | Initial Study/Negative Declaration   |
| LAFD                     | Los Angeles Fire Department  |
| LAHD                     | Los Angeles Harbor Department  |
| LAPD                     | Los Angeles Police Department  |
| L <sub>eq</sub>          | equivalent sound level   |
| LOS                      | level of service   |
| LST                      | Localized Significance Threshold   |
| mt <sub>y</sub>          | metric tons per year   |
| NO <sub>2</sub>          | nitrogen dioxide   |
| NO <sub>x</sub>          | nitrogen oxide   |
| OEHHA                    | Environmental Protection Agency's Office of Environmental Health Hazard Assessment |
| PCE                      | passenger car equivalent   |
| PM <sub>10</sub>         | directly emitted diesel-emitted particulate matter less than 10 microns            |
| PM <sub>2.5</sub>        | directly emitted particulate matter less than 2.5 microns                          |
| Port                     | Port of Los Angeles  |

|                 |  |
|-----------------|--|
| POY             | Peel-off yard                                  |
| ppm             | parts per million                              |
| RP              | revocable permit                               |
| SB              | Senate Bill                                    |
| SCAG            | Southern California Association of Governments |
| SCAQMD          | South Coast Air Quality Management District    |
| SEA             | Significant Ecological Area                    |
| SIP             | State Implementation Plan                      |
| SO <sub>2</sub> | sulfur dioxide                                 |
| SO <sub>x</sub> | sulfur oxides                                  |
| SR-             | State Route                                    |
| TACs            | toxic air contaminants                         |
| EPA             | U.S. Environmental Protection Agency           |
| V/C             | volume to capacity                             |
| VMT             | vehicle miles travelled                        |
| VOC             | volatile organic compound                      |

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## **APPENDIX A**

### **EMFAC Output**



**Peak Daily Regional Construction Emissions - Proposed Project**

| <b>Construction Year</b>  | <b>PM10 total<br/>(lb/day)</b> | <b>PM2.5<br/>total<br/>(lb/day)</b> | <b>NOX<br/>(lb/day)</b> | <b>SOX<br/>(lb/day)</b> | <b>CO<br/>(lb/day)</b> | <b>VOC<br/>(lb/day)</b> |
|---|--------------------------------|-------------------------------------|-------------------------|-------------------------|------------------------|-------------------------|
| <b>Construction Year 1</b>  | 2                              | 1                                   | 18                      | 0                       | 15                     | 2                       |
| Significance Threshold  | 150                            | 55                                  | 100                     | 150                     | 550                    | 75                      |
| <b>Significant?</b>   | <b>No</b>                      | <b>No</b>                           | <b>No</b>               | <b>No</b>               | <b>No</b>              | <b>No</b>               |
| <b>Notes:</b><br>Emissions might not add precisely due to rounding. |                                |                                     |                         |                         |                        |                         |

**Peak Daily Localized Construction Emissions - Proposed Project**

| Construction Year   | Residential Impacts    |                            |                 |                | Offsite Occupational Impacts |                            |                 |                |
|---|------------------------|----------------------------|-----------------|----------------|------------------------------|----------------------------|-----------------|----------------|
|   | PM10 total<br>(lb/day) | PM2.5<br>total<br>(lb/day) | NO2<br>(lb/day) | CO<br>(lb/day) | PM10 total<br>(lb/day)       | PM2.5<br>total<br>(lb/day) | NO2<br>(lb/day) | CO<br>(lb/day) |
| <b>Construction Year 1</b>  | 2                      | 1                          | 18              | 15             | 2                            | 1                          | 18              | 15             |
| Significance Threshold  | 158                    | 93                         | 142             | 7,558          | 4                            | 3                          | 57              | 585            |
| <b>Significant?</b>   | <b>No</b>              | <b>No</b>                  | <b>No</b>       | <b>No</b>      | <b>No</b>                    | <b>No</b>                  | <b>No</b>       | <b>No</b>      |
| <b>Notes:</b><br>Emissions might not add precisely due to rounding.<br>Conservatively assumes all emissions are on-site.<br>LST thresholds assume:<br>SRA 4: South Coastal LA County<br>1-acre site disturbance.<br>500 meters distance to nearest residential receptor. Nearest residential receptor are live-aboards, is more than 1,000 meters to the north, at the California Yacht Marina in Wilmington.<br>25 meters distance to nearest offsite occupational receptor. |                        |                            |                 |                |                              |                            |                 |                |

**Peak Daily Localized Operational Emissions - Proposed Project Increment**

| Source Category  | Residential Impacts    |                            |                 |                | Offsite Occupational Impacts |                            |                 |                |
|--|------------------------|----------------------------|-----------------|----------------|------------------------------|----------------------------|-----------------|----------------|
|  | PM10 total<br>(lb/day) | PM2.5<br>total<br>(lb/day) | NO2<br>(lb/day) | CO<br>(lb/day) | PM10 total<br>(lb/day)       | PM2.5<br>total<br>(lb/day) | NO2<br>(lb/day) | CO<br>(lb/day) |
| <b>Year 2021</b>   | 1                      | 0                          | 23              | 3              | 1                            | 0                          | 23              | 3              |
| Significance Threshold   | 46                     | 29                         | 179             | 10,198         | 4                            | 2                          | 123             | 1,530          |
| <b>Significant?</b>  | <b>No</b>              | <b>No</b>                  | <b>No</b>       | <b>No</b>      | <b>No</b>                    | <b>No</b>                  | <b>No</b>       | <b>No</b>      |
| <b>Notes:</b><br>Emissions might not add precisely due to rounding.<br>Conservatively assumes all emissions are on-site.<br>LST thresholds assume:<br>SRA 4: South Coastal LA County<br>5-acre site.<br>500 meters distance to nearest residential receptor.<br>25 meters distance to nearest offsite occupational receptor. |                        |                            |                 |                |                              |                            |                 |                |

**Peak Daily Operational Emissions - Proposed Project**

| <b>Source Category</b>                             | <b>PM10 total<br/>(lb/day)</b> | <b>PM2.5<br/>total<br/>(lb/day)</b> | <b>NOX<br/>(lb/day)</b> | <b>SOX<br/>(lb/day)</b> | <b>CO<br/>(lb/day)</b> | <b>VOC<br/>(lb/day)</b> |
|--|--------------------------------|-------------------------------------|-------------------------|-------------------------|------------------------|-------------------------|
| <b>Year 2021 with POY</b>                          |                                |                                     |                         |                         |                        |                         |
| Mobile Exhaust                                     | 50                             | 48                                  | 8,590                   | 15                      | 775                    | 200                     |
| Mobile Road Dust                                   | 188                            | 47                                  |                         |                         |                        |                         |
| Mobile Brake and Tire Wear                         | 99                             | 36                                  |                         |                         |                        |                         |
| Worker Vehicle Emissions                           | 0.03                           | 0.01                                | 0.06                    | 0.00                    | 0.74                   | 0.08                    |
| On-site Idling Emissions                           | 0.01                           | 0.01                                | 5.70                    | 0.01                    | 0.54                   | 0.19                    |
| <i>Total with POY</i>                              | 337                            | 131                                 | 8,596                   | 15                      | 776                    | 200                     |
| <b>Year 2021 without POY</b>                       |                                |                                     |                         |                         |                        |                         |
| Mobile Exhaust                                     | 50                             | 47                                  | 8,574                   | 15                      | 773                    | 200                     |
| Mobile Road Dust                                   | 188                            | 47                                  |                         |                         |                        |                         |
| Mobile Brake and Tire Wear                         | 99                             | 36                                  |                         |                         |                        |                         |
| Worker Vehicle Emissions                           | --                             | --                                  | --                      | --                      | --                     | --                      |
| On-site Idling Emissions                           | --                             | --                                  | --                      | --                      | --                     | --                      |
| <i>Total without POY</i>                           | 336                            | 130                                 | 8,574                   | 15                      | 773                    | 200                     |
| Project Increment                                  | 1                              | 0                                   | 23                      | 0                       | 3                      | 1                       |
| Significance Threshold                             | 150                            | 55                                  | 55                      | 150                     | 550                    | 55                      |
| <b>Significant?</b>                                | <b>No</b>                      | <b>No</b>                           | <b>No</b>               | <b>No</b>               | <b>No</b>              | <b>No</b>               |
| <b>Notes:</b>                                      |                                |                                     |                         |                         |                        |                         |
| POY - peel-off yard.                               |                                |                                     |                         |                         |                        |                         |
| Emissions might not add precisely due to rounding. |                                |                                     |                         |                         |                        |                         |



### Annual GHG Emissions - Proposed Project

| Source Category  | CO2e<br>(mton/yr) |
|--|-------------------|
| Amortized Construction Emissions   | 86                |
| <b>Year 2021 with POY</b>  |                   |
| Mobile Exhaust   | 272,507           |
| <b>Year 2021 without POY</b>   |                   |
| Mobile Exhaust   | 271,834           |
| Project Increment  | 759               |
| Significance Threshold   | 10,000            |
| <b>Significant?</b>  | <b>No</b>         |
| <b>Notes:</b><br>POY - peel-off yard.<br>Emissions might not add precisely due to rounding.<br>Amortized over 5 years. |                   |

**Legend:**

|                       |
|-----------------------|
| Provided by CSI       |
| Provided by Starcrest |
| Provided by Dudek     |
| Provided by POLA      |
| Calculated            |

**Activity<sup>[1]</sup>**

|                          |          |               |
|--------------------------|----------|---------------|
| Haul away asphalt debris | 1000 sft | 5 truck loads |
| Asphalt                  | 1000 sft | 5 truck loads |
| Clean existing asphalt   | 4920 sft |               |
| Tack coat and overlay    | 4920 sft |               |

**Equipment<sup>[2]</sup>**

|                |
|----------------|
| Tool truck     |
| Dump truck     |
| Backhoe/roller |
| 6 workers      |

**Source:**

[1] Sanchez Bros Paving Corporation quote. Zou Miller (POLA) e-mail, 3/21/16.

[2] Sanchez Brothers Paving Corp e-mail, 3/21/16. E-mail received from Zou Miller (POLA), 3/22/16.

**CalEEMod Output**

**Unmitigated Construction (lb/day)**

| Year  | ROG | NOx  | CO   | SO2 | Fugitive | Exhaust | PM10  | Fugitive | Exhaust | PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e   |
|-------|-----|------|------|-----|----------|---------|-------|----------|---------|-------|----------|-----------|-----------|-----|-----|--------|
|       |     |      |      |     | PM10     | PM10    | Total | PM2.5    | PM2.5   | Total |          |           |           |     |     |        |
| 2017  | 1.9 | 18.0 | 14.6 | 0.0 | 1.3      | 1.1     | 2.3   | 0.2      | 1.0     | 1.2   | 0.0      | 2586.2    | 2586.2    | 0.4 | 0.0 | 2594.9 |
| Total | 1.9 | 18.0 | 14.6 | 0.0 | 1.3      | 1.1     | 2.3   | 0.2      | 1.0     | 1.2   | 0.0      | 2586.2    | 2586.2    | 0.4 | 0.0 | 2594.9 |

Source: CalEEMod output.





All emission factors were provided by Starcrest

Port of Los Angeles  
 HDV Emissions by Speed, g/mile  
 2015 through 2023  
 10 June 2016  
 DRAFT

| Calendar Year | Speed | Emission factors - g/mi (running) and g/hr (idling, 0 mph) |                   |         |                 |                 |         |         | CO <sub>2e</sub> |
|---------------|-------|--|-------------------|---------|-----------------|-----------------|---------|---------|------------------|
|               |       | PM <sub>10</sub>   | PM <sub>2.5</sub> | DPM     | NO <sub>x</sub> | SO <sub>x</sub> | CO      | HC      |                  |
| 2015          | 0     | 0.0313   | 0.0299            | 0.0291  | 42.2493         | 0.0432          | 3.8417  | 1.3164  | 4,735            |
| 2015          | 5     | 0.0906   | 0.0867            | 0.0843  | 21.0147         | 0.0148          | 5.4191  | 1.5554  | 3,241            |
| 2015          | 10    | 0.0822   | 0.0786            | 0.0764  | 17.9641         | 0.0148          | 4.3785  | 1.2488  | 2,893            |
| 2015          | 15    | 0.0714   | 0.0683            | 0.0664  | 14.042          | 0.0148          | 3.048   | 0.8522  | 2,445            |
| 2015          | 20    | 0.0638   | 0.061             | 0.0593  | 11.4564         | 0.0148          | 2.1837  | 0.5992  | 2,146            |
| 2015          | 25    | 0.0584   | 0.0559            | 0.0543  | 10.1361         | 0.0148          | 1.6129  | 0.4408  | 1,955            |
| 2015          | 30    | 0.0545   | 0.0521            | 0.0507  | 9.3691          | 0.0148          | 1.2075  | 0.3285  | 1,822            |
| 2015          | 35    | 0.0517   | 0.0495            | 0.0481  | 8.7928          | 0.0148          | 0.9093  | 0.2452  | 1,719            |
| 2015          | 40    | 0.0497   | 0.0476            | 0.0462  | 8.3398          | 0.0148          | 0.6905  | 0.1835  | 1,635            |
| 2015          | 45    | 0.0484   | 0.0463            | 0.045   | 7.9719          | 0.0148          | 0.5307  | 0.1378  | 1,565            |
| 2015          | 50    | 0.0479   | 0.0458            | 0.0445  | 7.6708          | 0.0148          | 0.4147  | 0.104   | 1,506            |
| 2015          | 55    | 0.0479   | 0.0458            | 0.0445  | 7.4256          | 0.0148          | 0.3315  | 0.0791  | 1,456            |
| 2015          | 60    | 0.0482   | 0.0461            | 0.0448  | 7.3241          | 0.0148          | 0.2994  | 0.0693  | 1,434            |
| 2015          | 65    | 0.0482   | 0.0461            | 0.0448  | 7.352           | 0.0148          | 0.2994  | 0.0693  | 1,434            |
| 2015          | 70    | 0.0482   | 0.0461            | 0.0448  | 7.3746          | 0.0148          | 0.2994  | 0.0693  | 1,434            |
| 2016          | 0     | 0.03634  | 0.03474           | 0.03378 | 41.80574        | 0.0432          | 3.88138 | 1.31674 | 4,717            |
| 2016          | 5     | 0.08918  | 0.08534           | 0.08298 | 21.76132        | 0.0148          | 5.4747  | 1.50748 | 3,230            |
| 2016          | 10    | 0.08088  | 0.07734           | 0.07518 | 18.5549         | 0.0148          | 4.42408 | 1.21076 | 2,883            |
| 2016          | 15    | 0.07022  | 0.06718           | 0.0653  | 14.42278        | 0.0148          | 3.08198 | 0.82734 | 2,436            |
| 2016          | 20    | 0.06274  | 0.06              | 0.05832 | 11.6983         | 0.0148          | 2.2094  | 0.58244 | 2,136            |
| 2016          | 25    | 0.05742  | 0.05496           | 0.0534  | 10.28672        | 0.0148          | 1.63108 | 0.4284  | 1,947            |
| 2016          | 30    | 0.05356  | 0.0512            | 0.04982 | 9.4672          | 0.0148          | 1.2199  | 0.3191  | 1,815            |
| 2016          | 35    | 0.05074  | 0.04858           | 0.0472  | 8.85726         | 0.0148          | 0.9174  | 0.23806 | 1,712            |
| 2016          | 40    | 0.04872  | 0.04666           | 0.0453  | 8.3814          | 0.0148          | 0.6954  | 0.17804 | 1,629            |
| 2016          | 45    | 0.04738  | 0.04532           | 0.04406 | 7.99786         | 0.0148          | 0.53316 | 0.1336  | 1,560            |
| 2016          | 50    | 0.0468   | 0.04476           | 0.04348 | 7.68632         | 0.0148          | 0.41528 | 0.10072 | 1,502            |
| 2016          | 55    | 0.0467   | 0.04466           | 0.0434  | 7.43538         | 0.0148          | 0.33054 | 0.07652 | 1,453            |
| 2016          | 60    | 0.04694  | 0.0449            | 0.04364 | 7.3325          | 0.0148          | 0.2978  | 0.06698 | 1,431            |
| 2016          | 65    | 0.04694  | 0.0449            | 0.04364 | 7.36022         | 0.0148          | 0.2978  | 0.06698 | 1,431            |
| 2016          | 70    | 0.04694  | 0.0449            | 0.04364 | 7.38274         | 0.0148          | 0.2978  | 0.06698 | 1,431            |
| 2017          | 0     | 0.04138  | 0.03958           | 0.03846 | 41.36218        | 0.0432          | 3.92106 | 1.31708 | 4,698            |
| 2017          | 5     | 0.08776  | 0.08398           | 0.08166 | 22.50794        | 0.0148          | 5.5303  | 1.45956 | 3,219            |
| 2017          | 10    | 0.07956  | 0.07608           | 0.07396 | 19.1457         | 0.0148          | 4.46966 | 1.17272 | 2,873            |
| 2017          | 15    | 0.06904  | 0.06606           | 0.0642  | 14.80356        | 0.0148          | 3.11596 | 0.80248 | 2,426            |
| 2017          | 20    | 0.06168  | 0.059             | 0.05734 | 11.9402         | 0.0148          | 2.2351  | 0.56568 | 2,126            |
| 2017          | 25    | 0.05644  | 0.05402           | 0.0525  | 10.43734        | 0.0148          | 1.64926 | 0.416   | 1,938            |
| 2017          | 30    | 0.05262  | 0.0503            | 0.04894 | 9.5653          | 0.0148          | 1.2323  | 0.3097  | 1,808            |
| 2017          | 35    | 0.04978  | 0.04766           | 0.0463  | 8.92172         | 0.0148          | 0.9255  | 0.23092 | 1,706            |
| 2017          | 40    | 0.04774  | 0.04572           | 0.0444  | 8.423           | 0.0148          | 0.7003  | 0.17258 | 1,624            |
| 2017          | 45    | 0.04636  | 0.04434           | 0.04312 | 8.02382         | 0.0148          | 0.53562 | 0.1294  | 1,555            |
| 2017          | 50    | 0.0457   | 0.04372           | 0.04246 | 7.70184         | 0.0148          | 0.41586 | 0.09744 | 1,498            |
| 2017          | 55    | 0.0455   | 0.04352           | 0.0423  | 7.44516         | 0.0148          | 0.32958 | 0.07394 | 1,449            |
| 2017          | 60    | 0.04568  | 0.0437            | 0.04248 | 7.3409          | 0.0148          | 0.2962  | 0.06466 | 1,428            |
| 2017          | 65    | 0.04568  | 0.0437            | 0.04248 | 7.36844         | 0.0148          | 0.2962  | 0.06466 | 1,428            |
| 2017          | 70    | 0.04568  | 0.0437            | 0.04248 | 7.39088         | 0.0148          | 0.2962  | 0.06466 | 1,428            |
| 2018          | 0     | 0.04642  | 0.04442           | 0.04314 | 40.91862        | 0.0432          | 3.96074 | 1.31742 | 4,680            |
| 2018          | 5     | 0.08634  | 0.08262           | 0.08034 | 23.25456        | 0.0148          | 5.5859  | 1.41164 | 3,208            |
| 2018          | 10    | 0.07824  | 0.07482           | 0.07274 | 19.7365         | 0.0148          | 4.51524 | 1.13468 | 2,863            |
| 2018          | 15    | 0.06786  | 0.06494           | 0.0631  | 15.18434        | 0.0148          | 3.14994 | 0.77762 | 2,417            |
| 2018          | 20    | 0.06062  | 0.058             | 0.05636 | 12.1821         | 0.0148          | 2.2608  | 0.54892 | 2,116            |
| 2018          | 25    | 0.05546  | 0.05308           | 0.0516  | 10.58796        | 0.0148          | 1.66744 | 0.4036  | 1,929            |

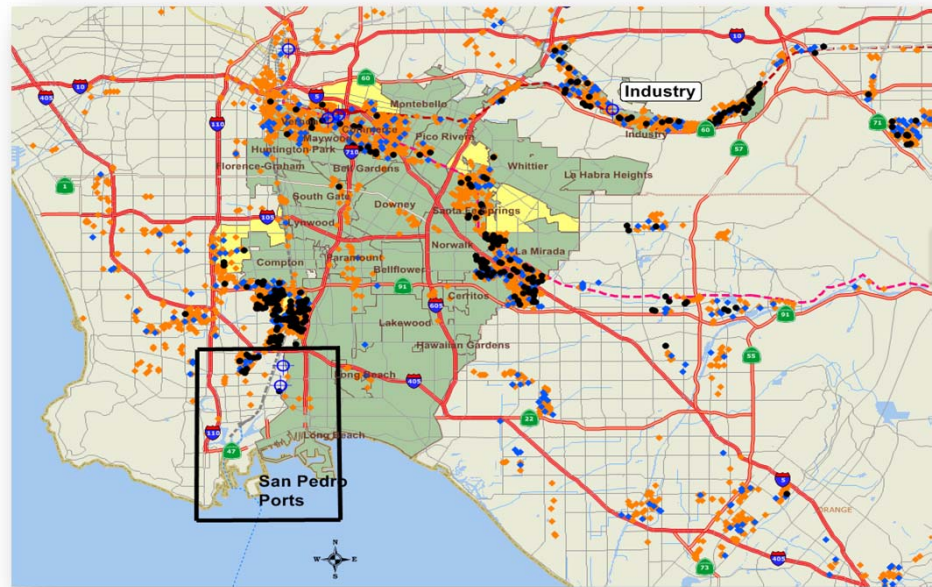
|      |    |         |         |         |          |        |         |         |       |
|------|----|---------|---------|---------|----------|--------|---------|---------|-------|
| 2018 | 30 | 0.05168 | 0.0494  | 0.04806 | 9.6634   | 0.0148 | 1.2447  | 0.3003  | 1,801 |
| 2018 | 35 | 0.04882 | 0.04674 | 0.0454  | 8.98618  | 0.0148 | 0.9336  | 0.22378 | 1,700 |
| 2018 | 40 | 0.04676 | 0.04478 | 0.0435  | 8.4646   | 0.0148 | 0.7052  | 0.16712 | 1,618 |
| 2018 | 45 | 0.04534 | 0.04336 | 0.04218 | 8.04978  | 0.0148 | 0.53808 | 0.1252  | 1,551 |
| 2018 | 50 | 0.0446  | 0.04268 | 0.04144 | 7.71736  | 0.0148 | 0.41644 | 0.09416 | 1,494 |
| 2018 | 55 | 0.0443  | 0.04238 | 0.0412  | 7.45494  | 0.0148 | 0.32862 | 0.07136 | 1,446 |
| 2018 | 60 | 0.04442 | 0.0425  | 0.04132 | 7.3493   | 0.0148 | 0.2946  | 0.06234 | 1,425 |
| 2018 | 65 | 0.04442 | 0.0425  | 0.04132 | 7.37666  | 0.0148 | 0.2946  | 0.06234 | 1,425 |
| 2018 | 70 | 0.04442 | 0.0425  | 0.04132 | 7.39902  | 0.0148 | 0.2946  | 0.06234 | 1,425 |
| 2019 | 0  | 0.05146 | 0.04926 | 0.04782 | 40.47506 | 0.0432 | 4.00042 | 1.31776 | 4,661 |
| 2019 | 5  | 0.08492 | 0.08126 | 0.07902 | 24.00118 | 0.0148 | 5.6415  | 1.36372 | 3,197 |
| 2019 | 10 | 0.07692 | 0.07356 | 0.07152 | 20.3273  | 0.0148 | 4.56082 | 1.09664 | 2,854 |
| 2019 | 15 | 0.06668 | 0.06382 | 0.062   | 15.56512 | 0.0148 | 3.18392 | 0.75276 | 2,408 |
| 2019 | 20 | 0.05956 | 0.057   | 0.05538 | 12.424   | 0.0148 | 2.2865  | 0.53216 | 2,106 |
| 2019 | 25 | 0.05448 | 0.05214 | 0.0507  | 10.73858 | 0.0148 | 1.68562 | 0.3912  | 1,921 |
| 2019 | 30 | 0.05074 | 0.0485  | 0.04718 | 9.7615   | 0.0148 | 1.2571  | 0.2909  | 1,794 |
| 2019 | 35 | 0.04786 | 0.04582 | 0.0445  | 9.05064  | 0.0148 | 0.9417  | 0.21664 | 1,694 |
| 2019 | 40 | 0.04578 | 0.04384 | 0.0426  | 8.5062   | 0.0148 | 0.7101  | 0.16166 | 1,613 |
| 2019 | 45 | 0.04432 | 0.04238 | 0.04124 | 8.07574  | 0.0148 | 0.54054 | 0.121   | 1,546 |
| 2019 | 50 | 0.0435  | 0.04164 | 0.04042 | 7.73288  | 0.0148 | 0.41702 | 0.09088 | 1,489 |
| 2019 | 55 | 0.0431  | 0.04124 | 0.0401  | 7.46472  | 0.0148 | 0.32766 | 0.06878 | 1,443 |
| 2019 | 60 | 0.04316 | 0.0413  | 0.04016 | 7.3577   | 0.0148 | 0.293   | 0.06002 | 1,422 |
| 2019 | 65 | 0.04316 | 0.0413  | 0.04016 | 7.38488  | 0.0148 | 0.293   | 0.06002 | 1,422 |
| 2019 | 70 | 0.04316 | 0.0413  | 0.04016 | 7.40716  | 0.0148 | 0.293   | 0.06002 | 1,422 |
| 2020 | 0  | 0.0565  | 0.0541  | 0.0525  | 40.0315  | 0.0432 | 4.0401  | 1.3181  | 4,643 |
| 2020 | 5  | 0.0835  | 0.0799  | 0.0777  | 24.7478  | 0.0148 | 5.6971  | 1.3158  | 3,186 |
| 2020 | 10 | 0.0756  | 0.0723  | 0.0703  | 20.9181  | 0.0148 | 4.6064  | 1.0586  | 2,844 |
| 2020 | 15 | 0.0655  | 0.0627  | 0.0609  | 15.9459  | 0.0148 | 3.2179  | 0.7279  | 2,398 |
| 2020 | 20 | 0.0585  | 0.056   | 0.0544  | 12.6659  | 0.0148 | 2.3122  | 0.5154  | 2,096 |
| 2020 | 25 | 0.0535  | 0.0512  | 0.0498  | 10.8892  | 0.0148 | 1.7038  | 0.3788  | 1,912 |
| 2020 | 30 | 0.0498  | 0.0476  | 0.0463  | 9.8596   | 0.0148 | 1.2695  | 0.2815  | 1,786 |
| 2020 | 35 | 0.0469  | 0.0449  | 0.0436  | 9.1151   | 0.0148 | 0.9498  | 0.2095  | 1,688 |
| 2020 | 40 | 0.0448  | 0.0429  | 0.0417  | 8.5478   | 0.0148 | 0.715   | 0.1562  | 1,607 |
| 2020 | 45 | 0.0433  | 0.0414  | 0.0403  | 8.1017   | 0.0148 | 0.543   | 0.1168  | 1,541 |
| 2020 | 50 | 0.0424  | 0.0406  | 0.0394  | 7.7484   | 0.0148 | 0.4176  | 0.0876  | 1,485 |
| 2020 | 55 | 0.0419  | 0.0401  | 0.039   | 7.4745   | 0.0148 | 0.3267  | 0.0662  | 1,439 |
| 2020 | 60 | 0.0419  | 0.0401  | 0.039   | 7.3661   | 0.0148 | 0.2914  | 0.0577  | 1,419 |
| 2020 | 65 | 0.0419  | 0.0401  | 0.039   | 7.3931   | 0.0148 | 0.2914  | 0.0577  | 1,419 |
| 2020 | 70 | 0.0419  | 0.0401  | 0.039   | 7.4153   | 0.0148 | 0.2914  | 0.0577  | 1,419 |
| 2021 | 0  | 0.0454  | 0.04348 | 0.04218 | 34.82306 | 0.0432 | 3.45824 | 1.14144 | 4,570 |
| 2021 | 5  | 0.07224 | 0.06912 | 0.06722 | 24.58756 | 0.0148 | 5.49712 | 1.19676 | 3,116 |
| 2021 | 10 | 0.06538 | 0.06252 | 0.0608  | 20.51188 | 0.0148 | 4.44596 | 0.9636  | 2,778 |
| 2021 | 15 | 0.05662 | 0.0542  | 0.05264 | 15.25926 | 0.0148 | 3.11016 | 0.66452 | 2,342 |
| 2021 | 20 | 0.05056 | 0.0484  | 0.04702 | 11.7954  | 0.0148 | 2.2374  | 0.4718  | 2,048 |
| 2021 | 25 | 0.04622 | 0.04424 | 0.04302 | 9.85686  | 0.0148 | 1.64712 | 0.34662 | 1,871 |
| 2021 | 30 | 0.04298 | 0.04108 | 0.03996 | 8.76686  | 0.0148 | 1.22494 | 0.25732 | 1,752 |
| 2021 | 35 | 0.04044 | 0.03872 | 0.0376  | 8.01132  | 0.0148 | 0.91412 | 0.19126 | 1,658 |
| 2021 | 40 | 0.03856 | 0.03692 | 0.03588 | 7.45212  | 0.0148 | 0.68568 | 0.1424  | 1,581 |
| 2021 | 45 | 0.0372  | 0.03556 | 0.03462 | 7.02094  | 0.0148 | 0.51818 | 0.1063  | 1,518 |
| 2021 | 50 | 0.03632 | 0.03478 | 0.03376 | 6.68332  | 0.0148 | 0.39582 | 0.07956 | 1,465 |
| 2021 | 55 | 0.0358  | 0.03426 | 0.03332 | 6.42232  | 0.0148 | 0.30686 | 0.05994 | 1,420 |
| 2021 | 60 | 0.03574 | 0.0342  | 0.03326 | 6.31816  | 0.0148 | 0.27218 | 0.05216 | 1,400 |
| 2021 | 65 | 0.03574 | 0.0342  | 0.03326 | 6.34168  | 0.0148 | 0.27218 | 0.05216 | 1,400 |
| 2021 | 70 | 0.03574 | 0.0342  | 0.03326 | 6.36054  | 0.0148 | 0.27218 | 0.05216 | 1,400 |

Daily VMT Provided by CSI

| <b>Harbor District</b>               |            |                |                |            |              |
|--------------------------------------|------------|----------------|----------------|------------|--------------|
|                                      | Roadway    | Scenario 1     | Scenario 2     | Difference |              |
|                                      |            | Without POY    | With POY       | Num. Diff. | Per. Diff.   |
| <b>Container Truck</b>               | Collector  | 13,000         | 13,000         | 0          | <b>0.00%</b> |
|                                      | Freeways   | 162,800        | 163,100        | 300        | <b>0.18%</b> |
|                                      | Local      | 100            | 100            | 0          | <b>0.00%</b> |
|                                      | Major      | 109,100        | 109,400        | 300        | <b>0.27%</b> |
|                                      | <b>All</b> | <b>285,000</b> | <b>285,600</b> | <b>600</b> | <b>0.21%</b> |
| <b>Chassis Truck</b>                 | Collector  | 2,100          | 2,100          | 0          | <b>0.00%</b> |
|                                      | Freeways   | 15,700         | 15,700         | 0          | <b>0.00%</b> |
|                                      | Local      | 0              | 0              | 0          | <b>0.00%</b> |
|                                      | Major      | 14,700         | 14,700         | 0          | <b>0.00%</b> |
|                                      | <b>All</b> | <b>32,500</b>  | <b>32,500</b>  | <b>0</b>   | <b>0.00%</b> |
| <b>Bobtail Truck</b>                 | Collector  | 8,100          | 8,100          | 0          | <b>0.00%</b> |
|                                      | Freeways   | 71,400         | 71,550         | 150        | <b>0.21%</b> |
|                                      | Local      | 100            | 100            | 0          | <b>0.00%</b> |
|                                      | Major      | 62,750         | 62,900         | 150        | <b>0.24%</b> |
|                                      | <b>All</b> | <b>142,350</b> | <b>142,650</b> | <b>300</b> | <b>0.21%</b> |
|                                      | Roadway    | Scenario 1     | Scenario 2     | Difference |              |
|                                      |            | Without POY    | With POY       | Num. Diff. | Per. Diff.   |
| <b>Port Container Related Trucks</b> | Collector  | 23,200         | 23,200         | 0          | <b>0.00%</b> |
|                                      | Freeways   | 249,900        | 250,350        | 450        | <b>0.18%</b> |
|                                      | Local      | 200            | 200            | 0          | <b>0.00%</b> |
|                                      | Major      | 186,550        | 187,000        | 450        | <b>0.24%</b> |
|                                      | <b>All</b> | <b>459,850</b> | <b>460,750</b> | <b>900</b> | <b>0.20%</b> |

**Please note**

We prefer rounding daily VMT estimates to the nearest thousand. But since the changes due to the project are very minimal - we rounded the VMT estimates to the nearest 100 (and to nearest 50) in some instances. Please use the numbers with caution - since the travel model is not this precise.



Harbor District is shown in the above reference map with a rectangle

Note: We drew an approximate rectangle to define harbor district

w/in margin of error; the margin of error increases as one zooms into the model (LG)





## EMFAC Output

### Used for Tire and Brake Wear Calculations

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: Air Basin

Region: South Coast

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

| Region      | CalYr | VehClass | MdYr | Speed      | Fuel | Population | VMT         | Trips | ROG_RUNE | ROG_IDLEX | ROG_STREX | ROG_TOTEX | ROG_DIURN | ROG_HTSK | ROG_RUNLS | ROG_RESTL | ROG_TOTAL | TOG_RUNEX | TOG_IDLEX | TOG_STREX |
|-------------|-------|----------|------|------------|------|------------|-------------|-------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| South Coast | 2021  | T7 POLA  | 2008 | Aggregated | DSL  | 1633.6261  | 254154.0364 |       | 0        | 0.1284055 | 0.0061584 | 0         | 0.1345639 | 0        | 0         | 0         | 0.1345639 | 0.1461799 | 0.0070108 | 0         |
| South Coast | 2021  | T7 POLA  | 2009 | Aggregated | DSL  | 1803.5006  | 280582.5452 |       | 0        | 0.1343332 | 0.0064053 | 0         | 0.1407384 | 0        | 0         | 0         | 0.1407384 | 0.1529281 | 0.0072919 | 0         |
| South Coast | 2021  | T7 POLA  | 2010 | Aggregated | DSL  | 1935.7515  | 301157.6936 |       | 0        | 0.1301375 | 0.0060892 | 0         | 0.1362267 | 0        | 0         | 0         | 0.1362267 | 0.1481516 | 0.0069321 | 0         |
| South Coast | 2021  | T7 POLA  | 2011 | Aggregated | DSL  | 2008.4541  | 312468.5236 |       | 0        | 0.0666245 | 0.0025913 | 0         | 0.0692157 | 0        | 0         | 0         | 0.0692157 | 0.0758469 | 0.00295   | 0         |
| South Coast | 2021  | T7 POLA  | 2012 | Aggregated | DSL  | 1436.9536  | 223556.4044 |       | 0        | 0.0334872 | 0.0011119 | 0         | 0.0345991 | 0        | 0         | 0         | 0.0345991 | 0.0381226 | 0.0012658 | 0         |
| South Coast | 2021  | T7 POLA  | 2013 | Aggregated | DSL  | 1341.8259  | 208756.7563 |       | 0        | 0.0293621 | 0.0010383 | 0         | 0.0304004 | 0        | 0         | 0         | 0.0304004 | 0.0334265 | 0.001182  | 0         |
| South Coast | 2021  | T7 POLA  | 2014 | Aggregated | DSL  | 1133.912   | 176410.2106 |       | 0        | 0.0201224 | 0.0008774 | 0         | 0.0209999 | 0        | 0         | 0         | 0.0209999 | 0.0229079 | 0.0009989 | 0         |
| South Coast | 2021  | T7 POLA  | 2015 | Aggregated | DSL  | 781.01372  | 121507.4817 |       | 0        | 0.0127241 | 0.0006044 | 0         | 0.0133284 | 0        | 0         | 0         | 0.0133284 | 0.0144854 | 0.000688  | 0         |
| South Coast | 2021  | T7 POLA  | 2016 | Aggregated | DSL  | 399.69383  | 62183.01842 |       | 0        | 0.0061902 | 0.0003093 | 0         | 0.0064994 | 0        | 0         | 0         | 0.0064994 | 0.007047  | 0.0003521 | 0         |
| South Coast | 2021  | T7 POLA  | 2017 | Aggregated | DSL  | 399.69383  | 62183.01842 |       | 0        | 0.0057531 | 0.0003093 | 0         | 0.0060624 | 0        | 0         | 0         | 0.0060624 | 0.0065495 | 0.0003521 | 0         |
| South Coast | 2021  | T7 POLA  | 2018 | Aggregated | DSL  | 399.69383  | 62183.01842 |       | 0        | 0.0053599 | 0.0003093 | 0         | 0.0056692 | 0        | 0         | 0         | 0.0056692 | 0.0061019 | 0.0003521 | 0         |
| South Coast | 2021  | T7 POLA  | 2019 | Aggregated | DSL  | 399.69383  | 62183.01842 |       | 0        | 0.0049833 | 0.0003093 | 0         | 0.0052926 | 0        | 0         | 0         | 0.0052926 | 0.0056731 | 0.0003521 | 0         |
| South Coast | 2021  | T7 POLA  | 2020 | Aggregated | DSL  | 399.69383  | 62183.01842 |       | 0        | 0.0046294 | 0.0003093 | 0         | 0.0049387 | 0        | 0         | 0         | 0.0049387 | 0.0052702 | 0.0003521 | 0         |
| South Coast | 2021  | T7 POLA  | 2021 | Aggregated | DSL  | 399.69383  | 62183.01842 |       | 0        | 0.0042713 | 0.0003093 | 0         | 0.0045805 | 0        | 0         | 0         | 0.0045805 | 0.0048625 | 0.0003521 | 0         |

6/14/17 revision resulted in applying 2017 emission factors. 2017 and 2021 brake wear and tire wear are the same. No change warranted for brake wear and tire wear.

### Used for Worker Vehicle Calculations

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: Air Basin

Region: South Coast

Calendar Year: 2017

Season: Winter

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

| Region      | CalYr | VehClass | MdYr       | Speed      | Fuel | Population | VMT         | Trips      | ROG_RUNE  | ROG_IDLEX | ROG_STREX | ROG_TOTEX | ROG_DIURN | ROG_HTSK  | ROG_RUNLS | ROG_RESTL | ROG_TOTAL | TOG_RUNEX | TOG_IDLEX | TOG_STREX |
|-------------|-------|----------|------------|------------|------|------------|-------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| South Coast | 2017  | LDA      | Aggregated | Aggregated | GAS  | 5987191.6  | 210679198.3 | 37700073.5 | 5.6979649 | 0         | 6.2227055 | 11.92067  | 2.7176796 | 6.4315216 | 12.41524  | 2.2689678 | 35.754079 | 7.9402107 | 0         | 6.8102503 |
| South Coast | 2017  | LDA      | Aggregated | Aggregated | DSL  | 45416.553  | 1758230.591 | 279214.718 | 0.0741936 | 0         | 0         | 0.0741936 | 0         | 0         | 0         | 0         | 0.0741936 | 0.0844645 | 0         | 0         |
| South Coast | 2017  | LDA      | Aggregated | Aggregated | ELEC | 44797.326  | 2095087.747 | 291393.597 | 0         | 0         | 0         | 0         | 0.0012055 | 0.0015688 | 0         | 0.0004167 | 0.0031909 | 0         | 0         | 0         |



| PM10_TOTE | PM10_PMTW   | PM10_PMBW   | PM10_TOT  | PM2_5_RUN | PM2_5_IDL | PM2_5_STR | PM2_5_TOT | PM2_5_PMTW  | PM2_5_PMBW  | PM2_5_TOT | SOx_RUNEX | SOx_IDLEX | SOx_STREX | SOx_TOTEX | Fuel_Consumption | Brake Wear (lb/n<br>PM10) |
|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|------------------|---------------------------|
| 0.0194198 | 0.010085647 | 0.017296885 | 0.0468023 | 0.0185042 | 7.549E-05 | 0         | 0.0185797 | 0.002521412 | 0.007412951 | 0.028514  | 0.0050157 | 0.0001794 | 0         | 0.0051951 | 49.008122        | 0.000136113               |
| 0.0171262 | 0.011134415 | 0.019095522 | 0.0473562 | 0.0163814 | 3.931E-06 | 0         | 0.0163853 | 0.002783604 | 0.008183795 | 0.0273527 | 0.0055416 | 0.0001985 | 0         | 0.0057401 | 54.149694        | 0.000136113               |
| 0.0161278 | 0.011950903 | 0.020495799 | 0.0485745 | 0.0154259 | 4.219E-06 | 0         | 0.0154301 | 0.002987726 | 0.008783914 | 0.0272018 | 0.0059007 | 0.0002087 | 0         | 0.0061094 | 57.633482        | 0.000136113               |
| 0.005861  | 0.012399753 | 0.021265577 | 0.0395263 | 0.005603  | 4.378E-06 | 0         | 0.0056074 | 0.003099938 | 0.009113819 | 0.0178212 | 0.0058678 | 0.0001959 | 0         | 0.0060637 | 57.202326        | 0.000136113               |
| 0.0020393 | 0.008871435 | 0.015214511 | 0.0261252 | 0.0019479 | 3.132E-06 | 0         | 0.001951  | 0.002217859 | 0.006520505 | 0.0106894 | 0.0041411 | 0.0001361 | 0         | 0.0042772 | 40.348981        | 0.000136113               |
| 0.0017755 | 0.008284138 | 0.014207296 | 0.0242669 | 0.0016957 | 2.925E-06 | 0         | 0.0016987 | 0.002071034 | 0.006088841 | 0.0098585 | 0.003867  | 0.000127  | 0         | 0.003994  | 37.67784         | 0.000136113               |
| 0.001202  | 0.007000523 | 0.012005897 | 0.0202084 | 0.0011475 | 2.472E-06 | 0         | 0.00115   | 0.001750131 | 0.005145384 | 0.0080455 | 0.0028698 | 9.429E-05 | 0         | 0.0029641 | 27.962131        | 0.000136113               |
| 0.0007503 | 0.004821807 | 0.008269398 | 0.0138415 | 0.0007161 | 1.702E-06 | 0         | 0.0007178 | 0.001205452 | 0.003544028 | 0.0054673 | 0.0019767 | 6.494E-05 | 0         | 0.0020416 | 19.259702        | 0.000136113               |
| 0.0003594 | 0.002467622 | 0.004231971 | 0.007059  | 0.000343  | 8.712E-07 | 0         | 0.0003438 | 0.000616905 | 0.001813702 | 0.0027745 | 0.0010116 | 3.323E-05 | 0         | 0.0010448 | 9.8564005        | 0.000136113               |
| 0.000326  | 0.002467622 | 0.004231971 | 0.0070256 | 0.000311  | 8.712E-07 | 0         | 0.0003119 | 0.000616905 | 0.001813702 | 0.0027425 | 0.0009829 | 3.229E-05 | 0         | 0.0010152 | 9.5769572        | 0.000136113               |
| 0.0002959 | 0.002467622 | 0.004231971 | 0.0069955 | 0.0002823 | 8.712E-07 | 0         | 0.0002831 | 0.000616905 | 0.001813702 | 0.0027137 | 0.0009829 | 3.229E-05 | 0         | 0.0010152 | 9.5769572        | 0.000136113               |
| 0.0002671 | 0.002467622 | 0.004231971 | 0.0069667 | 0.0002547 | 8.712E-07 | 0         | 0.0002556 | 0.000616905 | 0.001813702 | 0.0026862 | 0.0009829 | 3.229E-05 | 0         | 0.0010152 | 9.5769572        | 0.000136113               |
| 0.0002401 | 0.002467622 | 0.004231971 | 0.0069397 | 0.0002288 | 8.712E-07 | 0         | 0.0002297 | 0.000616905 | 0.001813702 | 0.0026603 | 0.0009829 | 3.229E-05 | 0         | 0.0010152 | 9.5769572        | 0.000136113               |
| 0.0002127 | 0.002467622 | 0.004231971 | 0.0069123 | 0.0002026 | 8.712E-07 | 0         | 0.0002035 | 0.000616905 | 0.001813702 | 0.0026341 | 0.0009829 | 3.229E-05 | 0         | 0.0010152 | 9.5769572        | 0.000136113               |

| PM10_TOTE | PM10_PMTW   | PM10_PMBW   | PM10_TOT  | PM2_5_RUN | PM2_5_IDL | PM2_5_STR | PM2_5_TOT | PM2_5_PMTW  | PM2_5_PMBW  | PM2_5_TOT | SOx_RUNEX | SOx_IDLEX | SOx_STREX | SOx_TOTEX | Fuel_Consumption | Emission Rate (g/<br>PM <sub>10</sub> ) |
|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|------------------|---|
| 0.5681371 | 1.857872506 | 8.534601824 | 10.960611 | 0.4291203 | 0         | 0.0938218 | 0.5229421 | 0.464468126 | 3.657686496 | 4.6450967 | 0.7498228 | 0         | 0.0295975 | 0.7794203 | 8313.6506        | 0.04720                                 |
| 0.0458395 | 0.01550494  | 0.071225817 | 0.1325703 | 0.0438565 | 0         | 0         | 0.0438565 | 0.003876235 | 0.03052535  | 0.0782581 | 0.0054941 | 0         | 0         | 0.0054941 | 51.794884        | 0.06840                                 |
| 0         | 0.018475511 | 0.08487188  | 0.1033474 | 0         | 0         | 0         | 0         | 0.004618878 | 0.036373663 | 0.0409925 | 0         | 0         | 0         | 0         | 0                | 0.04475                                 |
|           |             |             |           |           |           |           |           |             |             |           |           |           |           |           |                  | Composite EF: 0.04735                   |

| ii)         | Tire Wear (lb/mi) |             |
|-------------|-------------------|-------------|
|             | PM2.5             | PM10        |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |
| 5.83343E-05 | 7.93664E-05       | 1.98416E-05 |

| 'mi)    | PM <sub>2.5</sub> | DPM | NO <sub>x</sub> | SO <sub>x</sub> | CO      | HC      | CO2       |
|---------|-------------------|-----|-----------------|-----------------|---------|---------|-----------|
|         | 0.02000           |     |                 | 0.11024         | 0.00336 | 1.33419 | 0.15396   |
| 0.04038 |                   |     | 0.17677         | 0.00283         | 0.33813 | 0.03828 | 296.93672 |
| 0.01775 |                   |     | 0.00000         | 0.00000         | 0.00000 | 0.00138 | 0.00000   |
| 0.02015 |                   |     | 0.10971         | 0.00332         | 1.31300 | 0.15152 | 330.38082 |

### Paved Road Dust Emission Factor Derivation

| Emission Source   | (k)                                       | (k)                       | (W)                        | (E)                                   | (E)                                       |  |
|---|---|---------------------------|----------------------------|---------------------------------------|---|--|
|   | Particle Size (sL)<br>Silt Loading (g/m2) | Multiplier - PM10 (g/VMT) | Multiplier - PM2.5 (g/VMT) | Average Vehicle Weight on Road (tons) | Uncontrolled PM10 Emission Factor (g/VMT) | Uncontrolled PM2.5 Emission Factor (g/VMT) |
| <b>Onsite Trucks</b>                                    | 0.6                                       | 1.00                      | 0.25                       | 20.0                                  | <b>13.34</b>                              | <b>3.34</b>                                |
| Offsite Autos   | 0.6                                       | 1.00                      | 0.25                       | 2.4                                   | <b>1.53</b>                               | <b>0.38</b>                                |
| Offsite Roadway (all vehicles) <500 ADT                 | 0.6                                       | 1.00                      | 0.25                       | 2.4                                   | 1.53                                      | 0.38                                       |
| Offsite Roadway (all vehicles) 500-5000 ADT             | 0.2                                       | 1.00                      | 0.25                       | 2.4                                   | 0.56                                      | 0.14                                       |
| <b>Offsite Roadway (all vehicles) 5000-10000 ADT</b>    | 0.06                                      | 1.00                      | 0.25                       | 2.4                                   | <b>0.19</b>                               | <b>0.05</b>                                |
| Offsite Roadway (all vehicles) >10000 ADT               | 0.03                                      | 1.00                      | 0.25                       | 2.4                                   | 0.10                                      | 0.03                                       |
| Offsite Roadway (all vehicles) >10000 ADT Limited Acces | 0.015                                     | 1.00                      | 0.25                       | 2.4                                   | 0.05                                      | 0.01                                       |

#### Notes:

1. Emission factors are calculated using Equation 1 of AP-42 Section 13.2.1 (Jan 2011). Because the emissions are primarily used for peak day or peak hour calculations, the downward adjustment due to annual precipitation (in Equation 2) was not made.
2. Emission factors exclude engine exhaust, tire wear, and brake wear, which are accounted for in EMFAC calculations.
3. The equation is:  $E = k (sL)^{0.91} \times (W)^{1.02}$

### Summary of Daily VMT by Roadway Type

#### Los Angeles - Long Beach - Santa Ana Metro Area

| Metropolitan Area | Interstate/<br>Other Fwy/<br>Exprwy       | Other<br>Principal<br>Arterial | Minor<br>Arterial | Collector | Local  |
|-------------------|---|--------------------------------|-------------------|-----------|--------|
|                   | Daily Vehicle-Miles Travelled (Thousands) | 132,168                        | 69,417            | 48,441    | 11,845 |
| Travel Fraction   | 0.48                                      | 0.25                           | 0.18              | 0.04      | 0.05   |

Source: Federal Highway Administration. Highway Statistics 2008 - Urbanized Areas - 2008 Miles and Daily Vehicle Miles Traveled. Table HM-71. October 2009. website: <http://www.fhwa.dot.gov/policyinformation/statistics/2008/hm71.cfm>.

### Composite Paved Road Dust Emission Factors for Project Trips

| Road Type  | Fraction of Travel by Roadway Type  |                                |                   |           |       | Composite EF    |                  |
|--|-------------------------------------|--------------------------------|-------------------|-----------|-------|-----------------|------------------|
|  | Interstate/<br>Other Fwy/<br>Exprwy | Other<br>Principal<br>Arterial | Minor<br>Arterial | Collector | Local | PM10<br>(g/VMT) | PM2.5<br>(g/VMT) |
| Vehicle Trips in Los Angeles - Long Beach - Santa Ana Me | 0.48                                | 0.25                           | 0.18              | 0.04      | 0.05  | 0.19            | 0.05             |

**Material Loading/Handling Dust Emission Factors**

|   |           |
|---|-----------|
| PM10 (lb/ton)   | 0.0000888 |
| PM2.5 (lb/ton)  | 0.0000134 |
| <hr/>   |           |
| EF = (k)(0.0032)[(U/5) <sup>1.3</sup> ]/[(M/2) <sup>1.4</sup> ] |           |
| EF = lb/ton   |           |
| k = Particle Size Constant (0.35 for PM10 and 0.053 for PM2.5)  |           |
| U = average wind speed = 2.2 m/s (CalEEMod), 4.9 mph            |           |
| M = moisture content = 12% (CalEEMod)                           |           |
| Soil density (ton/cyd):   | 1.26      |
| Truck capacity (cyd)  | 20        |
| Truck capacity (ton)  | 25.28     |
| <hr/>   |           |

Source: AP-42, p. 13.2.4 & CalEEMod

**Debris Loading Dust Emission Factors**

|                |        |
|----------------|--------|
| PM10 (lb/ton)  | 0.0203 |
| PM2.5 (lb/ton) | 0.0031 |

$$EF = k * 0.058$$

EF = lb/ton of debris

k = Particle Size Constant (0.35 for PM10 and 0.053 for PM2.5)

Source: CalEEMod

## Fugitive Dust Control

### Regulatory Requirement <sup>[1]</sup>

Water disturbed areas within the construction site: 2x/day (3.2-hour watering interval). SCAQMD Rule

61% 403

Demolition debris removal: Water every 4 hours within 100 feet of a structure being demolished.

36% SCAQMD Rule 403.

98% Demolition: Prohibit demolition activities when winds exceed 25 mph. SCAQMD Rule 403.

### Mitigation <sup>[2]</sup>

90% Water storage pile by hand or apply cover when wind events are declared.

74% Construction activities: Water disturbed areas within the construction site: 2.1 hour watering interval.

Source:

[1] SCAQMD Rule 403, as applicable for Small Projects (<50 acres disturbed, <5,000 yd<sup>3</sup> 3 times per year).

[2] 2006 WRAP Fugitive Dust Handbook.



## **APPENDIX B**

### **Iteris Traffic Memorandum**





## MEMORANDUM

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|   |   |
|---|---|
| <b>To:</b> Matt Valerio<br>Dudek<br>605 Third Street<br>Encinitas, CA 92024 | <b>From:</b> Sean Daly<br>Iteris, Inc.<br>1700 Carnegie Ave., Ste. 100<br>Santa Ana, CA 92705 |
| <b>Date:</b> November 7, 2016   |   |
| <b>RE:</b> Pasha Transportation Analysis – With Revised Trip Generation     |   |

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This memorandum is intended to provide CEQA traffic analysis for the Pasha Peel-Off Yard Project. It describes existing ground transportation within the Port and surrounding area, and addresses the reasonably foreseeable and potentially significant adverse impacts that could result from implementation of the Project. The ground transportation analysis is how the Project is forecasted to impact key locations in the roadway system. The peel-off yard will generate truck and employee trips to the project site, thereby potentially increasing vehicle trips on area roadways.

### Environmental Setting

The Project site is located on Terminal Island, within an industrial area of the Port of Los Angeles. The site is within the Port of Los Angeles Community Plan area in the City of Los Angeles, which is adjacent to the communities of San Pedro and Wilmington, and approximately 20 miles south of downtown Los Angeles. The site is generally bounded on the north by the Terminal Island Freeway (SR-47), the Port of Long Beach Pier T on the east, Navy Way to the west and Reeves Avenue to the south. Access to the Project site is from a driveway along Reeves Avenue.

A network of freeways and arterial routes provides regional access to the Project site. The freeway network consists of the Terminal Island Freeway (SR-47/SR-103) which is also called Seaside Freeway adjacent to the site, and the north-south freeways: the Harbor Freeway (Interstate 110) to the west and the Long Beach Freeway (I-710) to the east. The closest highway interchanges serving the Project site is the Seaside Avenue (SR-47) Navy Way intersection.

The arterial street network that serves the Project area includes Seaside Boulevard, Navy Way and Reeves Avenue. Below is a description of Project area roadways.

*Seaside/Terminal Island Freeway (SR-47)* is a four- to six-lane street that bisects Terminal Island and connects San Pedro to Long Beach via the Vincent Thomas and Gerald Desmond bridges. Ocean Boulevard is designated SR-710 between I-710 and the Terminal Island Freeway, and Seaside Freeway is designated SR-47 between I-110 and the Terminal Island Freeway.



*Navy Way* is an internal Port roadway that provides local access to Pier 300 and Pier 400 from Seaside Avenue/Ocean Boulevard and the Terminal Island Freeway (SR-47/SR-103). *Navy Way* is generally a four-lane north-south roadway, although south of the Terminal Way intersection, the southbound lanes turn into a single lane until the Seaside Way/Ocean Boulevard westbound off-ramp merges to form two southbound lanes. *Navy Way* is unclassified in the City of Los Angeles General Plan.

*Reeves Avenue* is a two-to three-lane roadway (two eastbound lanes and one westbound lane) that serves as the eastbound extension of Terminal Way between *Navy Way* and Nimitz Road. *Reeves Avenue* is unclassified in the City of Los Angeles General Plan.

## Existing Area Traffic Conditions

Existing truck and automobile traffic along study roadways and intersections, including automobiles, Port trucks, and other truck and regional traffic not related to the Port, was determined by collecting vehicle turning movement counts classified by vehicle type at the study locations. These weekday A.M. (7:00 to 9:00 A.M.), mid-day (M.D.; 1:00 to 3:00 P.M.), and P.M. (4:00 to 6:00 P.M.) traffic counts were collected in February of 2015.

Level of service (LOS) is a qualitative indication of an intersection’s operating conditions as represented by the volume to capacity (V/C) ratio traffic congestion. For intersections, it is measured from LOS A (excellent conditions) to LOS F (very poor conditions), with LOS D (V/C of less than 0.900, fair conditions, for signalized intersections; delay of less than 35.0 seconds, fair conditions, for unsignalized intersections) typically considered to be the threshold of acceptability. The relationship between V/C ratio and LOS for signalized intersections is shown in the following table.

**The Relationship Between Volume To Capacity Ratio and Level of Service**

| Signalized Intersections (V/C Ratio) | LOS | Traffic Conditions  |
|--------------------------------------|-----|---|
| 0 to 0.600                           | A   | Excellent. Little or no delay/congestion. No vehicle waits longer than one red light, and no approach phase is fully used.                                    |
| >0.601 to 0.700                      | B   | Very Good. Slight congestion/delay. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles. |
| >0.701 to 0.800                      | C   | Good. Moderate delay/congestion. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.         |
| >0.801 to 0.900                      | D   | Fair. Significant delay/congestion. Delays may be substantial during portions of the rush hours, but enough lower volume                                      |



| Signalized Intersections (V/C Ratio) | LOS | Traffic Conditions  |
|--------------------------------------|-----|---|
|                                      |     | periods occur to permit clearing of developing lines, preventing excessive backups.   |
| >0.901 to 1.000                      | E   | Poor. Extreme congestion/delay. Represents the most vehicles that the intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.   |
| > 1.000                              | F   | Failure. Intersection failure/gridlock. Backups from nearby locations or cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths. |

Intersection levels of service were assessed using the LADOT Critical Movement Analysis (CMA) method as published in the *Los Angeles Department of Transportation Traffic Study Policies and Procedures* (LADOT, 2013). For signalized intersections, LOS values were determined by using CMA methodology contained in *the Transportation Research Board's Circular No. 212 – Interim Materials on Highway Capacity* (TRB, 1980).

In the City of Los Angeles, Project operations would have a significant impact under CEQA on transportation/circulation if it increases an intersection's V/C ratio in accordance with the following guidelines:

- V/C ratio increase greater than or equal to 0.04 if final LOS is C;
- V/C ratio increase greater than or equal to 0.02 if final LOS is D; or
- V/C ratio increase greater than or equal to 0.01 if final LOS is E or F.

For this analysis, it is assumed that trucks use more roadway capacity than automobiles because of their size, weight, and acceleration capabilities when compared to autos. The concept of passenger car equivalent (PCE)<sup>1</sup> is used in the study to adjust for the effect of trucks in the traffic stream. A PCE factor of 1.1 was applied to tractors (bobtails), and a PCE factor of 2.0 was applied to chassis and to the container truck volumes for the LOS calculations. This means tractors are calculated as using 10 percent more roadway capacity than autos, and chassis and container trucks are calculated as using 100 percent more roadway capacity than autos. These factors are consistent with factors applied in previous port studies, including the *Draft Port of Los Angeles Baseline Transportation Study (Baseline Transportation Study)* (POLA, 2004). They are also consistent with subsequent work conducted for various environmental studies in the Port area.

Many of the methodologies employed in this CEQA technical traffic analysis are based on, and consistent with, the methodologies developed for the *Baseline Transportation Study*. This includes a computerized traffic analysis tool called the PortTAM Model, the trip generation

<sup>1</sup> PCE is defined as the amount of capacity in terms of passenger cars used by a single heavy vehicle of a particular type under specified roadway, traffic, and control conditions.



methodology, and the intersection analysis methodologies. However, the *Baseline Transportation Study* was not conducted specifically for this Project, and the precise assumptions and figures used in preparation of this analysis are Project-specific. The PortTAM Model was updated to integrate with the Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) model and was used to develop non-project traffic volume for the Future Year 2021 analysis.

## Significance Determination

A project in the Port is considered to have a significant transportation/circulation impact if the project would result in one or more of the following occurrences. These criteria are based on the *L.A. CEQA Thresholds Guide* (City of Los Angeles, 2006) and other criteria applied to Port projects, and are used as the basis for determining the impacts of the Project under CEQA.

### ***Would the Project construction result in a short-term temporary increase in truck and auto traffic?***

The Project will have minimal paving of a dirt area, repair of pavement and possible lighting replacement. Since the construction trips would occur throughout the day, the level of construction trips occurring in the peak hours is negligible and would not meet the LADOT minimum threshold of intersection analysis—25 trips in a peak hour.

### ***Would the long-term vehicular traffic associated with the Project significantly impact at least one study location’s volume/capacity ratios or level of service?***

Traffic conditions with the Project were estimated by adding traffic resulting from the Project under CEQA Baseline conditions and Future Year 2021 conditions. Table 3.5-22 summarizes the peak hour trip generation assumptions for the Project at buildout. It includes both auto (employee) and truck trips. These volumes were distributed through the transportation network at the analysis intersections. Traffic generated by the Project was estimated to determine potential impacts of the Project on study area roadways.

**Project Trip Generation**

| Time Period    | Vehicle Type | CEQA Baseline Conditions |     |       |
|----------------|--------------|--------------------------|-----|-------|
|                |              | In                       | Out | Total |
| A.M. Peak Hour | Auto         | 5                        | 0   | 5     |
|                | Truck (PCE)  | 39                       | 39  | 78    |
| M.D. Peak Hour | Auto         | 0                        | 0   | 0     |
|                | Truck (PCE)  | 23                       | 22  | 45    |
| P.M. Peak Hour | Auto         | 5                        | 5   | 10    |
|                | Truck (PCE)  | 22                       | 23  | 45    |



Two intersections are included in the Project study area: Navy Way at Seaside Avenue and Navy Way at Reeves Avenue. The below tables include the level of service and impact determination for each peak hour of each analyzed scenario at the two study locations. As shown, no significant intersection operation impacts are forecasted for the Project.

**LOS Analysis Summary for Intersection #1 Navy Way at Seaside Avenue**

| Navy Way at Seaside Avenue    | A.M. Peak |       | M.D. Peak |       | P.M. Peak |       |
|-------------------------------|-----------|-------|-----------|-------|-----------|-------|
|                               | LOS       | V/C   | LOS       | V/C   | LOS       | V/C   |
| CEQA Baseline                 | A         | 0.379 | A         | 0.352 | A         | 0.541 |
| CEQA Baseline Plus Project    | A         | 0.383 | A         | 0.359 | A         | 0.543 |
| V/C Difference                |           | 0.004 |           | 0.007 |           | 0.001 |
| Significant Impact            | No        |       | No        |       | No        |       |
|                               |           |       |           |       |           |       |
| Future Year 2021 No Project   | B         | 0.667 | B         | 0.631 | D         | 0.841 |
| Future Year 2021 With Project | B         | 0.670 | B         | 0.636 | D         | 0.843 |
| V/C Difference                |           | 0.003 |           | 0.005 |           | 0.002 |
| Significant Impact            | No        |       | No        |       | No        |       |

**LOS Analysis Summary for Intersection #2 Navy Way at Reeves Avenue**

| Navy Way at Reeves Avenue     | A.M. Peak |       | M.D. Peak |       | P.M. Peak |       |
|-------------------------------|-----------|-------|-----------|-------|-----------|-------|
|                               | LOS       | V/C   | LOS       | V/C   | LOS       | V/C   |
| CEQA Baseline                 | A         | 0.108 | A         | 0.261 | A         | 0.400 |
| CEQA Baseline Plus Project    | A         | 0.131 | A         | 0.280 | A         | 0.421 |
| V/C Difference                |           | 0.023 |           | 0.019 |           | 0.021 |
| Significant Impact            | No        |       | No        |       | No        |       |
|                               |           |       |           |       |           |       |
| Future Year 2021 No Project   | A         | 0.387 | A         | 0.503 | C         | 0.725 |
| Future Year 2021 With Project | A         | 0.399 | A         | 0.523 | C         | 0.748 |
| V/C Difference                |           | 0.012 |           | 0.020 |           | 0.023 |
| Significant Impact            | No        |       | No        |       | No        |       |

***Would an increase in on-site employees due to Project operations result in a significant increase in related public transit use?***

The only transit service operated near the project site is the LADOT Commuter Express Line 142, which traverses Terminal Island without stops. Given the lack of stops within the project



study area, on-site employees would not access the Project using public transportation. Therefore the Project will not significantly impact public transit use.

***Would Project operations result in increases considered significant related to freeway congestion?***

The Project does not meet the minimum geographic study requirements for the Los Angeles County Metropolitan Transportation Authority (Metro) Congestion Management Program (CMP) as described in Appendix D of the CMP guidelines (Metro, 2010). The project does not generate more than 50 trips during either the AM or PM peak hour on a CMP arterial monitoring intersection or segment nor will add 150 or more trips in either direction during either the AM or PM weekday peak hours. Therefore, this analysis does not include analysis of CMP locations.

***Would the Project cause an increase in rail activity and/or delays in regional highway traffic due to an increase in rail activity?***

The Project will not involve increases in rail activity and there are no at-grade rail crossings in the Project analysis area, therefore the Project will not significantly impact rail activity or delay in regional highway traffic due to rail activity.

***Would the Project substantially increase transportation hazards due to a design feature?***

The Project would not create a substantial transportation hazard such as creating sharp turns in roadways or dangerous intersections since the Project would only make minimal paving of a dirt area, repair of pavement and possible lighting replacement at the Project Site. Therefore the Project would not have a significant impact from a design feature.

***Would the Project result in inadequate emergency access?***

The Project would not alter or change existing emergency access therefore the Project is not expected to have a significant impact on emergency access.

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

The Project does not include any modifications to existing roadways on Terminal Island that support current or future bike lanes or bus stops. The Project itself would not include visitor-serving uses that would benefit from alternative modes of transportation. The Project is therefore expected to have no impact on alternative transportation policies or facilities.



# Level of Service Worksheet (Circular 212 Method)



| I/S #:   | North-South Street: | Navy Way        |             | Year of Count:        | 2015         |                  | Ambient Growth: (%):         |                  |              | Conducted by:    |                             |                  | Date:        | 7/11/2016        |                                 |              |              |             |     |
|--|---------------------|-----------------|-------------|-----------------------|--------------|------------------|------------------------------|------------------|--------------|------------------|-----------------------------|------------------|--------------|------------------|---------------------------------|--------------|--------------|-------------|-----|
| 2  | East-West Street:   | Seaside Avenue  |             | Projection Year:      | 2021         |                  | Peak Hour:                   | AM               |              | Reviewed by:     |                             |                  | Project:     | Pasha Analysis   |                                 |              |              |             |     |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? |                     | 2               |             | 2                     |              | 2                |                              | 2                |              | 2                |                             | 2                |              | 2                |                                 |              |              |             |     |
| Right Turns: FREE-1, NRTOR-2 or OLA-3?               |                     | NB-- 1          | SB-- 0      | NB-- 1                | SB-- 0       | NB-- 1           | SB-- 0                       | NB-- 1           | SB-- 0       | NB-- 1           | SB-- 0                      | NB-- 1           | SB-- 0       | NB-- 1           | SB-- 0                          |              |              |             |     |
| ATSAC-1 or ATSAC+ATCS-2? Override Capacity           |                     | EB-- 3          | WB-- 1      | EB-- 3                | WB-- 1       | EB-- 3           | WB-- 1                       | EB-- 3           | WB-- 1       | EB-- 3           | WB-- 1                      | EB-- 3           | WB-- 1       | EB-- 3           | WB-- 1                          |              |              |             |     |
|  |                     | 2               |             | 2                     |              | 2                |                              | 2                |              | 2                |                             | 2                |              | 2                |                                 |              |              |             |     |
|  |                     | 0               |             | 0                     |              | 0                |                              | 0                |              | 0                |                             | 0                |              | 0                |                                 |              |              |             |     |
|  |                     | 0               |             | 0                     |              | 0                |                              | 0                |              | 0                |                             | 0                |              | 0                |                                 |              |              |             |     |
|  |                     | 1               |             | 1                     |              | 1                |                              | 1                |              | 1                |                             | 1                |              | 1                |                                 |              |              |             |     |
|  |                     | 2               |             | 2                     |              | 2                |                              | 2                |              | 2                |                             | 2                |              | 2                |                                 |              |              |             |     |
|  |                     | 0               |             | 0                     |              | 0                |                              | 0                |              | 0                |                             | 0                |              | 0                |                                 |              |              |             |     |
| MOVEMENT   | EXISTING CONDITION  |                 |             | EXISTING PLUS PROJECT |              |                  | FUTURE CONDITION W/O PROJECT |                  |              |                  | FUTURE CONDITION W/ PROJECT |                  |              |                  | FUTURE W/ PROJECT W/ MITIGATION |              |              |             |     |
|  | Volume              | No. of Lanes    | Lane Volume | Project Traffic       | Total Volume | Lane Volume      | Added Volume                 | Total Volume     | No. of Lanes | Lane Volume      | Project Traffic             | Total Volume     | No. of Lanes | Lane Volume      | Added Volume                    | Total Volume | No. of Lanes | Lane Volume |     |
| NORTHBOUND   | Left                | 1               | 2           | 84                    | 6            | 159              | 87                           | 181              | 334          | 2                | 184                         | 6                | 340          | 2                | 187                             | 0            | 340          | 2           | 187 |
|  | Left-Through        | 2               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Through             | 3               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Through-Right       | 4               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Right               | 5               | 350         | 0                     | 21           | 371              | 0                            | 461              | 811          | 1                | 0                           | 21               | 832          | 1                | 0                               | 0            | 832          | 1           | 0   |
|  | Left-Through-Right  | 6               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Left-Right          | 7               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
| SOUTHBOUND   | Left                | 8               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Left-Through        | 9               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Through             | 10              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Through-Right       | 11              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Right               | 12              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Left-Through-Right  | 13              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
| Left-Right   | 14                  | 0               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           |     |
| EASTBOUND  | Left                | 15              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Left-Through        | 16              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Through             | 17              | 1849        | 3                     | 9            | 1858             | 619                          | 450              | 2299         | 3                | 766                         | 9                | 2308         | 3                | 769                             | 0            | 2308         | 3           | 769 |
|  | Through-Right       | 18              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Right               | 19              | 170         | 1                     | 13           | 183              | 96                           | 508              | 678          | 1                | 494                         | 13               | 691          | 1                | 504                             | 0            | 691          | 1           | 504 |
|  | Left-Through-Right  | 20              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
| Left-Right   | 21                  | 0               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           |     |
| WESTBOUND  | Left                | 22              | 35          | 2                     | 0            | 35               | 19                           | -35              | 0            | 2                | 0                           | 0                | 0            | 2                | 0                               | 0            | 0            | 2           | 0   |
|  | Left-Through        | 23              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Through             | 24              | 1817        | 3                     | 7            | 1824             | 608                          | 1080             | 2897         | 3                | 966                         | 7                | 2904         | 3                | 968                             | 0            | 2904         | 3           | 968 |
|  | Through-Right       | 25              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Right               | 26              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
|  | Left-Through-Right  | 27              | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           | 0   |
| Left-Right   | 28                  | 0               | 0           | 0                     | 0            | 0                | 0                            | 0                | 0            | 0                | 0                           | 0                | 0            | 0                | 0                               | 0            | 0            | 0           |     |
| CRITICAL VOLUMES                                     |                     | North-South: 84 |             | North-South: 87       |              | North-South: 184 |                              | North-South: 187 |              | North-South: 187 |                             | North-South: 187 |              | North-South: 187 |                                 |              |              |             |     |
|  |                     | East-West: 635  |             | East-West: 638        |              | East-West: 966   |                              | East-West: 968   |              | East-West: 968   |                             | East-West: 968   |              | East-West: 968   |                                 |              |              |             |     |
|  |                     | SUM: 719        |             | SUM: 725              |              | SUM: 1150        |                              | SUM: 1155        |              | SUM: 1155        |                             | SUM: 1155        |              | SUM: 1155        |                                 |              |              |             |     |
| VOLUME/CAPACITY (V/C) RATIO:                         |                     | 0.479           |             | 0.483                 |              | 0.767            |                              | 0.770            |              | 0.770            |                             | 0.770            |              | 0.770            |                                 |              |              |             |     |
| V/C LESS ATSAC/ATCS ADJUSTMENT:                      |                     | 0.379           |             | 0.383                 |              | 0.667            |                              | 0.670            |              | 0.670            |                             | 0.670            |              | 0.670            |                                 |              |              |             |     |
| LEVEL OF SERVICE (LOS):                              |                     | A               |             | A                     |              | B                |                              | B                |              | B                |                             | B                |              | B                |                                 |              |              |             |     |

REMARKS:

Version: 1i Beta; 8/4/2011

Change in v/c due to project: **0.004**  
Significant impacted? **NO**

**PROJECT IMPACT**

Change in v/c due to project: **0.003**  
Significant impacted? **NO**  
Δv/c after mitigation: **0.003**  
Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



|                                 |  |                    |  |                  |  |                     |   |                              |   |                  |   |                             |              |              |             |                                 |              |              |             |     |
|---------------------------------|--|--------------------|--|------------------|--|---------------------|---|------------------------------|---|------------------|---|-----------------------------|--------------|--------------|-------------|---------------------------------|--------------|--------------|-------------|-----|
| I/S #:                          | North-South Street:                                  | Navy Way           |  | Year of Count:   | 2015   | Ambient Growth: (%) | 0   | Conducted by:                | 0   | Date:            | 7/11/2016                                       |                             |              |              |             |                                 |              |              |             |     |
| 2                               | East-West Street:                                    | Seaside Avenue     |  | Projection Year: | 2021   | Peak Hour:          | MD  | Reviewed by:                 | 0   | Project:         | Pasha Analysis                                  |                             |              |              |             |                                 |              |              |             |     |
|                                 | No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? |                    | 2  |                  | 2  |                     | 2   |                              | 2   |                  | 2   |                             |              |              |             |                                 |              |              |             |     |
|                                 | Right Turns: FREE-1, NRTOR-2 or OLA-3?               | NB-- 1<br>EB-- 3   | SB-- 0<br>WB-- 1                               | NB-- 1<br>EB-- 3 | SB-- 0<br>WB-- 1                               | NB-- 1<br>EB-- 3    | SB-- 0<br>WB-- 1                                | NB-- 1<br>EB-- 3             | SB-- 0<br>WB-- 1                                | NB-- 1<br>EB-- 3 | SB-- 0<br>WB-- 1                                |                             |              |              |             |                                 |              |              |             |     |
|                                 | ATSAC-1 or ATSAC-ATCS-2?                             |                    | 2  |                  | 2  |                     | 2   |                              | 2   |                  | 2   |                             |              |              |             |                                 |              |              |             |     |
|                                 | Override Capacity                                    |                    | 0  |                  | 0  |                     | 0   |                              | 0   |                  | 0   |                             |              |              |             |                                 |              |              |             |     |
|                                 | MOVEMENT   | EXISTING CONDITION |  |                  | EXISTING PLUS PROJECT                          |                     |   | FUTURE CONDITION W/O PROJECT |   |                  |   | FUTURE CONDITION W/ PROJECT |              |              |             | FUTURE W/ PROJECT W/ MITIGATION |              |              |             |     |
|                                 |  | Volume             | No. of Lanes                                   | Lane Volume      | Project Traffic                                | Total Volume        | Lane Volume                                     | Added Volume                 | Total Volume                                    | No. of Lanes     | Lane Volume                                     | Project Traffic             | Total Volume | No. of Lanes | Lane Volume | Added Volume                    | Total Volume | No. of Lanes | Lane Volume |     |
| NORTHBOUND                      | Left   | 1                  | 259  | 2                | 142  | 13                  | 272   | 150                          | 202   | 461              | 2   | 254                         | 13           | 474          | 2           | 261                             |              | 474          | 2           | 261 |
|                                 | Left-Through   | 2                  |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Through  | 3                  | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Through-Right  | 4                  |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Right  | 5                  | 887  | 1                | 0  | 6                   | 893   | 0                            | 424   | 1311             | 1   | 0                           | 6            | 1317         | 1           | 0                               |              | 1317         | 1           | 0   |
|                                 | Left-Through-Right                                   | 6                  |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Left-Right   | 7                  |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
| SOUTHBOUND                      | Left   | 8                  | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Left-Through   | 9                  |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Through  | 10                 | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Through-Right  | 11                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Right  | 12                 | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Left-Through-Right                                   | 13                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
| Left-Right                      | 14   |                    | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           |     |
| EASTBOUND                       | Left   | 15                 | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Left-Through   | 16                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Through  | 17                 | 1551   | 3                | 517  | 10                  | 1561  | 520                          | 287   | 1838             | 3   | 613                         | 10           | 1848         | 3           | 616                             |              | 1848         | 3           | 616 |
|                                 | Through-Right  | 18                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Right  | 19                 | 114  | 1                | 0  | 7                   | 121   | 0                            | 330   | 444              | 1   | 190                         | 7            | 451          | 1           | 190                             |              | 451          | 1           | 190 |
|                                 | Left-Through-Right                                   | 20                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
| Left-Right                      | 21   |                    | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           |     |
| WESTBOUND                       | Left   | 22                 | 35   | 2                | 19   | 0                   | 35  | 19                           | -35   | 0                | 2   | 0                           | 0            | 0            | 2           | 0                               |              | 0            | 2           | 0   |
|                                 | Left-Through   | 23                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Through  | 24                 | 1488   | 3                | 496  | 4                   | 1492  | 497                          | 1038  | 2526             | 3   | 842                         | 4            | 2530         | 3           | 843                             |              | 2530         | 3           | 843 |
|                                 | Through-Right  | 25                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Right  | 26                 | 0  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Left-Through-Right                                   | 27                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
|                                 | Left-Right   | 28                 |  | 0                | 0  | 0                   | 0   | 0                            | 0   | 0                | 0   | 0                           | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0   |
| CRITICAL VOLUMES                |  |                    | North-South: 142<br>East-West: 536<br>SUM: 678 |                  | North-South: 150<br>East-West: 539<br>SUM: 689 |                     | North-South: 254<br>East-West: 842<br>SUM: 1096 |                              | North-South: 261<br>East-West: 843<br>SUM: 1104 |                  | North-South: 261<br>East-West: 843<br>SUM: 1104 |                             |              |              |             |                                 |              |              |             |     |
| VOLUME/CAPACITY (V/C) RATIO:    |  |                    | 0.452  |                  | 0.459  |                     | 0.731   |                              | 0.736   |                  | 0.736   |                             |              |              |             |                                 |              |              |             |     |
| V/C LESS ATSAC/ATCS ADJUSTMENT: |  |                    | 0.352  |                  | 0.359  |                     | 0.631   |                              | 0.636   |                  | 0.636   |                             |              |              |             |                                 |              |              |             |     |
| LEVEL OF SERVICE (LOS):         |  |                    | A  |                  | A  |                     | B   |                              | B   |                  | B   |                             |              |              |             |                                 |              |              |             |     |

REMARKS:

Version: 1i Beta; 8/4/2011

Change in v/c due to project: **0.007**  
Significant impacted? **NO**

**PROJECT IMPACT**

Change in v/c due to project: **0.005**  
Significant impacted? **NO**  
 $\Delta v/c$  after mitigation: **0.005**  
Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



| I/S #:  | North-South Street: <b>Navy Way</b>     | Year of Count: <b>2015</b>                                 | Ambient Growth: (%): <b>0</b>                              | Conducted by: <b>0</b>                                     | Date: <b>7/11/2016</b>                                     |             |  |              |  |             |  |              |              |             |                                 |              |              |             |      |
|---|---|--|--|--|--|-------------|--|--------------|--|-------------|--|--------------|--------------|-------------|---------------------------------|--------------|--------------|-------------|------|
| <b>2</b>  | East-West Street: <b>Seaside Avenue</b> | Projection Year: <b>2021</b>                               | Peak Hour: <b>PM</b>                                       | Reviewed by: <b>0</b>                                      | Project: <b>Pasha Analysis</b>                             |             |  |              |  |             |  |              |              |             |                                 |              |              |             |      |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? <b>2</b><br>Right Turns: FREE-1, NRTOR-2 or OLA-3? <b>0</b><br>ATSAAC-1 or ATSAAC+ATCS-2? <b>0</b><br>Override Capacity <b>0</b> |   | NB-- <b>1</b> SB-- <b>0</b><br>EB-- <b>3</b> WB-- <b>0</b> | NB-- <b>1</b> SB-- <b>0</b><br>EB-- <b>3</b> WB-- <b>1</b> | NB-- <b>1</b> SB-- <b>0</b><br>EB-- <b>3</b> WB-- <b>1</b> | NB-- <b>1</b> SB-- <b>0</b><br>EB-- <b>3</b> WB-- <b>1</b> |             |  |              |  |             |  |              |              |             |                                 |              |              |             |      |
| MOVEMENT  | EXISTING CONDITION                      |  |  | EXISTING PLUS PROJECT                                      |  |             | FUTURE CONDITION W/O PROJECT                     |              |  |             | FUTURE CONDITION W/ PROJECT                      |              |              |             | FUTURE W/ PROJECT W/ MITIGATION |              |              |             |      |
|   | Volume                                  | No. of Lanes   | Lane Volume  | Project Traffic  | Total Volume   | Lane Volume | Added Volume                                     | Total Volume | No. of Lanes                                     | Lane Volume | Project Traffic                                  | Total Volume | No. of Lanes | Lane Volume | Added Volume                    | Total Volume | No. of Lanes | Lane Volume |      |
| NORTHBOUND  | Left                                    | 1  | 356  | 2  | 196  | 5           | 361  | 199          | 186  | 542         | 2  | 298          | 5            | 547         | 2                               | 301          | 547          | 2           | 301  |
|   | Left-Through                            | 2  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Through                                 | 3  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Through-Right                           | 4  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Right                                   | 5  | 957  | 1  | 0  | 15          | 972  | 0            | 603  | 1560        | 1  | 0            | 15           | 1575        | 1                               | 0            | 1575         | 1           | 0    |
|   | Left-Through-Right                      | 6  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Left-Right                              | 7  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
| SOUTHBOUND  | Left                                    | 8  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Left-Through                            | 9  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Through                                 | 10   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Through-Right                           | 11   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Right                                   | 12   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Left-Through-Right                      | 13   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
| EASTBOUND   | Left                                    | 15   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Left-Through                            | 16   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Through                                 | 17   | 2226   | 3  | 742  | 4           | 2230   | 743          | 292  | 2518        | 3  | 839          | 4            | 2522        | 3                               | 841          | 2522         | 3           | 841  |
|   | Through-Right                           | 18   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Right                                   | 19   | 216  | 1  | 20   | 9           | 225  | 26           | 215  | 431         | 1  | 133          | 9            | 440         | 1                               | 139          | 440          | 1           | 139  |
|   | Left-Through-Right                      | 20   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
| WESTBOUND   | Left                                    | 22   | 42   | 2  | 23   | 0           | 42   | 23           | -42  | 0           | 2  | 0            | 0            | 0           | 2                               | 0            | 0            | 2           | 0    |
|   | Left-Through                            | 23   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Through                                 | 24   | 2037   | 3  | 679  | 0           | 2037   | 679          | 1305   | 3342        | 3  | 1114         | 0            | 3342        | 3                               | 1114         | 3342         | 3           | 1114 |
|   | Through-Right                           | 25   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Right                                   | 26   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
|   | Left-Through-Right                      | 27   | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           | 0    |
| Left-Right  | 28                                      | 0  | 0  | 0  | 0  | 0           | 0  | 0            | 0  | 0           | 0  | 0            | 0            | 0           | 0                               | 0            | 0            | 0           |      |
| CRITICAL VOLUMES  |   |  | North-South: 196<br>East-West: 765<br>SUM: 961             |  | North-South: 199<br>East-West: 766<br>SUM: 965             |             | North-South: 298<br>East-West: 1114<br>SUM: 1412 |              | North-South: 301<br>East-West: 1114<br>SUM: 1415 |             | North-South: 301<br>East-West: 1114<br>SUM: 1415 |              |              |             |                                 |              |              |             |      |
| VOLUME/CAPACITY (V/C) RATIO:  |   |  | 0.641  |  | 0.643  |             | 0.941  |              | 0.943  |             | 0.943  |              |              |             |                                 |              |              |             |      |
| V/C LESS ATSAAC/ATCS ADJUSTMENT:  |   |  | <b>0.541</b>   |  | <b>0.543</b>   |             | <b>0.841</b>                                     |              | <b>0.843</b>                                     |             | <b>0.843</b>                                     |              |              |             |                                 |              |              |             |      |
| LEVEL OF SERVICE (LOS):   |   |  | <b>A</b>   |  | <b>A</b>   |             | <b>D</b>   |              | <b>D</b>   |             | <b>D</b>   |              |              |             |                                 |              |              |             |      |

REMARKS:

Version: 1i Beta; 8/4/2011

ge in v/c due to project: **0.002**  
 :ant impacted? **NO**

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **0.002**  
 Significant impacted? **NO**                      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



| I/S #:                          | North-South Street:                                  | Navy Way         |             | Year of Count:        | 2015         |                  | Ambient Growth: (%)          |                  |              | Conducted by:    |                             |                  | Date:        | 7/11/2016        |                                 |                  |              |                  |     |
|---------------------------------|--|------------------|-------------|-----------------------|--------------|------------------|------------------------------|------------------|--------------|------------------|-----------------------------|------------------|--------------|------------------|---------------------------------|------------------|--------------|------------------|-----|
| 2                               | East-West Street:                                    | Reeves Avenue    |             | Projection Year:      | 2021         |                  | Peak Hour:                   | AM               |              | Reviewed by:     |                             |                  | Project:     | Pasha Analysis   |                                 |                  |              |                  |     |
|                                 | No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? | 4                |             | NB--                  | 0            |                  | NB--                         | 0                |              | NB--             | 0                           |                  | NB--         | 0                |                                 |                  |              |                  |     |
|                                 | Right Turns: FREE-1, NRTOR-2 or OLA-3?               | NB--             | 0           | SB--                  | 0            | NB--             | 0                            | SB--             | 0            | NB--             | 0                           | SB--             | 0            | SB--             | 0                               |                  |              |                  |     |
|                                 | ATSAC-1 or ATSAC+ATCS-2?                             | EB--             | 0           | WB--                  | 3            | EB--             | 0                            | WB--             | 3            | EB--             | 0                           | WB--             | 3            | EB--             | 0                               |                  |              |                  |     |
|                                 | Override Capacity                                    | 2                |             | 2                     |              | 2                |                              | 2                |              | 2                |                             | 2                |              | 2                |                                 |                  |              |                  |     |
|                                 |  | 0                |             | 0                     |              | 0                |                              | 0                |              | 0                |                             | 0                |              | 0                |                                 |                  |              |                  |     |
| MOVEMENT                        | EXISTING CONDITION                                   |                  |             | EXISTING PLUS PROJECT |              |                  | FUTURE CONDITION W/O PROJECT |                  |              |                  | FUTURE CONDITION W/ PROJECT |                  |              |                  | FUTURE W/ PROJECT W/ MITIGATION |                  |              |                  |     |
|                                 | Volume   | No. of Lanes     | Lane Volume | Project Traffic       | Total Volume | Lane Volume      | Added Volume                 | Total Volume     | No. of Lanes | Lane Volume      | Project Traffic             | Total Volume     | No. of Lanes | Lane Volume      | Added Volume                    | Total Volume     | No. of Lanes | Lane Volume      |     |
| NORTHBOUND                      | Left   | 1                | 1           | 13                    | 0            | 13               | 13                           | 32               | 45           | 1                | 45                          | 0                | 45           | 1                | 45                              | 0                | 45           | 1                | 45  |
|                                 | Left-Through   | 2                | 0           | 0                     |              |                  |                              |                  |              | 0                |                             |                  |              | 0                |                                 |                  |              | 0                |     |
|                                 | Through  | 3                | 1           | 134                   | -3           | 264              | 147                          | 387              | 654          | 1                | 336                         | -3               | 651          | 1                | 349                             | 0                | 651          | 1                | 349 |
|                                 | Through-Right  | 4                | 1           | 1                     |              |                  |                              |                  |              | 1                | 1                           |                  |              | 1                | 1                               |                  |              | 1                | 1   |
|                                 | Right  | 5                | 0           | 1                     | 28           | 29               | 29                           | 17               | 18           | 0                | 18                          | 28               | 46           | 0                | 46                              | 0                | 46           | 0                | 46  |
|                                 | Left-Through-Right                                   | 6                | 0           | 0                     |              |                  |                              |                  |              | 0                | 0                           |                  |              | 0                | 0                               |                  |              | 0                | 0   |
|                                 | Left-Right   | 7                | 0           | 0                     |              |                  |                              |                  |              | 0                | 0                           |                  |              | 0                | 0                               |                  |              | 0                | 0   |
| SOUTHBOUND                      | Left   | 8                | 1           | 40                    | 13           | 53               | 53                           | 1                | 41           | 1                | 41                          | 13               | 54           | 1                | 54                              | 0                | 54           | 1                | 54  |
|                                 | Left-Through   | 9                | 0           | 0                     |              |                  |                              |                  |              | 0                |                             |                  |              | 0                |                                 |                  |              | 0                |     |
|                                 | Through  | 10               | 1           | 85                    | -1           | 135              | 84                           | 451              | 587          | 1                | 344                         | -1               | 586          | 1                | 343                             | 0                | 586          | 1                | 343 |
|                                 | Through-Right  | 11               | 1           | 1                     |              |                  |                              |                  |              | 1                | 1                           |                  |              | 1                | 1                               |                  |              | 1                | 1   |
|                                 | Right  | 12               | 0           | 33                    | 0            | 33               | 33                           | 67               | 100          | 0                | 100                         | 0                | 100          | 0                | 100                             | 0                | 100          | 0                | 100 |
|                                 | Left-Through-Right                                   | 13               | 0           | 0                     |              |                  |                              |                  |              | 0                | 0                           |                  |              | 0                | 0                               |                  |              | 0                | 0   |
| Left-Right                      | 14   | 0                | 0           |                       |              |                  |                              |                  | 0            | 0                |                             |                  | 0            | 0                |                                 |                  | 0            | 0                |     |
| EASTBOUND                       | Left   | 15               | 2           | 109                   | -3           | 195              | 107                          | 305              | 503          | 2                | 277                         | -3               | 500          | 2                | 275                             | 0                | 500          | 2                | 275 |
|                                 | Left-Through   | 16               | 0           | 0                     |              |                  |                              |                  |              | 0                |                             |                  |              | 0                |                                 |                  |              | 0                |     |
|                                 | Through  | 17               | 0           | 19                    | 4            | 5                | 23                           | 0                | 1            | 0                | 41                          | 4                | 5            | 0                | 45                              | 0                | 5            | 0                | 45  |
|                                 | Through-Right  | 18               | 1           | 1                     |              |                  |                              |                  |              | 1                | 1                           |                  |              | 1                | 1                               |                  |              | 1                | 1   |
|                                 | Right  | 19               | 0           | 0                     | 0            | 18               | 0                            | 22               | 40           | 0                | 0                           | 0                | 40           | 0                | 0                               | 0                | 40           | 0                | 0   |
|                                 | Left-Through-Right                                   | 20               | 0           | 0                     |              |                  |                              |                  |              | 0                | 0                           |                  |              | 0                | 0                               |                  |              | 0                | 0   |
| Left-Right                      | 21   | 0                | 0           |                       |              |                  |                              |                  | 0            | 0                |                             |                  | 0            | 0                |                                 |                  | 0            | 0                |     |
| WESTBOUND                       | Left   | 22               | 0           | 1                     | 2            | 3                | 3                            | 0                | 1            | 0                | 1                           | 2                | 3            | 0                | 3                               | 0                | 3            | 0                | 3   |
|                                 | Left-Through   | 23               | 1           | 1                     |              |                  |                              |                  |              | 1                | 1                           |                  |              | 1                | 1                               |                  |              | 1                | 1   |
|                                 | Through  | 24               | 0           | 3                     | 2            | 4                | 7                            | 0                | 2            | 0                | 3                           | 2                | 4            | 0                | 7                               | 0                | 4            | 0                | 7   |
|                                 | Through-Right  | 25               | 0           | 0                     |              |                  |                              |                  |              | 0                | 0                           |                  |              | 0                | 0                               |                  |              | 0                | 0   |
|                                 | Right  | 26               | 1           | 0                     | 34           | 64               | 11                           | -2               | 28           | 1                | 0                           | 34               | 62           | 1                | 8                               | 0                | 62           | 1                | 8   |
| Left-Through-Right              | 27   | 0                | 0           |                       |              |                  |                              |                  | 0            | 0                |                             |                  | 0            | 0                |                                 |                  | 0            | 0                |     |
| Left-Right                      | 28   | 0                | 0           |                       |              |                  |                              |                  | 0            | 0                |                             |                  | 0            | 0                |                                 |                  | 0            | 0                |     |
| CRITICAL VOLUMES                |  | North-South: 174 |             | North-South: 200      |              | North-South: 389 |                              | North-South: 403 |              | North-South: 403 |                             | North-South: 403 |              | North-South: 403 |                                 | North-South: 403 |              | North-South: 403 |     |
|                                 |  | East-West: 112   |             | East-West: 118        |              | East-West: 280   |                              | East-West: 283   |              | East-West: 283   |                             | East-West: 283   |              | East-West: 283   |                                 | East-West: 283   |              | East-West: 283   |     |
|                                 |  | SUM: 286         |             | SUM: 318              |              | SUM: 669         |                              | SUM: 686         |              | SUM: 686         |                             | SUM: 686         |              | SUM: 686         |                                 | SUM: 686         |              | SUM: 686         |     |
| VOLUME/CAPACITY (V/C) RATIO:    |  | 0.208            |             | 0.231                 |              | 0.487            |                              | 0.499            |              | 0.499            |                             | 0.499            |              | 0.499            |                                 | 0.499            |              | 0.499            |     |
| V/C LESS ATSAC/ATCS ADJUSTMENT: |  | 0.108            |             | 0.131                 |              | 0.387            |                              | 0.399            |              | 0.399            |                             | 0.399            |              | 0.399            |                                 | 0.399            |              | 0.399            |     |
| LEVEL OF SERVICE (LOS):         |  | A                |             | A                     |              | A                |                              | A                |              | A                |                             | A                |              | A                |                                 | A                |              | A                |     |

REMARKS:

Version: 1i Beta; 8/4/2011

Change in v/c due to project: **0.023**  
Significant impacted? **NO**

**PROJECT IMPACT**

Change in v/c due to project: **0.012**  
Significant impacted? **NO**

Δv/c after mitigation: **0.012**  
Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



|   |  |  |  |  |  |                                    |                                     |                                    |                   |                                    |                                    |              |              |             |  |              |              |             |   |
|---|--|--|--|--|--|------------------------------------|-------------------------------------|------------------------------------|-------------------|------------------------------------|------------------------------------|--------------|--------------|-------------|--|--------------|--------------|-------------|---|
| I/S #:  | North-South Street: <b>Navy Way</b>    | Year of Count: <b>2015</b>               | Ambient Growth: (%): <b>0</b>            | Conducted by: <b>0</b>                   | Date: <b>7/11/2016</b>                   |                                    |                                     |                                    |                   |                                    |                                    |              |              |             |  |              |              |             |   |
| <b>2</b>  | East-West Street: <b>Reeves Avenue</b> | Projection Year: <b>2021</b>             | Peak Hour: <b>MD</b>                     | Reviewed by: <b>0</b>                    | Project: <b>Pasha Analysis</b>           |                                    |                                     |                                    |                   |                                    |                                    |              |              |             |  |              |              |             |   |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?<br>Right Turns: FREE-1, NRTOR-2 or OLA-3?<br>ATSAC-1 or ATSAC-ATCS-2?<br>Override Capacity |  | NB-- 0 SB-- 0<br>EB-- 0 WB-- 3<br>2<br>0 | NB-- 0 SB-- 0<br>EB-- 0 WB-- 3<br>2<br>0 | NB-- 0 SB-- 0<br>EB-- 0 WB-- 3<br>2<br>0 | NB-- 0 SB-- 0<br>EB-- 0 WB-- 3<br>2<br>0 |                                    |                                     |                                    |                   |                                    |                                    |              |              |             |  |              |              |             |   |
| <b>MOVEMENT</b>   | <b>EXISTING CONDITION</b>              |  |  | <b>EXISTING PLUS PROJECT</b>             |  |                                    | <b>FUTURE CONDITION W/O PROJECT</b> |                                    |                   |                                    | <b>FUTURE CONDITION W/ PROJECT</b> |              |              |             | <b>FUTURE W/ PROJECT W/ MITIGATION</b> |              |              |             |   |
|   | Volume                                 | No. of Lanes                             | Lane Volume                              | Project Traffic                          | Total Volume                             | Lane Volume                        | Added Volume                        | Total Volume                       | No. of Lanes      | Lane Volume                        | Project Traffic                    | Total Volume | No. of Lanes | Lane Volume | Added Volume                           | Total Volume | No. of Lanes | Lane Volume |   |
| <b>NORTHBOUND</b>   | Left                                   | 1  | 16                                       | 0  | 16                                       | 16                                 | 23                                  | 39                                 | 1                 | 39                                 | 0                                  | 39           | 1            | 39          |  | 39           | 1            | 39          |   |
|   | Left-Through                           | 2  | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            | 0           |   |
|   | Through                                | 3  | 513                                      | 257                                      | -2                                       | 511                                | 263                                 | 327                                | 840               | 1                                  | 423                                | -2           | 838          | 1           | 430                                    | 838          | 1            | 430         |   |
|   | Through-Right                          | 4  | 1  | 1  | 1  | 1                                  | 1                                   | 1                                  | 1                 | 1                                  | 1                                  | 1            | 1            | 1           | 1                                      | 1            | 1            | 1           |   |
|   | Right                                  | 5  | 0  | 0  | 15                                       | 15                                 | 15                                  | 6                                  | 6                 | 0                                  | 6                                  | 15           | 21           | 0           | 21                                     | 21           | 0            | 21          |   |
|   | Left-Through-Right                     | 6  | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            | 0           | 0 |
|   | Left-Right                             | 7  | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            | 0           |   |
| <b>SOUTHBOUND</b>   | Left                                   | 8  | 21                                       | 1  | 21                                       | 21                                 | 1                                   | 22                                 | 1                 | 22                                 | 5                                  | 27           | 1            | 27          | 27                                     | 1            | 27           |             |   |
|   | Left-Through                           | 9  | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            |             |   |
|   | Through                                | 10                                       | 80                                       | 1  | 80                                       | 62                                 | 192                                 | 272                                | 1                 | 216                                | 0                                  | 272          | 1            | 216         | 272                                    | 1            | 216          |             |   |
|   | Through-Right                          | 11                                       | 1  | 1  | 1  | 1                                  | 1                                   | 1                                  | 1                 | 1                                  | 1                                  | 1            | 1            | 1           | 1                                      | 1            | 1            |             |   |
|   | Right                                  | 12                                       | 44                                       | 0  | 44                                       | 44                                 | 115                                 | 159                                | 0                 | 159                                | 0                                  | 159          | 0            | 159         | 159                                    | 0            | 159          |             |   |
|   | Left-Through-Right                     | 13                                       | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            |             |   |
| Left-Right  | 14                                     | 0  | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            |              |             |   |
| <b>EASTBOUND</b>  | Left                                   | 15                                       | 365                                      | 2  | 365                                      | 201                                | 311                                 | 676                                | 2                 | 372                                | 0                                  | 676          | 2            | 372         | 676                                    | 2            | 372          |             |   |
|   | Left-Through                           | 16                                       | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 2                                  | 2            | 0            | 37          | 2                                      | 0            | 37           |             |   |
|   | Through                                | 17                                       | 19                                       | 1  | 19                                       | 0                                  | 16                                  | 35                                 | 1                 | 0                                  | 0                                  | 35           | 1            | 0           | 35                                     | 0            | 0            |             |   |
|   | Through-Right                          | 18                                       | 1  | 1  | 1  | 1                                  | 1                                   | 1                                  | 1                 | 1                                  | 1                                  | 1            | 1            | 1           | 1                                      | 1            | 1            |             |   |
|   | Right                                  | 19                                       | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            |             |   |
|   | Left-Through-Right                     | 20                                       | 19                                       | 0  | 19                                       | 0                                  | 16                                  | 35                                 | 0                 | 0                                  | 0                                  | 35           | 0            | 0           | 35                                     | 0            | 0            |             |   |
| Left-Right  | 21                                     | 0  | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            |              |             |   |
| <b>WESTBOUND</b>  | Left                                   | 22                                       | 1  | 0  | 1  | 1                                  | 0                                   | 1                                  | 0                 | 1                                  | 1                                  | 2            | 0            | 2           | 2                                      | 0            | 2            |             |   |
|   | Left-Through                           | 23                                       | 1  | 1  | 1  | 1                                  | 1                                   | 1                                  | 1                 | 1                                  | 1                                  | 2            | 1            | 2           | 1                                      | 1            | 2            |             |   |
|   | Through                                | 24                                       | 1  | 0  | 2  | 1                                  | 2                                   | 4                                  | 0                 | 1                                  | 0                                  | 2            | 0            | 4           | 2                                      | 0            | 4            |             |   |
|   | Through-Right                          | 25                                       | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            |             |   |
|   | Right                                  | 26                                       | 39                                       | 1  | 39                                       | 18                                 | -5                                  | 34                                 | 1                 | 12                                 | 20                                 | 54           | 1            | 27          | 54                                     | 1            | 27           |             |   |
|   | Left-Through-Right                     | 27                                       | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            | 0            |             |   |
| Left-Right  | 28                                     | 0  | 0  | 0  | 0  | 0                                  | 0                                   | 0                                  | 0                 | 0                                  | 0                                  | 0            | 0            | 0           | 0                                      | 0            |              |             |   |
| <b>CRITICAL VOLUMES</b>   |  | North-South:<br>East-West:<br>SUM:       | 278<br>219<br>497                        | North-South:<br>East-West:<br>SUM:       | 289<br>234<br>523                        | North-South:<br>East-West:<br>SUM: | 445<br>384<br>829                   | North-South:<br>East-West:<br>SUM: | 457<br>399<br>856 | North-South:<br>East-West:<br>SUM: | 457<br>399<br>856                  |              |              |             |  |              |              |             |   |
| <b>VOLUME/CAPACITY (V/C) RATIO:</b>   |  | 0.361                                    |  | 0.380                                    |  | 0.603                              |                                     | 0.623                              |                   | 0.623                              |                                    |              |              |             |  |              |              |             |   |
| <b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>  |  | <b>0.261</b>                             |  | <b>0.280</b>                             |  | <b>0.503</b>                       |                                     | <b>0.523</b>                       |                   | <b>0.523</b>                       |                                    |              |              |             |  |              |              |             |   |
| <b>LEVEL OF SERVICE (LOS):</b>  |  | <b>A</b>                                 |  | <b>A</b>                                 |  | <b>A</b>                           |                                     | <b>A</b>                           |                   | <b>A</b>                           |                                    |              |              |             |  |              |              |             |   |

REMARKS:

Version: 1i Beta; 8/4/2011

Change in v/c due to project: **0.019**  
Significant impacted? **NO**

**PROJECT IMPACT**

Change in v/c due to project: **0.020**      Δv/c after mitigation: **0.020**  
Significant impacted? **NO**                      Fully mitigated? **N/A**



## **APPENDIX C**

### **Noise Calculations**





## Noise Level Predictions from On-Site Activities

| Potential Live-Aboards approx. 0.5 mile from Site |  |                         |                      |                               |                       |                          |  |                           |   |                  |                               |   |
|---|--|-------------------------|----------------------|-------------------------------|-----------------------|--------------------------|--|---------------------------|---|------------------|-------------------------------|---|
| Noise Source                                      | Reference Noise Level (dBA) <sup>1</sup> | Reference distance (ft) | Distance to Receiver | Noise Level at Receiver (dBA) | Shielding Atten (dBA) | Excess Attenuation (dBA) | Noise Level at Receiver with Attenuation (dBA) | Level of Activity         | Duration of Activity (Fraction of Hour) | Occurences / Hr. | Duration (min.s / hour) Total | Leq Calculation (t/60)10 <sup>^(L/10)*n</sup> |
| S-1, Trcuk Back-In                                | 66.0                                     | 50                      | 2640                 | 31.5                          | 0.0                   | 4.2                      | 27.3   | 43 trucks/hr @ 90 seconds | 0.03                                    | 43               | 64.50                         | 27.6  |
| S-2, Truck Pull-Out                               | 73.2                                     | 50                      | 2640                 | 38.7                          | 0.0                   | 4.2                      | 34.5   | 43 trucks/hr @ 25 seconds | 0.01                                    | 43               | 17.92                         | 29.3  |
| S-3, Truck Drive-By - Near                        | 73.2                                     | 50                      | 2640                 | 38.7                          | 0.0                   | 4.2                      | 34.5   | 43 trucks/hr @ 60 seconds | 0.017                                   | 43               | 43.00                         | 33.1  |
| <b>Leq (dBA) - Worst-Case</b>                     |  |                         |                      |                               |                       |                          |  |                           |   |                  |                               | <b>35.4</b>                                   |

1 - Source: Wilder, 2000. Noise survey of commercial loading dock operations. URS Corporation

