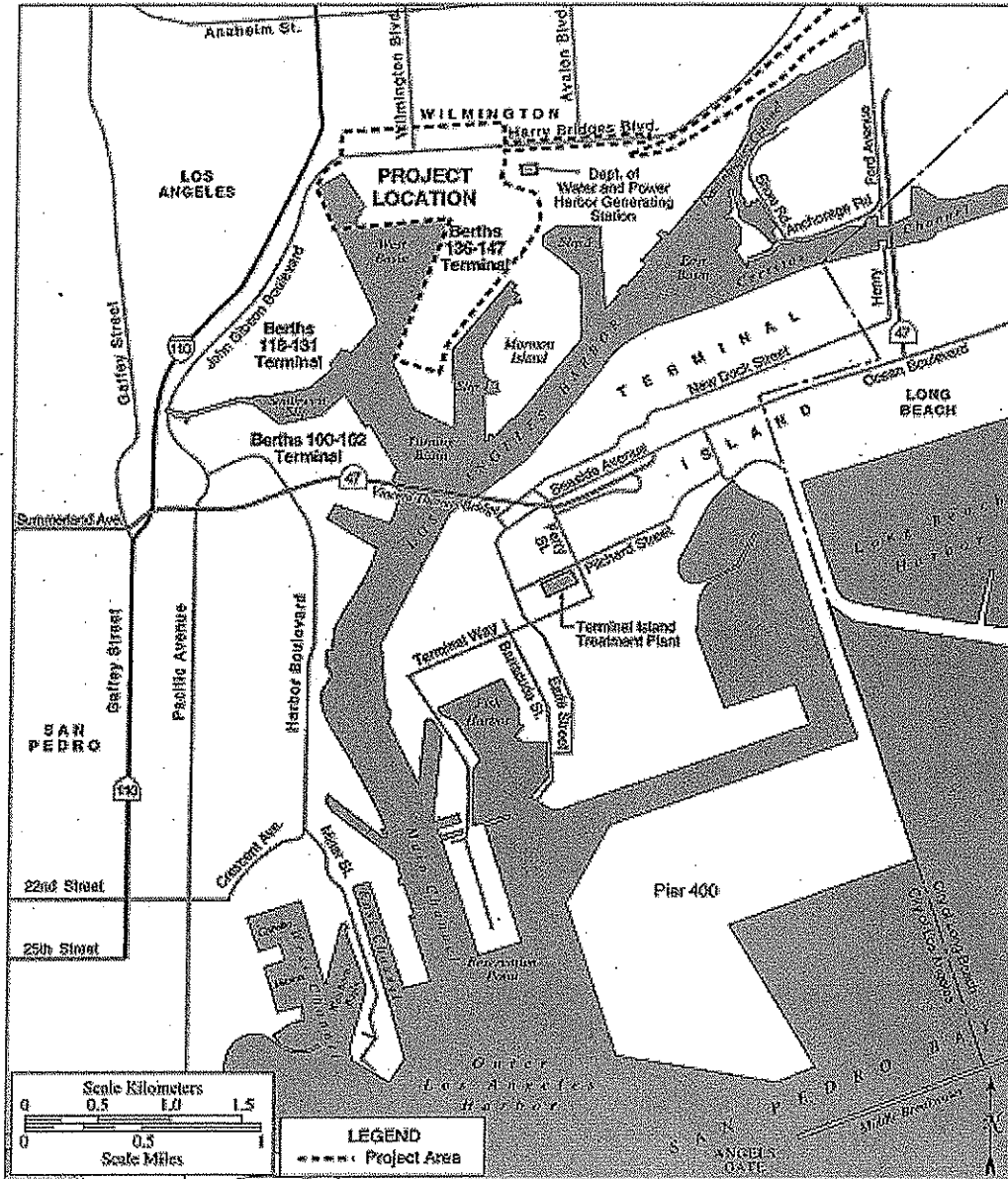


# EIR Addendum

## Berth 136-147 [TraPac] Container Terminal Project

[SCH No. 2003104005, ADP No. 030127-020]



Prepared by Los Angeles Harbor Department  
 Environmental Management Division  
 June 6, 2012

## I. Purpose

On December 6, 2007, the Board certified the Berths 136-147 [TraPac] Environmental Impact Report (EIR), State Clearinghouse #2003104005, and adopted a Mitigation Monitoring and Reporting Plan (MMRP), Findings of Fact and a Statement of Overriding Considerations. The LAHD has prepared an addendum to the TraPac EIR to assess the potential impacts associated with proposed project changes since the Final EIR was certified. According to Section 15164(a) of the State CEQA Guidelines, the lead agency will prepare an addendum to a previously certified EIR if changes or additions are necessary, but none of the conditions described in Section 15162 calling for the preparation of a subsequent or supplemental EIR have occurred. An addendum need not be circulated for public review but can be included in or attached to the EIR. The decision-making body considers the addendum with the EIR prior to making a subsequent decision on the project.

Section 15162 of the State CEQA Guidelines states that, for a project covered by a certified EIR, preparation of a subsequent or supplemental EIR rather than an addendum is required only if one or more of the following conditions occur:

- 1) Substantial changes are proposed in the project that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
  - a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - d) Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

## II. Scope and Content

This addendum has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq.), and the State CEQA Guidelines (California Administrative Code [CAC] 1500 et seq.). This addendum describes the affected environmental resources and evaluates the potential changes in the impacts that were previously

described in the 2007 Final EIR with respect to building and operating the TraPac project. The criteria for determining the significance of environmental impacts in this addendum analysis are the same as those contained within the certified EIR. The threshold of significance for a given environmental effect is the level at which the LAHD finds a potential effect of the proposed project to be significant. Thresholds of significance can be defined as a "quantitative or qualitative standard, or set of criteria, pursuant to which significance of a given environmental effect may be determined" (CEQA Guidelines, Section 15064.7 [a]). Except as noted in particular sections of the document, the LAHD has adopted the City of Los Angeles CEQA Thresholds for purposes of this addendum, although some criteria were adapted to the specific circumstances of this project.

The analysis in this addendum focuses on the changes to the impacts that would potentially occur as a result of project modifications. The scope of analysis contained within this addendum addresses the environmental resource areas that were previously analyzed in the certified EIR. The following issues were therefore evaluated in preparation of this addendum:

- Aesthetics
- Air Quality and Meteorology
- Biological Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Noise
- Transportation/ Circulation
- Marine Transportation
- Utilities and Public Services
- Water Quality, Sediments, and Oceanography

### III. Previous Environmental Documents Incorporated by Reference

Consistent with Section 15150 of the California State CEQA Guidelines, the following documents were used in preparation of this addendum and are incorporated herein by reference:

- Berths 136-147 [TraPac] Container Terminal Draft EIS/EIR, December 2007, (SCH No. 2003104005)
- Berths 136-147 [TraPac] Container Terminal Final EIS/EIR, December 2007, (SCH No. 2003104005)
- Berths 136-147 [TraPac] Container Terminal Mitigation Monitoring Report and Program, December 2007

#### IV. Proposed Project Modifications

##### 1. Substituting Rubber Tire Gantry Cranes with Rail Mounted Gantry Cranes

###### *EIR Assumption*

The EIR assumed that wharfside gantry cranes would be electric powered and rubber tired gantry (RTG) cranes would be diesel powered, and both would be used for purposes of handling containers at the redeveloped TraPac terminal. As described in the EIR, containers would be hauled by yard tractors between the vessel berths and the new rail yard. At the rail yard, containers would be lifted onto and off of railcars by diesel-fueled RTGs. Yard tractors would be used to move containers in and out of the stacks, which would be grounded. The number of RTGs to be utilized during operations was not specified in the EIR. However, the total throughput capacity analyzed in the EIR was 2,389,000 TEUs (1,277,540 containers) per year. That maximum capacity is expected to be reached by 2025 as described in Chapter 2 (Project Description) of the EIR.

Improvements associated with loading areas for the RTGs, such as reinforced concrete runways, were included in the Phase I construction activities analyzed for the on-dock rail yard and backland improvements. These improvements are not within the limits of federal jurisdiction and are not subject to federal permitting requirements by the US Army Corps of Engineers. The concrete runways would be built parallel to the wharf at Berth 142-147. Final engineering design estimates included four rows of concrete runways, approximately 14,800 linear feet per pair.

The EIR analyzed the significance of the project's air emissions, including greenhouse gas emissions, for construction and operational activities associated with the RTGs in Section 3.2 (Air Quality and Meteorology). The EIR determined that air quality impacts from both construction and operation of the project would be significant. To mitigate significant environmental impacts related to air quality, the EIR identified numerous mitigation measures (MMs AQ-1 through AQ-5 and AQ-18A for construction emissions; MMs AQ-6 through AQ-18B for operational emissions). However, even with implementation of these mitigation measures, air quality impacts from construction would be significant. Similarly, even with implementation of mitigation measures AQ-6 through AQ-18B, air quality impacts from operations would be significant. No other feasible mitigation measures were identified to further reduce these significant impacts. As such, the EIR concluded that air quality impacts from construction and operations were significant and unavoidable.

The EIR determined that the project would produce significant greenhouse gas emissions and identified mitigation measures AQ-6, AQ-9-10, AQ-14, AQ-16, and AQ-19 through AQ-24 to reduce these emissions. However, implementation of these mitigation measures would not reduce greenhouse gas emissions below the significance threshold. No other feasible mitigation measures were identified to further reduce these significant impacts. As such, the EIR concluded that greenhouse gas impacts were significant and unavoidable.

The EIR also analyzed the impacts of construction and operations of the RTGs in the backlands area on other environmental resource areas and identified applicable mitigation measures including: MM CR-1 for potential archaeological resources encountered during construction, MM GEO-1 for emergency response planning during construction, MM GW-1-2 for soil and groundwater contamination encountered during construction, MM NOI-1 for noise control measures during

construction, MM PS-1 through PS-3 for recycled materials during construction and solid waste management, and MM WQ-2-3 for pollution control and prevention during operations.

### ***Proposed Modifications***

TraPac requested that the Harbor Department modify the scope of the project to allow for rail mounted gantry (RMG) cranes rather than the originally planned RTG cranes. RMGs will be electric powered and automated, resulting in zero emissions when in operation. In addition, in place of diesel-fueled yard tractors and their associated emissions related to moving containers in and out of the stacks from the wharf side gantry cranes to the stacks and/or the intermodal container transfer facility (ICTF) rail yard, diesel electric shuttles will be used to move containers in and out of the stacks from the wharf side gantry cranes to the stacks and/or ICTF.

RMG operations require improvements and equipment that are different from those required under an RTG operation. The proposed change would require removal of the RTG-related improvements that have already been constructed to date and installation of the RMG-related improvements. According to engineering estimates, approximately 1,844 linear feet of concrete runways have been built, which is roughly 10 percent of the total RTG-related improvements originally proposed. This construction is relatively minor in comparison to overall project construction and other ongoing activities and would be replaced with approximately 20,500 linear feet of RMG runway, including rail runways and necessary electrical infrastructure to provide power to the cranes, communications, and control conduits to the Administration Building and Yard Operations building. In addition, approximately 702 new reefer plugs would be added in the RMG stacking area beyond the 458 reefer plugs that currently exist in the backlands area. The location for the RMG runways would be the same as the originally planned RTG runways parallel and perpendicular to the wharf.

### ***Comparison of Impacts***

The analysis contained herein demonstrates and provides substantial evidence that no additional significant impacts are present, nor would the severity of known significant impacts be increased by the proposed project. Below is a discussion of the resource areas that could potentially be impacted by this change in scope and a discussion of why the impact determinations made in the EIR would not be affected.

### ***Air Quality and Meteorology***

The proposed change to substitute electric-powered RMGs in place of diesel-fueled RTGs results in a beneficial change through the use of an environmentally preferred zero emission technology. Although there would be a minor increase in temporary construction activities from the removal of approximately 1,844 linear feet of concrete runways, the same mitigation measures identified in the EIR would still be required and implemented and no new significant impacts would occur as a result of this change, nor would there be any substantial increase in the severity of impacts identified in the EIR. Over the long term, terminal operations would result in a substantial reduction in emissions from the use of electric-powered RMGs in place of diesel-powered RTGs. This reduction is a beneficial change that would not cause any new significant air quality impacts or any substantial increase in the severity of impacts identified in the EIR. The mitigation requirements for operations would not change and would still be required and implemented as part of the project.

The use of RMGs in place of RTGs would increase electricity consumption compared to what was assumed in the EIR. Comparative air quality analysis was conducted to determine the change in greenhouse gas emissions with the change from RTGs to RMGs (see Appendix A). The analysis shows decreases of 68%, 93%, 82% and 68% for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and CO<sub>2</sub>e, respectively. This reduction is a beneficial change that would not cause any new significant greenhouse gas impacts or any substantial increase in the severity of impacts identified in the EIR.

#### *Other Resource Areas*

The RMGs would be built in the same location, would be of similar appearance and scale, and would provide essentially the same function as the originally planned RTGs. Construction of the RTG equipment would adhere to all construction-related mitigation measures outlined in the EIR to reduce impacts to various resource areas including cultural resources, groundwater and soils, noise, transportation and circulation and would also adhere to all applicable laws and Harbor Department policies for protection of resource areas. As such, switching from RTGs to RMGs would not differentially impact biological resources, cultural resources, geology, groundwater and soils, hazards and hazardous materials, land use, noise, transportation and circulation, marine transportation, utilities and public services, or water quality, sediments, and oceanography compared to what was analyzed in the EIR. Therefore, the proposed change would not result in any new significant impacts or any substantial increase in the severity of impacts identified in the EIR. Additionally, there would be no change to the mitigation measures identified in the EIR for other resource areas analyzed.

## **2. Update to Project Description – Rail Improvements**

### ***EIR Assumption***

Figure 1-5 of the certified Final EIR shows three tracks crossing Avalon Boulevard but does not depict the rail crossings at Fries Avenue and Water Street, which are also within the project boundaries. Although the project accounted for and analyzed the relocation of the Pier A Rail Yard, the EIR did not explicitly describe the number and configuration of existing and new rail tracks that would be required to serve the TraPac container terminal and the relocated Pier A Rail Yard.

### ***Proposed Modifications***

The following modifications shown as underlined text are being added to Section 1.4.2.4 on page 1-19 of the Final EIR to describe the finalized rail configuration connecting the TraPac terminal to the relocated Pier A Rail yard:

**Relocated Pier A Rail Yard.** The Pacific Harbor Line's (PHL) Pier A rail yard would be relocated to a 70-acre area northeast of the existing terminal, between the Consolidated Slip and Alameda Street (Figure 1-5), that is currently being used as a rail transfer facility. PHL would continue its operations out of the relocated rail yard. The new rail yard (Figure 1-5) would include 46 tracks totaling 125,630 feet of track, a locomotive service facility; a small yard office (8,000 square feet) with change areas, toilets, and showers; a track and material storage area; and 30 parking spaces for employees. The locomotive service facility would include a 5,000-square-foot diesel service shed and inspection pits, a sanding building with storage and compressed air, and a 1,000-square-

foot maintenance shed. The relocation of the rail yard would also include the construction of new rail tracks to connect the relocated yard to the TraPac terminal and the removal of some existing tracks (Attachment B). The rail track configuration between TraPac and the Pier A Rail Yard includes four tracks crossing Avalon Boulevard (one existing and three new). It also includes four tracks across Fries Avenue (one existing and three new) and three across Water Street (all new).

### ***Comparison of Impacts***

The assumptions used to calculate the rail yard capacity, which is an input variable to the transportation and air quality analyses in the EIR, is unchanged with the finalized track configuration shown in Attachment A. Specifically, the analysis accounted for a peak monthly throughput of 198,287 TEUs, thereby establishing the need for an additional rail track at the Avalon Boulevard crossing. This modification merely clarifies the project description and accurately accounts for the rail improvements at the rail crossing locations. Any construction-related traffic impacts resulting from construction of the rail tracks would be reduced through the development and implementation of a traffic management plan as required under mitigation measure TRANS-1 in the EIR. All other construction-related impacts to air quality, noise and other resource areas would be reduced by adherence to applicable construction mitigation measures for each resource area as identified in the EIR. Therefore, the finalized configuration would not result in any new significant impacts or any substantial increase in the severity of impacts identified in the EIR.

### **3. Other Minor Technical Changes to the Project Scope**

#### ***EIR Assumption***

The EIR assumed certain improvements associated with the wharf, gate complex, terminal buildings and structures, and utilities.

#### ***Proposed Modifications***

During final design, minor, technical project changes have been identified for the following:

- a. Wharf Specifications: A concrete pile-supported wharf has been reduced from 1,014 to 874 linear feet.
- b. Main Gate: Minor changes have been made to lane configurations, truck scales, guard booths, and concrete pedestals for communications and cameras.
- c. Crane Maintenance Building at B142: The building size has been reduced from 7,000 to 5,000 square feet.
- d. Yard Operations Building: The building size has increased from 3,000 to 5,700 square feet.

### ***Comparison of Impacts***

The minor technical changes to building size are not substantial and would not result in any new significant environmental impacts or any substantial increase in the severity of impacts previously identified in the EIR.

**Attachment A  
Comparative GHG Emission Analysis**

**Annual RTG Usage from TraPac EIR**

Analysis Year	Terminal Container Throughput (TEU/yr) <sup>a</sup>	RTG Work Performed (hp-hr/yr) <sup>b</sup>	Diesel Brake-Specific Fuel Consumption Factor (lb/hp-hr) <sup>c</sup>	Diesel Fuel Density (barrels/metric ton) <sup>d</sup>	Diesel Fuel Consumption (gal/yr)
2003 (Baseline)	892,014	1,904,186	0.41	7.46	110,957
2007	1,091,207	2,329,404	0.41	7.46	135,734
2015	1,747,626	3,730,664	0.41	7.46	217,386
2025	2,389,088	6,267,433	0.41	7.46	365,203
2038	2,389,088	6,267,433	0.41	7.46	365,203

Notes:

- a. Container throughputs for the analysis years were obtained from the TraPac EIR.
- b. Consistent with the TraPac EIR, RTG work performed was scaled from 2001 actual RTG usage provided by Starcrest (11/19/2004). Equipment rated horsepower and annual hours of operation were converted to work performed (hp-hr/yr) using an average load factor of 0.43 (from TraPac EIR). Consistent with the TraPac EIR, RTG work performed in 2025 and 2038 was scaled up by an additional 23% to simulate the effects of additional equipment usage needed to handle future cargo levels within a constrained terminal space (>8,000 TEUs/acre).
- c. An average brake-specific fuel consumption (BSFC) factor of 0.41 for RTGs was obtained from the CARB OFFROAD 2007 data file "Equip.csv". The BSFC factor and diesel fuel density were used to convert RTG work performed (hp-hr/yr) into diesel fuel consumption (gal/yr).
- d. Diesel fuel density was obtained from the California Climate Action Registry (CCAR) *General Reporting Protocol* v. 3.1 Appendix B.

**Annual RTG GHG Operational Emissions**

Analysis Year	Diesel Fuel Consumption (gal/yr)	GHG Emission Factors (kg/gal) <sup>a,b</sup>				GHG Emissions (metric ton/yr) <sup>c</sup>			
		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	
2003 (Baseline)	110,957	10.21	0.00058	0.00026	1,133	0.06	0.03	1,143	
2007	135,734	10.21	0.00058	0.00026	1,386	0.08	0.04	1,398	
2015	217,386	10.21	0.00058	0.00026	2,220	0.13	0.06	2,240	
2025	365,203	10.21	0.00058	0.00026	3,729	0.21	0.09	3,763	
2038	365,203	10.21	0.00058	0.00026	3,729	0.21	0.09	3,763	

Notes:

- a. CO<sub>2</sub> emission factors are from the 2011 *Climate Registry Default Emission Factors*, Table 13.1.
- b. N<sub>2</sub>O and CH<sub>4</sub> emission factors are from the 2011 *Climate Registry Default Emission Factors*, Table 13.6 for diesel equipment (Other Large Utility Non-Highway Vehicles).
- c. CO<sub>2</sub>e is "CO<sub>2</sub>-equivalent", which equals CO<sub>2</sub> + (CH<sub>4</sub> x 21) + (N<sub>2</sub>O x 310).



### Annual Equivalent RMG Usage Due to RTG Replacement

Analysis Year	Terminal Container Throughput (TEU/yr) <sup>a</sup>	RMG Electric Motor Efficiency <sup>b</sup>	Electricity Consumption without Regeneration (kWh/yr) <sup>c</sup>	Electricity Regeneration Factor <sup>d</sup>	Net Electricity Consumption Including Regeneration (kWh/yr)
2007	1,091,207	90%	1,930,041	70%	579,012
2015	1,747,626	90%	3,091,062	70%	927,319
2025	2,389,088	90%	5,192,916	70%	1,557,875
2038	2,389,088	90%	5,192,916	70%	1,557,875

**Notes:**

- a. Container throughputs were obtained from the TraPac EIR.
- b. RMG electric motor efficiency is estimated from Attachment C of *Determining Electric Motor Load and Efficiency* (U.S. Department of Energy, Motor Challenge Fact Sheet, DOE/GO-10097-517, undated). A 90% efficiency is the lowest published efficiency from all load and RPM combinations for a 300-hp electric motor (the largest motor listed).
- c. RMG work performed is assumed to be equivalent to RTG work performed on a per-TEU basis. Therefore, RMG electricity consumption without regeneration is assumed to be equivalent to the RTG work performed divided by the RMG-electric motor efficiency (and converted to kWh/yr).
- d. The 70% electricity regeneration factor is the low end of the range (70-75%) provided by the manufacturer for hoisting down (10/26/2011).

### RMG GHG Operational Emissions Due to RTG Replacement

Analysis Year	Net Electricity Consumption Including Regeneration (kWh/yr)	GHG Emission Factors (lb/MWh) <sup>a</sup>					GHG Emissions (metric ton/yr) <sup>b</sup>				
		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
2007	579,012	1,711.72	0.02219	0.02382	450	0.01	0.01	452	0.01	0.01	452
2015	927,319	1,711.72	0.02219	0.02382	720	0.01	0.01	723	0.01	0.01	723
2025	1,557,875	1,711.72	0.02219	0.02382	1,210	0.02	0.02	1,215	0.02	0.02	1,215
2038	1,557,875	1,711.72	0.02219	0.02382	1,210	0.02	0.02	1,215	0.02	0.02	1,215

**Notes:**

- a. GHG emission factors are LADWP-specific, and were obtained from eGRIDweb (<http://efpub.epa.gov/efgridweb>, EPA, December 29, 2010, "Electric Generating Company, Location (Operator)-based"). Emission factors are for the 2005 year, the most recent year available.
- b. CO<sub>2</sub>e is "CO<sub>2</sub>-equivalent", which equals CO<sub>2</sub> + (CH<sub>4</sub> x 21) + (N<sub>2</sub>O x 310).

Change in Annual Operational GHG Emissions Due to RTG Replacement with RMGs

Analysis Year	Change in GHG Emissions (metric ton/yr)				Percent Change in RMG Emissions Relative to RTG Emissions			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
2007	-936	-0.07	-0.03	-947	-68%	-93%	-82%	-68%
2015	-1,500	-0.12	-0.05	-1,516	-68%	-93%	-82%	-68%
2025	-2,519	-0.20	-0.08	-2,547	-68%	-93%	-82%	-68%
2038	-2,519	-0.20	-0.08	-2,547	-68%	-93%	-82%	-68%



TRAPAC EXPANSION PROGRAM - SCOPE CHANGES

DATE	DESCRIPTION	NOTES
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B136-147 TRAPAC ADMINISTRATION BUILDING & MAIN GATE

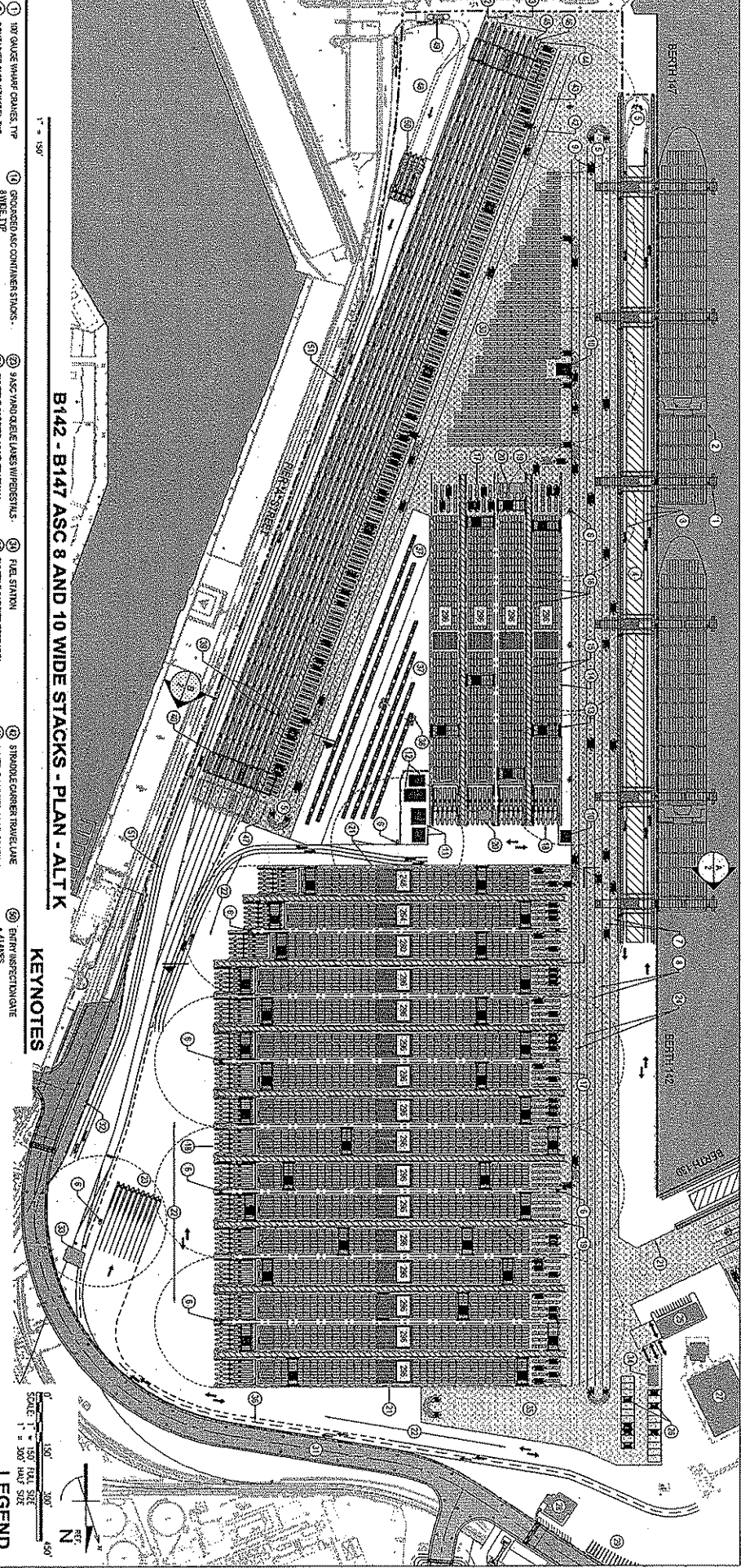
	Yard Operations Bldg - Size Increase	Increase in size from 3,000sf to 5,700sf (increase is due to addition of functions from Admin. Bldg to yard ops, including resulted changes from exterior corridor to interior)
	Guard Booth (500sf/booth) - Delete 2	Deleted 2 of 3 guard booths
	Truck Scales - Add 4	Increase from 5 to 6 truck scales
	Camera T-poles - Deleted @ Out-Gate	Deleted @ out-gate per tenant, will attach cameras to canopy
	ILWJ Parking Area - Reduced	ILWJ parking area decreased in size from 7 to 4 acres, due to Lagoon Grade Sep. Added area s/o Lagoon/HBB for overflow parking
	POV Overflow Parking - Added	1/15/10 meeting w/ Mike C., Dave W., PHL Rail Yard team - eliminate at-grade xing due to safety issues & PHL's opposition. Allow handicap parking @ Yard Ops Bldg. 2/2/11 Mike C. to reconsider, if PUC approves
1/15/2010	At-Grade Crossing - Deleted	Tenant does not want to relocate Main In-Gate due to proximity to fault line & slope
9/27/2010	Main In-Gate Canopy - Deleted	

B142-147 BACKLAND IMPROVEMENTS

10/6/2010	Driver Service Bldg @ Pier A St. Gate - Deleted	per AECOM's Alternate H
10/21/2010	Crane Maintenance Bldg - Size Decrease	Lease provides for 7,000sf. 10/21 tenant wants to decrease size by +/- 2,500sf.
10/29/2010	Trucker restrooms (350sf/each) - Delete	Deleted total 4 trucker restrooms
2/16/2011	20 RMG Rows Panzerbelt - Deleted	AECOM's Alternate K (w/ reduced pavement section in RMG stacking areas and Cable Management Assembly)

Scope Changes Accepted: Neal N. Vance date 3/16/11  
for Trapac

Franklin Kratz date 3/11/11  
for City of Los Angeles Harbor Department



**B142 - B147 ASC 8 AND 10 WIDE STACKS - PLAN - ALT K**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1 TOP GAUGE WARE CRANES, TYP</li> <li>2 CONCRETE SILL (7 WIDE), TYP</li> <li>3 BONDICANT TRAVEL LINES</li> <li>4 HYDROCOIL (4) W/CONCRETE</li> <li>5 TORUS/ROUND AREA</li> <li>6 HIGH VOLT LIGHT POLE W/WIRE</li> <li>7 2 W/HAIR CONDUIT LINES</li> <li>8 SHUTTLE CARRIER, TYP</li> <li>9 NEW ELECTRICAL TRANSFORMER</li> <li>10 EXISTING ELECTRICAL SUBSTATIONS</li> <li>11 NEW ELECTRICAL SUBSTATIONS</li> <li>12 GAUGE ASC - 2/FERROCAL TYP</li> <li>13 GROUNDING ASC CONTAINERS STACKS - 8 WIDE TYP</li> <li>14 ASC 8/10 W/310'S AT BOTH ENDS, TYP</li> <li>15 ASC 8/10 W/310'S AT BOTH ENDS, TYP</li> <li>16 ASC POWER CABLE TRUNKING, TYP</li> <li>17 ASC SHUTTLE CARRIER TRANSFER AREA, 4/FERROCAL TYP</li> <li>18 STREET TRUCK TRANSFER AREA, 5/SLOTS FERROCAL TYP</li> <li>19 ELECTRICAL AND FIRE SERVICE ASILE, TYP</li> <li>20 ASC INHALE/EXHALE POSITION</li> <li>21 SAFETY FENCE AT PERIMETER OF AUTOMATED OPERATIONS</li> <li>22 STREET TRUCK WASH/WAXING AND TRAVEL AREA</li> <li>23 9/ASC 7/10 Q/LEVEL LINES W/POSTS/SLITS</li> <li>24 SHUTTLE CARRIER ASSEMBLY/DECELEBRATION LINE</li> <li>25 WAREHOUSE OPERATIONS BUILDING (CRANE MAINTENANCE BUILDING)</li> <li>26 EXISTING MAINTENANCE AND REPAIR AND OPERATIONS BUILDING</li> <li>27 EQUIPMENT TRUCKS</li> <li>28 SHUTTLE CARRIER BUFFER AREA</li> <li>29 MAINTENANCE ACCESS (PERIMETER DETECTOR ROAD)</li> <li>30 AT GRADE WALL CROSSING</li> <li>31 FUEL STATION</li> <li>32 SHUTTLE CARRIER TEST AREA</li> <li>33 DECELEBRATION LINE</li> <li>34 WAREHOUSE OPERATIONS BUILDING (CRANE MAINTENANCE BUILDING)</li> <li>35 EXISTING MAINTENANCE AND REPAIR AND OPERATIONS BUILDING</li> <li>36 EQUIPMENT TRUCKS</li> <li>37 SHUTTLE CARRIER BUFFER AREA</li> <li>38 MAINTENANCE ACCESS (PERIMETER DETECTOR ROAD)</li> <li>39 AT GRADE WALL CROSSING</li> <li>40 SHUTTLE CARRIER TRAVEL LINE</li> <li>41 SHUTTLE CARRIER ASSEMBLY/DECELEBRATION LINE</li> <li>42 ELECTRICAL SERVICE ASILE</li> <li>43 FIRE RISK W/STREPS AT EACH END, TYP</li> <li>44 SHUTTLE 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Revision: \_\_\_\_\_ By: \_\_\_\_\_ Date: \_\_\_\_\_

TR-418-PORT-11-10-10

**AECOM**

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Scale: 1" = 300'

North Arrow

**LEGEND**

- TERMINAL BOUNDARY
- GROUNDING CONTAINERS - ASC 438 TOS
- ASC SHUTTLE CARRIER TRANSFER AREA - 20 TOS
- ASC SHUTTLE CARRIER TRANSFER AREA - 100 SPOTS TONNAGE
- GROUNDING REBERS AT SERVICE PLATFORMS - 18 TOS
- ELEVATED AT CONTAINERS FOR MOBILE SCANNER - 78 SPOTS
- 35' SPAN CONTAINERS - ASC 388 GROUNDING STACKS - 241 TOS
- BUILDINGS
- GRADE SEPARATION - RETAINED STRUCTURE
- GRADE SEPARATION - CONDUIT SUPPORTED STRUCTURE
- ELECTRICAL
- AREA OF AUTOMATED OPERATION
- SAFETY FENCE
- CONCRETE BARRIER
- EXH. TRUCK FLOW
- EXH. TRUCK FLOW
- VEHICLE FLOW DIRECTION
- RAIL

Sheet Title: **B142-B147 ASC 8 AND 10 WIDE STACKS - PLAN - ALT K**

Project Number: 601146632

Sheet Number: 1 of 1

**PRELIMINARY**



## AUDIT COMMITTEE

Report to the  
Board of Harbor Commissioners

Transmittal 4

DATE: APRIL 11, 2012  
TO: BOARD OF HARBOR COMMISSIONERS  
FROM: AUDIT COMMITTEE  
SUBJECT: APPROVAL OF BASELINE PROJECT BUDGETS

Transmittal herewith is Resolution No. 12-7291 - Approval of Baseline Project Budgets.

**THE PORT  
OF LOS ANGELES**Executive Director's  
Report to the  
Board of Harbor Commissioners

**DATE:** APRIL 11, 2012

**FROM:** ENGINEERING

**SUBJECT:** RESOLUTION NO. 12-7291 - APPROVAL OF BASELINE  
PROJECT BUDGETS.

**SUMMARY:**

Staff is requesting approval of baseline budgets for the attached Capital Improvement Program (CIP) projects of the City of Los Angeles Harbor Department (Harbor Department). These baseline budgets were approved by the Audit Committee (Audit Committee) of the Board of Harbor Commissioners (Board) on March 15, 2012. Baseline budgets will be used as a benchmark against which to measure project performance. They represent an understanding of the costs of the projects based on its current scope. These budgets provide a basis for financial approval and a reference for managing changes to the cost of the project. Staff believes having the Board formalize the approval of baseline budgets allows greater financial oversight and budget control, especially during early project phases, as noted in the Industrial, Economic and Administrative Survey dated June 2011.

**RECOMMENDATION:**

It is recommended that the Board of Harbor Commissioners:

1. Approve the Baseline Project Budgets for the Capital Improvement Program projects listed in Transmittal 1; and
2. Adopt Resolution No. 12-7291.

DATE: APRIL 11, 2012

PAGE 2 OF 4

SUBJECT: APPROVAL OF BASELINE PROJECT BUDGETS

DISCUSSION:

Background - The Harbor Department has formalized its project approval process in response to the Industrial, Economic, and Administrative Survey dated June 2011. The survey included two recommendations dealing with project scope and costs:

1. Finding 15: Clearly defining project scope earlier in the project life cycle could help to mitigate cost growth and schedule slippage.
2. Finding 16: Improved Status Reporting could assist the Board in the oversight of capital projects.

The terms project and program are used throughout this report. A project is a term typically used to define a discreet element of work to construct, for example, a wharf, a building, or a rail yard. A project is typically executed under a single construction contract. A program is a term used to describe a collection of related projects accomplishing multiple elements of work. A program is typically executed using multiple construction contracts spanning several years.

Prior to placing projects into the CIP, they must be preliminarily approved for inclusion by the Project Development Committee (PDC). This recommended inclusion in the Harbor Department's CIP Budget is ultimately approved by the Board during the Harbor Department's budget process. The PDC is co-chaired by the Deputy Executive Directors of Development and Business Development and includes participation of the Deputy Directors of Operations, Finance and Administration, and External Relations. The PDC is facilitated by the Planning and Economic Development Division and includes seven additional Divisions involved in the project development process. Information required by the PDC for project approval includes scope, cost, schedule, and other pertinent details deemed necessary to make an informed decision.

The PDC's preliminary project approval is an internal staff recommendation that staff commence development work on the project leading up to later proposals going to the Board for certification of environmental assessments, project approvals, contract approvals and budget approvals. Preliminary design and the environmental review process are initiated once projects are approved through PDC. For smaller, less complex projects, the initial PDC project approval may serve as the approval of the baseline budget. For larger complex projects, the baseline budget will not be set until completion of the environmental review process allowing confirmation of the project scope. These larger projects may entail multiple approvals at various project phases in order to approve expenditures required to evaluate and define the project, and baseline budgets for these projects must be approved by the Audit Committee and the Board.



DATE: APRIL 11, 2012

PAGE 3 OF 4

**SUBJECT: APPROVAL OF BASELINE PROJECT BUDGETS**

Transmittal 1 lists the proposed baselines for current projects both in design and construction. These items only include projects that have environmental clearances or involve only initial project studies.

Project Baseline Budget - The top ten CIP programs/projects proposed for baseline approval are listed in Transmittal 2. These projects, and the corresponding programs under which they fall, represent a five-year period and over \$998 million of the nearly \$1.2 billion worth of projects listed in Transmittal 1.

Given the complexity of these projects, it is impossible to predict all the variables that may be encountered during the project life cycle. In order to mitigate this variability, a contingency of between 10 and 25 percent is included in the initial project cost estimate. The percentage applied is a function of the project risk and the clarity of the project scope. Even with these contingencies, it is unrealistic to expect baseline budgets will not change during the life of the project. If a project is projected to exceed the approved baseline budget, staff will bring the project back to the Audit Committee and the Board for re-approval. Staff is developing protocols for monitoring and reporting these budgets. Once these protocols are developed, they will be presented to the Audit Committee for approval.

**ENVIRONMENTAL ASSESSMENT:**

The proposed action is approval of baseline project budgets for CIP projects. This action does not constitute environmental clearance for any of the listed projects. As an administrative activity, the Director of Environmental Management has determined the proposed action is exempt from the California Environmental Quality Act (CEQA) in accordance with Article II, Section 2(f) of the Los Angeles City CEQA Guidelines.

**ECONOMIC BENEFITS:**

This Board action will have no employment impacts for the five-county region. However, the CIP projects proposed for baseline approval would generate significant economic impacts for the region. When the projects are brought before the Board for approval, at that time, staff will be able to fully evaluate the economic benefits of the projects.

**FINANCIAL IMPACT:**

Approval of this Board action establishes a reference baseline budget for the CIP projects discussed herein. Establishment of such baseline budgets does not authorize approval or commencement of a project but are intended to represent an understanding of the costs and scope of the projects at a point in time based on current available information. Adoption of the Harbor Department's CIP Budget is undertaken each fiscal year as part of the annual budget adoption process and presented to the Board for

DATE: APRIL 11, 2012

PAGE 4 OF 4

SUBJECT: APPROVAL OF BASELINE PROJECT BUDGETS

approval. The baseline budgets proposed will serve as a reference for managing proposed CIP budget costs and scope when recommending to approve the CIP Budget each fiscal year.

CITY ATTORNEY:

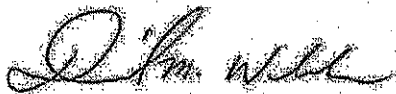
The Office of the City Attorney has reviewed this Board report and finds it raises no legal issues at this time.

TRANSMITTALS:

- 1. CIP Baseline Budgets, February 2012
- 2. Top Ten CIP Programs/Projects Proposed for Baseline Approval

FIS Approval:  (initials)

CA Approval:  (initials)



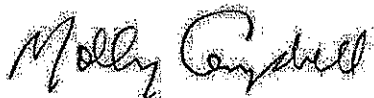
ANTONIO V. GIOIELLO  
Chief Harbor Engineer



for MICHAEL R. CHRISTENSEN, P.E.  
Deputy Executive Director, Development

AVG:sc  
Baseline Budget Approval

APPROVED:



for GERALDINE KNATZ, Ph.D.  
Executive Director

Author: Antonio V. Gioiello

## Transmittal 2

## Top Ten CIP Programs/Projects Proposed for Baseline Approval

The below listed projects are the 10 individual projects with the highest budgeted cost proposed for base lining.

Project	Baseline Budget	Program
1. Channel Deepening Project:	\$171,250,000	Channel Deepening
2. Berth 200 Rail Yard:	\$112,510,000	Transportation
3. B. 145-147 - Wharf Improvements	\$ 88,075,000	TraPac
4. B. 142-145 - Backland Improvements - Phases 2-4	\$ 79,340,000	TraPac
5. South Wilmington Grade Separation:	\$ 84,300,000	Transportation
6. RB 136-139 - Terminal Buildings & Main Gate	\$ 62,500,000	TraPac
7. B. 142-147 - TraPac ICTF & Backland	\$ 40,426,000	TraPac
8. B. 401-406 - Alternative Maritime Power (AMP)	\$ 40,380,000	AMP
9. B. 302-305 - Alternative Maritime Power	\$ 37,500,000	AMP
10. B. 145-147 Backland Improvements - Phase 1C	\$ 26,595,000	TraPac

As the above projects are elements of larger programs, the information below puts these projects into the context of the identified programs. These program costs reflect only the costs of the requested baseline approvals. They do not include entire program costs for projects already completed and closed out.

### TraPac Container Terminal Development: \$364,495,525

The TraPac Terminal Expansion Program consists of multiple projects to redevelop approximately 110 acres of existing container terminal property and develop an additional 50 acres of new property. The new terminal will consist of approximately 226 acres. Improvements include the construction of 705 feet of new wharf and upgrade of 1,022 feet of existing wharf at Berths 145-147, new cranes (purchased by TraPac), Alternative Maritime Power (AMP), dredging to -53', new buildings (including Administration Building, Yard Operations, Crane Maintenance/Marine Building, Driver Service Buildings), ILWU parking, new Main Gate (including security, customs and guard booths), Intermodal Container Transfer Facility (ICTF), and general container yard improvements including heavy duty pavement, electrical, lighting, water system, fire protection, sanitary sewer, storm drain, electric rail mounted automated stacking cranes, and demolition of existing buildings and gates. The projects in the program include:

B. 144 & 145-147 - AMP	\$14,500,000
B. 136-139 - Alternative Marine Power	\$12,500,000
*B. 145-147 - Wharf Improvements	\$88,075,000
B. 136 Electrical System Circuit Breaker Upgrade	\$ 140,000
B. 147 Backland Improvements - Phase 1A	\$ 4,215,000
B. 145-147 Backland Improvements - Phase 1B	\$19,870,000
B. 136-147 - Terminal Improvement Project EIR	\$ 5,581,025
*B. 145-147 Backland Improvements - Phase 1C	\$26,595,000
*RB 136-139 - Terminal Buildings & Main Gate	\$62,500,000
*B. 142-147 - TraPac ICTF & Backland	\$40,426,000
*B. 142-145 - Backland Improvements - Phases 2-4	\$79,340,000
B. 134-135 - Backland Expansion (5-acre)	\$10,753,500

**Channel Deepening Program: \$204,390,000**

The objective of the Channel Deepening Program is to dredge existing navigation channels and berthing areas from -45 feet to a depth of -53 feet Mean Lower Low Water (MLLW). Elements of the project include creating 40 acres of land at Berth 306APL's terminal expansion, 43 acres of land at Berth 102 for the China Shipping Terminal expansion, 5 acres of fill at berth 136 for the TraPac terminal expansion, 50 acres of shallow water fill for environmental enhancements, and an 8 acre fill at berths 243-245 as a confined disposal facility for disposal of material unsuitable for ocean disposal. Numerous elements of the Channel Deepening Program have already been completed. Remaining project elements include:

*Channel Deepening Program	\$171,250,000
B. 243-245 - Southwest Marine Dry Dock Demolition and Slip Fill	\$ 19,000,000
Cabrillo Shallow Water Habitat	\$ 14,140,000

**Transportation: \$221,860,000**

The Transportation program includes various projects to facilitate vehicle, truck, and train movements in and out of the Port complex. Major projects submitted for baseline approval include the Berth 200 Rail Yard and the South Wilmington Grade Separation.

The Berth 200 rail yard project includes rail yard site development and tracks, yard office building and diesel engine service facility, roadway, storage tracks for West Basin Intermodal Container Transfer Facility (ICTF), West Basin East ICTF and West Basin mainline track improvements. This project will be completed in two phases, the Berth 200 Rail Yard and the Berth 200 Rail Yard Track Connections. This new rail yard will replace the existing Pier A rail yard to allow for the construction of the new ICTF for the TraPac Container Terminal.

The South Wilmington Grade Separation will carry vehicular traffic over the main line railroad tracks to Port terminals. This grade separation will serve as the main entrance to the TraPac Terminal and the entire Mormon Island and Wilmington Waterfront areas.

Baseline approval request for the Transportation Program include:

*Berth 200 - Rail Yard	\$112,510,000
Berth 200 - Rail Yard Track Connections	\$ 25,050,000
*South Wilmington Grade Separation:	\$ 84,300,000
Advanced Transportation Management Information System	\$ 2,000,000
Southern California International Gateway (SCIG) - EIR	\$ 8,635,000
Terminal Island Street Improvements	\$ 1,521,240
Navy Way - Traffic Control Devices Study	\$ 32,500

**Alternative Maritime Power (AMP) Program: \$113,780,000**

The AMP systems in this program are required for Port container terminals to be able to connect vessels to shore power supply and meet the California Air Resource Board (CARB) as well as the Clean Air Action Plan (CAAP) air emissions requirements. AMP projects not included in this program are associated with separate

terminal developments. For example, AMP systems in the TraPac and China Shipping Terminals are included in the program costs of those terminals. AMP projects include:

*B. 401-406 - Alternative Maritime Power	\$40,380,000
*B. 302-305 - Alternative Maritime Power	\$37,500,000
B. 212-216 - Alternative Maritime Power Phase II	\$11,650,000
B. 230-232 - Alternative Maritime Power	\$10,750,000
B. 125-129 - Alternative Maritime Power	\$10,600,000
B. 214-215 - Alternative Marine Power Retrofit	\$ 2,900,000

### **China Shipping Terminal Development: \$93,505,028**

Although the individual projects associated with the China Shipping Terminal Development are not included in the top ten most expensive projects, the program is a major element of the Department's Capital Improvement Program budget. The three-phase program involves construction of a container terminal with 2,500 ft. of wharf, 134 acres of backland, two bridges, and two buildings.

Phase I construction was completed in December of 2003. Work included construction of a 1,200 feet wharf at Berth 100, 75 acres of backland development, and an access Bridge across the Southwest Slip between the China Shipping and Yang Ming terminals. Phase II construction was completed December 2010. This phase included construction of 925 feet of wharf at Berth 102, 18 acres of backland behind Berth 102, and a second access bridge between the China Shipping and Yang Ming Terminals. The remaining elements of the project include the construction of 17 acres of backland, a Marine Operations building, 375' Berth 100 south wharf extension (total wharf length at B100-102 of 2,500 feet), another 10 acres of backland improvements, and a Crane Maintenance Building. Projects included in this program are:

#### **Phase II**

B. 100-109 - Marine Operations Building	\$12,000,000
B. 102 - Rear Backland Development	\$25,000,000

#### **Phase III**

B. 94-95 - Catalina Express Relocation	\$ 3,875,000
B. 49-50 Lane Victory Relocation	\$ 550,028
B. 100-102 -14 of 24 Acre Backland Development	\$20,900,000
B. 100 - Wharf - South Extension	\$24,700,000
B. 100 - Wharf - South Extension - AMP	\$ 2,700,000
B. 100-109 - Crane Maintenance Building	\$ 3,780,000

\*Designates projects included in the top ten highest costs requesting baseline approval

**TRAPAC TERMINAL PROGRAM**  
**Cost Summary & Status Update**  
 August 2013

**SUMMARY:**

The TraPac Terminal Program consists of 10 projects and will provide wharves, automated backlands, rail facilities, buildings, and gates for the Port of Los Angeles' first automated container terminal at Berths 136-147.

In February 2012, the TraPac Terminal Program was identified in the City's Priority Capital Projects at the Port. This program will deliver the first automated terminal on the West Coast.

Cost Summary

The baseline budget for this program of \$364,495,525 was approved by the Board on April 19, 2012. A significant portion of this cost estimate was based on conceptual level information, particularly the automated portions of the program. Our current cost estimate for the program has increased to \$510,412,388, a 40% increase or \$145,916,813, due to a number of factors detailed in the Background Section of this memo.

There was no grant funding at the time the baseline budget was set. Since then, the Port has secured \$60,081,000 bringing the POLA Share amount to \$450,331,388, a 23.5% increase.

It is important to note that these cost increases are not a result of tenant initiated scope changes. The table below indicates the overall baseline, Grant Funding, current cost estimate, and the delta.

	<b>TraPac Terminal Program</b>
<b>Baseline Budget (4/19/2012)</b>	\$364,495,525
Grant Funding	\$0
POLA Share	\$364,495,525
<b>Current Cost Estimate</b>	\$510,412,338
Grant Funding	\$60,081,000
POLA Share	\$450,331,338
<b>Delta = Current Cost Estimate – Baseline Budget</b>	<b>\$145,916,813</b> (40.0% increase)
<b>Delta POLA Share = Current POLA Share – Baseline POLA Share</b>	<b>\$85,835,813</b> (23.5% increase)

### Current Status Summary

The Program is on schedule and continues to move forward. Three projects are complete, and three are under construction. Two projects are nearing advertisement, and the last two are in design and planning. See attached Exhibit 2 for a project listing and status.

### BACKGROUND

The TraPac Terminal Program will expand, modernize, and automate the TraPac container terminal at Berths 136-147. The improvements consist of expanding and redeveloping container terminal facilities, new buildings and structures, a new main gate and secondary gate, a new wharf extension and upgrades to the existing wharf facilities, AMP, a new intermodal container transfer facility (ICTF), and automated backland infrastructure.

Consultant CH2M Hill was selected as the designer for the automated backlands due to their experience in container terminal automation design, specifically APM Terminal in Norfolk, VA, the only existing automated terminal in the United States. There is no standard design for automated container terminals, each is unique based on layout, operational needs, and equipment. The conceptual construction cost estimates for the automated backlands were prepared by the consultant in October 2011, based on costs and experience in the development of the Norfolk terminal. Design of the first phase of Berths 142-147 Backland automation began early 2012, and subsequent phases started design near the end of 2012. As design progressed, the cost estimates increased as a result of factors unique to this development and the current bidding climate. Berths 144-145 Backland Improvements (Phase 1C automation) opened bids in January 2013 with unit bid item costs much higher than anticipated at the baseline budget.

### Cost Increase Factors

The primary reasons for the cost increase for the TraPac Terminal Terminal are indicated below. A detailed Cost Increase Breakdown is included as Exhibit 3:

1. Electrical System  
(Current Estimate \$67.08 M - Baseline Estimate \$15.01 M = Delta \$52.07 M)
  - a. As design of the terminal progressed, it was evident that automation requires a much more extensive electrical infrastructure than estimated, a 4.16 kV power supply system was assumed in the baseline estimate. During the design process, it was determined that a 12.47 kV power supply system was required, which resulted in additional infrastructure including new high voltage 34.5kV electrical substations, multiple feeds from DWP, switchgear, transformers, voltage conversion switchgear, and extensive underground conduit for telecommunication, fiber optics, and power. 12.47 kV is a US standard voltage; Norfolk, VA is supplied by 13.2 kV and CTB Hamburg is 10 kV.
  - b. Construction activities in the San Pedro Bay are at a historic high. The current bidding climate is showing significant signs of large cost increases, particularly with electrical infrastructure. With the number of AMP projects in construction, in both ports, the availability of equipment and resources have been stretched and is resulting in increased costs showing up in recent bids.
2. Storm Drain System  
(Current Estimate \$14.53 M - Baseline Estimate \$1.63 M = Delta \$12.90 M)
  - The original storm drain design consisted of infiltration to comply with the City of Los Angeles Watershed Protection Program and the Standard Urban Stormwater Mitigation

Plan (SUSMP). The existing site is contaminated. Since infiltration is prohibited due to the high levels of contamination, the storm drain system resulted in a very intricate design, including sand filtration, subdrains, trench drains, and overflow system.

3. Concrete Pavement & Foundations  
(Current Estimate \$24.60 M – Baseline Estimate \$3.80 M = Delta \$20.80 M)
  - Due to site conditions and geotechnical studies, design is resulting in thicker concrete pavement sections, pile supported buildings and structures, thicker and stronger crane rail, and surcharge to decrease long-term settlement.
4. Water/Fire Protection System, Los Angeles Fire Department  
(Current Estimate \$6.01 M - Baseline Estimate \$1.22 M = Delta \$4.79 M)
  - The automated stacking block layout does not provide for typical LAFD access per code, design was approved by LAFD to incorporate an extensive stand pipe system, containment areas, and additional access points to allow LAFD to provide fire protection.
5. Fencing and Specialty Gates  
(Current Estimate \$3.88 – Baseline Estimate \$0.75 = Delta \$3.13 M)
  - Life Safety fencing surrounding the automated areas and individual blocks are required to provide life safety and separation between automated and manned operations. Additional specialty gates, with electrical infrastructure, will be equipped with radio-frequency identification (RFID) to maintain safety for personnel accessing the automated areas.
6. Construction Inflation (\$8.60 M)
  - Per Engineering News Record (ENR), there was a 5.9% cost increase in local labor union wages for 2012. Recent bids are indicating much higher labor and material costs.
7. Phasing, Specialty Design, Construction Management, Miscellaneous  
(Current Estimate \$58.09 – Baseline Estimate \$14.50 = Delta \$43.59 M) See Exhibit 3 for details.
  - Additional phasing within each project is required to facilitate ongoing terminal operations at a higher than anticipated level and concurrent construction projects that are adjacent, nearby and interdependent.
  - Additional miscellaneous specialty infrastructure associated with automation: reefer racks, protected access, booth and weight activated pad for trucker safety.
  - Grant funding deadlines required some schedules to be accelerated impacting design and construction phasing.
  - Additional utility relocations were identified during design.

#### Value Engineering

Engineering has and continues to perform value engineering to decrease the cost estimates. To date, approximately \$50 Million has been trimmed from these projects' cost estimates (see attached Exhibit 4). The following changes have been incorporated and have helped to reduce the cost estimates: revisions to materials and design elements of the storm drain system and electrical system, foundation selection for the automated stacking crane (ASC) crane rail, redesign of the rail mounted gantry (RMG) crane rail foundation, using construction material for surcharge instead of hauling material in and out, revising the phasing plan to reduce mobilization costs, early detailed coordination with 3<sup>rd</sup> party utilities to minimize impacts during construction.

The scopes of the projects, for the TraPac Terminal Program, are consistent with the proposed lease amendment.



**FINANCIAL IMPACT:**

The TraPac Terminal Program Baseline budget of \$364,495,525 was approved by the Board on April 19, 2012. The proposed revised baseline cost of \$510,412,388 for the TraPac Terminal Program will result in an increase of \$145,916,813. Reimbursement grant funding in the amount of \$60,081,000 was secured, resulting in a change in the POLA cost share from \$364,495,525 to \$450,331,338, which is a \$85,835,813 increase.

The TraPac Terminal Program is expected to be completed in 17/18. It is expected that through FY 12/13, \$154,263,637 of the \$364,495,525 April 19, 2012 Board adopted baseline budget, will have been expended. Funds in the amount of \$99,344,073 have been included in the FY 13/14 Capital Budget for the TraPac Terminal Program costs. Revised TraPac Terminal Program costs have been incorporated into the Harbor Department's ten-year Capital Improvement Program as follows:

Fiscal Year	Through 12/13	13/14 (estimated)	14/15 (estimated)	15/16 (estimated)	16/17 (estimated)	17/18 (estimated)	Total
Amount	\$154,263,637	\$84,426,874	\$114,725,075	\$92,587,482	\$52,122,062	\$12,287,208	<b>\$510,412,388</b>

These project estimates include approximately 10% contingencies applied to individual project budgets.

Each fiscal year capital expenditures are requested to be budgeted as part of the annual budget adoption process before the Board.

**Grant Funding**

Grant Funding in the amount of \$60,081,000 has been allocated for three projects, within the TraPac Terminal Program. By the end of 2013, the Port should begin receiving reimbursements on one project. The remaining two should begin receiving reimbursements by 2014 and 2015.

**Rate of Return:**

The original Rate of Return at Board approval of the baseline budget was 10.09%. The revised Rate of Return, based on the current cost estimate, is 8.75%. The FY 2013-2014 and 5-year CIP includes the current cost estimates.

This Program continues to make financial sense because it:

- Fulfills our contractual commitment to deliver the terminal infrastructure required under our permit with TraPac
- Creates the capacity needed to meet the revenue projections planned for TraPac
- Returns 8.75% on our terminal infrastructure investment (compared to 10.09% initially)
- Allows us to take advantage of significant grant funding opportunities (see Exhibit 2)
- Compares well with POLB's per-acre development cost for similar automated terminal infrastructure (\$3.3M/acre @ TraPac versus \$3.9M/acre @ POLB's Middle Harbor, see Exhibit 5)

**PROGRAM CURRENT STATUS**

The status of the TraPac Terminal Program projects are at various stages from design and planning, bid and award, construction, and complete (see attached Exhibit 2). The remaining projects awaiting a construction start are described below.

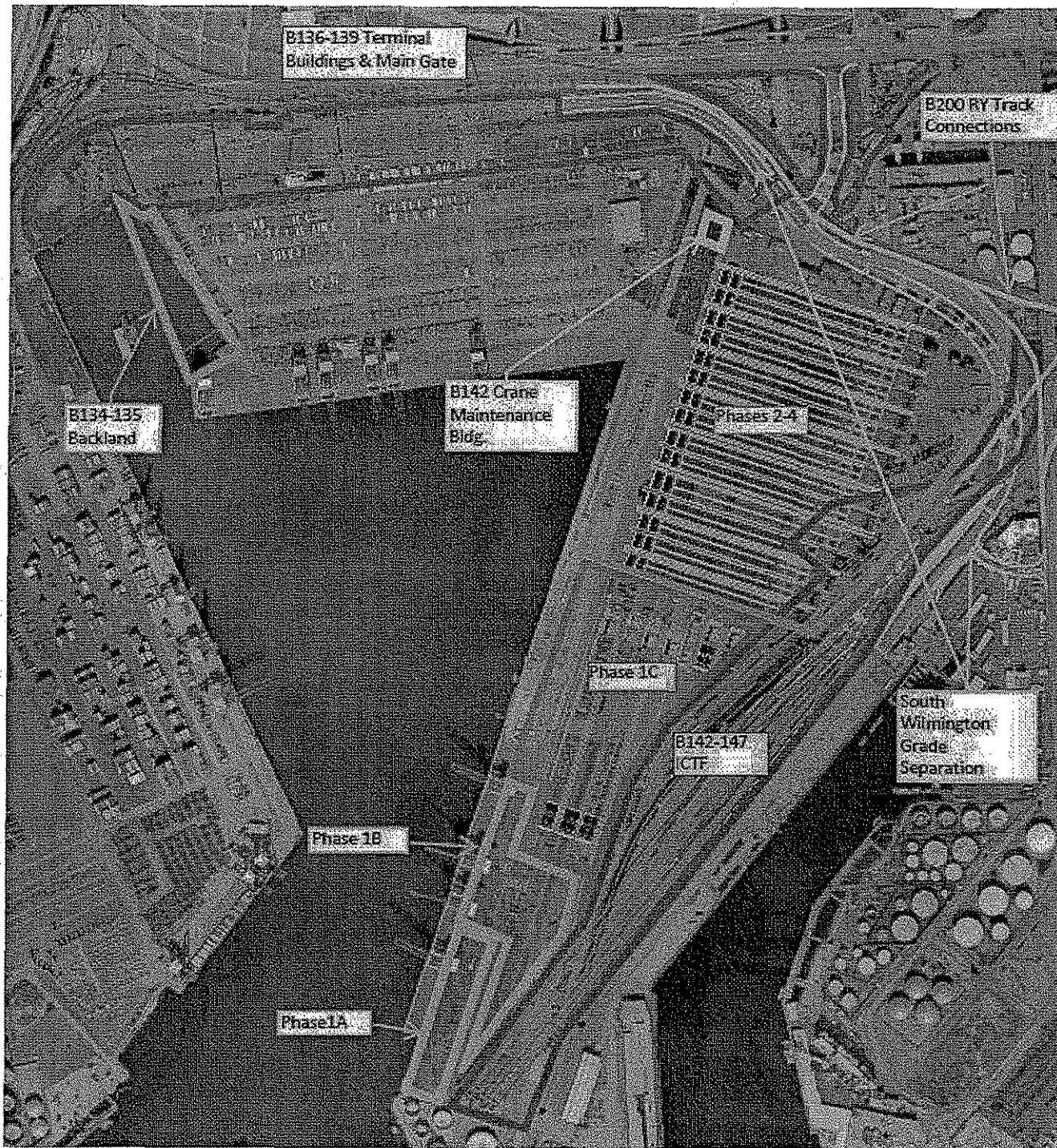
<b>TraPac Terminal Project</b>	<b>Status</b>	<b>Bid &amp; Award</b>	<b>Construction</b>
Berths 142-143 Backland Impr. (Phases 2-4 – Automation)	100% Design	Sept. 2013 – Dec. 2013	Feb. 2014 – Feb. 2018
Berths 142-147 ICTF (Automation)	100% Design	Sept. 2013 – Dec. 2013	Feb. 2014 – Feb. 2016
Berth 142 Crane Maintenance Building	80% Design	Mid 2015 – Early 2016	Early 2016 – Early 2017
Berths 134-135 Backland Terminal	Planning/ Pre-Design	Mid 2015 – Early 2016	Early 2016 – Mid 2017

These projects, in addition to the three under construction (Terminal Buildings and Main Gate, Phase 1B Automation, and Phase 1C Automation), are all moving forward on schedule. Staff will continue to monitor the progress of these projects and report their status on a quarterly basis, implementing any and all cost saving measures available within the scope of our contractual commitments.

**EXHIBITS:**

- Exhibit 1 TraPac Terminal Projects - Site Map
- Exhibit 2 TraPac Terminal Projects – Status & Cost Breakdown
- Exhibit 3 TraPac Terminal Projects – Cost Increase Breakdown
- Exhibit 4 TraPac Terminal Projects – Estimated Cost Reductions
- Exhibit 5 POLA/POLB Comparison (FYI Only)

# Exhibit 1 TraPac Terminal Projects - Site Map



Note Berth 200 Rail Yard & B145-147 Wharf not shown for clarity.

## Exhibit 2

## TraPac Terminal Projects – Status &amp; Cost Breakdown

TOTAL PROJECT - DESIGN & CONSTRUCTION										
TraPac Terminal Projects	WO	Status	Sept. 2009 (at Lease Execution)	Feb. 2011 Estimate (w/ conventional backland, no automation)	Feb. 2011 Estimate (includes automation)	April 19, 2012 Baseline Budget	Proposed Budget (May 2013)	Delta (Proposed - Baseline)	Grant Funding	
1	EIR/EIS and Small Misc Impvs. 24612 25111	Complete	\$5,110,405	\$5,721,025	\$5,721,025	\$5,721,025	\$5,221,189	\$(499,836)		
2	Berths 145 - 147 Wharf Imp., including AMP at B136-139 and B144-147 24242 24898 24943	Complete	\$107,695,285	\$115,075,001	\$115,075,001	\$115,075,000	\$111,931,001	\$(3,143,999)		
3	Berth 147 Backland Impr. (Phase 1A - Automation)	Complete	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	\$4,215,000	\$3,641,577	\$(573,423)		
4	Rear Berths 136-139 Terminal Buildings & Main Gate	In Const.	\$36,935,375	\$54,000,000	\$54,000,000	\$62,500,000	\$80,000,000	\$17,500,000		
5	Berths 145 - 147 Backland Impr. (Phase 1B - Automation)	In Const.	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	\$19,870,000	\$13,862,310	\$(6,007,690)		
6	Berths 144 - 145 Backland Impr. (Phase 1C - Automation)	In Const.	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	\$26,595,000	\$50,034,494	\$23,439,494	\$12,705,000	
7	Berths 142 - 143 Backland Impr. (Phases 2 - 4 Automation)	In Design	\$52,503,000	\$86,068,125	\$118,500,000	\$79,340,000	\$143,422,405	\$64,082,405	\$26,664,000	
8	Berths 142 - 147 ICTF (Automation)	In Design	\$36,807,446	\$40,426,000	\$40,426,000	\$40,426,000	\$85,865,560	\$45,439,560	\$20,712,000	
9	Berth 142 Crane Maintenance Building	In Design	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	included in B142 - 143 Backland	\$5,680,302	\$5,680,302		
10	Berths 134 - 135 Backland Expansion	Pre-Design	\$11,258,894	\$10,753,500	\$10,753,500	\$10,753,500	\$10,753,500	\$		
	<b>GRAND TOTAL</b>		<b>\$250,310,405</b>	<b>\$312,043,651</b>	<b>\$344,475,526</b>	<b>\$364,495,525</b>	<b>\$510,412,338</b>	<b>\$145,916,813</b>	<b>\$60,081,000</b>	
						Increase in Total Project Budget		40.0%		
	Grant Funding						\$60,081,000			
	<b>POLA SHARE</b>		<b>\$250,310,405</b>		<b>\$344,475,526</b>	<b>\$364,495,525</b>	<b>\$450,331,338</b>			
						Increase in POLA Share		23.5%		

\*Cost w/o EIR: \$245,200,000

## Exhibit 3

## TraPac Terminal Projects - Cost Increase Breakdown

	Current Estimate	Baseline Estimate	Delta
<b>Electrical System (\$52 M Increase)</b>			
Phase 1C Electrical System	\$ 12,404,000	\$ 2,398,600	\$ 10,005,400
New & Relocated HMP	\$ 780,000	\$ 584,000	\$ 196,000
Phs 2-4 Conduit, Wires, Cables, Ductbanks, MHs)	\$ 21,400,000	\$ 5,213,300	\$ 16,186,700
Equipment (Switchgears, Meters, Substations)	\$ 10,700,000	\$ 4,000,000	\$ 6,700,000
New & Relocated HMP	\$ 2,160,000	\$ 1,386,000	\$ 774,000
ICTF Conduit, Wires, Cables, Ductbanks, MHs)	\$ 5,980,000	\$ 425,000	\$ 5,555,000
Equipment (Switchgears, Meters, Substations)	\$ 11,400,000	\$ 200,000	\$ 11,200,000
New & Relocated HMP	\$ 2,260,000	\$ 800,000	\$ 1,460,000
<b>Subtotal</b>	<b>\$ 67,084,000</b>	<b>\$ 15,006,900</b>	<b>\$ 52,077,100</b>
<b>Storm Drain System (\$12.9 M Increase)</b>			
Phase 1C SD System, including Geotextile	\$ 4,230,000	\$ 346,000	\$ 3,884,000
Phases 2-4 SD System, including Geotextile	\$ 6,200,000	\$ 740,000	\$ 5,460,000
ICTF	\$ 4,100,000	\$ 540,000	\$ 3,560,000
<b>Subtotal</b>	<b>\$ 14,530,000</b>	<b>\$ 1,626,000</b>	<b>\$ 12,904,000</b>
<b>Concrete Pavement &amp; Foundations (\$20.8 M Increase)</b>			
Phases 1B & 1C Concrete Pavement	\$ 6,036,340	\$ 1,500,000	\$ 4,536,340
Phases 2-4 Concrete Pavement	\$ 6,500,000	\$ 1,100,000	\$ 5,400,000
RMG Rail Foundation (Ties/Ballast to Concr. Beam)	\$ 6,000,000	\$ 700,000	\$ 5,300,000
Building Foundation (Matt to Piles)	\$ 600,000	\$ 200,000	\$ 400,000
Surcharge	\$ 3,000,000		\$ 3,000,000
Crane Maintenance Building (Matt Foundation to Piles)	\$ 2,500,000	\$ 300,000	\$ 2,200,000
<b>Subtotal</b>	<b>\$ 24,636,340</b>	<b>\$ 3,800,000</b>	<b>\$ 20,836,340</b>
<b>Water/Fire Protection System, Los Angeles Fire Department (\$4.8 M Increase)</b>			
Phase 1C Water Distribution System	\$ 1,206,000	\$ 300,000	\$ 906,000
Phases 2-4 Water Distribution System	\$ 4,800,000	\$ 920,000	\$ 3,880,000
<b>Subtotal</b>	<b>\$ 6,006,000</b>	<b>\$ 1,220,000</b>	<b>\$ 4,786,000</b>
<b>Safety Fencing and Specialty Gates (\$3.1 M Increase)</b>			
Phase 1C	\$ 777,819	\$ 100,300	\$ 677,519
Phases 2-4	\$ 1,900,000	\$ 152,000	\$ 1,748,000
ICTF	\$ 1,200,000	\$ 500,000	\$ 700,000
<b>Subtotal</b>	<b>\$ 3,877,819</b>	<b>\$ 752,300</b>	<b>\$ 3,125,519</b>
<b>Construction Inflation Subtotal</b>	<b>\$ 8,600,000</b>		<b>\$ 8,600,000</b>
<b>Phasing, Specialty Design, Construction Management, misc (\$43.6 M Increase)</b>			
Phase 1C Reefer Racks	\$ 2,229,000	\$ 1,000,000	\$ 1,229,000
Booth & weight activated pad for trucker safety	\$ 78,900		\$ 78,900
Prefabricated Walkways	\$ 110,000		\$ 110,000
10% Contingency at Award	\$ 3,839,954		\$ 3,839,954
Phs 2-4 Additional Design/Construction Support	\$ 2,000,000		\$ 2,000,000
Reefer Racks	\$ 8,700,000	\$ 4,000,000	\$ 4,700,000
Phasing/Mobilization 10%	\$ 8,000,000		\$ 8,000,000
Booth & weight activated pad for trucker safety	\$ 230,000		\$ 230,000
Prefabricated Walkways	\$ 400,000		\$ 400,000
Contingency/Allowance	\$ 8,000,000	\$ 6,000,000	\$ 2,000,000
10% Contingency at Award	\$ 11,000,000		\$ 11,000,000
ICTF Additional Design/Construction Support	\$ 1,500,000		\$ 1,500,000
Contingency/Allowance	\$ 5,000,000	\$ 3,500,000	\$ 1,500,000
10% Contingency at Award	\$ 7,000,000		\$ 7,000,000
<b>Subtotal</b>	<b>\$ 58,087,854</b>	<b>\$ 14,500,000</b>	<b>\$ 43,587,854</b>
<b>GRAND TOTAL</b>			<b>\$ 145,916,813</b>

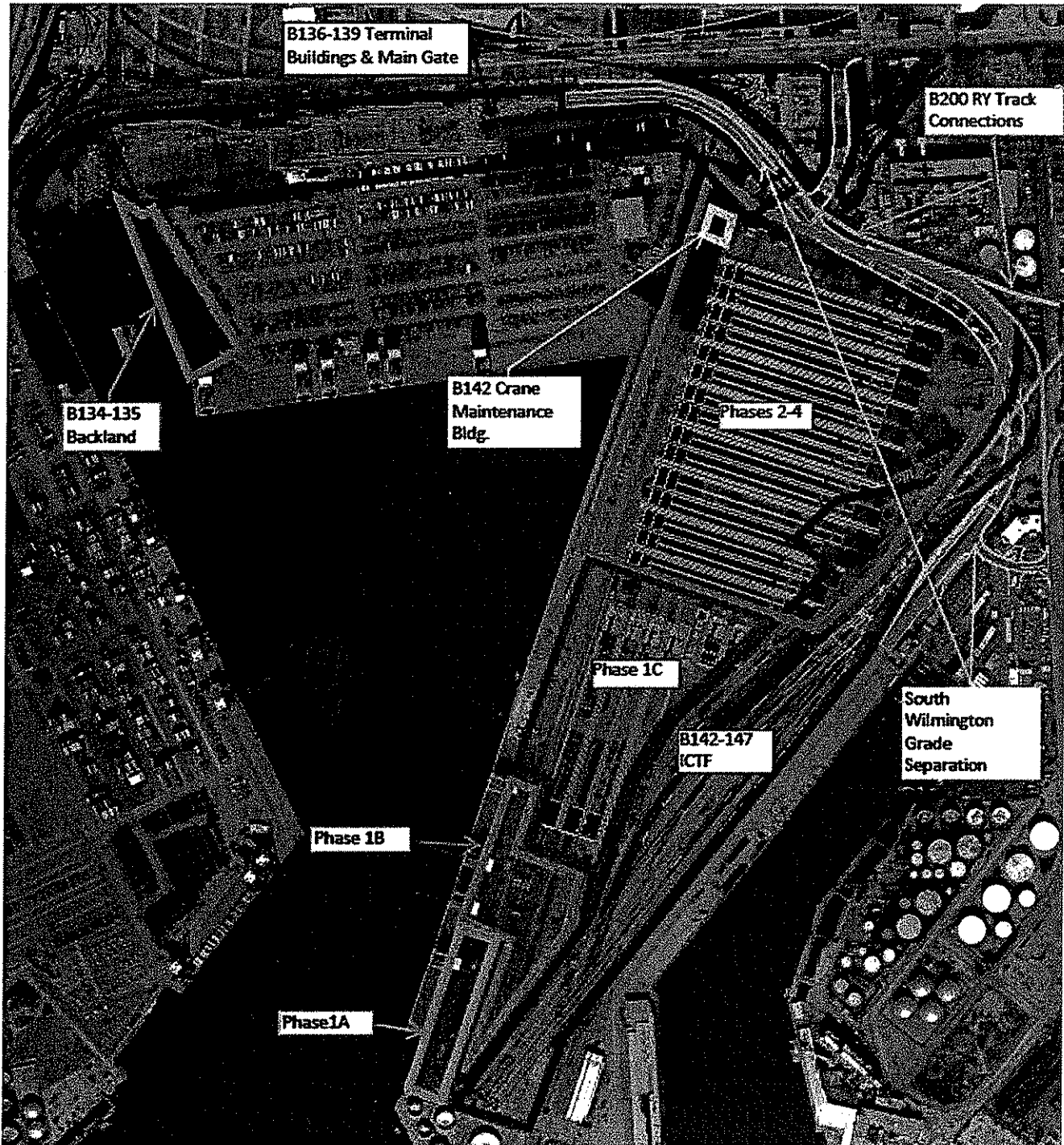
## Exhibit 4

## TraPac Terminal Projects – Estimated Cost Reductions

Project	Status	Description	Estimated Cost Reduction*	Notes
Berths 144-145 Backland Impr. (Phase 1C – Automation)	In Construction	Storm Drain System	\$ 600,000	Material substitution, CM to verify amount
		<b>Subtotal</b>	<b>\$ 600,000</b>	
Berths 142-143 Backland Impr. (Phases 2-4 Automation)	In Construction	Demo & Dispose AC pvmt	\$ 650,000	Reduced volume
		Excavation	\$ 75,000	Reduced volume
		Asphalt Concrete pvmt	\$ 400,000	Reduced quantity
		CMB	\$ 626,000	Maximized Department furnished CMB
		Curb in Rows	\$ 890,000	Eliminated
		Concrete pvmt & Misc Concrete	\$ 620,000	Reduced quantity
		Ballast, Subballast, Crushed Rock	\$ 920,000	Reduced quantity & adjusted unit costs per Ph 1C bids
		Reefer Racks	\$ 3,665,000	Reduced quantity, modified design
		Container Corridor	\$ 220,000	Reduced quantity
		Concrete barriers, pvmt markings, tire stops	\$ 166,000	Reduced quantity
		Fencing, gates, railings	\$ 790,000	Reduced quantity & adjusted unit costs per Ph 1C bids
		Storm Drain System	\$ 3,700,000	Material substitution (HDPE)
		Mobilization/Phasing	\$ 7,750,000	Reduced from 15% to 10% of subtotal
		Electrical System	\$ 13,860,000	Re-evaluated materials & equipment, adjusted unit costs
		Contingency	\$ 5,000,000	Reduced contingency
<b>Subtotal</b>	<b>\$ 39,332,000</b>			
Berths 142-147 ICTF (Automation)	100% Design	RMG Rail System	\$ 5,900,000	Modified foundation & unit costs (TraPac agreed to increase # of wheels from 6 to 8 on RMGs to accommodate the change in design)
		Rail	\$ 240,000	Refined estimate due to design
		Storm Drain System	\$ 343,000	Material substitution (HDPE)
		Surcharge Material	\$ 1,500,000	Replaced with onsite construction material
		Slurry Seal - deleted	\$ 100,000	Modified AC mix, to not require slurry seal
		Contingency	\$ 1,700,000	Reduced contingency
		<b>Subtotal</b>	<b>\$ 9,783,000</b>	
<b>TOTAL</b>			<b>\$ 49,715,000</b>	

\*Estimated Cost Reductions are estimates only

### TraPac Expansion Program Phasing Map (Projects)



Note Berth 200 Rail Yard & B145-147 Wharf not shown for clarity.

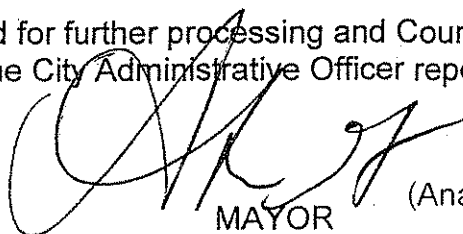
0150-09316-0001

**TRANSMITTAL**

TO Geraldine Knatz, Ph.D., Executive Director Harbor Department	DATE NOV 05 2013	COUNCIL FILE NO.
FROM The Mayor	COUNCIL DISTRICT 15	

**PROPOSED SECOND AMENDMENT TO PERMIT NO. 881 AND APPROVAL OF  
REVISED BUDGET FOR THE TRAPAC TERMINAL PROGRAM**

Transmitted for further processing and Council consideration.  
See the City Administrative Officer report attached.

  
MAYOR (Ana Guerrero)

MAS:ABN:10140072t



REPORT FROM

OFFICE OF THE CITY ADMINISTRATIVE OFFICER

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Date: October 24, 2013

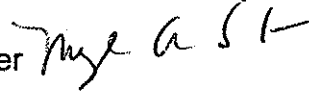
CAO File No. 0150-09316-0001

Council File No.

Council District: 15

To: The Mayor

From: Miguel A. Santana, City Administrative Officer



Reference: Communication from the Harbor Department dated September 24, 2013; referred by the Mayor for report on September 26, 2013

Subject: **PROPOSED SECOND AMENDMENT TO PERMIT NO. 881 AND APPROVAL OF REVISED BUDGET FOR THE TRAPAC TERMINAL PROGRAM**

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**SUMMARY**

The Harbor Department (Port) Board of Harbor Commissioners (Board) requests approval of Board Resolution No. 13-7559 to authorize the proposed Second Amendment (Amendment) to Permit No. 881 (Permit) with TraPac Inc. (TraPac), to design, develop and construct container terminal facilities at Port Berths 136-147. The proposed Amendment will allow the Port to modify and amend the TraPac Terminal Program's (TraPac Program) scope of work and budget, as follows: 1) incorporate new automated container terminal operations; 2) include corrections, clarifications, and technical changes (to the project scope); and 3) increase the current \$364,495,525, budget by a proposed \$145,916,813, for a total budget of approximately \$510.4 million over a 30-year lease agreement.

The modified TraPac Program consists of 10 capital projects for wharves, rail facilities, building and gate complexes, an Alternative Maritime Power (AMP) system, an intermodal container transfer facility (ICTF), and the first automated terminal on the West Coast. The ICTF serves to enhance the efficient flow of intermodal (truck and rail) cargo through the Port of Los Angeles (POLA) and Port of Long Beach. These projects are intended to increase the efficiency of Port operations and will allow for the greater use of Port land and facilities in the future. See Attachment for a brief overview of the 10 projects, including project purpose, status, and estimated cost increase breakdown. The terminal berths' improvements will be constructed to allow for TraPac to continue terminal operations throughout the construction.

**BACKGROUND**

In 1984, the Mayor and Council approved the original lease agreement, Permit No. 552, with Mitsui O.S.K. Lines (MOL), the parent company of Trans Pacific Containers Service Corporation (TraPac) to operate POLA marine container terminals (C.F. 84-1835). In 1987, the Board authorized Mitsui O.S.K. Lines (MOL) to reassign the permit to TraPac. The original agreement was for ten years and one five-year optional extension for a total of 15 years. The original agreement lacked many standard permit provisions that the Port currently uses and did not fulfill many of the efficiencies and requirements for modern container terminal operations. In September 2009, the Council and Mayor approved a 30-year replacement lease term with TraPac Inc. (C.F.09-2165).

The current lease provides for the expansion, redevelopment and modernization of cargo handling operations on Port-owned land and, watersides, and wharf and backland areas at Berths 136-147. The lease is on approximately 226 acres of Port property, including wharf area. The Port's original budget for the TraPac Program included an estimated cost of \$245 million. In May 2010, the Board approved the First Amendment to the Permit to implement the 2010 Container Customer Initiatives for TraPac, which provided an empty container and trans-shipment discount, and an on-time container terminal tenant discount. This was part of a series of financial incentive programs to Port tenants to remain competitive in the market place and maintain its long-term market share. In April 2012, the Board approved a revised budget for the TraPac Program of \$364,495,525 because of project contingencies and increased costs.

### **PROPOSED SECOND AMENDMENT TO PERMIT NO. 881**

The proposed Second Amendment will modify the scope of work of terminal redevelopment as requested by TraPac to incorporate terminal automation, including Automated Stacking Cranes (ASC), and other project-related design and construction modifications of the TraPac Program. In addition, the Board approved correlating changes to the TraPac budget, including the receipt of grant funds and addressed minor corrections, clarifications, and technical changes to the scope of the TraPac Program. The automated terminal operations, using ASC cranes and equipment, are intended to enhance and improve the operational efficiency of the terminal, which will allow for greater use of current and future Port land and investments. Although more costly to the Port, TraPac is expected to provide additional revenue and increase throughput charges to the Port. (Throughput charges are for moving a container through a container yard off of or onto a ship). The Port will redevelop, build and expand the wharf and backlands, terminal buildings, main gates, a crane maintenance building, the ICTF and increase water depths. The proposed TraPac improvements for Berths 136-147 consists of multiple projects to expand the container terminals and provide air quality mitigation measures and projects that meet or exceed Clean Air Action Plan (CAAP) compliance guidelines. The TraPac Program includes the following 10 project/activities:

- Environmental Impact Report (EIR) Statement (EIS) and Miscellaneous Improvements;
- Berth 147 Backland Improvements (Phase 1A – Includes Automation);
- Berths 145-147 Wharf Improvements;
- Berths 136-139 Terminal Buildings and Main Gates;
- Berths 145-147 Backland Improvements (Phase 1B – Includes Automation);
- Berths 144-145 Backland Improvements (Phase 1C – Includes Automation);
- Berths 142-143 Backland Improvements (Phases 2-4 – Includes Automation);
- Berths 142-147 TraPac ICTF (Includes Automation);
- Berth 142 Crane Maintenance Building; and,
- Berths 134,135 Backland Expansion (5 Acre expansion)

The Port has included funding in the current FY 2013/14 CIP budget and in the estimated budget for the Port's 10-year CIP. The Port states that construction of the TraPac Program is expected to be completed by FY 2017/18.

**Terminal Automation**

In April 2010, TraPac requested to revise the project design and scope of work for the TraPac Program to allow for the inclusion of terminal automation using Automated Rail Mounted Gantry Cranes (RMG), also known as Automated Stacking Cranes (ASC). Initially, TraPac began using the Rubber Tire Gantry (RTG) cranes, which operate on diesel power to move containers off cargo ships and onto trucks for transportation. However, the ASCs are considered the environmentally preferred technology because they are electric-powered and result in zero emissions. The Port advises that the use of the ASCs will help to mitigate potential health risks by reducing diesel fuel emissions. Also, the ASCs are already incorporated into the Port's certified Environmental Impact Report (EIR). According to the Port, the ASC operations require equipment and improvements that are different from those used with the RTG cranes. Consequently, the Port would have to replace the RTG equipment that has already been obtained with the proposed ASC equipment and improvements. Although the Port and TraPac will share in the potential costs and risks to improve operations and efficiencies for the terminal, TraPac indicates that it plans to make an investment of over \$170 million toward the TraPac Program.

**Proposed Budget Impact of Permit No. 881**

In August 2009, the Board approved Permit 881 with TraPac for a 30-year lease agreement, from 2009 through 2039, to operate a container terminal facility at Port Berths 136-147. The original cost estimates for the TraPac Program was \$245,200,000, based on concept-level designs. In April 2012, the Port's project costs increased to its current budgetary amount of approximately \$364,495,525 due to the following reasons: 1) potential growth and complexity of the project scope; 2) design and development of the 10 projects comprising the TraPac Program; and 3) inclusion of the ASC-related improvements and automated terminal operations.

The proposed Amendment will increase the budget for the TraPac Program by approximately \$145,916,813, to a total of \$510,412,338 for the terminal redevelopment project. Since approval of the original agreement, the Port has secured grant funding for \$60,081,000, which will be used to reduce the POLA's projected shared budget to \$450,331,388. This amount does not include the \$5.2 million that the Port paid to complete the EIR. According to the Port, the TraPac Program has been proceeding on an expedited basis due to the strategic importance of the terminal improvements and is currently on-schedule for completion in the first part of 2018. Below is table providing an overview of budgets, grant funding and the current and total cost estimate for the TraPac Program:

<b>Date</b>	<b>Budget Category</b>	<b>TraPac Terminal Program</b>
Sept. 2009	Original-Lease Execution	\$ 245,200,000
	Scope of Work, Design, Development of Automated Stacking Cranes (ASC), 10 TraPac Projects	\$ 119,295,525
April 2012	<b>Current Total Budget</b>	<b>\$ 364,495,525</b>
Proposed 2013	Second Amendment	\$ 145,916,813
	<b>TraPac Terminal Program Budget (without Grant Funding)</b> <i>(Proposed 40% Increase)</i>	<b>\$ 510,412,338</b>
	Grant Funding	\$ (60,081,000)
	<b>Proposed POLA Budget Funding Appropriation</b> <i>(Proposed 23.5% Increase)</i>	<b>\$ 450,331,388</b>

It is the policy of the Board that pricing for use of Port property will be structured to enhance the Port's competitive position and advance the Port as a positive place to do business while working to achieve a minimum Rate of Return (ROR) on land and on improvements consistent with Port financial management policies. The targeted ROR in the Port's Leasing Policy is a 10 percent ROR on the value of land and a 12 percent ROR on the value of improvements for facilities. According to the Port, the two respective ROR rates are blended (weighted), with various cash flow estimates to obtain a target ROR rate. According to the Port, the financial analysis is based on several categories of cash flow estimates, including revenue, operating expenses, land market values, and other various improvements, assembled yearly, from the start until the end of the prescribe lease term to determine the internal ROR.

The revised ROR rate for the TraPac Program, based on the current cost estimate, is calculated at 8.75 percent, which is a deviation from the Port's Leasing Policy. In 2009, the Port estimated that the original revenue projections for the ROR would be approximately 10.02 percent, based on the value of land and improvements. The Port will have an opportunity to renegotiate and reset the rents in the lease agreement every five years to impact the ROR based on fair market values and economic outlooks. Although the 8.75 percent ROR is less than the targeted ROR, the Port states that the TraPac Program will benefit the POLA operations by implementing the following:

- Expand, modernize, and automate the TraPac container terminal facilities at Berths 136-147;
- Supports TraPac as a major tenant contributing to the Port's leadership in the North American container goods movements. According to the Port, during FY 2011/12, TraPac provided about \$29.8 million to Port revenue (or 7.3 percent of the Port's operating revenue);
- Allows the Port to take advantage of grant funding of approximately \$60 million to offset use of Harbor Revenue Funds to fund the TraPac Program;
- Fulfills the Port's contractual commitment to deliver the terminal infrastructure required under its lease agreement with TraPac and creates the capacity needed to meet the revenue projections planned for TraPac;
- Creates the first automated terminal on the West Coast, which POLA believes will benefit TraPac, the Port and other container terminal facilities; and,
- Supports an estimated 7,442 one-year, full-time jobs, in construction spending in the region; an increase of approximately 2,100 construction-related jobs from the start of program.

The Port states that construction of the TraPac Program is expected to be completed by the 2017/18 fiscal year (FY). The Port has included funding in the current FY 2013/14 CIP budget and in the estimated budget during the Port's 10-year CIP. The Port's capital expenditures will be budgeted and approved as part of the annual FY budget adoption process for the 10-year CIP, as follows:

FY	Through 2012/13	2013/14 (estimated)	2014/15 (estimated)	2015/16 (estimated)	2016/17 (estimated)	2017/18 (estimated)
<b>Amount</b>	\$154,263,637	\$84,426,874	\$114,725,075	\$92,587,482	\$52,122,062	\$12,287,208
<b>FY 2012-18 TOTAL</b>	<b>\$510,412,338</b>					

As part of their lease agreement, TraPac agreed to implement the following: (1) to expand, modernize and redevelop terminal berths 136-147 and to improve traffic mitigation projects; (2) to implement a compensation structure based on charges collected on containers (TEUs) through a Minimum Annual Guarantee (MAG); (3) to implement an Environmental Compliance Program (ECP) which outlines applicable environmental laws, polices, rules and directives and the operational mitigation measures required by TraPac's EIR; and, (4) to develop economic and community improvement projects. TraPac will have preferential use of the 226 acres and Berths 136-147 upon completion of the improvements to the terminal properties.

### Revenue

The Port estimates that the approximate revenue from the income producing property of the TraPac lease will be approximately \$2.26 billion over the life of the 30-year contract term. The compensation structure will be based on charges collected on containers (TEUs) through the Minimum Annual Guarantee (MAG). The MAG is a per acre rent charge that is required to be paid regardless of how many twenty-foot equivalent units (TEUs) are handled in the terminal berths. A TEU is a twenty foot standard size for cargo containers. The TEU charges can increase or decrease based on assessment guidelines that are used by the Port. These guidelines can be adjusted annually or during the five-year contract reset. The Port estimates annual revenues from TraPac will be between \$24 and \$37 million during the design, development and construction of the TraPac Program and approximately \$41 million annual revenue after the completion of the terminal improvements, subject to changes to container volumes, Consumer Price Index, and fair market.

According to the Port, if the proposed Amendment to the TraPac Program is not approved, there would a decrease in revenue from the lease agreement and TEU throughput charges and an increase in costs from potential litigation cost and loss of the grant funding award. In addition, all work on the TraPac Program could be stopped or delayed, including the redesign, contract bid/re-advertisement/award and construction of the automated terminal operations. The Port would likely be required to reimburse TraPac to cover their costs of automated equipment and loss of future business. The Port estimates that its current project revenue forecast of approximately \$2.26 billion could be reduced by as much as \$930 million and result in an adjusted net revenue forecast of approximately \$1.33 billion over the 30-year contract term.

The above-mentioned aspects of the proposed Amendment, and this report, are based upon revised information received from the Port subsequent to the initial request submittal.

### City Compliance and Environmental Issues

The proposed Amendment has been approved by the City Attorney as to form and legality. The proposed lease is in compliance with City requirements and ordinances. In December 2007, the

Board certified the Environmental Impact Report (EIR) authorizing a 30-year contract term to redevelop TraPac terminals. The Port and the other environmental and community stakeholders negotiated a number of clean air initiatives and emission mitigation measures as outlined in the Clean Air Action Plan (CAAP). The proposed long-term lease agreement requires TraPac to implement various environmental measures to mitigate and offset emission pollution from Port operations and to expand and complete the container terminal project. According to the Port, all the changes in the proposed Amendment to the TraPac Program were documented in the EIR Addendum completed in June 2012 and did not need to be circulated for public review but included in the EIR. The Port Director of Environmental Management has concluded that the proposed Amendment will have no significant environmental impacts than what was previously approved in the certified EIR and determined that the Amendment is exempt from the requirements of the California Environmental Quality Act (CEQA) under Article II, Section 2(i) of the Los Angeles City CEQA Guidelines.

## **RECOMMENDATION**

That the Mayor approve the request by the Harbor Department (Port) Board of Harbor Commissioners to:

1. Authorize Resolution No. 13-7559, approving a proposed Second Amendment to Permit No. 881 with TraPac Incorporated to further design, develop and construct the container terminal facilities, in the TraPac Terminal Program, at Port Berths 136-147, to incorporate the terminal automation operations and the addendum to the Certified Environmental Impact Report;
2. Approve the budget increase of \$145,916,813 for the 10 projects comprising the TraPac Terminal Program; and,
3. Return Board Resolution No. 13-7559 to the Port for further processing, including City Council consideration.

## **FISCAL IMPACT STATEMENT**

The Harbor Department (Port) estimates that the approximate revenue from the income producing property of the TraPac lease is \$2.26 billion over the life of the 30-year contract term. This amount is assuming an 8.75 percent Rate of Return (ROR), with compound growth rate for twenty-foot equivalent units (TEUs). The proposed Second Amendment to the agreement with TraPac Inc. will commit existing Port land and facilities assets, plus an additional capital expenditure to expand, improve and modernize Port-owned container cargo terminals, wharf and backland properties at Berths 136-147. The proposed Amendment will increase TraPac's current budget of \$364,495,525, by a proposed amount of \$145,916,813, for a total budget of approximately \$510.4 million over a 30-year lease agreement. The Port secured grant funding of \$60,081,000, which will be used to off-set the POLA's projected shared budget to a net cost of \$450,331,388 for the TraPac Program. The Port will incorporate into future year's budget requests sufficient funds to address the proposed increase. All revenues will be deposited into the Harbor Revenue Fund and will have no financial impact on the City General Fund.

## **TIME LIMIT FOR COUNCIL ACTION**

Pursuant to Charter Section 606, "Process for Granting Franchises, Permits, Licenses and Entering Into Leases," and Charter Section 654(a)(1), "Limitations on Franchises, Permits, Licenses and Leases," unless Council takes action disapproving a contract that is longer than five years within 30 days after submission to Council, the contract will be deemed approved.

*MAS:ABN:10140072*

Attachment

**ATTACHMENT**

**TraPac Terminal Projects – Status & Cost Breakdown**

TOTAL PROJECT - DESIGN & CONSTRUCTION										
TraPac Terminal Projects	WO	Status	Sept. 2009 (at Lease Execution)	Feb. 2011 Estimate (w/ conventional backland, no automation)	Feb. 2011 Estimate (includes automation)	April 19, 2012 Baseline Budget	Proposed Budget (May 2013)	(Proposed -	Grant Funding	
1	EIR/EIS and Small Misc Impvs.	24612 25111	Complete	\$5,110,405	\$5,721,025	\$5,721,025	\$5,721,025	\$5,221,189	\$(499,836)	
2	Berths 145 - 147 Wharf Imp., Including AMP at B136-139 and B144-147	24242 24898 24943	Complete	\$107,695,285	\$115,075,001	\$115,075,001	\$115,075,000	\$111,931,001	\$(3,143,999)	
3	Berth 147 Backland Impr. (Phase 1A - Automation)	25132	Complete	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	\$4,235,000	\$3,641,577	\$(573,423)	
4	Rear Berths 136-139 Terminal Buildings & Main Gate	24585	In Const.	\$36,935,375	\$54,000,000	\$54,000,000	\$62,500,000	\$80,000,000	\$17,500,000	
5	Berths 145 - 147 Backland Impr. (Phase 1B - Automation)	25143	In Const.	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	\$19,870,000	\$13,862,310	\$(6,007,690)	
6	Berths 144 - 145 Backland Impr. (Phase 1C - Automation)	25131	In Const.	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	\$26,595,000	\$50,034,494	\$23,439,494	\$12,705,000
7	Berths 142 - 143 Backland Impr. (Phases 2 - 4 Automation)	24498	In Design	\$52,503,000	\$86,068,125	\$118,500,000	\$79,340,000	\$143,422,405	\$64,082,405	\$26,664,000
8	Berths 142 - 147 ICTF (Automation)	24551	In Design	\$36,807,446	\$40,426,000	\$40,426,000	\$40,426,000	\$85,865,560	\$45,439,560	\$20,712,000
9	Berth 142 Crane Maintenance Building	25177	In Design	included in B142 - 143 Backland	included in B142-143 Backland	included in B142 - 143 Backland	included in B142 - 143 Backland	\$5,680,302	\$5,680,302	
10	Berths 134 - 135 Backland Expansion	25138	Pre-Design	\$11,258,894	\$10,753,500	\$10,753,500	\$10,753,500	\$10,753,500	\$	
	<b>GRAND TOTAL</b>			<b>\$250,310,405</b>	<b>\$312,043,651</b>	<b>\$344,475,526</b>	<b>\$364,495,525</b>	<b>\$510,412,338</b>	<b>\$145,916,813</b>	<b>\$60,081,000</b>
							Increase in Total Project Budget		40.0%	
	Grant Funding								\$60,081,000	
	POLA SHARE			\$250,310,405		\$344,475,526		\$364,495,525		\$450,331,338
							Increase in POLA Share		23.5%	

\*Cost w/o EIR: \$245,200,000



## TraPac Terminal Projects - Cost Increase Breakdown

		Current Estimate	Baseline Estimate	Delta
<b>Electrical System (\$52 M Increase)</b>				
Phase 1C	Electrical System	\$ 12,404,000	\$ 2,398,600	\$ 10,005,400
	New & Relocated HMP	\$ 780,000	\$ 584,000	\$ 196,000
Phs 2-4	Conduit, Wires, Cables, Ductbanks, MHs)	\$ 21,400,000	\$ 5,213,300	\$ 16,186,700
	Equipment (Switchgears, Meters, Substations)	\$ 10,700,000	\$ 4,000,000	\$ 6,700,000
	New & Relocated HMP	\$ 2,160,000	\$ 1,386,000	\$ 774,000
ICTF	Conduit, Wires, Cables, Ductbanks, MHs)	\$ 5,980,000	\$ 425,000	\$ 5,555,000
	Equipment (Switchgears, Meters, Substations)	\$ 11,400,000	\$ 200,000	\$ 11,200,000
	New & Relocated HMP	\$ 2,260,000	\$ 800,000	\$ 1,460,000
<b>Subtotal</b>		<b>\$ 67,084,000</b>	<b>\$ 15,006,900</b>	<b>\$ 52,077,100</b>
<b>Storm Drain System (\$12.9 M Increase)</b>				
Phase 1C	SD System, including Geotextile	\$ 4,230,000	\$ 346,000	\$ 3,884,000
Phases 2-4	SD System, including Geotextile	\$ 6,200,000	\$ 740,000	\$ 5,460,000
ICTF		\$ 4,100,000	\$ 540,000	\$ 3,560,000
<b>Subtotal</b>		<b>\$ 14,530,000</b>	<b>\$ 1,626,000</b>	<b>\$ 12,904,000</b>
<b>Concrete Pavement &amp; Foundations (\$20.8 M Increase)</b>				
Phases 1B & 1C	Concrete Pavement	\$ 6,036,340	\$ 1,500,000	\$ 4,536,340
Phases 2-4	Concrete Pavement	\$ 6,500,000	\$ 1,100,000	\$ 5,400,000
ICTF	RMG Rail Foundation (Ties/Ballast to Concr. Beam)	\$ 6,000,000	\$ 700,000	\$ 5,300,000
	Building Foundation (Matt to Piles)	\$ 600,000	\$ 200,000	\$ 400,000
	Surcharge	\$ 3,000,000		\$ 3,000,000
	Crane Maintenance Building (Matt Foundation to Piles)	\$ 2,500,000	\$ 300,000	\$ 2,200,000
<b>Subtotal</b>		<b>\$ 24,636,340</b>	<b>\$ 3,800,000</b>	<b>\$ 20,836,340</b>
<b>Water/Fire Protection System, Los Angeles Fire Department (\$4.8 M Increase)</b>				
Phase 1C	Water Distribution System	\$ 1,206,000	\$ 300,000	\$ 906,000
Phases 2-4	Water Distribution System	\$ 4,800,000	\$ 920,000	\$ 3,880,000
<b>Subtotal</b>		<b>\$ 6,006,000</b>	<b>\$ 1,220,000</b>	<b>\$ 4,786,000</b>
<b>Safety Fencing and Specialty Gates (\$3.1 M Increase)</b>				
Phase 1C		\$ 777,819	\$ 100,300	\$ 677,519
Phases 2-4		\$ 1,900,000	\$ 152,000	\$ 1,748,000
ICTF		\$ 1,200,000	\$ 500,000	\$ 700,000
<b>Subtotal</b>		<b>\$ 3,877,819</b>	<b>\$ 752,300</b>	<b>\$ 3,125,519</b>
<b>Construction Inflation Subtotal</b>		<b>\$ 8,600,000</b>		<b>\$ 8,600,000</b>
<b>Phasing, Specialty Design, Construction Management, misc (\$43.6 M Increase)</b>				
Phase 1C	Reefer Racks	\$ 2,229,000	\$ 1,000,000	\$ 1,229,000
	Booth & weight activated pad for trucker safety	\$ 78,900		\$ 78,900
	Prefabricated Walkways	\$ 110,000		\$ 110,000
	10% Contingency at Award	\$ 3,839,954		\$ 3,839,954
Phs 2-4	Additional Design/Construction Support	\$ 2,000,000		\$ 2,000,000
	Reefer Racks	\$ 8,700,000	\$ 4,000,000	\$ 4,700,000
	Phasing/Mobilization 10%	\$ 8,000,000		\$ 8,000,000
	Booth & weight activated pad for trucker safety	\$ 230,000		\$ 230,000
	Prefabricated Walkways	\$ 400,000		\$ 400,000
	Contingency/Allowance	\$ 8,000,000	\$ 6,000,000	\$ 2,000,000
	10% Contingency at Award	\$ 11,000,000		\$ 11,000,000
ICTF	Additional Design/Construction Support	\$ 1,500,000		\$ 1,500,000
	Contingency/Allowance	\$ 5,000,000	\$ 3,500,000	\$ 1,500,000
	10% Contingency at Award	\$ 7,000,000		\$ 7,000,000
<b>Subtotal</b>		<b>\$ 58,087,854</b>	<b>\$ 14,500,000</b>	<b>\$ 43,587,854</b>
<b>GRAND TOTAL</b>				<b>\$ 145,916,813</b>