



AGENDA REPORT

PROPOSED ACTION: Resolution: Approve and Authorize the Executive Director to: (1) Enter into Contract with Teichert Construction in an Amount Not-To-Exceed \$14,576,255 for Construction of Infrastructure for Electric Bus Charging Stations - Phase 1 at Oakland International Airport, (2) Execute Contract Change Orders to the Extent Necessary in an Amount Not to Exceed \$3,644,064 and; (3) Execute a Supplemental Agreement with YEI Engineers, Inc. in an Amount Not to Exceed \$385,000 for Design Support Services During Construction; and Finding that the Proposed Action is Exempt Under the California Environmental Quality Act. **(Engineering /Aviation)**

Submitted By: Craig Simon, Interim Director of Aviation; Emilia Sanchez, Director of Engineering; Kristi McKenney, Acting Executive Director

Parties Involved:

Contractor: Teichert Construction, Oakland, CA
 Design Consultant: YEI Engineers, Inc., Oakland, CA

Amount: Capital Expenditure: Not to exceed \$18,605,319 Contract Authority (part of a \$23,508,319 Phase 1 total project budget).

EXECUTIVE SUMMARY: To fulfill the Port’s goal of complying with the California Air Resources Board (CARB) Zero-Emissions Airport Shuttle Regulation (ZEASR) and transitioning the Port’s shuttle bus fleet to zero emissions vehicles, the Airport has procured five electric shuttles buses and must construct infrastructure to charge them. The Construction of Infrastructure for Electric Bus Charging Stations – Phase 1 will provide civil site improvements for a charging depot at the Airport’s North Field that can ultimately accommodate up to 40 shuttle buses (including both Port and rental car shuttles) , and electrical infrastructure necessary for the first five Port electrical shuttle buses. The Project was designed, advertised and bids were opened for the construction of the improvements. Teichert Construction is the lowest, responsive, and responsible bidder.

BACKGROUND & ANALYSIS

To advance the Port’s goal of transitioning to zero emissions and to comply with multiple CARB regulations, the Aviation Division and its various tenants are electrifying their fleets of equipment, vehicles and shuttle buses.

The Port of Oakland (Port) owns, operates and maintains 14 compressed natural gas (CNG) shuttle bus fleet at the Oakland International Airport (OAK). The oldest of these buses are model year 2009 and at the end of their useful life. The Port has procured five battery electric-powered replacements, which are scheduled to arrive during Summer 2024. This will allow the Port to comply early with CARB’s first ZEASR compliance deadline of December 31, 2027. CARB adopted ZEASR in 2019, mandating that shuttle buses serving airports must be 100% zero emission by 2035 as shown in Table 1.

Table 1
CARB Zero-Emission Airport Shuttle Regulation (ZEASR) Compliance Dates

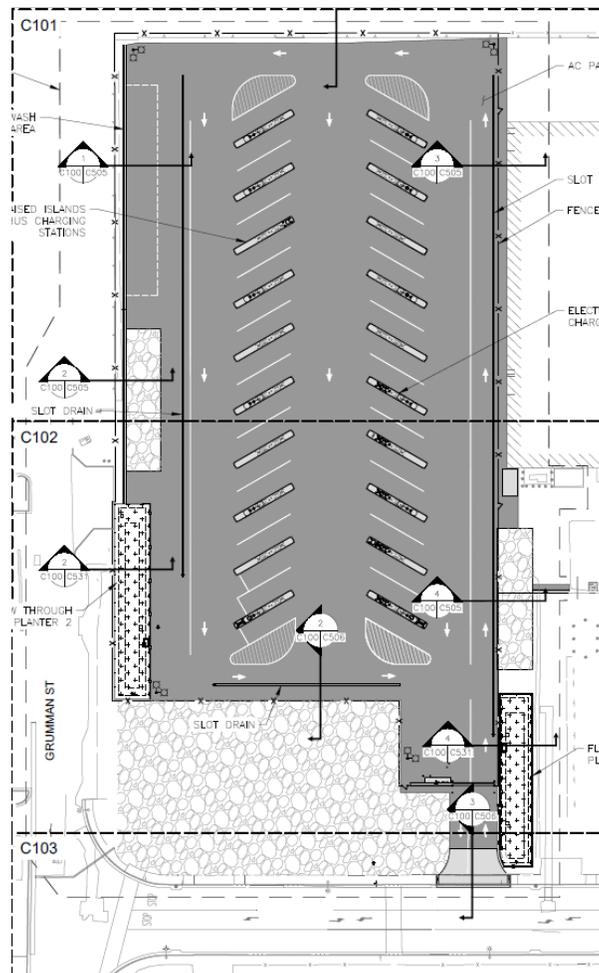
Compliance Deadline	% of Fleet That Must Be Zero-Emission
December 31, 2027	33%
December 31, 2031	66%
December 31, 2035	100%

Future replacement shuttles will be purchased in the coming years until the entire fleet is zero-emissions. To accommodate the need to charge the electric buses, Port Staff went through a planning and design process culminating in the identification of a bus charging depot, as shown in Figure 1, and the design of the required civil and electrical improvements to support Airport bus operations, bus parking and bus charging, as shown in Figure 2. The capacity of the charging depot was sized for a combined fleet of 40 buses to accommodate future growth of bus operations.

Figure 1. North Field Electric Bus Charging Depot Location.



Figure 2. North Field Electric Bus Charging Depot Site Layout.



The Port's future all-electric shuttle bus fleet in addition to the other fleets discussed below are contributing to an increased demand for electricity at the Airport's North Field.

- To meet CARB's Advanced Clean Fleet regulations, staff are actively planning for the replacement of the Port-owned fleet of pool cars, work vehicles and equipment at the Airport, as well as the required electrical infrastructure improvements to charge them.
- Tenant-owned rental car shuttle bus fleet consisting of 12 diesel buses must also comply with ZEASR. This fleet is in the process of being replaced with a battery electric bus fleet that is expected to arrive in 2026-2027. The bus charging depot has been designed to accommodate this fleet in addition to the Port-owned buses.
- As the Airport's three main rental car companies prepare to comply with CARB's Advanced Clean Cars II requirement, there are more electric-powered vehicles in their rental fleet.. Staff are working with the rental car companies to understand their future electric vehicle charging needs and associated electrical demand.

The Port expects the dominant zero emissions technology to be battery-electric for all of these fleets. This shift toward electrification is resulting in an increased demand on the

Port's limited electrical capacity and is resulting in the need for upgrades to the Port's electrical distribution system. The Port has developed a phased approach to respond to this increased demand.

- Phase 1 is to construct primarily civil, and some minimal electrical improvements needed to prepare for the electric buses that will be incorporated into the fleet within the next 9 months. To support the Port's future electric shuttle bus fleet, as well as the future electric shuttle bus fleet of the tenant-owned rental car operation, the Port has designed a 40-stall electric shuttle bus charging depot. Design of this Project was completed in August 2023. Authorizations for construction of Phase 1 are presented in this Agenda Report.
- Phase 2 comprises the load centers and main 12kV distribution substation (SS-EV1) and other improvements to the Port's electrical infrastructure required to support the growing demand for electrification in the North Field. This infrastructure will be placed at the bus charging depot site as well as at other centrally located sites in the North Field to respond to electrification demand referenced above from Port vehicles and equipment, from rental car shuttles buses and rental vehicles, as well as any other future electrification needs. The estimated total project cost of Phase 2 is in the range of \$36 million.

A component of the Phase 1 design incorporates adaptive load management to balance charging loads and reduce infrastructure needs. This is occurring in parallel to the pursuit of the integration of microgrid resources (solar canopies and battery storage) at this site, to reduce utility costs.

Phase 1 of the project was posted for bid on August 17, 2023. A pre-bid meeting and site tour was held on August 28, 2023, with 24 companies attending. On October 19, 2023, eight construction bids were received and opened. The bids received are summarized in Table 2.

Table 2
Infrastructure for Electric Bus Charging Stations - Phase 1 Project Bid Summary

Bidder	Location	Total Base Bid	Status
McGuire and Hester	Oakland, CA	\$11,668,400	Withdrawn
Rodan Builders, Inc.	Hayward, CA	\$14,206,990	Withdrawn
Teichert Construction	Pleasanton, CA	\$14,576,255	Responsive
Anvil Builders, Inc.	Emeryville, CA	\$15,569,965	Disqualified
Patriot Contracting, Inc.	Union City, CA	\$17,971,120	Responsive
Par Western Line Contractors LLC	Vacaville, CA	\$18,135,477	Disqualified
Silman Industries	San Leandro, CA	\$18,719,882	Responsive
Goodfellow Bros.	Livermore, CA	\$19,969,969	Responsive

Subsequent to bid opening, the two apparent low bidders requested to be relieved of their bid. Port Staff reviewed their documentation and determined that both bidders had made clerical errors in their bid that were material to their bid price, which allows for them to withdraw this bid. Two other bidders were found to be non-responsive to the bid and were disqualified. The apparent low bidder is therefore Teichert Construction (Teichert). Teichert is appropriately licensed and in good standing with the Contractors State License Board; their bid demonstrates that they can perform the work as specified in the contract documents; they have submitted all required documentation; and they have submitted an unconditional offer to provide the work as specified in the contract documents. Staff, therefore, determined that Teichert is the lowest, responsive, and responsible bidder and recommends awarding the Project to Teichert in the amount of \$14,576,255.

The project site is in an area of previous development by the U.S. Navy and subsequent businesses that were not well documented. In spite of significant site investigations, historically projects in this area of the North Field have encountered unforeseen subsurface conditions including soft soils and conflicting utilities. In order to account for this, Port Staff is requesting \$3,644,064 in change order authority (25% of the contract value) in the likely event that unforeseen conditions during construction are encountered that may result in contract change orders.

On September 15, 2022, by Resolution 22-87, the Board authorized execution of a Professional Services Agreement for an amount not to exceed \$1,500,000 with YEI Engineers, Inc. (YEI) for engineering design services for electric infrastructure and civil site improvements to support shuttle bus electrification.

Port Staff is requesting additional consultant contract authority in the amount of \$385,000 and authority to execute a Supplemental Agreement for YEI to provide engineering design support during construction.

OTHER FINDINGS AND PROVISIONS

ENVIRONMENTAL REVIEW

The proposed action was analyzed under the California Environmental Quality Act (CEQA) and was found to be:

- Categorically exempt under the following CEQA Guidelines Section:
[15303 \(New Construction or Conversion of Small Structures\)](#)
- Not a "Project" under CEQA, as defined in Public Resources Code § 21065
- Other/Notes:

BUDGET

- Administrative (No Impact to Operating, Non-Operating, or Capital Budgets); OR
 - Operating
 - Non-Operating
 - Capital

Analysis: Aviation's 5-Year Capital Improvement Plan (CIP) includes \$5.5 million in anticipated capital expenditures for Phase 1 design and construction of which \$3.8 million is budgeted in FY 2024. The higher than anticipated Phase 1 construction cost

may necessitate (i) a re-programming of Aviation capital projects over the 5-Year CIP period and (ii) a transfer of FY 2024 budget out of other Aviation capital projects to fund the higher than budgeted Phase 1 expenditures in FY 2024 anticipated to be about \$8,530,000. The project will be funded using Port cash. For the Phase 1 total project budget summary, see Table 3 below.

Table 3: Phase 1 Total Project Budget Summary.

Description	Design Budget	Procurement Budget	Construction Budget	Total Project Budget
Port Labor	\$500,000		\$684,000	\$1,184,000
Consultants ¹	\$871,000		\$1,021,000	\$1,892,000
Construction – Bid Award			\$14,576,255	\$14,576,255
Construction Change Order Contingency			\$3,644,064	\$3,644,064
Procurement of Electrical Equipment (Resolution 22-87)		\$1,500,000		\$1,500,000
Other Related Costs ²			\$712,000	\$712,000
TOTAL	\$2,871,000		\$20,637,319	\$23,508,319

¹ Consultant costs include design, design support during construction, and testing/inspection support services during construction.

² Other costs include permitting, MAPLA, and OCIP.

STAFFING

- No Anticipated Staffing Impact.
- Anticipated Change to Budgeted Headcount.
Reason:
- Other Anticipated Staffing Impact (e.g., Temp Help).
Reason:

MARITIME AND AVIATION PROJECT LABOR AGREEMENT (MAPLA):

Applies? Yes (CIP) – proposed action entails covered work on Port’s Capital Improvement Program in Aviation or Maritime areas above the threshold cost.

Additional Notes:

LIVING WAGE (City Charter § 728):

Applies?

No (Public Works) – proposed action is a construction contract covered by state or federal prevailing wages that are higher than those under the Living Wage requirements.

Additional Notes:

<p><u>SUSTAINABLE OPPORTUNITIES:</u></p> <p><u>Applies?</u> Yes.</p> <p><u>Reason:</u> Constructing these civil and electrical upgrades facilitates fleet electrification, which lowers emissions, improves air quality and advances the Port toward the goal of achieving zero emissions.</p>	<p><u>GENERAL PLAN</u> (City Charter § 727):</p> <p><u>Conformity Determination:</u></p> <p>Maritime/Aviation – proposed action conforms to policies for transportation designation of the General Plan.</p>
<p><u>STRATEGIC PLAN.</u> The proposed action would help the Port achieve the following goal(s) and objective(s) in the Port’s Strategic Business Plan:</p> <p><input type="checkbox"/> Grow Net Revenues <input checked="" type="checkbox"/> Modernize and Maintain Infrastructure</p> <p><input checked="" type="checkbox"/> Improve Customer Service <input type="checkbox"/> Pursue Employee Excellence</p> <p><input type="checkbox"/> Strengthen Safety and Security <input type="checkbox"/> Serve Our Community</p> <p><input checked="" type="checkbox"/> Care for Our Environment</p>	