

## AGENDA REPORT

**Resolution:** Authorization to Enter into a Professional Services Agreement with WSP, Inc. to Provide Assessment and Preliminary Design Services for the Replacement of Substations SS-1 and SS-2 and the Rehabilitation of Portions of the Electrical Distribution Network Infrastructure at the Oakland International Airport for a Contract Amount Not to Exceed \$1,160,000. **(Engineering/Aviation)**

**MEETING DATE:** 9/24/2020

**AMOUNT:** \$1,160,000 Contract Authority  
**(Part of a \$1,600,000 Assessment and Preliminary Design Budget)**

**PARTIES INVOLVED:** WSP, Inc., Oakland, CA

**SUBMITTED BY:** Kristi McKenney, Chief Operating Officer  
Bryant L. Francis C.M., Director of Aviation

**APPROVED BY:** Danny Wan, Executive Director

**ACTION TYPE:** Resolution

### **EXECUTIVE SUMMARY**

This Agenda Report seeks Board authorization for Executive Director to enter into a Professional Services Agreement with WSP, Inc. to provide assessment and preliminary design services for the replacement of Substations SS-1 and SS-2 and the rehabilitation of the portions of the electrical distribution network infrastructure at the Oakland International Airport for a contract amount not to exceed \$1,160,000. This work is included in the Port's approved capital budget.

### **BACKGROUND**

Electrical Substations SS-1 and SS-2, located near Earhart Road between Airport Drive and Swan Way, are the primary electrical substations serving the Oakland International Airport (OAK). Substation SS-1 is the Point of Common Coupling (PCC) with PG&E. A 12-kV line from PG&E serves SS-1 from PG&E's Edes substation. Both substations were constructed in 1982. The design life for these substations is 30 years, so these are both 8 years beyond their expected service life.

SS-1 and SS-2 are experiencing an increasing number of electrical component failures including cables, relays and vacuum interrupting power breakers. Some of these components have been repaired or replaced while others are bypassed or inoperable. The electrical

system at OAK continues to function, but maintenance of these substations is becoming costly and difficult with an increased risk of system failure. Additionally, system failures at this location have wide-reaching impacts on Airport operations, including disruption of power in terminal facilities that impacts airline operations.

Power is distributed to the airport from SS-1 to SS-2, and then through a network of feeder cables, related equipment, and more substations. Much of this distribution network is well over 30 years-old, with some sections that were installed before 1960. This network is experiencing an increasing number of outages, resulting in increased maintenance costs and increased use of backup renewable diesel generators while diagnostics and repairs are conducted. It is, therefore, critical to replace these primary substations and rehabilitate the distribution network to provide a reliable power service to OAK. These substations are shown in Figure 1 below.



Figure 1

## **ANALYSIS**

### **Scope of Work –**

In order to develop a preliminary design to replace the two substations, upgrade the electrical distribution system, and initiate an application to PG&E for a new Interconnection Agreement (IA), professional consulting services are needed. The scope of these consulting services includes:

Assessment of the electrical distribution system's ability to meet the needs of reliability, redundancy, maintainability and scalability (e.g. capacity to accommodate future loads, renewable energy projects).

Substation planning, including load flow studies, future load demand analysis, and an analysis of the potential to develop on-site power generation options.

Preliminary engineering to establish the basis of design, support the preparation of a new IA with PG&E, and recommend options for project delivery (e.g. Design-Build, Construction Manager at-Risk, or other delivery methods).

### **Consultant Selection -**

In August 2019, the Port solicited Statements of Qualifications (SOQ) for engineering assessment and preliminary design services for the replacement of Substations SS-1 and SS-2 and the rehabilitation of portions of the electrical distribution network.

The Request For Qualifications (RFQ) was posted in digital format on the Port's website that can be accessed via the 'Current RFP's/RFQ's: Engineering Consulting Services' link at the following URL: <http://www.portofoakland.com/business/bids-RFQs/rfq-engineering/>.

The Port's outreach efforts (to advise potential proposers that the RFQ was available) included:

- Emails to 40 qualified local contractors certified with the Port's Social Responsibility Division under the Non-Discrimination and Small Local Utilization Policy
- Port's Social Responsibility Division sent solicitation notifications to 119 recipients subscribed through Community Based Organizations and Chamber of Commerce branches
- Emails to 32 firms certified under the California Department of General Services
- Emails to 24 firms certified under the California Unified Certification Program

The Port received Proposals from three consultant teams on September 11, 2019. The Proposals were determined to be responsive and were evaluated and ranked by Port staff from Engineering, Aviation Planning and Development, and Social Responsibility Divisions.

Port staff invited all three consultant teams to participate in interviews on September 19 & 20, 2019. During the interviews, the consultant teams presented their capabilities, described their

understanding of the work, and answered prepared questions from the Port interview panel. The sum of the scores for each team’s proposal, presentation, and interview constituted their total score. Based on this evaluation process, WSP, Inc. was ranked the highest. Table 1 presents the ranking of the consultant teams evaluated during the selection process.

**Table 1. Ranking of Firms Evaluated**

<b>Rank</b>	<b>Consultant Team</b>	<b>Location</b>	<b>Certified LIA/LBA</b>
1	WSP, Inc.	Oakland, California	LIA
2	ATI Architects and Engineers	Pleasanton, California	LBA
3	Burns & McDonnell	San Francisco, California	None

Port staff, therefore, selected WSP, Inc. as the preferred consultant team to provide consulting services to provide assessment and preliminary design services for the replacement of Substations SS-1 and SS-2 and associated system upgrades. Following consultant selection, staff worked to determine the timeline and scope for the substation replacement, including efforts to minimize disruptions to Airport operations.

**BUDGET & STAFFING**

The cost for the assessment and preliminary design phase is estimated to be \$1,600,000 and is included in the Capital Budget for FY2020-2021. The total cost including final design and construction for the substations replacement and distribution system rehabilitation is anticipated to be a rough order of magnitude of \$30 million. This assessment and preliminary design effort will result in a more precise estimate of the total project cost, which will be brought to the Board for approval at a later date.

	<b>Port Labor</b>	<b>Consultants</b>	<b>Total Budget</b>
Assessment & Preliminary Design Budget	\$440,000	\$1,160,000	\$1,600,000

The project will be funded with Port cash and eligible costs will be recovered through airlines’ rates and charges and/or electricity service rates charged by the Port.

There is no anticipated staffing impact.

**MARITIME AVIATION PROJECT LABOR AGREEMENT (MAPLA)**

This contract is for professional services. The provisions of the Port of Oakland Maritime and Aviation Project Labor Agreement (MAPLA) apply to this professional services contract only to the extent it involves work within the craft jurisdiction of the unions signatory to the MAPLA,

such as any field surveying, on-site soils and materials testing and inspection, and geotechnical and exploratory drilling work.

### **STRATEGIC PLAN**

The action described herein would help the Port achieve the following goals and objectives in the Port's Strategic Business Plan (2018-2022).

<https://www.portoakland.com/wp-content/uploads/Port-of-Oakland-Strategic-Plan.pdf>

- Goal: Grow Net Revenues
- Goal: Improve Customer Service
- Goal: Modernize and Maintain Infrastructure

### **LIVING WAGE**

Living wage requirements, in accordance with the Port's Rules and Regulations for the Implementation and Enforcement of the Port of Oakland Living Wage Requirements (the "Living Wage Regulations"), apply to this agreement as the service provider employs 21 or more employees working on Port-related work and the contract value is greater than \$50,000.

### **SUSTAINABILITY**

Port staff have reviewed the Port's 2000 Sustainability Policy and the Sustainability Opportunities Assessment Form. The substation assessment and preliminary design will incorporate opportunities for on-site renewable power generation and storage as well as fuel cell technology to reduce the dependence on renewable diesel-fueled generators as backup. Preliminary design of flood protection for the substations will address sea level rise.

### **ENVIRONMENTAL**

This action was reviewed in accordance with the requirements of the California Environmental Quality Act (CEQA). The Port has determined that this project is categorically exempt from the California Environmental Quality Act (CEQA) Guidelines pursuant to Section 15302, Replacement or Reconstruction. Section 15302 exempts from CEQA the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, including replacement of existing utility facilities involving negligible or no expansion of capacity.

### **GENERAL PLAN**

Pursuant to Section 727 of the City of Oakland Charter, this project has been determined to conform to the policies for the transportation designation of the Oakland General Plan.

### **OWNER-CONTROLLED INSURANCE PROGRAM (OCIP)**

Professional service agreements are not subject to the Port's Owner Controlled Insurance Program (OCIP) as professional services are not construction activities.

## **OPTIONS**

Staff has identified the following options for the Board's consideration:

**Option 1:** Authorize the Executive Director to enter into a Professional Services Agreement with WSP, Inc. to provide assessment and preliminary design services for the replacement of Substations SS-1 and SS-2 and the rehabilitation of portions of the electrical distribution network infrastructure at the Oakland International Airport for a contract amount not to exceed \$1,160,000. This is the recommended action.

**Option 2:** Direct staff to reissue the request for proposals for this project. This option is not recommended as it places additional demand on Port staff resources and will delay completion of this effort.

**Option 3:** Direct staff to not pursue replacement of SS1 and SS2 and related electrical distribution and instead continue to maintain the existing equipment. This option is not recommended as it will result in increased utility failures and disruptions to operations and tenant businesses and ultimately decrease revenues and customer experience.

## **RECOMMENDATION**

Staff recommends that the Board adopt a resolution authorizing the Executive Director to enter into a Professional Services Agreement with WSP, Inc. to provide assessment and preliminary design services for the replacement of Substations SS-1 and SS-2 and the rehabilitation of portions of the electrical distribution network infrastructure at the Oakland International Airport for a contract amount not to exceed \$1,160,000.