#### **AGENDA REPORT**

**Resolution:** Authorize: Additional Project Budget for the Airport Perimeter Dike (APD) Improvement Project for Construction of the APD Stability Berms During Construction of the Runway 12-30 Rehabilitation Project; Entering into a Second Supplemental Agreement with Wood Rodgers Inc. to Prepare Application Materials to the Federal Emergency Management Agency (FEMA); and Applying for and accepting grant funding from the California Office of Emergency Services (CalOES). **(Aviation)** 

**MEETING DATE**: 6/8/2017

**AMOUNT:** \$776,000 (Capital Expenditure)

\$85,000 (Operating Expense)

**PARTIES INVOLVED:** DeSilva Gates Construction LP, Oakland, CA

Richard B. Gates, President and General Partner

Wood Rodgers, Inc., Oakland, CA Dan Matthies, Vice President

**SUBMITTED BY:** Bryant L. Francis C.M., Director of Aviation

Chris Chan, Director of Engineering

**APPROVED BY:** J. Christopher Lytle, Executive Director

**ACTION TYPE**: Resolution

# **EXECUTIVE SUMMARY**

This Agenda Report seeks budget approval and authorizations for the construction of a portion of the Airport Perimeter Dike (APD). The recommended actions include:

- a) Authorize additional APD Improvement Project budget by \$776,000 to \$2,886,090 in order to construct portions of the APD stability berms by the Runway 12-30 Rehabilitation Project contractor, utilizing asphalt millings generated by that Runway 12-30 Project.
- b) Enter into a Second Supplemental Agreement with Wood Rodgers, Inc. (Wood Rodgers) to assist Port Staff in preparing a Conditional Letter of Map Revision (CLOMR) application to the Federal Emergency Management Agency (FEMA) in order to determine potential ramifications of Port proposed APD improvements for future Flood Insurance Mapping (FIRM Maps). The Second Supplemental Agreement will increase Wood Rodgers' maximum compensation by \$85,000 to \$264,920.

c) Apply for and accept grant amount up to \$3,000,000 for APD construction funded via the California Office of Emergency Services (CalOES) Hazard Mitigation Grant Program (HMGP).

#### **BACKGROUND**

The Airport Perimeter Dike (APD) protects facilities at Oakland International Airport's (OAK) south field—including the main air carrier Runway 12-30, taxiways, passenger terminals, auto parking, fuel farm, airline provisioning, Aircraft Rescue and Firefighting (ARFF) station, and air cargo facilities (UPS and Federal Express) from inundation by water from the San Francisco Bay. The APD is approximately 4.5 miles long, comprised primarily of sand, gravel or clay, and located on the San Francisco Bay. Some segments of the APD do not meet the structural levee standards of the Federal Emergency Management Administration (FEMA), and some segments are vulnerable to liquefaction during major seismic events. The purpose of the APD Improvement Project is to correct these deficiencies, enabling the APD to withstand severe storms and seismic events, protect OAK from potential flooding, and meet FEMA certification standards. In addition, the planned improvements will help mitigate the effects of anticipated sea level rise due to global warming.

The Board has previously approved budget and contracting authority to hire AECOM to complete final design of the flood protection improvements for the dike. The design for those improvements is scheduled to be completed by the end of this summer and construction is expected to begin in early 2018.

### APD Stability Berm

Part of the flood protection improvements include stability berm construction and strengthening which requires asphalt-grinding materials. Construction of the Runway 12-30 Rehabilitation Project, scheduled for September 2017, will generate a significant volume of asphalt grindings, (that would otherwise be stockpiled) at the Port's Materials Management site (MMS) for future use, thereby creating a synergistic opportunity for both projects. This material is suitable for constructing the stability berm component of the APD Improvement Project. Port staff and the design teams for the two projects explored the potential to incorporate the construction of portions of the APD stability berm utilizing these grindings as part of the Runway 12-30 Project. Significant cost savings may be realized by incorporating the construction of the stability berm into the Runway 12-30 Project asphalt milling operation.

# Conditional Letter of Map Revision (CLOMR)

Coincident with the planning and design of the APD Improvement Project, FEMA issued Preliminary Flood Insurance Rate Maps (FIRM) for Northern Alameda County, including OAK. Numerous areas not previously characterized as flood hazard zones are proposed to be characterized as such by FEMA. The runways and general aviation hangars in the north field are designated as being within a Special Hazard Zone. However, the Airport south field

including the main air carrier runway, the passenger terminal areas, Fedex facilities and airline support services are designated as "Seclusion" status because of the planned dike improvements. Due to the complex nature of grading and drainage between the north and south fields and the potential for flooding at the north field to affect the south field (and vice versa) it is unclear how inundation mapping on the FIRMs will be affected by the APD Improvement Project. In order to determine this, FEMA has recommended that the Port perform this analysis and submit a Conditional Letter of Map Revision (CLOMR) application to FEMA for their review and determination.

Wood Rodgers has assisted Port staff in detailed modeling of potential flood impacts on Airport property. On May 26, 2016, the Board authorized the Executive Director to execute a supplemental agreement with Wood Rodgers to identify preliminary engineering improvements and additional modeling in support of the Port's appeal of FEMA's preliminary FIRMs that include OAK. The Port of Oakland seeks to draw on Wood Rodgers previous flood risk modeling of OAK to assistance in the preparation of a CLOMR application to FEMA that include the construction of the APD Improvement Project.

# CalOES Hazard Mitigation Grant Program (HMGP)

The Port continues to seek funding sources to help pay for the APD Improvement Project. Most recently, due to recent federal disaster declarations (DR-4301) in the State of California, State agencies, local governments and private non-profits are eligible to apply for HMGP grant funds administered via the CalOES. These funds are available for projects in declared counties (including Alameda County) that reduce or eliminate future potential damages.

#### **ANALYSIS**

#### **APD Stability Berm**

Port staff estimates that the Runway 12-30 Project will save an estimated \$990,000 by utilizing the runway asphalt millings to construct portions of the planned APD stability berm instead of hauling and stockpiling the millings at the MMS. The APD Improvement Project will save an estimated \$220,000 by utilizing the Runway 12-30 Project asphalt millings and obviate the need to import and haul material from the MMS to construct the stability berm. Based on the bids received for the Runway 12-30 Project, the total cost to construct portions of the stability berm under the Runway 12-30 Project using the runway asphalt millings is \$705,200 with an additional \$70,800 (approximately 10% of bid cost) for change order authority, for a total cost of \$776,000.

# Conditional Letter of Map Revision (CLOMR)

The CLOMR application will evaluate the inundation risk at OAK following construction of the APD improvements. Wood Rodgers has been working with the Port on airfield flood risk modeling and has deep familiarity with the APD improvement design, its hydrologic impacts for the south field, and the relationship between flooding at the north and south fields. This existing body of knowledge will enable the Port to shorten the CLOMR preparation time and

most efficiently assemble the information needed for FEMA review. Port staff has determined that an additional \$85,000 is needed to compensate Wood Rodgers to incorporate the Port proposed APD improvements into the existing OAK flood risk model, perform the analysis, and assist Port staff in preparing the CLOMR application.

# CalOES Hazard Mitigation Grant Program

CalOES has received funding through FEMA to award grants of up to \$3,000,000 for projects that reduce hazards and future damages. Grants are available for "Immediate Needs" projects which are well-developed, shovel ready and provide long-term risk reduction from flooding. The APD Improvement Project is well-positioned for this grant as the project has completed CEQA review, and the initial phase has a complete 100% design. The HMGP grant requires a 25% local match (from any non-federal funding source), and must be completed within 4 years of the disaster declaration time. Port staff has reviewed the granting program and finds the assurances and compliance requirements to be acceptable.

#### **BUDGET & STAFFING**

To date the Board has authorized \$2,110,090 for design of the APD improvements. This Agenda Report requests an additional project budget authorization of \$776,000 for the APD stability berm construction, utilizing the asphalt grindings from the Runway 12-30 Project, based on the bids received, for a total project budget of \$2,886,090. Port staff has obtained a State grant for \$5 million for design and construction costs related to APD improvements. The State grant covers 50% of project costs and requires a sponsor match of the remaining amount, which will be paid with Port cash, a portion of which will be reimbursed through the airlines' rates and charges over the useful life of the improvements. Staff continues to seek other funding for the APD Improvement Project. As described above, the remaining improvements to be constructed for the APD Improvement Project are anticipated to be bid in future phases. Port staff will return to the Board for budget and contracting authority at that time.

Funds for the FEMA appeal were included in the Port's FY 17-18 Aviation operating budget. The recommended \$85,000 increase will revise the consultant's budget to \$264,920.

The HMGP grant requires a local match of 25% which would equal \$750,000 if the Port received the maximum grant amount. These funds may come from any non-federal source including other grants and Port cash. The APD project has previously received a \$5,000,000 grant from the State of California, which would be eligible to serve as the local match along with Port cash funds committed to date.

There is no anticipated staffing impact.

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

The provisions of the Port of Oakland Maritime and Aviation Project Labor Agreement (MAPLA) apply to the construction portion of this Agenda Report.

#### STRATEGIC PLAN

The action described herein would help the Port achieve the following goals and objectives in the Port's Strategic Plan (http://www.portofoakland.com/pdf/about/strategicPlan2011-2015.pdf)

- Goal A: Create Sustainable Economic Growth for the Port and Beyond
  - Goal A: Objective 1: Maximize the use of existing assets.
- Goal B: Maintain and Aggressively Grow Core Businesses
  - Goal B: Objective 1: Retain existing customers and tenants.
- Goal G: Sustain Healthy Communities through Leading Edge Environmental Stewardship
  - Goal G: Objective 5: Develop effective relationships with regulatory and resource agencies.

### **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"), do not apply because the requested action is for a construction contract covered by prevailing wage rules and the prevailing rate of wage is higher than the wage required by the Living Wage Regulations. Furthermore, living wage requirements do not apply to the supplemental agreement because the service provider does not employ 21 or more employees working on Port-related work.

#### **ENVIRONMENTAL**

The proposed project to rehabilitate Runway 12-30 was reviewed in accordance with the requirements of CEQA. Projects that restore or rehabilitate deteriorated or damaged structures, facilities, or mechanical equipment to meet current standards of public health and safety are exempt from the provisions of CEQA pursuant to CEQA Guidelines Sections 15301, Existing Facilities. The Port has determined that the proposed project meets this exemption and will not have a significant effect on the environment.

Sustainable Opportunities: Approximately 22,000 cubic yards of asphalt millings generated from the Runway 12-30 Rehabilitation Project will be beneficially reused for construction of stability berms adjacent to the south field airport perimeter dike. This eliminates the need to haul and stockpile the millings at the MMS and then haul them back to the south field airport perimeter dike to construct the stability berms at a later date under a separate contract. In addition to the reduced cost, the elimination of the hauling and double handling of the material will decrease fuel consumption and the resultant truck emissions.

#### **GENERAL PLAN**

Pursuant to Section 727 of the City of Oakland Charter, the construction project has been determined to conform to the policies for the transportation designation of the Oakland General Plan. The supplemental agreement is for professional services and will not directly include any alteration of property. Development projects that result from these professional services will be subject to separate findings of conformity with the City of Oakland General Plan in accordance with Section 727 of the Charter.

## OWNER-CONTROLLED INSURANCE PROGRAM (OCIP)

As the construction project is a capital improvement project, the applicable Owner Controlled Insurance Program (OCIP) coverages and provisions apply to the construction phase.

### **OPTIONS**

Following options are for the Board's consideration:

- 1. Approve the action as outlined in this agenda report. Doing so will enable the APD stability berms to be constructed as part of the Runway 12-30 Rehabilitation Project, allow Port staff to formally present its proposed APD improvements to FEMA in order to understand the ramifications for future FIRMs, and apply for available grant funding through the California Office of Emergency Services. This is the recommended action.
- 2. Do not proceed with the actions requested in this Agenda Report. This is not recommended because delaying the stability berm construction until after the Runway 12-30 Rehabilitation Project is completed would increase the cost of both projects. In addition, not presenting the Port's proposed APD improvements formally to FEMA prior to construction, would risk completing improvements with no beneficial flood reduction as shown on FEMA's Flood Insurance Rate Maps. Forgoing the HMGP grant would deny the APD project access to possible grant funds for the construction of flood protection improvements.

#### **RECOMMENDATION**

Staff recommends that the Board approve the following actions to construct a portion of the Airport Perimeter Dike Improvement project:

- a) Authorization of additional project budget of \$776,000 to \$2,886,090 for construction of the Airport Perimeter Dike (APD) stability berms during construction of the Runway 12-30 Rehabilitation project,
- b) Authorization to enter into a second supplemental agreement with Wood Rodgers Inc. to increase maximum compensation by \$85,000 to \$264,920 to prepare application materials to the Federal Emergency Management Agency (FEMA), and

c)	Authorization to apply for and accept grant funding from the California Office of Emergency Services (CalOES) in an amount up to \$3,000,000.