

MEMORANDUM

July 7, 2017

TO: MEMBERS, PORT COMMISSION
Hon. Willie Adams, President
Hon. Kimberly Brandon, Vice President
Hon. Leslie Katz
Hon. Doreen Woo Ho

FROM: Elaine Forbes
Executive Director

SUBJECT: Informational Update on the Fire Station 35 Expansion at Pier 22½

DIRECTOR'S RECOMMENDATION: Information only; No Action Required

EXECUTIVE SUMMARY

At the July 12, 2016 Port Commission Hearing, the San Francisco Department of Public Works ("Public Works"), along with Port staff, gave a detailed presentation on the City's plans to expand Fire Station No. 35, located on Port property at Pier 22½ along The Embarcadero between Folsom and Harrison Streets. This memo and the July 11, 2017 informational presentation will provide a periodic update on the project that the Port Commission requested. In particular, this update covers the outcome of a recently concluded process to select a Design-Build Team to carry out the project under the supervision of Public Works, working in partnership with the Port, on behalf of the San Francisco Fire Department ("SFFD"). The presentation on July 11 will also focus on the design concept developed by the Design-Build Team as part of the selection process.

STRATEGIC PLAN CONFORMITY

Port staff has determined that this project is consistent with three of the 2016 Port Strategic Plan Goals, which are as follows:

#4 Resiliency - this project is addressing sea level rise with the construction of a floating pier and adoption of a future adaptation strategy.

#5 Sustainability - this project will meet current building code requirements and seek to reduce its energy demand and impact on the bay.

THIS PRINT COVERS CALENDAR ITEM NO. 12A

#7 Stability – this project will not involve the use of Port funds for implementation beyond the continued use of Port funds consistent with the Public Trust need for Fire Boat service and maintenance.

ROLE OF Pier 22½'s Fire Station No. 35 IN THE BAY

Fire Station 35 (“FS 35”) is the only fire boat facility for the San Francisco Bay region. The Port of Oakland decommissioned their fire boat station in 2003. FS 35 is strategically located to respond to San Francisco waterfront emergencies with its central location and proximity to the Bay Bridge. Emergency response capability from FS 35 supplements existing capacity from the U.S. Coast Guard Station at Alameda. The FS 35 project area includes one of the four manifolds (bay water access infrastructure) on the San Francisco waterfront that are used to pump Bay water to respond to Bay and City fire emergencies.

PROJECT CONCEPT

The Pier 22½ Fire Station 35 expansion project (“Project”) concept consists of construction of a new two-level, 16,000+ sq. ft. fireboat station behind the existing historic fire station. The new structure will rest on a new 181 ft. x 95 ft. floating pier secured by pilings. While floating structures are commonplace internationally, this is the first floating structure of this magnitude proposed on Port property. A ramp located south of the existing FS 35 will provide access to the new firehouse from The Embarcadero. The Project will include a pedestrian gangway between the two buildings. The new pier will provide berths for three fire boats and multiple small watercraft. The deteriorated existing Pier 24, the 1980's era shed and portions of the existing Pier 22½ will be demolished. The 2014 Earthquake Safety and Emergency Response (ESER) bond provides funding for construction of and the move to the new facility.

The new facility will improve the City's capacity for meeting current and future fire service demands. SFFD currently operates out of the existing FS 35 building, but the current facility is insufficient for adequately meeting SFFD's needs for serving the public and expanding its water-rescue service area within the Bay. The engine company will continue to operate out of the existing, historic Fire Station 35¹. The Project will provide an upgraded facility that will improve the capacity for water-oriented emergency response.

Existing Conditions

The existing Pier 22½ consists of a main pier (“Main Pier”) and two finger piers to the north and south of the main pier. The Main Pier supports the existing FS 35, a two level structure with a garage for one fire engine. The station is approximately 100 years old and does not meet seismic requirements of current building codes. The Main Pier that supports the Fire Station was partially retrofitted in 2009 but a complete retrofit of the Main Pier that will provide a seismic resistance load path was deferred due to budget constraints. The substructure supporting FS 35 was strengthened in 2008 with the

¹ Improvements to the existing historic fire station building are not included within the scope or budget of the Project.

addition of a new concrete beam, steel beams, and new steel piles. The concrete and steel beams installed in 2008 are generally free of significant defects.

The Main Pier has a parking and storage area immediately south of the fire station and a smaller parking area north of the fire station. The North Finger Pier supports a shed building and provides mooring for two fire boats.

The existing seawall at Pier 22½ has signs of deterioration evident in corrosion of reinforcement bars and cracked concrete. In the event of an earthquake, it is likely that lateral spreading and the resulting lateral movement of the soft Bay Mud may impose some loads and movement on the seawall. The Project will be independent of the seawall with regard to seismic safety and, similar to the Downtown Ferry Terminal Expansion, the Project will be an “Essential Facility” structure to ensure that it will remain fully operational after a seismic event.

New Steel Floating Pier (Building Substructure)

To address the expected flooding and sea level rise in the project area, the Public Works design team studied and selected a “floating pier” or barge concept for the new pier upon which the new building will be constructed. Floating piers such as this exist in other locations and the project design team has identified and evaluated precedent floating barge offices, ferry terminals and fire stations both within the United States and in international locales. The concept design team evaluated both steel and concrete barges and selected a steel barge structure based on meeting the Project needs and available budget. This floating pier will have guide piles to maintain its position and two ramps to connect it to the Port seawall for vehicle and personnel access between the existing building and floating pier.

The floating pier is anchored by vertical steel pipe guide piles for lateral loads on the pier and fire station to address seismic, wind, wave and vessel berthing. The Design-Build Team is required to meet comfort criteria for the occupants as specified in the Project technical requirements. The current conceptual design has a uniform freeboard of 5 ft. Dredging is not required as the existing water depth at the project site is sufficient based on review of the tide range and draft of the steel pier. However, future sedimentation below the new floating barge may require dredging to maintain the floating condition. A transfer span will link the new pier structure to the Embarcadero waterfront providing vehicle and pedestrian access, and a second span (aluminum gangway) between the historic structure and the new building will also provide pedestrian (fire personnel) access between the two buildings.

New Fire Station Structure

The new two-story steel-framed structure will comprise approximately 16,880 gross square feet of interior space. The new building will house all necessary fire boat operation and support programs, including a Marine Emergency Operations Center (EOC), storage of specialty gear, hoses, booms, small rescue craft storage, a decontamination space, and a drive-through ambulance access way. Cranes on the pier/barge deck will be used for moving equipment and small craft.

Generally, the first floor will serve as the primary “work space” while the second floor will be the primary “living space” for the firefighters on duty. Specifically, the first floor will be used for emergency operations, equipment storage, supply, and repair, night watch room, mechanical, decontamination/drying rooms, equipment lockers and small craft storage. The second floor will include communications room, a study, laundry room, firefighter dormitory, officers’ quarters, day room, dining area, kitchen with outdoor patio at the east end of the building and lockers, showers and bathrooms. The roof level will contain mechanical equipment and the emergency generator.

The second floor is entirely for “clean” firefighter operations, including a dormitory, dedicated men’s and women’s locker rooms, restrooms, and shower rooms, officer’s sleeping rooms, day room, and a kitchen/dining area that opens onto an outdoor deck at the East end of the building. There are 2 slide poles, 2 exit stairs, and 1 elevator that connect to the 1st floor areas.

Existing Fire Station 35 Structure and Pier

The existing Fire Station 35 and its supporting pier will continue to house the existing engine operation. The finger piers and the existing pier providing the parking/storage area south of the existing fire station as well as Pier 24 will be removed to allow placement of the new pier and transfer span. A viewing platform may be constructed on the existing pier on the south side of the existing station to allow for public access, with the potential for viewing of the fireboats.

DESIGN-BUILD CONTRACT PROCUREMENT PROCESS

SF Public Works, on behalf of the SFFD, recently completed a 6-month selection process for the design-build contract for the project utilizing two selection panels. The procurement began with a Request for Qualifications (RFQ) process that yielded five submittals that were invited by Public Works to participate in a subsequent 2-step Request for Proposals (RFP) process:

- Nibbi
- Overaa/Dutra, JV
- Swinerton/Power, JV
- Plant & TEF/Kuth Ranieri, JV
- Turner/Pfau Long, JV

Step 1 of the RFP process resulted in two teams being shortlisted and invited to participate in Step 2:

- Overaa/Dutra, JV
- Swinerton/Power, JV

The Step-1 RFP panel included a member of the Port’s Engineering staff, and the Step 2 RFP panel included participation by a member of the Port’s Central Waterfront Advisory Group.

The Design-Build Team selected for contract award is a Joint Venture between Swinerton Builders and Power Engineering. Swinerton Builders is the primary structure builder, while Power Engineering is the primary marine builder. The team also includes Shah Kawasaki as the architecture firm and Liftech, a marine structural engineering firm.

The LBE participation requirement set by the City's Contract Monitoring Division (CMD) for contract was set at 10% for design and 15% for construction. Public Works is currently working on getting the contract in place and targets execution in early August.

PROJECT SCHEDULE

The full project team - which includes Public Works, SFFD, the Port, and the Design-Build Team - intends to initiate the public design, historic and environmental review process for the Project in earnest upon award of the Design-Build contract. With input provided through the environmental review process and with considerable input from various regulatory agencies and community stakeholders, the project team expects to complete the design for this project by the end of 2018. With a completed design, the team will also aim to complete the project permitting by mid-2019. Finally, with project permitting secured, the Design-Build Team will start the project construction in late 2019, with the completion of construction slated for the fall of 2020.

NEXT STEPS

As noted above, the Design-Build Team that has been selected is expected to be under contract in early August. Also in August, the Port will seek to enter into a cooperative agreement with San Francisco Public Works outlining the project objectives; roles and responsibilities of each agency; permit and planning approval process and requirements; and Port staff work program and cost reimbursement. Port staff will continue to provide periodic reports to the Port Commission on the progress of the project, and the Project will include outreach to additional stakeholders and regulatory entities such as the Central Waterfront Advisory Group (CWAG), BCDC Design Review Board and the Waterfront Design Advisory Committee, the San Francisco Historic Preservation Commission, San Francisco Architectural Heritage, and City Planning Architectural Review Committee, and others.

Prepared by: James Hurley, Project Manager

Prepared for: Mike Martin, Deputy Director
Real Estate & Development