

MEMORANDUM

July 7, 2016

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

FROM: Elaine Forbes
Interim Executive Director

SUBJECT: Informational Presentation on the San Francisco Fire Department Earthquake Safety and Emergency Response Bond Improvement Project at Pier 22½; Fire Boat Berthing at Pier 26; and Supporting Port Agreements

DIRECTOR'S RECOMMENDATION: Information only; No Action Required

Executive Summary

The San Francisco Fire Department ("SFFD") is working to improve fire and emergency response capability in the Bay and along the waterfront. This informational presentation describes two proposed improvement projects that are under discussion by SFFD and Port staff. Each will require future Port Commission authorization and approval, as further described.

- Rehabilitation of Fire Station No. 35, located at Pier 22½, on The Embarcadero between Folsom and Harrison Streets. SFFD proposes to preserve the historic Fire Station structure and replace the existing non-historic maintenance shed with a modern new facility to provide expanded space to fully accommodate fire station staff and equipment, and to replace deteriorated berths for the two fireboats. Station No. 35 does not currently meet emergency response facility requirements. Rehabilitation of the facility is required to enable the SFFD to respond immediately and efficiently to emergencies on the Bay. Port staff is working with SFFD to develop a Cooperative Agreement to be presented for Port Commission action at the August 9, 2016 Port Commission meeting. The Agreement will outline the project objectives; roles and responsibilities of each agency; permit and planning approval process and requirements; Port staff work

program and cost reimbursement. Ultimately, a new Agreement will be required for the improved facilities at Pier 22½ that identifies the scope of services SFFD provides to the Port, and terms of payment that are consistent with other work order agreements and MOUs between City departments. Based on the current project schedule, the entitlement process is expected to be completed by 2019.

- Fireboat berth along Pier 26 north apron. SFFD has purchased a third fire boat that will be able to respond to chemical, biological, radiological, and nuclear explosive emergencies (“CBRNE boat”), and can deploy spill response containment booms. SFFD proposes to repair 255 lineal feet of the Pier 26 north apron and replace fender piles for long term berthing of the CBRNE boat. Port staff and SFFD are developing a lease in the form of a Memorandum of Understanding and Berthing Agreement for the use of Pier 26. To service the CBRNE boat, the proposed MOU includes 1,916 square feet of adjacent shed work space in Pier 26, as well as 1,356 square feet of office space. SFFD is working with San Francisco Public Works to develop and implement the repair construction work that will comply with Secretary of Interior Standards for Historic Rehabilitation, Port Best Management Practices and applicable permitting and regulatory requirements. Project staff estimate the cost of the berth improvements to be \$2.3 million. The Port’s proposed MOU with SFFD would credit the capital repairs toward parameter rent for the space, and will be presented for Port Commission action at the August 9, 2016 meeting. The proposed capital improvement will have a secondary benefit of allowing for temporary berthing of SFFDs other two fireboats while Station No. 35 is under construction. The capital improvements for this project will leave a new leasable berth for the Port once SFFD’s temporary berthing has concluded.

Funding for SFFD station rehabilitation projects has been allocated through the June 2010, voter-approved bond measure known as the Earthquake Safety Emergency Response (“ESER”) bond program. This ESER Bond assigned a maximum of \$37 million to rehabilitate this station.

Role of Pier 22½’s Station No. 35 in the Bay

Station No. 35 is the only fire boat facility in the San Francisco Bay region. The Port of Oakland decommissioned their fire boat station in 2003. Station No. 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 Station No. 35 would supplement existing capacity from the U.S. Coast Guard Station at Alameda. The Station No. 35 project area includes one of the four manifolds (bay water access infrastructure) on the San Francisco waterfront that are used to access Bay water to respond to Bay and City fire emergencies.

Station No. 35 Existing Conditions

This station consists of an historic station house, two wharf piers, and maintenance shed. The station is assigned two fire boats and one fire engine. This station has not been updated since the 1980s and does not provide adequate storage for its fire equipment. The existing fire boat berthing areas are also unstable and inadequate for

the assigned fire boats. The assigned fire boats and other vital emergency equipment often travel from other waterfront areas and nearby SFFD stations to Station No. 35 to respond to emergencies. This travel causes delay in emergency response time. The following are details on the current building and berthing capacity at Station No. 35.

Station Buildings: Station No. 35 includes a historic fire boat house and maintenance shed. The fire boat house is a two story Mediterranean style fire station built in 1915 with a footprint of 4,736 square feet. This building has a fire engine loading and storage area, kitchen and office on the first floor and one dorm room and mezzanine storage area on the second floor. The station does not have the building area to provide separate changing areas for men and women. This is the only fire boat house in San Francisco that does not provide separate changing accommodations for fire fighters. The maintenance shed, built in 1987, is one story and has a footprint of 1,700 square feet. It has limited storage and maintenance areas for performing routine boat engine maintenance and loading and unloading boat equipment and personnel. Due to space constraints, the SFFD stores its emergency response equipment (rescue boats, oil spill equipment, dive equipment, and jet skis) off-site.

Station Berthing Area: The berthing structures at Station No. 35 have deteriorated significantly and will soon be completely unserviceable. The Pier 24 wharf, located south of Pier 22½, was used to berth the fire boats until it was demolished for safety reasons in the 1990s. The remaining wharf areas assigned to Station No. 35 cannot berth the two fire boats during inclement weather due to their deteriorated condition. Currently, SFFD stores these boats at southern and northern waterfront locations during storms.

Station No. 35 Improvement Project

- In 2010, the SFFD received funds for this project through a San Francisco voter approved fire station safety bond referred to as the 2010 Earthquake Safety and Emergency Response (ESER) General Bond Obligation for the purpose of improving San Francisco Fire Stations including seismically upgrading stations. This bond includes funding for Station No. 35.
- In 2011, the SFFD sought project and budget approval from the Fire Commission (resolution 2011-03) which approved the allocation of ESER bond proceeds for a Pier 22½ Station rehabilitation project.
- The SFFD designated the Department of Public Works (DPW) as its development agent for the Station 35 Project, assigning DPW project management responsibilities including hiring and managing all project engineers, consultants, contractors and other related entities required to complete the Project. DPW also has management authority over the bond proceeds allocated to the Project.

Objective

The objective of the Station 35 project to remove any barriers to emergency response times on the Bay and create a “first response” facility at Pier 22½ that is a seismically secure with a berthing area for two fire boats and “24/7” accommodations for 12 firefighters and boat engineers. These accommodations must have changing quarters

for male and female SFFD employees and storage areas for first response equipment. The berthing area must have vehicle access and provide a vehicle turnaround area. The new station building lifespan is planned for 75 years or more.

Considerations

Since this station will increase a pier footprint on the Bay and will introduce a new building to the San Francisco waterfront there are a unique set of project considerations to address which are: Port Planning, Historic and Design review requirements for buildings on the waterfront; San Francisco City planning area designations; and project permitting for in Bay work such as permits from Bay Conservation Development Commission (“BCDC”), Regional Water Quality Control Board (“RWQCB”), and United States Army Corps of Engineers (“Army Corps”). In addition, this project must address relatively new Port project considerations which are sea level rise and Federal Emergency Management Agency (“FEMA”) flood zone designation. The following are preliminary guidance on these areas of consideration.

Port Building Requirements: A Port building permit will be required for this project. This permit cannot be issued until CEQA is complete and all applicable regulatory permits are issued and restrictions are addressed. Once project permits have been secured, the project must comply with the in-Bay water work window which is between June 30th and November 30th. It is anticipated that this project will also require a public design and historic review process to ensure the project’s consistency with the Embarcadero Historic District and waterfront design standards.

Area Zoning: The pier location is identified as a Waterfront Mixed Use Opportunity Area within the China Basin Waterfront Subarea, South Beach Segment, in the Port of San Francisco Waterfront Land Use Plan. It is zoned M-1 Light Industrial, Height-and-Bulk District 40-X, and is in the Waterfront 1 Special Use District.

Port staff has determined that this rehabilitation project is consistent with the Port of San Francisco Waterfront Land Use Plan in that it seeks to maintain an important service for maritime commerce and other water dependent activity in the San Francisco Bay, and to use its strategic central location more efficiently.

Regarding historic review and preservation requirements, the Port has requested that this project maintain the historic station house building and occupy it with uses compliant with preservation standards. Provided as background, the project is located in the Embarcadero Historic District. The historic fire boat house is listed as a contributing resource to the Port of San Francisco Embarcadero National Register Historic District and has local landmark designation.

Port staff has also recommended that this project not exceed the existing 40-foot height limit for the project area.

Other Regulatory Approvals: SFFD and Port personnel have started discussions on this project informally with BCDC. These discussions have recognized the importance of the project and consideration of public access and view requirements for BCDC permit

approval. Discussions with the RWQCB and Army Corps on this project will commence with Port involvement when required project area studies on habitat conditions and project impacts are completed.

FEMA Flood Zone Designation: Based on the 2015 Preliminary FEMA Flood Insurance Rate Maps, the project area is in a Special Flood Hazard area. This map designates the project area in Zone VE, which gives this project area a flood elevation of 11 feet during a 100-year flood event. Given the estimated Pier 22½ deck elevation of 10.9 feet, the project area is anticipated to experience some flooding during a 100-year flood event.

Sea Level Rise Projections: Using current City projections from the City Sea Level Rise Action Plan, it is anticipated that this project area may experience a sea level rise of one to two feet by 2050 and three feet by 2100.

Under new Port project considerations, Port staff recommends that this project locate all its utilities such as sewer and water lines above the Pier to be able to address utility maintenance issues efficiently.

Proposed Area Improvements

To create a permanent fire station facility at Pier 22½, the SFFD-DPW project staff proposes to construct a new pier and building behind the existing historic station house. This new pier will provide a safe berthing area for the fire boats assigned to the station and support a new building for emergency equipment and dormitories for the personnel assigned to the station. The project scope will remove the deteriorated pier and wharf structures located north and south of the fire station house. To support this new building, the existing historic station house will be maintained in place and will continue to house the station assigned fire engine.

To address the expected flooding and sea level rise in the project area, the DPW design team has studied and selected a “floating pier” or barge concept for the new pier upon which the new building will be constructed. The design team determined this concept would accommodate a 24/7 facility with negligible impact on the quality of life for the occupants. This floating pier design concept exists 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. Through their evaluation process they have determined that a floating, steel pier design would be the most cost efficient. This floating pier would have guide piles to maintain its position and two ramps to connect it to the Port seawall. These ramps would provide vehicle and emergency personnel access between the existing building and floating pier.

Pier 22½ Project Scope Specifics

- Remove the deteriorated wharf and pier structures north and south of the historic station house at Pier 22½ to reduce the wharf pier support structure footprint from 14,820 to 7,000 square feet.
- Maintain the existing historic fire station building and supporting structural improvements and use the building to store the station assigned fire engine.

- Construct and install: (1) a new 14,400 square foot floating pier barge (180 feet in length and 80 feet in width) to accommodate up to four boats at the Pier 22½ location; (2) A new 9,396 square feet (174 feet in length, 54 feet in width, and 32 feet in height) building on this floating Pier barge with a building area of approximately 18,305 square feet on two floors. This new building will have storage areas for “first response” equipment such as rescue boats, jet skis, booms and firefighting foam; and (3) two access ramps with a total area of 2,000 square feet. One access ramp must provide vehicle access. This ramp that will be secured behind the seawall to address seawall and seismic concerns. The program for the building is further described in the attached **Exhibit A**.
- All station utilities will be above the pier deck.
- All new in-bay structures will be designed to last 75 years with no significant maintenance.

This proposed new pier and building will have a significantly smaller building envelope than existing piers and buildings. For comparison, the project area pier heights range from 41 feet to 51 feet. The new cruise terminal at Pier 27 is 504 feet in length and 104 feet in width, and has a total building area of 91,000 square feet. To comply with the area zoning, the proposed new station building will have a height of no greater than 36 feet with sea level rise. With sea level rise, it is anticipated that this new building will be seven feet taller than the existing historic building, which is 28 feet in height.

This project will be presented to additional stakeholders and regulatory entities including Port citizen advisory committees, 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.

Project Schedule Goals

The SFFD-DPW project team intends to start the public design, historic and environmental review process for this project this year. With input provided through the environmental review process and with considerable input from various regulatory agencies and community stakeholders, the SFFD-DPW project team expects to complete the design for this project by 2018. With a completed design, SFFD-DPW team will aim to complete the project permitting by 2019. Finally, with project permitting secured, the SFFD-DPW team will start the project construction in 2019 or when project approvals are secured.

Pier 26 Improvements

SFFD has purchased a third fire boat that will be able to respond to chemical, biological, radiological, and nuclear explosive emergencies (“CBRNE boat”), and can deploy spill response containment booms. This will be the only boat in the Bay region with this capacity. The SFFD seeks to berth the CBRNE boat at Pier 26, to keep it in close proximity to Pier 22½ Fireboat Station 35.

Pier 26 is located on The Embarcadero between Harrison and Bryant Streets. The Pier 26 north apron was designed for maritime berthing but has not been in active use and is in need of repair. The Pier 26 north apron is identified as a vessel berth resource in the Port Maritime Industrial Preservation Policy approved by the Port

Commission September 8, 2015. Port staff has prepared repair drawings to reuse this facility but has not pursued this repair to date because of insufficient capital funds.

SFFD and the Port are negotiating a Memorandum of Understanding to allow SFFD to make repairs to a portion of the Pier 26 north apron repair for the new fireboat, as shown in the attached site plan. The improved apron would include also support back up berthing for two additional fireboats and life safety boats for San Francisco Bay. SFFD also is negotiating use of approximately 3,300 square feet of space inside the Pier 26 shed for storage of equipment and ancillary office space, as a provision of the MOU. Pier 26 has been used for vessel berthing in the past, which was limited due to deterioration of the fender piles. The SFFD light storage and ancillary office use would be the same as ongoing existing uses in the Pier 26 shed.

To address the necessary repairs to the Pier 26 north apron, Port and SFFD staffs have collaborated on a repair solution that is consistent with Port preservation guidelines. The Port, SFFD and DPW are jointly pursuing permits for this repair project from the RWQCB, BCDC, and City Planning for CEQA determination.

The Port MOU for the use of the Pier 26 north apron and shed is further described in the Port agreement section of this report.

Pier 26 Project Scope Specifics

- Remove of existing fender system, including 29 15” rotten creosote piles (at minimum two feet below the mudline), 8 lineal feet of rotten creosote timber blocking, 56 lineal feet of rotten creosote timber chocks and 81 lineal feet of rotten creosote timber wales.
- Remove and replace in-kind of hardscape adjoining the fender system, including 722 square feet of chipped concrete and 2,664 square feet of chipped asphalt overlay.
- Install new fender system: installation of (1) 36 new steel pipe piles, 103 lineal feet of galvanized steel wales, 63 lineal feet of new pressure treated timber blocking and 67 lineal feet of new pressure treated timber chocks; and (2) six foam fill fenders (two of which relocated from Pier 22½).
- Construct of 255 linear feet of new infill bridge overlay (steel, concrete with asphalt topping), covering (but not encasing) the existing depressed apron and railroad tracks, creating 3,060 square feet of newly usable apron.
- Install new access stairs from pier deck to fireboats.
- Upgrade electrical service for P26 to handle additional power requirement of new berths, installing new switch gear adjacent to SFFD office space.
- Repair and modify roll up door servicing SFFD shed space to include a pass door for transit while the roll up door is closed (see **Exhibit B**).

Port Project Agreements

To accommodate the two projects described above, the Port and SFFD will seek partner on a series of agreements that will be brought to the Port Commission for review and approval. These agreements are described briefly below; the first two (the Pier 26 Temporary Berthing Agreement and the Cooperative Agreement) are currently slated to

be presented at the August 9th Port Commission hearing, while the other two (the Pier 22½ Property Agreement and the Service Agreement) will follow as the project team nears the start of construction.

Pier 22½ Cooperative Agreement

The Port and SFFD intend to work cooperatively to review and evaluate station improvement and expansion options and to plan and deliver a viable expanded Station No. 35 to serve the needs of the San Francisco waterfront and Bay region. To this end, the Port and SFFD seek to enter into a cooperative agreement outlining the project objectives; roles and responsibilities of each agency; permit and planning approval process and requirements; Port staff work program and cost reimbursement; and project schedule.

This agreement will cover the SFFD and Port understanding and relationships for this project from conceptual design through full project entitlement. This agreement will sunset when the entitlements for this project are secured and the property agreement for the SFFD Station House No. 35 operations at Pier 22½ is finalized. Based on the current project schedule, the entitlement process is expected to be completed by 2019.

Pier 26 Berthing Agreement

On August 9, 2016 Port staff will present to the Port Commission for approval an MOU between the Port and SFFD that will function similar to a lease with the following proposed terms (see **Exhibit C**):

- For an initial period of five years, SFFD will lease at parameter rental rates water and apron space for berthing and servicing of three fireboats, as well as adjacent shed and office space to compliment that work.
- After the first five years, SFFD will proceed on a month-to-month basis, leasing at parameter rental rates, water and apron space for a single fireboat, retaining the same shed and office space from the initial five years.
- For these operations, SFFD will repair apron decking and replace the fendering system within the leasehold, as well as upgrade electrical service to Pier 26, making a total of approximately \$2.3 million in capital improvement to Port facilities (see “Pier 26 Project Scope Specifics” above).
- The Port will allow SFFD to use 100% rent credits in lieu of rental payment until such time as the required capital improvements are fully offset.
- All capital improvements treat the historic railroad tracks at Pier 26 in a fashion that is consistent with the Secretary of Interior’s standards for treatment of historical properties.

Rent for Years 1-5 (3% annual increase)

<u>Space</u>	<u>Units</u>	<u>Cost/Unit</u>	<u>Total/Month</u>	<u>Annual Total</u>
P26 Apron	6,043 sf	\$0.36	\$2,175.48	\$26,105.76
Berths 1-3	11,680 sf	0.18	2,102.40	25,228.80
Shed Work / Laydown Space	1,916 sf	1.40	2,682.40	32,188.80
Office Space	1,356 sf	2.40	3,254.40	<u>39,052.80</u>
All Space Year 1 Total				\$122,576.16
Year 2 Total				126,253.44
Year 3 Total				130,041.05
Year 4 Total				133,942.28
<u>Year 5 Total</u>				<u>137,960.55</u>
All Space Years 1-5 Total				\$650,773.48

Estimated Rent Beginning Year 6 (3% annual increase)

<u>Space</u>	<u>Units</u>	<u>Cost/Unit</u>	<u>Total/Month</u>	<u>Annual Total</u>
P26 Apron	4,940 sf	\$0.41	\$2,000.70	\$24,008.40
Berth 1	3,901 sf	0.20	789.95	9,479.43
Shed Work / Laydown Space	1,916 sf	1.58	3,017.70	36,212.40
Office Space	1,356 sf	2.70	3,661.20	<u>43,934.40</u>
All Space Total				\$113,634.63

Except as described above as to rent and rent credits, the terms of the MOU will be consistent with other Port MOUs allowing City departments to use Port property, including standard terms regarding term, permitting, defaults, surrender, hazardous materials, allocation of liability, and insurance requirements.

Pier 22½ Property Agreement

SFFD currently occupies Station No. 35 through an outdated (executed on June 14, 1930), basic license agreement currently in effect on a month to month basis. This property agreement will be replaced with a new MOU for the new Pier 22½ wharf and pier area. The agreement will include standard Port property agreement terms and conditions and require that the SFFD own and maintain the proposed barge pier and maintain the historic fire station building and support structure. This new lease agreement will be presented to the Port Commission for review and approval and will specify the market rate rent for all SFFD use areas on Port property including rent for submerged land for proposed berthing areas. The precise timing for bringing the property agreement before the Port Commission has not yet been determined but it will generally be post- project entitlements, and prior to start of construction, which is anticipated to begin in 2019.

Ongoing Service Agreement

Currently, \$3 million in Port revenues are directed to SFFD annually to support the cost of operating two fire boats. These funds support the cost of 10 Full Time Equivalent (FTE) fire personnel, boat repair and maintenance and general citywide overhead. While the Port makes a considerable annual investment in fire services, there is no agreement in place that establishes the terms of services provided by SFFD to the Port. Thus, Port staff propose a service agreement between the Port and SFFD that will fully identify the scope of services that SFFD provide to the Port and establish terms of payment that are consistent with other work order agreements and MOUs between City departments. Additionally, Port Finance is preparing to initiate a nexus study that will evaluate if the costs of City services, including those of the fire boats, are consistent with the Public Trust requirements.

Strategic Objectives

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 seal level rise with the construction of a floating pier and 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.

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

Next Steps

Port staff will seek Port Commission approval of two items at its August 9, 2016 meeting:

(1) A Memorandum of Understanding between the Port and SFFD for the Pier 26 temporary berthing; and

(2) A Cooperative Agreement between the Port and SFFD providing a framework for a joint planning process for the Pier 22½ expansion project. The Pier 22½ Fireboat Station 35 project requires a lengthy entitlement process, and Port staff will provide periodic reports to the Port Commission on the progress of the project.

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