AGENDA:
- Bond Seismic Improvement Program
- Project Approach
- Project History
- Design-Build Procurement
$400M General Obligation Bond authorized in June 2014 with approval by 79% of voters

- Neighborhood Fire Stations $85M
- Emergency Firefighting Water System $55M
- District Police Stations and Infrastructure $30M
- Motorcycle Police and Crime Lab $165M
- Medical Examiner Facility $65M

*Total ESER and PHS funding for SFFD bond funded projects: $172M
Project: AERIAL PHOTO OF EXISTING SITE
SEA LEVEL RISE

BARGE FLOATING STRUCTURE

+14.30' Projected 2070 MHHW (50 yrs)
+3.0' Wave Action & 3.5' 100-Yr Flood
+12.72' Current MHHW
+3.0' Wave Action & 3.5' 100-Yr Flood
+10.90' Current Top of Pier

+7.77' Projected 2070 MHHW (50 yrs)
+6.22' Current 2015 MHHW
SITE HISTORY

1915
• Pier 22 ½ built
• Fire Boat Headquarters Building constructed

1980s
• Non-historic Fireboat Pier constructed

1987
• Storage Shed on the Fireboat Pier constructed by San Francisco Port Commission Department of Engineering
• 2 parking lots constructed
• Wood decking at east side of the Fire Boat HQ Building was replaced
• Pier substructure was strengthened with installation of concrete drums at the pilings
• Electrical wiring for the building was reconfigured and electrical equipment was installed at the rear of the building

1987

1999
• Fire Boat Headquarters Building designated as San Francisco City Landmark #225

2006
• Fireboat Headquarters Building listed as contributing resource of the POSF Embarcadero National Register Historic District
• Bulkhead Wharf is not listed (non-contributing resource)
• Important feature of Pier 22 ½ is its connection to the bulkhead wharf and the seawall.

2006

2010
• Pier Strengthening at Pier 22 ½
• Emergency stabilization of the pier structure
• AWSS Hydrant Removed
• $2.3M
• Cowhey Pacific Drilling; Vortex Marine
• ESER 2010 Bond passed
• Doesn’t include Fire Boat Station project
PROJECT HISTORY

2011
• June 23: Fire Commission approved concept of new concrete pier and boathouse structure
• Preliminary Budget: $20M

2012
• February 29: Fire Commission approved ESER 2010 NFS project portfolio
  • Approved Budget: $27.17M
  • ESER 2010: $19.54M
  • Other Funds: $7.63M
  • Slab replacement project completed in June 2012
  • $437K (non-ESER funds)
  • JOC contractor; Azul Works (LBE)
  • Modification to (E) gas line completed in April 2013
  • November 2012: Warriors presented proposed development project at Piers 30/32 included a new Fire Boat Station #35 at the site

2014
• April 2014: Warriors proposed project site moved away from Piers 30/32
• June 2014: SFFD directed Public Works to resume project planning at Pier 22 ½
• November 2014: ESER 2014 Bond passed

2015
• June 2015: Project moved to ESER 2014
  • Baseline Budget: $37.85M
  • RFQ for A/E Services
  • Advertised in September
  • GHD highest ranked respondent in December
  • Presentation to Capital Planning Committee in October
  • $52M

2016
• Introduction of Sea Level Rise (SLR) floating barge solution / scope reduced
  • Budget: $39.9M
  • Design-Build project delivery method approved by Fire Administration
  • RFQ for Design-Build Services advertised in August
  • Pier 26 Fire Boat Berths
  • NTP issued in August to Vortex Marine

2017
• RFP for Design-Build Services advertised in February
  • RFP Step 1 submissions received in March
  • RFP Step 2 submissions due in May
  • Selection of Design-Builder in June

Building Design & Construction
Project Management
EXISTING CONDITIONS:

- Current facilities are over 100 years old – costly repairs continue to mount
- Two piers, both deteriorating
  - One is completely unusable, the other is in poor condition
- Fire Station not seismically retrofitted
- Storage offsite, so equipment is out of reach in emergency situations
- Spill response containment booms stored in trailers away from water
- Split operations

EXISTING FACILITY DEFICIENCIES:

- Current facility space is grossly undersized for the operation program
- Locker facilities and restrooms are inadequate
  - Only station with no equal accommodations for female firefighters
- Ongoing fireboat maintenance including welding and other metal work currently done in the existing (unsuitable) wood framed shed structure
- No ambulance access to back of fire station for transfer of injured
- No decontamination space for firefighters and equipment
EXISTING CAPACITY

EXISTING STATION  6,100 GSF

ASSETS

• Two Fire Boats

• One Fire Engine

LIABILITIES

• Deteriorated Berthing Areas

• No Environmental Responses Equipment Storage, e.g. Oil Spill Boom

• No capacity for: Jet Skis, Small Craft Rescue Equipment, Dive Boat, e.g. Small Rescue Watercraft

• No Storage Areas

• No Decon Area and No Dive Equipment Area

• No Rescue Unloading Area

• No Changing Facilities for Firefighters

Historic FS #35 is 4,736 GSF
Shed is 1,720 GSF
Existing Pier/Dock/Parking Lot: 14,820 GSF
PROPOSED CAPACITY

NEW STATION 16,339 GSF

ASSETS
- Three Fire Boats
- Rescue Watercraft
- Jet Skis
- Dive Boat
- One Fire Engine

FEATURES
- Addresses all liabilities of existing facility
- Construction to Essential Facility Standards
- Storage Areas Consolidated for Emergency Response Equipment
- Ambulance Access
- Equipment for Boat Access, Rescue, and Loading and Unloading

Historic FS #35: 4,736 GSF
Existing Pier to remain: 7,000 GSF
Proposed New Barge*: 19,400 GSF
Total Shadow (Remaining + New): 26,400 GSF
*includes: Barge = 14,400 sf; Ramp = 2,000 sf; Float (200’x15’) = 3000 sf
for total shadow of all three NEW components on the Bay
Note: in addition to these restroom guidelines: each fire station, regardless of size, will have one all-gender ADA-compliant full restroom with toilet, lav and shower.
NEW FIRE BOAT STATION 35 AT PIER 22.5
San Francisco Fire Commission | June 14, 2017

DESIGN-BUILD PROCUREMENT

Panel 1: 4 members (1 SFFD)

Step 1
Minimum Qualification Application (MQA) Technical Submittal

Panel 2: 5 members (1 SFFD)

Step 2
Creative Interpretation Exercise (Design Competition)

Step 3
Price Proposal (35%) to be responsive price proposal must be <= $29.9M FBL
Schedule, Project Approach Technical Level Design, Oral Interview (65%)

Panel 1: 4 members (1 SFFD)

RFQ
5 teams submitted and 5 shortlisted:
• Overaa/Dutra, JV
• Nibbi Brothers
• Plant Construction and TEF/KRA, JV
• Swinerton/Power, JV
• Turner/Pfau Long, JV

RFP Step 1
3 teams submitted and 2 shortlisted:
• Overaa/Dutra, JV
• Plant Construction and TEF/KRA, JV
• Swinerton/Power, JV

RFP Step 2
1 responsive proposal submitted:
• Overaa/Dutra, JV
• Swinerton/Power, JV

Total Project Budget: $39.9M
Design-Build Budget: $29.9M
Design-Build Proposal: $29.82M
CONCEPT INTERIOR – DAYROOM/DINING/KITCHEN

Building Design & Construction
Project Management

NEW FIRE BOAT STATION 35 AT PIER 22.5
San Francisco Fire Commission | June 14, 2017
CONCEPT ELEVATION - SOUTH
CONCEPT VIEW FROM THE EMBARCADERO
CONCEPT VIEW FROM THE BAY
CONCEPTUAL PLANNING PROCESS FLOWCHART

**Concept Phase**

- Begin Concept Phase
- Present to Fire Commission
- Present to WDAC & DRB
- Present to Port Commission
- Present to San Francisco Heritage
- Present to ARC of the San Francisco HPC
- Present to South Beach, Rincon Hill, Mission Bay Neighborhood Associations
- Initial Meetings: JARPA, Army Corps., RWQCB, etc.
- BCDC Follow-Up Meeting
- Concept Design Complete

**Design Phase**

- Fire Commission Follow-up
- WDAC & DRB Follow-up
- Port Permit Review
- Port Commission Follow-up
- San Francisco Heritage Follow-up
- Port Engineering Peer Review
- CWAG Follow-up
- ARC Follow-Up
- BCDC Follow-up
- South Beach, Rincon Hill, Mission Bay Neighborhood Associations Follow-up
- Follow-up Meetings: JARPA, Army Corps., RWQCB, etc.
- 100% DD Complete
- 100% CD Complete

*City PM will coordinate scheduling & presentations; meetings will be combined wherever feasible*
## PERMITTING AGENCIES

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<tr>
<th>Agency</th>
<th>Type of Application</th>
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<tr>
<td>SF Port Building Permit Division</td>
<td>Port Building Permit</td>
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<tr>
<td>SF City Planning Environmental Planning Division</td>
<td>CEQA Review and Determination including procedures for historical resources</td>
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<tr>
<td>San Francisco Fire Department (SFFD) Administration</td>
<td>Design Review</td>
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<td>Central Waterfront Advisory Group (CWAG)</td>
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<td>Citizen Advisory Committees (CAC)</td>
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<td>Waterfront Design Advisory Committee (WDAC)</td>
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<tr>
<td>San Francisco Bay Conservation and Development Commission (BCDC)</td>
<td>1) BCDC Permit; Design-Build team to confirm whether Major or Administrative 2) Engineering Criteria Review Board (ECRB) 3) Design Review Board (DRB)</td>
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<td>US Army Corps of Engineers (USACE)</td>
<td>Sec. 10 (RHA) / Sec. 404 (CWA) Permit for discharge of dredged or fill material (33 CFR 323)</td>
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<td>1) Consultation under Sec. 7 (FESA) 2) Incidental Take Authorization under Marine Mammal Protection Act (MMPA)</td>
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<td>Sec. 401 (CWA) Water Quality Certification</td>
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<td>Incidental Take Permit Sec. 2081 (FGC)</td>
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<td>US Coast Guard</td>
<td>Maritime Transportation Security Act of 2002 (33 CFR)</td>
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<td>Consultation under Sec. 7 (FESA)</td>
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<td>CA State Lands Commission</td>
<td>Use plan consultation</td>
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<td>State Historic Preservation Officer</td>
<td>Sec. 106 (NHPA) consultation</td>
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PROPOSER’S SCHEDULE

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June 14, 2017

EEA Submitted
July ’16
PROPOSER’S METHODOLOGY

- Barge Design and Fabrication team:
  - Power Engineering
  - Liftech Consultants Inc.
  - Shanghai Zhenhua Heavy Industries Co., Ltd. (ZPMC)

- Liftech and ZPMC have partnered on previous marine projects.

- ZPMC is one of the largest steel fabricators in China.
- ZPMC’s internal QC department is separate from the fabrication department
- Daily oversight by third party inspection agency
- Periodic (2 days/week) weld audits by American Welding Society (AWS) certified weld inspector
- Reviews by Liftech Shanghai and Liftech’s CA Engineer
- Once fabrication is complete, dry barged to San Francisco.
- The building will be assembled on top of the barge docked at Pier 1, Treasure Island.
www.sfearthquakesafety.org/fireboatstation35