Earthquake Safety & Emergency Response Bond Program 2010, 2014, and 2020

August 28, 2023

















ESER 2010 Bond Overview

- **Scope:** Approved by voters in June 2010, ESER 2010 is a comprehensive program to enhance earthquake safety and emergency response by ensuring that police and fire facilities and infrastructure remain uncompromised in the mission to ensure public safety, particularly after a major earthquake or disaster.
- **Bond Authorization Total:** \$412,300,000
- Amount Issued to Date: \$416,758,554
- **▶ Upcoming Bond Interest Appropriation:** \$2.3M

Bond Components and Projects	Appropriations	Expenditures	Encumbrances	Balances	Expenditures/ Appropriations
Public Safety Building (PSB)	229,379,359	229,228,061	0	151,298	100%
Neighborhood Fire Stations (NFS)	80,941,986	76,743,696	183,946	4,014,344	95%
Auxiliary Water Supply System (AWSS)	102,400,001	102,202,826	197,175	0	100%
Oversight, Accountability & Cost of Issuance (iii)	3,931,489	3,509,402	0	422,087	89%
Public Works Program Reserve	105,719	0	0	105,719	0%
TOTAL (i)	416,758,554	411,683,985	381,121	4,693,448	99%

Financial data as of 7/19/2023

(i) Includes underwriter fees \$1.38M (paid prior to depositing bond proceeds) and previous partial bond interest appropriation



ESER 2010 Status Updates

Bond Component	Accomplishments/Milestones
Public Safety Building	Completed April 2015
Neighborhood Fire Stations – Major Projects	Fire Station 16 Replacement completed January 2019 Fire Station 5 Replacement completed April 2019
Neighborhood Fire Stations – Focused Scope	Replacement of Emergency Generator at Fire Station 14 contractor procurement to start in Fall-Winter 2023
Auxiliary Water Supply System	Completed projects: Installation of 30 new cisterns; major improvements to Twin Peak Reservoir, Ashbury Tank, Jones Street Tank, Pumping Station No. 1, Ashbury Bypass pipeline, and Irving Street pipeline; planning evaluations; field investigations of existing facilities. Pumping Station No. 2 construction completed in May 2023.



ESER 2014 Bond Overview

Scope: ESER 2014 was approved by voters in June 2014 and builds on the ESER 2010 Bond Program. It is a comprehensive program to enhance earthquake safety and emergency response by ensuring that first responders' facilities and infrastructure remain uncompromised in the mission to ensure public safety, particularly after a major earthquake or disaster.

Bond Authorization Total: \$400,000,000

> Amount Issued to Date: \$400,000,000

> **Upcoming Bond Interest Appropriation:** \$12M

Bond Components and Projects	Appropriations	Expenditures	Encumbrances	Balances	Expenditures/ Appropriations
Office of the Chief Medical Examiner (OCME)	67,533,024	67,470,731	0	62,293	100%
Traffic Company & Forensic Services Division (TCFSD)	174,495,790	171,276,889	214,650	3,004,251	98%
Police Facilities (PF)	26,845,661	26,031,590	0	814,071	97%
Neighborhood Fire Station (NFS)	72,030,741	63,365,121	577,367	8,088,253	88%
Emergency Firefighting Water System (EFWS)	54,347,209	51,011,813	1,561,915	1,773,481	94%
Oversight, Accountability & Cost of Issuance (iii)	4,296,388	3,689,931	0	606,458	86%
Public Works Program Reserve	451,188	0	0	451,188	0%
TOTAL (i)	400,000,000	382,846,075	2,353,932	14,799,993	96%

Financial data as of 7/19/2023

(i) Includes manual addition \$2M to account for Underwriter Fee, paid prior to depositing bond proceeds



ESER 2014 Status Updates

Bond Component	Accomplishments/Milestones
Office of the Chief Medical Examiner	Project is complete and the facility opened for business on November 6, 2017
Traffic Company & Forensic Services Division (TCFSD)	 Notice To Proceed for New Construction issued on 10/7/19; Substantial Completion achieved on 8/27/21; 25 days ahead of schedule Final Completion achieved on 10/21/21 Full occupancy by SFPD and RED completed in February 2022 LEED Gold Certification obtained 7/18/22 2022 Construction Management Association of America (CMAA) NorCal Project Achievement Award 5th Annual Collaborative Partnering Award 2022 Public Art installation scheduled for summer 2023 is delayed due to art fabrication issues; new date TBD
Neighborhood Fire Stations – Major Projects	 Fireboat Station 35 at Pier 22½: Substantial completion achieved on 2/28/2022; Final Completion achieved on 11/22/2022 Final payment and retention released on 7/17/2023 SF Public Works 2022 Project of the Year Award
Neighborhood Fire Stations – Focused Scope	 FS 2 Generator Replacement: project is complete; substantial completion achieved 8/24/2022; final completion achieved on 10/09/2022 Fire Station 19 Generator: procurement in process. NTP anticipated Summer-Fall 2023 SFFD Network Modernization: Surveys of Fire Stations in 9 of 10 fiber rings completed as of July 2023.
District Police Stations	 3 Focused Scope projects completed at 7 stations (Northern, Richmond, Taraval, Park, Ingleside, Bayview, Tenderloin) 2 Focused Scope projects cancelled (Police Academy and Mission Station)
Emergency Firefighting Water Supply (EFWS)	Completed projects: Candlestick Point pipeline, Columbus Avenue pipeline, Fillmore/Haight pipeline, Mission Street pipeline, Mariposa/Terry Francois Blvd. pipeline, and Terry Francois Blvd./Mission Rock Street/Warriors Way pipeline. In construction: 19th Avenue pipeline, Clarendon Supply pipeline.



ESER 2020 Bond Overview

- Scope: ESER 2020 was approved in March 2020 and builds on the ESER 2010 and 2014 Bond Programs. It is a comprehensive program to enhance earthquake safety and emergency response by ensuring that first responders' facilities and infrastructure remain uncompromised in the mission to ensure public safety, particularly after a major earthquake or disaster.
- **Bond Authorization Total:** \$628,500,000
- > **Amount Issued to Date:** \$167,805,000
- > **Anticipated Future Issuances:** \$460,695,000
- > Anticipated Date of Next Issuance: Q1 FY25

Bond Components and Projects	Appropriations	Expenditures	Encumbrances	Balances	Expenditures/ Appropriations
Emergency Firefighting Water System	35,000,000	12,932,854	7,361,682	14,705,464	37%
Neighborhood Fire Stations & Support Facilities	74,416,188	42,446,328	536,657	31,433,203	57%
District Police Stations & Support Facilities	32,022,200	7,226,858	553,687	24,241,655	23%
Disaster Response Facilities (Kezar Pavilion)	15,855,705	1,812,524	522,270	13,520,911	11%
9-1-1 Response Facilities	8,863,438	3,654,565	2,671,096	2,537,777	41%
Oversight, Accountability & Cost of Issuance (iii)	1,647,469	1,101,091	0	546,378	67%
TOTAL (i)	167,805,000	69,174,219	11,645,392	86,985,388	41%

Financial data as of 7/19/2023



⁽i) Includes manual addition \$329K to account for Underwriter Fee, paid prior to depositing bond proceeds

ESER 2020 Status Updates

Component	Accomplishments/Milestones
Emergency Firefighting Water Supply (EFWS)	 Potable Emergency Firefighting Water System (PEFWS): Planning and design continues for pipelines and pump station improvements. Construction underway for PEFWS pipelines on Vicente Street from 19th Avenue to 26th Street and on 19th Avenue from Vicente Street to Sloat Boulevard. Fireboat Manifolds project planning continues for improvements to manifolds at Fort Mason and Pier 35.5.
Neighborhood Fire Stations & Support Facilities	 Fire Training Facility (FTF): Programming Phase 2 kicked off in November 2022 and completed March 2023; Executive Architect Agreement now in queue for approvals by Board of Supervisors and Mayor's Office. Concept Design anticipated to begin late-September or early-October 2023. Street vacation application underway. Negotiating MOU with SFPUC regarding sewer systems under roads to be vacated. CMGC RFQ/RFP for pre-construction services and design/build MEP expected to be advertised by early Fall 2023. Fire Station 7 Replacement: Due to funds required for the FTF project, funding for Fire Station 7 is not available.
District Police Stations & Support Facilities	 Mission Structural Improvement: Construction began in August 2022, and substantial completion was effectively achieved on 7/20/23. Ingleside Replacement: CM/GC selected in February 2023. Public Works Commission approved CM/GC contract on 7/21/23. Surge Facility (Make-Ready project for Ingleside): Schematic Design complete in May 2023 for installation of a Surge Facility at 1828 Egbert.
Disaster Response Facilities (Kezar Pavilion)	 Conceptual site development work proceeding and being refined Hazardous material testing for structures and site soils testing complete. Maher testing completed. Structural assessment is on-going. Cost reconciliation process for concept design nearly complete Plan to initiate formal public outreach process in fall
911 Call Center Renovation	 Construction NTP issued in Jan 2023; contractor mobilized in Feb 2023; Phase 1 substantially completed in May 2023; Phase 2 anticipates substantial completion in Nov 2023.



ESER 2020 Program Schedule Overview

Component	Planning / Design / Permits	Bid Award	Construction
Emergency Firefighting Water Supply (EFWS)	In progress – 11/25	1/21 – 7/26	6/21 – 1/29
Neighborhood Fire Stations & Support Facilities	FTF: 11/22 - 04/26	FTF: 04/24 - 08/25	FTF: 09/25 - 07/28
District Police Stations & Support Facilities	04/21 – 05/24	10/21 – 12/24	08/22 – 06/27
Disaster Response Facilities (Kezar Pavilion)	04/21 – 2/25	3/25 – 06/25	07/25 – 11/27
911 Call Center	05/21 – 04/22	05/22 – 12/22	1/23 – 12/23



ESER 2020 Upcoming Challenges and Risks

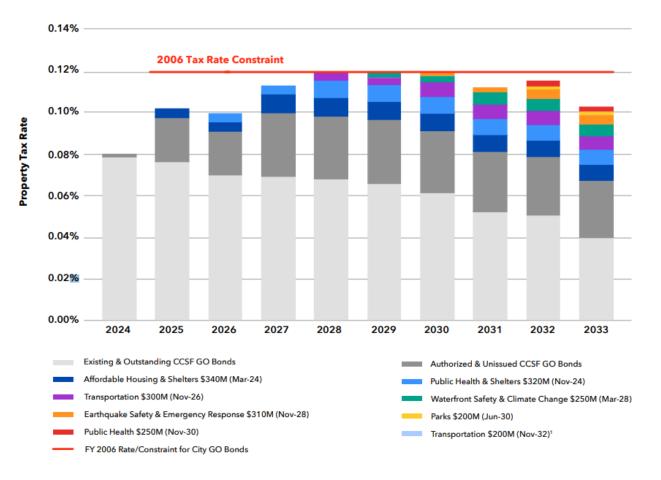
Component	Challenges & Risks
Emergency Firefighting Water Supply (EFWS)	 Market conditions have significantly increased material and labor costs, reducing mileage for construction of funded pipelines. Potholing to be performed during design to reduce risk of unforeseen field conditions that may delay project schedule and increase cost. Reviewing scope and cost estimates for cost reductions that may increase mileage for construction.
Neighborhood Fire Stations & Support Facilities	 Fire Training Facility Securing zoning variance for some training structures that will exceed current 40' height limitation Existing site soil conditions (fill on bay mud) as it relates to foundation requirements and/or potential contamination elements Aligning completion of facility with the target exit from Treasure Island may prove challenging
District Police Stations & Support Facilities	 Ingleside Police Station Situated at the western edge of Balboa Park on a compact site with limited development options Adjacent to I-280 and BART infrastructure Unforeseen conditions to be expected for rehabilitation of historic building. Single point of entry from San Jose Avenue poses challenges for construction logistics as well as temporary and permanent utility connections.
Disaster Response Facilities (Kezar Pavilion)	 While initial review from Historic Preserve staff from the Planning Departments is favorable, final environmental review is not yet complete Structural destructive testing may uncover unanticipated, unforeseen conditions Increased costs due to escalation and market volatility
911 Call Center	Construction in an existing facility while maintaining uninterrupted client department operation in the same building.



ESER Impacts: Equity & Climate Resilience

- Potable Emergency Firefighting Water Supply: New high-pressure pipelines in the Lakeshore, Sunset and Richmond Districts will expand post-seismic firefighting protection to western SF; these pipelines provide drinking water but can draw from Lake Merced for reliable multi-day firefighting water supply.
- Fire Training Facility: The project will replace two older, outdated, training facilities (19th/Folsom & Treasure Island) with a new, state-of-the-art, LEED-gold-certified facility to train SFFD fire fighters and paramedics. The new facility will also add street improvements to an often-neglected region in the City.
- Ingleside Police Station Replacement: The new facility will allow for continuous operations even after a major earthquake allowing the police department to serve their core mission with enhanced efficiencies. The project will preserve the historic building. It will be LEED gold certified.
- > **Surge Police Facility:** The installation will maximize the opportunity for SFPD to repurpose the works for their future permanent use as part of the consolidation of Property Control Division.
- Kezar Pavilion: Renovated facility to be all electric, LEED gold certified and 15% of the roof area will have PV panels. The building will also function as mass care shelter or mutual aid station in the event of an emergency and provide much needed emergency services to the western side of the City. The recreation center will provide expanded health and wellness opportunities to residents.

Capital Plan G.O. Debt Program FY2024-33

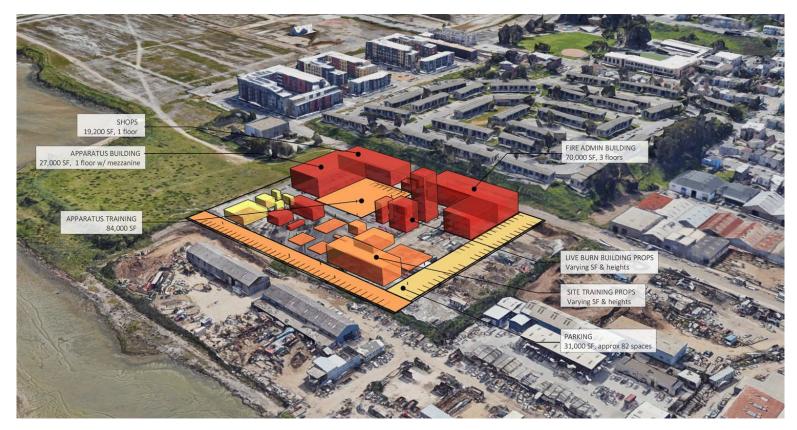


Based on the Capital Plan FY2024-33, this chart illustrates the relationship between the G.O. Bond Program and the local property tax rate, including existing and outstanding issuance and voter approved Bonds.

This view shows the City's policy constraint that G.O. Bonds will not increase the property tax rate above 2006 levels. Capital Plan FY2024-33



¹ First tax levy for Transportation (11/2032) authorization does not occur until FY2034



Pre-programming conceptual diagram only (not representative of current program)

Location:

1236 Carroll Avenue

Project Background:

- FTF at Treasure Island obliged to depart TI for emerging development
- Dept of Training Facility at Station 7 to join TI functions at 1236 Carroll
- BOS approval of CEQA in February 2022
- 1236 Carroll secured; Port property / State
 Lands approved in February 2023, escrow expected to close by September 2023.

Project Objectives and Goals

- 1. Provide a facility to meet modern firefighter training needs
- 2. Allow for continuous operation after a major earthquake
- 3. Build a sustainable, energyefficient, and durable facility
- 4. Provide a secured, safe and healthy work environment

Project Scope

Consolidate all training functions at single site including:

- 1. Administrative & Classroom Bldg.
- 2. Apparatus Building
- 3. In-Service Building
- 4. Shops/Maintenance Building
- 5. Fire Training Structures/Props:

Training Tower

Vehicle fire apparatus training hill

Commercial/Apartment Building

Victorian House

Junior-5 House

Urban Search & Rescue (EQ collapse)

	July 2022	July 2023
Budget Forecast	274,880,000	* 270,800,000
Project Controls Subtotal	50,890,000	50,600,000
Architecture and Engineering	19,214,000	22,300,000
Other Project Controls Costs	31,676,000	28,300,000
Total Construction Costs	171,430,000	158,200,000
Principal Construction Contract	165,080,000	152,600,000
Other Construction Costs	6,350,000	5,600,000
Contingencies/Reserves	11,560,000	** 23,000,000
Land Cost	41,000,000	*** 39,000,000

^{*} Excluding cost of bond issuance, oversight, auditing, etc. ~\$4.2M of \$275M bond total (erroneously included in 2022 forecast)



^{** 2023} Contingencies/Reserves include:

⁻ Construction change order allowance (10%)

⁻ Design add service allowance (10%)

⁻ Scope specific reserves (utilities, soils conditions, street improvements, etc.)

^{***} Private land purchases only – excludes Port/State Lands Commission property (general fund)

Project Delivery - Key Next Steps

- 1. Executive Architect agreement approval by BOS & Mayor's Office September 2023
- 2. Start Concept Design October 2023
- Next major contract solicitation CM/GC Request for Qualifications (Construction Mgr./ General Contractor) – September 2023
- 4. Street vacations application September 2023
- 5. Community outreach w/ massing diagrams at end of Concept Design December 2024

Issues related to spending and scope changes

- 1. Tour city buildings with SFFD to confirm prop building sizes and requirements for site
- 2. Construction Mgr./Gen. Contractor (CM/GC) entry at completion of Schematic Design Phase Spring 2024
- 3. Major trade contractors' pricing





Location:

1 Sgt. John V. Young Lane

Project Background

- Existing police station was built in 1910
- A major seismic event would impair the ability to perform its service function
- Major deficits pertaining to basic functions, security and life safety



Project Objectives and Goals

- Expand the facility to meet modern policing needs and enhance operational efficiencies
- 2. Allow for continuous operation after a major earthquake
- 3. Save the historic building structure
- Build a sustainable, energy-efficient, and durable facility
- 5. Provide a secured, safe and healthy work environment
- 6. Provide a welcoming community experience

Project Scope

- 1. Altering and rehabilitating the historic building structure
- 2. Constructing a new ancillary building on site to support expanded program
- Installation of the Surge Facility at 1828 Egbert – a make-ready project for the construction of Ingleside Police Station Replacement



	June 2022	July 2023
Budget Forecast	95,384,000	93,068,000
Project Controls Subtotal	26,544,000	24,057,000
Architecture and Engineering	11,413,000	11,554,000
Other Project Controls Costs	15,131,000	12,503,000
Total Construction Costs	63,403,000	64,188,000
Principal Construction Contract	53,507,000	52,960,000
Other Construction Costs	9,896,000	11,228,000
Contingencies/Reserves	5,437,000	4,822,000



Project Delivery

- 1. PW Commission approved award of a CM/GC (Construction Manager/ General Contractor) to Clark Construction Group on 7/21/22
- 2. Notice To Proceed for Construction targeted April 2025

Issues related to spending and scope changes

- 1. Local market construction escalation and supply chain issues
- 2. Unforeseeable conditions associated with rehabilitation of historic building
- 3. Unknown conditions working within Balboa Park and adjacent BART tunnel structure
- 4. Extensive connection of utilities anticipated due to siting of the existing police station



Emergency Firefighting Water Systems (EFWS)



Locations

Potable Emergency Firefighting Water System (PEFWS)

Construction

- 19th Ave from Sloat Blvd to Vicente St
- Vicente St from 19th Ave to 23rd Ave

Design

- Contract A 42-inch from Lake Merced to Sloat Blvd/19th Ave
- 2. Contract B 36-inch from 23rd/Vicente to 42nd Ave

Project Background

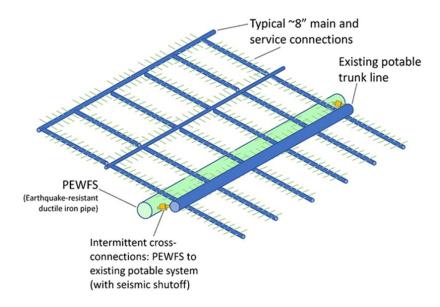
- Alternative Analysis Report Pump Station – July 2021
- 2050 Planning Study December
 2021
- Conceptual Engineering Report Draft May 2023

Building Our Future

Emergency Firefighting Water System (EFWS)

Potable EFWS Project Objectives

- Provide high-pressure water supply for firefighting following a major earthquake, or greater alarm fires that may occur in non-earthquake conditions.
- Provide domestic potable low-pressure water supply for normal daily conditions.
- Provide potable water after firefighting through seismically reliable pipe network.



Project Scope

- 1. High-pressure seismically reliable pipelines
- 2. Lake Merced Pump Station connection and mechanical upgrades
- 3. High-pressure EFWS hydrants
- 4. Automated seismic valves with back-up power
- 5. Electrical, instrumentation and control (I&C) upgrades



36-inch PEFWS Pipeline at 19th Ave and Sloat Blvd



Emergency Firefighting Water System (EFWS)

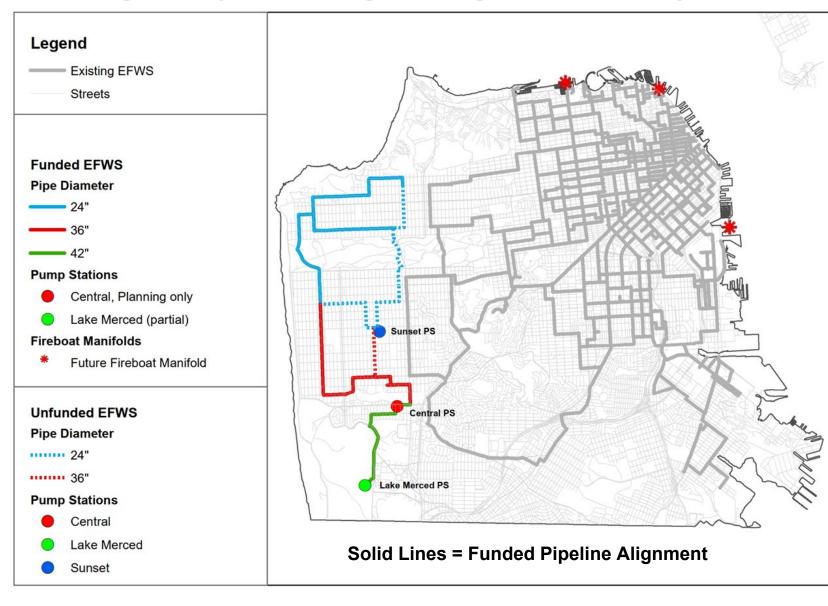
PEFWS Project Delivery – Forecasted Milestones

- 1. Contract A 35% design completion December 2023
- 2. Contract A 100% design completion Summer 2025
- 3. Contract A Construction Notice to Proceed January 2026
- 4. Contract A Construction Completion July 2028
- 5. Contract B is being developed concurrently with Contract A. Both has similar schedules but Contract B will lag by six months.

Challenges: significant cost increases = decreased pipeline mileage

- 1. Scope refinement: greater project detail such as seismically actuated valves and back-up power requirements have increased project cost.
- 2. Recent post-COVID market conditions have significantly increased labor and materials costs as well as causing delays in materials procurement.
- 3. Potholing will be performed during design to reduce potential increased costs due to unforeseen conditions.

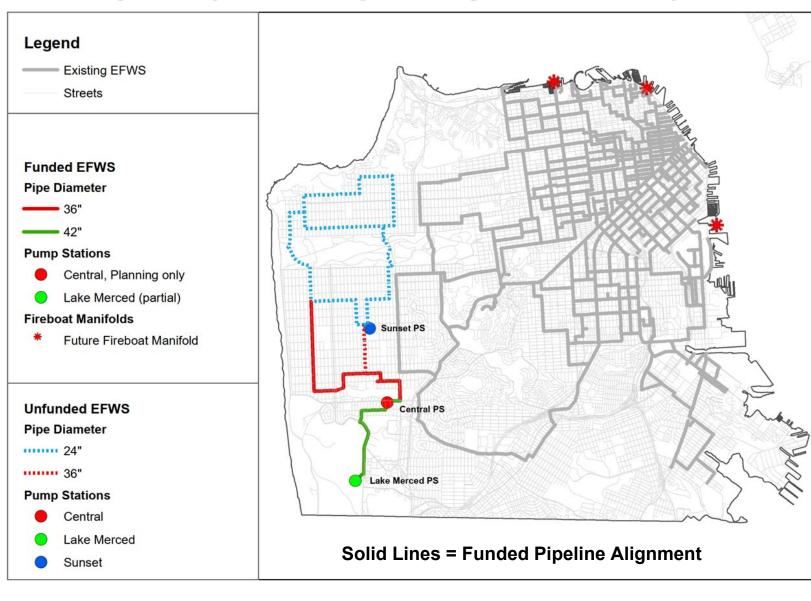




2019 Planning Study estimated funded mileage (unescalated planning-level estimate; approx. \$15M/mile)

Funding = ESER 2020 Bonds (\$153M) + Water Bonds (\$55M)





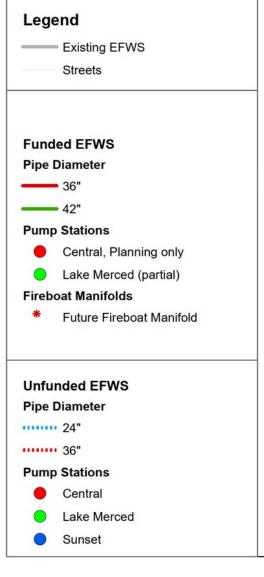
May 2023 Draft Conceptual Engineering Report estimated funded mileage (with escalation, higher level accuracy; approx. \$42M/mile)

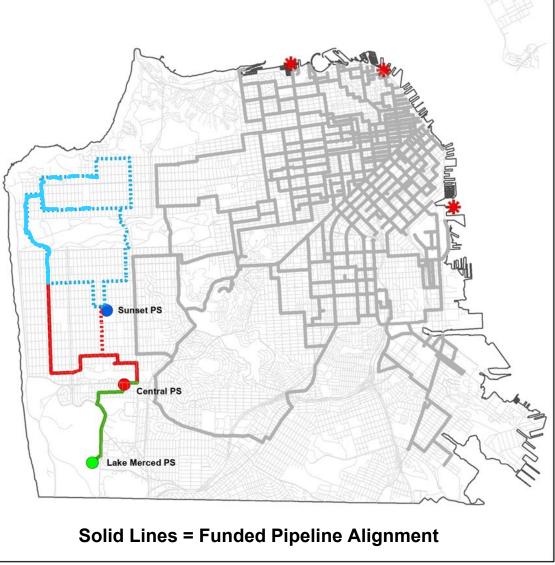
Funding = ESER 2020 Bonds (\$153M)

PEWFS: ESER 2020 (\$102M)

+ Water Bonds (>\$55M, TBD)







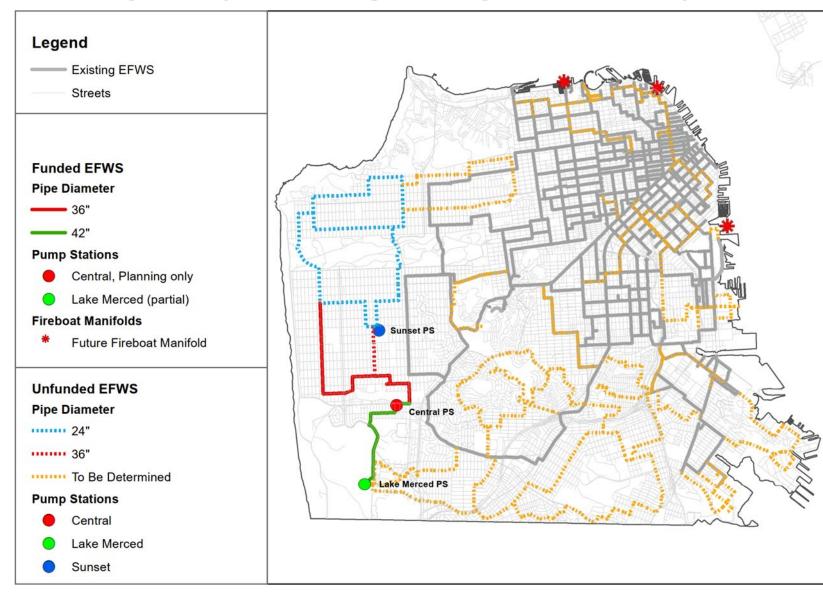
May 2023 Draft Conceptual Engineering Report estimated funded mileage (with escalation, higher level accuracy; approx. \$42M/mile)

Funding = ESER 2020 + Water Bonds (>\$55M, TBD)

Future (2028-2034) PEWFS Pipelines (mileage and alignment TBD)

Funding = ESER 2028 + FY28/29-FY33/34 Water CIP Bonds





2050 Planning Study Proposed future pipeline both EFWS and PEFWS – Full Build-Out



PEWFS Objective: Full looped system with multiple water sources

- 2019 Planning Study high-level planning cost estimate overestimated mileage to be built

 underestimated escalation, price of steel, cost for trenching
- 2023 Cost Estimate with higher accuracy forecasts lower mileage of pipeline with current ESER 2020 funding
- August 2023 Independent Cost Estimate confirms higher costs

Plans to increase coverage

- Reviewing cost/scope reduction alternatives
- Increasing SFPUC Water CIP bond funding contribution
 - Current \$55M to be increased to >\$100M (exact \$ TBD)
 - Water CIP bond funding proportional to cost for potable pipelines
- Future pipelines will be designed; ready to construct when funding available
- Future ESER and SFPUC Water CIP bonds will allow continuous system expansion

Full EFWS Build-Out will require significant future funding commitment



Kezar Pavilion- Disaster Response Facility



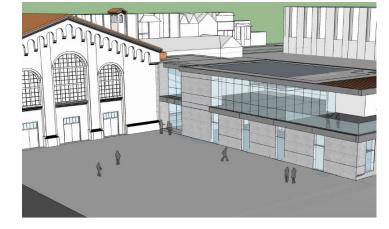
Location

755 Stanyan Street Golden Gate Park

Project Background

- Pavilion constructed in 1926 and the annex addition in phases between 1935-1964
- Pavilion is an historic structure and on the national registrar of historic places
- A major seismic event would impair the structure's ability to perform its service function and would create public life/safety issues.
- Facility will serve as a postdisaster response facility (mutual aid station or indoor congregate shelter) and will function as a community recreation facility in non-disaster times.







Kezar Pavilion- Disaster Response Facility

Project Objectives and Goals

- 1. Seismically strengthen the pavilion and build a sustainable, energy-efficient, accessible and code compliant facility
- 2. Pavilion to accommodate disaster response functions in emergency times and public recreation on regular basis
- 3. Replace existing annex building, new addition will continue to house SF Rec Park Rangers and include multi-purpose spaces and locker rooms.
- 4. Maintain historic structure/elements
- 5. Provide a welcoming and safe community experience

Project Scope

- Rehabilitate the historic building structure (Pavilion)
- 2. Complete significant seismic upgrades and correct code issues
- 3. Renovate building to be flexible and include multi-purpose spaces for recreation and emergency response
- 4. Construct a new three-story annex to better serve community and staff
- 5. Improve pedestrian and vehicle circulation around the building and improve park environment



Kezar Pavilion- Disaster Response Facility

Project Delivery

- 1. Concept design has been revised to improve circulation, accessibility and provide adequate space for building systems
- 2. Cost reconciliation underway for conceptual cost estimate
- 3. Project to be delivered through CM/GC (Construction Manager/ General Contractor)
- 4. Project schedule pending funding plan

Issues related to spending and scope changes

- 1. Project costs exceed available funds- funding plan being developed
- 2. Local market construction escalation and supply chain issues have impacted project costs
- 3. Risk due to rehabilitating historic building and unforeseen conditions
- 4. Historic significance of the building requires careful and considerate design
- 5. Environmental review still underway



Thank you!

Questions?

















ESER Webpage:

https://sfpublicworks.org/eser

