



## MEMORANDUM

January 20, 2023

**TO:** MEMBERS, PORT COMMISSION  
Hon. Willie Adams, President  
Hon. Kimberly Brandon, Vice President  
Hon. John Burton  
Hon. Gail Gilman  
Hon. Steven Lee

**FROM:** Elaine Forbes  
Executive Director 

**SUBJECT:** Request for approval and appropriation of the second bond issuance of Seawall Bonds, in the amount of \$42.0 million of Proposition A Bonds to support early projects, adaptation strategies, and San Francisco Waterfront Coastal Flood Study General Investigation (“Flood Study”).

**DIRECTOR’S RECOMMENDATION:** Approve Attached Resolution No. 23-05

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### EXECUTIVE SUMMARY

*This report was first issued for the December 13, 2022 Port Commission meeting. Updated information was added for clarity and is identified by underlining and italics.*

On November 6, 2018, residents of San Francisco passed Proposition A with 82.7% voter approval, authorizing a \$425.0 million General Obligation Bond known as the Embarcadero Seawall Earthquake Safety Bond (“Seawall Bond”)<sup>1</sup>. On March 12, 2019<sup>2</sup>, the Port Commission approved Resolution 19-08, authorizing the first issuance of the Seawall Bond in the amount of \$49.7 million. The purpose of this report is to

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<sup>1</sup> Proposition A specifically funds what was previously called the “Seawall Program” which refers to the section of the Embarcadero from Fisherman’s Wharf to Mission Creek. This geographic section falls into the larger WRP effort which covers the full 7.5 miles of Port jurisdiction. For simplicity, this report does not break out funding sources by geographic area.

<sup>2</sup> Item 8A Staff Report:  
<https://sfport.com/meetings/san-francisco-port-commission-march-26-2019>

request approval and appropriation of the second issuance of the Seawall Bond in the amount of \$42.0 million to support the preliminary and final design phases of projects to reduce life safety, disaster response and early flood risks (“Embarcadero Early Projects”), to continue work on strategies to reduce coastal and combined flood risk (the “Waterfront Adaptation Strategies” or “Strategies”), and to advance the San Francisco Waterfront Coastal Flood Study General Investigation (“Flood Study”) with the United States Army Corps of Engineers (“USACE”).

The Controller’s Office of Public Finance (“OPF”) manages debt financing for large-scale, long-term capital projects and improvements in San Francisco, including Port debt-financed capital projects. As part of its charge, OPF often coordinates the sale of bonds to finance projects across multiple departments.

As shown in Table 1 below, with approval of the second bond sale, total appropriations for WRP will total \$106.5 million.

**Table 1: Funding Sources (\$ millions)**

| Funding Source                             | FY16/17    | FY17/18    | FY18/19     | FY19/20     | FY20/21     | FY21/22     | FY22/23      |     | TOTAL        |
|--|------------|------------|-------------|-------------|-------------|-------------|--------------|-----|--------------|
| Port Capital                               | 2.9        |            | 1.1         |             | 1.7         | 0.6         | 1.5          | 1.6 | 9.4          |
| Loan: Port Harbor Funds                    |            |            |             | 11.5        | -11.5       |             |              |     | 0.0          |
| Loan: City Revolving Fund                  | 1.0        | 3.0        | 5.0         | -6.0        | -3.0        |             |              |     | 0.0          |
| SFMTA                                      | 0.5        | 0.5        |             |             |             |             |              |     | 1.0          |
| SF Planning Dept                           | 0.5        | 0.3        | 0.3         |             |             |             |              |     | 1.0          |
| CA Natural Resources Grant                 |            |            | 5.0         |             |             |             |              |     | 5.0          |
| 2018 GO Bond - First Issuance              |            |            |             |             | 49.7        |             |              |     | 49.7         |
| <b>Sub-Total of Current Appropriations</b> | <b>4.9</b> | <b>3.8</b> | <b>11.4</b> | <b>5.5</b>  | <b>36.9</b> | <b>0.6</b>  | <b>1.5</b>   |     | <b>64.5</b>  |
| 2018 GO Bond - Second Issuance             |            |            |             |             |             |             | 42.0         |     | 42.0         |
| <b>TOTAL</b>                               | <b>4.9</b> | <b>8.7</b> | <b>20.0</b> | <b>25.5</b> | <b>62.4</b> | <b>63.0</b> | <b>106.5</b> |     | <b>106.5</b> |

Staff anticipates a third bond issuance in 2024 to finance the construction of Embarcadero Early Projects, as well as continuing funding for the Waterfront Adaptation Strategies and Flood Study. The amount of that bond issuance will be known once the Embarcadero Early Projects are selected to advance to construction and the WRP Engineering and Project Delivery team has developed a scope, schedule and budget for these projects.

In addition to the sources shown in Table 1 above, the Port is pursuing \$58.7 million in federal and state grant applications, including a \$50.0 million Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure and Communities (BRIC) grant. The Port expects responses to these grant applications later this year and in 2024.

**STRATEGIC OBJECTIVES**

The Port’s Waterfront Resilience Program supports the goals of the Port’s Strategic Plan as follows:

### Engagement

By leading an inclusive stakeholder process to develop a shared vision, principles and goals for the Waterfront Resilience Program and Flood Study and using multiple avenues for public involvement in the development and evaluation of Draft Waterfront Adaptation Strategies.

### Equity

By developing a program-wide equity strategy and evaluating Draft Waterfront Adaptation Strategies through an equity lens to ensure that benefits accrue to, and burdens are minimized for Black, Indigenous, People of Color (BIPOC) communities, and by increasing the proportion of funds spent on contract services performed by LBE firms.

### Resilience

By leading the City's efforts to address threats from earthquakes and flood risk through research and infrastructure improvements to the entire Port shoreline and adjoining buildings and other infrastructure.

### Evolution

By developing adaptation options with a long-time horizon, developing strategies to adapt the waterfront and its uses over time, and recognizing that decisions made today influence the options available to future generations who will be addressing different environmental and social conditions.

### Sustainability

By incorporating nature-based features into the Draft Waterfront Adaptation Strategies to enhance the quality of the Bay water and habitat with the improvements.

### Productivity

Through wise investment of Proposition A Seawall Earthquake Safety Bonds and other public funding sources, and by developing strategies to defend or floodproof Port maritime and industrial facilities and historic finger piers to extend their useful life and reduce their risk from coastal flooding and sea level rise.

## **BACKGROUND**

In 2015, the Port launched the Waterfront Resilience Program<sup>3</sup>, a major City and Port effort to improve earthquake safety and performance of the Embarcadero seawall, provide near-term flood protection improvements, and plan for additional long-term resilience in the face of sea level rise. WRP work can be categorized in three major

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<sup>3</sup> WRP was previously named the San Francisco Seawall Earthquake Safety and Disaster Prevention Program. For clarity, this report uses the current WRP name.

efforts: (1) Embarcadero Early Projects, (2) Waterfront Adaption Strategies, and (3) Flood Study.

On November 6, 2018, residents of San Francisco passed Proposition A with 82.7% voter approval, authorizing a \$425.0 million General Obligation Bond.

On March 12, 2019, the Port Commission approved Resolution 19-08, authorizing the first issuance of the Seawall Bond up to \$50.0 million, including issuance costs, to support the planning and preliminary design phases of the WRP. Table 2 below, shows the projected bond budget at the time of Port Commission authorization and the bond expenditures through September 2022.

**Table 2: First Bond Issuance Projected Budget and Current Expenditures (\$ millions)**

| <b>Program Scope</b>                  | <b>2019 Budget</b> | <b>Actuals to Date</b> |
|---------------------------------------|--------------------|------------------------|
| Program Management (Port Labor)       | 5.9                | 6.0                    |
| USACE                                 | 8.9                | 4.1                    |
| Communications/Public Relations       |                    |                        |
| Planning/Engineering/Environmental    | 30.0               | 28.2                   |
| City Agencies and Regulatory Approval | 1.0                | 0.3                    |
| Cost of Issuance                      | 3.9                | 0.9                    |
| <b>Total</b>                          | <b>49.7</b>        | <b>39.5</b>            |

On September 24, 2019, the Port Commission approved Resolution 19-41, authorizing a contract amendment to CH2M HILL Engineers, Inc. to increase the contract by \$19.9 million resulting in an amended contract amount not to exceed \$59.9 million. The Port Commission approved contract amendment significantly expanded the scope of the contract, increasing Planning costs from \$10.2 million to \$34.9 million, and thus adjusted the Port’s projected expenditures for the first bond issuance. Planning costs increased \$24.7 million due to several factors, including the projected amendment to increase in the USACE Flood Study, development of an Adaptation Plan for the Port’s 7½ mile jurisdiction, a more thorough Multi-Hazard Risk Assessment to improve confidence in results and decrease uncertainty for future decision making, advanced earthquake analysis in the area surrounding the Ferry Building, the addition of workforce development and LBE support services, disaster response planning, and expanded stakeholder engagement.

## **WATERFRONT RESILIENCE PROGRAM**

### Embarcadero Early Projects

On December 14, 2021, WRP staff presented the selected 23 Embarcadero Early Projects<sup>4</sup> that will:

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<sup>4</sup> Item 12A Staff Report:

<https://sfport.com/meetings/san-francisco-port-commission-december-14-2021>

- reduce life safety risks identified during the Embarcadero Seawall Multi-Hazard Risk Assessment,
- reduce disaster response risks identified through the Port-San Francisco Department of Emergency Management sponsored disaster response task conducted in August, 2021, and
- address existing high-consequence flood risks identified through the Flood Study (“Embarcadero Early Projects”).

These projects were identified through a northern waterfront adaptation strategy planning process over the course of 2020-21; the Embarcadero Early Projects were developed to respond to the unique conditions and analysis of earthquake and flood hazards analysis in each of the areas that define the northern waterfront (South Beach, Ferry Building Area, Northeast Waterfront, and Fisherman’s Wharf).

The projects prioritize urgent seismic and flood risk using a people-first approach to support the Port Commission as it makes critical life-safety and disaster response decisions. The WRP has also conducted an adaptation strategy planning process for the Port’s southern waterfront, including the Southern Waterfront Earthquake Assessment with Port Engineering.

The WRP is currently advancing six projects in predesign:

- Wharf J9 Replacement & Resilient Shoreline Project
- Pier 15 Bulkhead Wall & Wharf Earthquake Safety Retrofit Project
- Pier 9 Bulkhead Wall & Wharf Earthquake Safety Retrofit Project
- Ferry Building Seawall & Substructure Earthquake Reliability Project
- Downtown Coastal Resilience Project (formerly the Pier 5 to 22½ Near Term Coastal Flood Risk Reduction Project)

The WRP has completed the needs assessment reports for these six projects and is commencing alternatives analysis. The proposed second issuance of Seawall Bonds will fund the planning and predesign phases of nine Embarcadero Early Projects and final design of three projects to be selected in 2023. The bond sale will also support continued work on Waterfront Adaptation Strategies and the USACE Flood Study.

Table 3 shows projected scope and expenditures of the second bond issuance over the next two calendar years through 2024. A third issuance in 2024 will be required to finance the construction of selected Embarcadero Early Projects, as well as continuing funding for the Waterfront Adaptation Strategies and Flood Study.

**Table 3: Second Bond Issuance Spending Plan (\$ millions)**

| <b>Program Scope</b>   | <b>2023</b> | <b>2024</b> | <b>Total</b> |
|--|-------------|-------------|--------------|
| Port Labor   | 4.4         | 4.5         | 8.9          |
| Program Management   | 3.6         | 3.5         | 7.1          |
| Planning   | 4.5         | 0.2         | 4.7          |
| Engagement   | 0.8         |             | 0.8          |
| USACE Flood Study  | 2.3         | 1.2         | 3.5          |
| Pilot Projects   | 0.2         | 0.2         | 0.4          |
| Embarcadero Early Projects Delivery. Pre-Design (9 Projects + 4 Nar) | 6.8         | 3.1         | 9.9          |
| Embarcadero Early Projects Delivery. Detailed Design (3 Projects)    | 0.4         | 2.9         | 3.3          |
| Cost of Issuance   | 3.4         |             | 3.4          |
| <b>Total</b>   | <b>26.4</b> | <b>15.6</b> | <b>42.0</b>  |

### Flood Study

The Port is collaborating with the U.S. Army Corps of Engineers (USACE) on a general investigation of flood risks to the Port’s entire 7½ mile jurisdiction (the “USACE San Francisco Waterfront Coastal Flood Study” or “Flood Study”). The Flood Study is a planning-level feasibility study with a \$16 million budget that will analyze coastal flood risk through 2100, identify and evaluate adaptation strategies, and conduct robust public engagement and analysis to recommend a Final Waterfront Adaptation Plan by 2025. The Port Commission approved a revised Feasibility Cost-Sharing Agreement for the Flood Study by Resolution 21-53 on December 14, 2021<sup>5</sup>, which provides for a 50/50% cost-share of Study costs.

Federal funding for flood risk mitigation is administered through USACE, making them a critical partner for local and regional resilience planning. Goals of the Flood Study are to better understand current and future flood risk, identify flood protection solutions, engage the public to identify priorities, and create opportunities for funding for flood risk reduction projects. The Flood Study assesses benefits and costs of various alternatives to determine the best plan, considering economic, social, and environmental benefits and impacts.

The Port of San Francisco’s community-affirmed vision and principles for its resilience work through the Waterfront Resilience Program include broader goals. Principles include: inspiring an adaptable waterfront that improves the health of the Bay, ensuring public access to the waterfront, providing opportunities for diverse families, businesses, and neighborhoods to thrive - and much more.

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<sup>5</sup> Item 10E Staff Report  
<https://sfport.com/meetings/san-francisco-port-commission-december-14-2021>

## Waterfront Adaptation Strategies

On October 11, 2022, WRP staff presented the Draft Waterfront Adaptation Strategies at the Port Commission for Port Commission and public review<sup>6</sup>. The WRP developed the Draft Waterfront Adaptation Strategies in partnership with multiple City departments (Office of Resilience and Capital Planning, San Francisco Municipal Transportation Agency, San Francisco Planning Department, San Francisco Public Utilities Commission, and San Francisco Public Works) and with USACE.

The Draft Waterfront Adaptation Strategies are different ways for the City to create a resilient, sustainable, and equitable waterfront for the next 100 years. The Strategies are options to reduce flood and seismic risk along the Port's entire waterfront jurisdiction, from Heron's Head Park to Fisherman's Wharf, through a combination of phased large and small projects, new policies, such as flood defenses, structure elevation, floodproofing, city infrastructure adaptations (e.g., wastewater and stormwater management, transportation system), flood-resilient building codes, and land use changes.

The Strategies are a combination of construction projects and policy changes that will guide decisions about:

- Where, when, and how high to build flood defenses
- How and when to adapt key buildings and infrastructure to ensure continued operations of the Port harbor and of City services
- How to incorporate nature-based and ecological features
- Recommendations for policy changes that will best defend public and private lands, preserve, and grow housing and jobs, and create recreational opportunities, waterfront access, and improved Bay habitat

The Draft Waterfront Adaptation Strategies are undergoing public review and will be analyzed and compared to develop a Draft Waterfront Adaptation Plan ("Draft Plan"). The WRP and USACE teams will refine the plan and conduct environmental review (NEPA/CEQA) and additional public outreach and engagement. The Draft Plan will go through local and USACE review and approvals to create a Final Waterfront Adaptation Plan ("Recommended Plan") by Flood Study completion in 2025.

Provided that the plan meets federal requirements that the benefits of the plan exceed its costs, USACE will present the Final Plan to the U.S. Congress for potential federal funding. If Congress approves the Final Plan, Congress will fund up to 65% of the resulting project, providing potentially billions of dollars in federal investment in San Francisco's waterfront.

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<sup>6</sup> Item 11A Staff Report

<https://sfport.com/meetings/san-francisco-port-commission-october-11-2022>

The Final Plan recommended to Congress in 2025 may differ from the Port and the City's preferences to address a higher rate of sea level rise and include additional community and seismic benefits (which collectively will inform a "Locally Preferred Plan"). The additional cost of these benefits will not be cost-shared with USACE – San Francisco will need to identify funding for 100% of the cost differential between the Recommended Plan and a Locally Preferred Plan.

## **BOND SALE SCHEDULE**

The tentative schedule for the second GO Bond issuance is:

December 5, 2022 Port staff received approval from the City's Capital Planning Committee (CPC) to move forward with the second Seawall Bond issuance.

December 6, 2022 Office of Public Finance staff introduced sale resolutions and appropriations ordinances to the Board of Supervisors requesting authorization for the second Seawall Bond issuance. The Seawall Bond (2018) was introduced along with the Health and Recovery (2020) and Affordable Housing (2019) Bonds.

December 13, 2022 Port staff provided an informational update to the Port Commission on the 2018 Seawall Bond and the Port's intentions to seek approval of a second bond issuance in a not to exceed amount of \$42.0 million from CPC and the Board of Supervisors.

January 24, 2023 Port staff seeks recommendation from the Port Commission that the Board of Supervisors approve the second Seawall Bond issuance in a not to exceed amount of \$42.0 million.

January 31, 2023 Board of Supervisors approval

March 2023 Second Seawall Bond issuance

## **BOND ACCOUNTABILITY**

Managing General Obligation Bond proceeds will require the Port to provide regular reporting to the City. The Port will submit a Bond Accountability Report to the Board outlining the proposed uses of bond funds and the expected expenditure schedule. Since the completion of the first GO Bond sale, the Port has provided updates on the expenditure of the funds to the Citizens General Obligation Bond Oversight Committee. Please see Table 3 for an overview and Attachment 1 for a detailed breakdown of projected expenditures.



## WRP EXPENDITURES

As shown in Table 1, the WRP has received \$64.5 million in funding from the first bond issuance, a state grant, and Port Capital. Table 4 below shows the combined projected budget and expenditures through September 2022.

**Table 4: Total Program Projected Budget and Expenditures (\$ millions)**

| <b>Program Scope</b>                  | <b>Projected Budget</b> | <b>Actuals to Date</b> |
|---------------------------------------|-------------------------|------------------------|
| Program Management (Port Labor)       | 8.0                     | 7.0                    |
| USACE Flood Study                     | 9.9                     | 6.1                    |
| Communications/Public Relations       | 1.9                     | 1.5                    |
| Planning/Engineering/Environmental    | 39.3                    | 35.5                   |
| City Agencies and Regulatory Approval | 1.5                     | 0.7                    |
| Cost of Issuance                      | 3.9                     | 0.9                    |
| <b>Total</b>                          | <b>64.5</b>             | <b>51.7</b>            |

The remaining balance of funds will be used to continue progress on the USACE Flood Study, Planning/Engineering/Environmental services, and Port Labor. Due to improved market conditions at the time of the first bond issuance, only \$0.9 million was required from the estimated \$3.9 million in Cost of Issuance. The remaining balance will be disturbed to other scopes as needed.

## CONCLUSION

The Waterfront Resilience Program is a critical effort to improve the infrastructure that supports the City's waterfront. This second bond issuance of \$42,000,000, including the costs of issuance, will continue the USACE Flood Study, enable selection of a Final Waterfront Adaptation Plan and complete final design for selected Embarcadero Early Projects, preparing the Program to move into the next phase of project construction.

Prepared by: Carlos Colón, Waterfront Resilience Program Administrator

Prepared for: Nate Cruz, Acting Deputy Director Finance and Administration

Brad Benson, Waterfront Resilience Director

*Attachment 1: Second Bond Issuance Program Tasks & Budget Forecast*

**PORT COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO**

**RESOLUTION NO. 23-05**

- WHEREAS, On November 6, 2018 San Francisco’s voters approved a \$425 million Embarcadero Seawall Earthquake Safety General Obligation Bond measure (2018 Seawall Bond) for the Seawall Earthquake Safety and Disaster Prevention Program (Seawall Program); and
- WHEREAS, On March 12, 2019, the Port Commission approved Resolution 19-08, authorizing the first issuance of the Seawall Bond up to \$50.0 million; and
- WHEREAS, The first issuance of the 2018 Seawall Bond issued in 2020 totaled \$49,675,000; and
- WHEREAS, The City and County of San Francisco is planning the second issuance of the 2018 Seawall Bond in or around March 2023; and
- WHEREAS, The Board of Supervisors requires the Port Commission to approve the issuance amount of each bond sale; and
- WHEREAS, Port staff have identified \$38,617,000 to be included in the second 2018 Seawall Bond issuance for the Seawall Program to fund, among other things: (1) preliminary and final design and engineering of Embarcadero Early Projects; (2) Waterfront Adaptation Strategies; and (3) costs related to ongoing efforts to advance the United States Army Corps Flood Study; and
- WHEREAS, The initial 2018 Seawall Bond issuance amount includes \$3,383,000 in bond related costs (\$77,234 for the City Services Auditor Fee (CSA Audit), \$39,090 for the Citizens’ GO Bond Oversight Committee, \$161,226 in Cost of Issuance, \$195,450 in Underwriter’s Discount; and
- WHEREAS, Staff recommends that the Port Commission approve the sale of the second issuance of the 2018 Seawall Bond in an aggregate principal amount not to exceed \$42,000,000, and recommend that the Board of Supervisors consider and approve the second issuance of the 2018 Seawall Bonds; now therefore, be it

RESOLVED, The Port Commission hereby approves the second 2018 Seawall Bond sale in an aggregate principal amount not to exceed \$42,000,000; and, be it further

RESOLVED, The Port Commission hereby approves the appropriation of the bond sale proceeds to the Waterfront Resilience Program budget and to pay for any associated costs of issuance; and, be it further

RESOLVED, The Port Commission hereby recommends that the Board of Supervisors consider and approve a second issuance of the 2018 Seawall Bond sale in an amount not to exceed \$42,000,000 of Seawall Bonds.

***I hereby certify that the foregoing resolution was adopted by the Port Commission at its meeting of January 24, 2023.***

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Secretary

## ATTACHMENT 1

| <b>Second Bond Issuance Program Tasks &amp; Budget Forecast</b>                          | <b>\$ 42,000,000</b> |
|--|----------------------|
| <b>Program Management</b>  | <b>\$ 16,029,000</b> |
| Port Program Staff   | \$ 8,900,000         |
| Program Management (Consultant)  | \$ 4,782,000         |
| As-needed Program Management Support   | \$ 903,000           |
| Program Management Initiation Task   | \$ 156,000           |
| Embarcadero Early Projects Pre-Design. Program Management Support                        | \$ 993,000           |
| Project Management Detailed Design Cost  | \$ 295,000           |
| <b>Planning</b>  | <b>\$ 4,720,000</b>  |
| WFW Adaptation Strategies - Phase B (USACE)  | \$ 1,500,000         |
| WFW Adaptation Strategies - Phase C (USACE)  | \$ 1,500,000         |
| Engineering Support (USACE)  | \$ 1,000,000         |
| Other Planning efforts (incl. Piers adaptation)  | \$ 720,000           |
| <b>Engagement</b>  | <b>\$ 800,000</b>    |
| USACE Public Engagement to Tentatively Selected Project                                  | \$ 180,000           |
| FY23 engagement through Tentatively Selected Project Completion                          | \$ 620,000           |
| <b>USACE Flood Study</b>   | <b>\$ 3,523,000</b>  |
| Management   | \$ 450,000           |
| Hydrology and Hydraulics   | \$ 400,000           |
| Economics  | \$ 148,000           |
| Story Maps   | \$ 128,000           |
| Engineering  | \$ 375,000           |
| National Environmental Policy Act & Cultural Resources                                   | \$ 375,000           |
| Plan Formulation   | \$ 230,000           |
| Continued USACE Study Support through ADM  | \$ 750,000           |
| Continued USACE Study Support through Final Report                                       | \$ 667,000           |
| <b>Pilot Projects</b>  | <b>\$ 340,000</b>    |
| SF Living Seawall (Monitoring)   | \$ 340,000           |
| <b>Embarcadero Early Projects Delivery (Pre-Design)</b>                                  | <b>\$ 9,928,000</b>  |
| Wharf J9 Replacement and Resilient Shoreline Project Alternatives Analysis Report        | \$ 675,000           |
| Wharf J9 Replacement and Resilient Shoreline Project Conceptual Engineering Report       | \$ 600,000           |
| Pier 15 Bulkhead Wall and Wharf Earthquake Safety Retrofit Alternatives Analysis Report  | \$ 240,000           |
| Pier 15 Bulkhead Wall and Wharf Earthquake Safety Retrofit Conceptual Engineering Report | \$ 300,000           |
| Pier 9 Bulkhead Wall and Wharf Earthquake Safety Retrofit Alternatives Analysis Report   | \$ 333,000           |
| Pier 9 Bulkhead Wall and Wharf Earthquake Safety Retrofit Conceptual Engineering Report  | \$ 400,000           |

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|--|---------------------|
| Ferry Building Seawall & Substructure Earthquake Reliability Alternatives Analysis Report                      | \$ 1,417,000        |
| Ferry Building Seawall & Substructure Earthquake Reliability Conceptual Engineering Report                     | \$ 1,000,000        |
| Pier 5 to Pier 22-1/2 Near-Term Coastal Flood Risk Reduction Project Alternatives Analysis Report              | \$ 600,000          |
| Pier 5 to Pier 22-1/2 Near-Term Coastal Flood Risk Reduction Project Conceptual Engineering Report             | \$ 400,000          |
| Pier 24 to Pier 28-1/2 Bulkhead Wall and Wharf Earthquake Safety Alternatives Analysis Report                  | \$ 675,000          |
| Pier 24 to Pier 28-1/2 Bulkhead Wall and Wharf Earthquake Safety Conceptual Engineering Report                 | \$ 600,000          |
| Pier 33 to Pier 35 Seawall and Wharf Substructure Earthquake Reliability Project Needs Assessment Report       | \$ 100,000          |
| Pier 33 to Pier 35 Seawall and Wharf Substructure Earthquake Reliability Project Alternatives Analysis Report  | \$ 500,000          |
| Pier 33 to Pier 35 Seawall and Wharf Substructure Earthquake Reliability Project Conceptual Engineering Report | \$ 400,000          |
| Pier 27 Seawall and Wharf Substructure Earthquake Reliability Project Needs Assessment Report                  | \$ 150,000          |
| Pier 27 Seawall and Wharf Substructure Earthquake Reliability Project Alternatives Analysis Report             | \$ 788,000          |
| Pier 1 Bulkhead Wall and Wharf Substructure Earthquake Reliability Project Needs Assessment Report             | \$ 150,000          |
| Pier 1 Bulkhead Wall and Wharf Substructure Earthquake Reliability Project Alternatives Analysis Report        | \$ 600,000          |
| <b>Embarcadero Early Projects Delivery (Detailed Design)</b>   | <b>\$ 3,277,000</b> |
| Project A 35% Design   | \$ 234,000          |
| Project A 65% Design   | \$ 409,000          |
| Project A 100% Design  | \$ 255,000          |
| Project B 35% Design   | \$ 467,000          |
| Project B 65% Design   | \$ 817,000          |
| Project B 100% Design  | \$ 438,000          |
| Project C 35% Design   | \$ 415,000          |
| Project C 65% Design   | \$ 242,000          |
| <b>Bond Related Costs</b>  | <b>\$ 3,383,000</b> |
| Reserve for Market Uncertainty   | \$ 2,910,000        |
| Cost of Issuance   | \$ 161,226          |
| Underwriter's Discount   | \$ 195,450          |
| City Services Auditor Fee  | \$ 77,234           |
| General Obligation Bond Oversight Committee Fee  | \$ 39,090           |