

## MEMORANDUM

August 5, 2017

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

**FROM:** Elaine Forbes  
Executive Director

**SUBJECT:** Request for authorization to award a contract to CH2M HILL Engineers, Inc., for planning, engineering, and environmental services for the Seawall Resiliency Project in an amount of \$36,349,740 and authorization for staff to increase the contract amount, if needed for unanticipated contingencies, by an additional \$3,634,974 (10% of \$36,349,740) for a total contract authorization of \$39,984,714, with a term of ten years and the Port's option to extend the term for one additional year

**DIRECTOR'S RECOMMENDATION:** Approve the Attached Resolution

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### EXECUTIVE SUMMARY

On March 14, 2017, the Port Commission authorized Port staff, through Resolution 17-14, to issue a Request for Proposals ("RFP") to solicit engineering and related consulting services for the Seawall Resiliency Project for an amount not to exceed \$40,000,000. On April 24, 2017, Port staff issued a RFP for such consulting services and staff now recommends, subject to approval of the Board of Supervisors, award of the contract in the amount not to exceed \$39,984,714.

The Port received five proposals in response to the RFP. Staff determined that all five proposals were responsive and met the minimum qualifications specified in the RFP. The Contract Monitoring Division ("CMD") determined that all five firms met the pre-award requirements of the City's Local Business Enterprise Utilization and Non-Discrimination in Contracting Ordinance (San Francisco Administrative Code Chapter 14B; the "LBE" Ordinance). An evaluation panel then evaluated and scored the written proposals and held oral interviews. CMD monitored the panel evaluation process. After the panel completed its evaluation and scoring of the proposals, Port staff identified CH2M HILL Engineers, Inc. ("CH2M"), as the highest-ranked firm.

Port staff now seeks Port Commission authorization to award a professional services contract for planning, engineering, and environmental services for the Seawall Resiliency Project to the highest-ranked consultant, CH2M. The proposed contract, for the not-to-exceed amount of \$39,984,714, will carry a term of ten years with the option to extend the term for one additional year at the Port's sole discretion. Prior to issuance of the RFP, CMD established a 15 percent subcontracting goal for LBE participation in this contract, pursuant to the LBE Ordinance. In its proposal, CH2M agreed to exceed this goal and achieve 21 percent LBE subcontractor participation. Therefore, the proposed contract will incorporate a 21 percent LBE subcontractor participation requirement.

Charter Section 9.118 requires Board of Supervisors' approval of contracts for professional services related to design, engineering or construction management when the term exceeds ten years or the contract anticipates expenditures of \$10,000,000 or more. Port staff will advocate for the Board of Supervisors to approve the contract following Port Commission direction and approval.

## **STRATEGIC OBJECTIVE**

This contract opportunity will support the goals of the Port's Strategic Plan as follows:

**Engagement:**

By leading an inclusive stakeholder process to develop goals, values, and ensure consideration of all issues during development and implementation of the Seawall improvement program.

**Livability:**

By increasing the proportion of funds spent by the Port on contract services performed by LBE firms.

**Resiliency:**

By leading the City's efforts to address threats from earthquakes and flood risk through research and infrastructure improvements to the Seawall.

**Sustainability:**

By enhancing the quality of the Bay water and habitat with the improvements, by limiting construction impacts and waste, and by sustainable design and construction best management practices.

## **BACKGROUND**

The Port is the lead City agency for the restoration of the Seawall, a project expected to span ten years from 2015-2025 and cost approximately \$500 million. The Seawall was constructed over 100 years ago and stretches for more than three miles from Fisherman's Wharf to Mission Creek along San Francisco's historic waterfront. With a century of erosion and structural deterioration, the Seawall must be upgraded and improved to protect critical infrastructure from seismic vulnerabilities and sea level rise and continue to function today and for generations to come.

The Seawall infrastructure supports the world-renowned Embarcadero Promenade which was added in 2016 to the list of National Trust for Historic Preservation's Endangered Historic Places. Additionally, the Seawall supports an extensive network of infrastructure, utilities and assets owned by various City and County of San Francisco agencies such as the Port of San Francisco, San Francisco Fire Department, San Francisco Municipal Transportation Agency, San Francisco Public Utilities Commission, San Francisco Public Works, and the Office of Community Investment and Infrastructure. Regional and private entities such as the Bay Area Rapid Transit, Golden Gate Ferry, and Pacific Gas and Electricity own and operate critical infrastructure that the Seawall protects. The Seawall also supports infrastructure for small businesses along the waterfront that contribute to the City's economic vitality and diversity and generate billions of dollars in rent, business income, and wages. A recent economic analysis conducted by the Port, concluded that the Seawall supports over \$25 billion of economic activity annually.

The Seawall is highly vulnerable to widespread damage from a major seismic event and to overtopping from sea level rise in the coming decades. There is a 72 percent chance of a major seismic event taking place in the Bay Area in the next 30 years and sea level could rise up to 66 inches by year 2100. A recent seismic vulnerability study showed that a major seismic event is likely to cause ground movement that would damage both the Seawall and wharf structures and could contribute to loss of life and significant economic harm.

The first phase of a Seawall Resiliency Project will require specialized planning, engineering, and related services to address the immediate seismic vulnerabilities and life-safety issues associated with specific, critical sections of the seawall as well as address the highest flood risks. Design and engineering solutions to these challenges will also consider expected sea level rise.

## **CONTRACT SCOPE OF SERVICES**

The proposed scope for the proposed contract includes the specialized and expert services needed to complete planning studies, develop and assess alternatives, select and define a preferred alternative, advance engineering and design to 35 percent, complete California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) approvals, advance environmental and other permitting for construction, develop and recommend final design and construction project(s) delivery methods, and to assist with managing and review of final design and construction of the project(s). Final design, construction, and construction management will be handled via separate contracts.

The proposed contract will require the consultant to provide the following services:

### Phase 0: Program Management and Controls (10 years)

The consultant will support the Port's Project Management team by providing the following services and personnel:

- Consultant team project manager, single point of contact.
- Technical team leaders for: structural engineering, coastal engineering, geotechnical engineering, civil engineering, utility engineering, transportation

engineering, urban planning and design, historic preservation, environmental planning and permitting

- Quarterly project reports
- Monthly project updates
- Meeting scheduling and minutes
- Develop and maintain a risk register
- Assist the Port in refining and actively managing the project management plan

#### Phase 1: Planning (2 years)

The consultant will lead and carry out all work necessary to complete a multi-hazard feasibility study of the Seawall that culminates in a framework to address the dual threats of seismic and flood risk and a recommendation for initial project improvements to be implemented. This will include conceptual designs, cost estimates, construction impacts and schedule, environmental impacts and benefits, economic impacts and benefits.

- Conduct a Feasibility Study
  - Identify problems and opportunities
  - Inventory and forecast conditions
  - Formulate project alternatives
  - Evaluate project alternatives
  - Compare project alternatives
  - Select a recommended program for initial improvements and a framework for responding to the dual threat of seismic and flood risk.
- Prepare Supporting Studies and Scopes of Repair
  - Condition assessment of bulkhead wall and wharves, Embarcadero promenade and roadway, light rail, utilities.
  - Advance existing screening level earthquake vulnerability assessment including developing and implementing a subsurface exploration program.
  - Advance existing flood assessment including developing coastal modeling, transects for wave run-up and effects, and consideration of sea level rise and other climate change impacts such as storm intensity.
  - Assess existing environmental conditions and potential impacts and benefits with various improvement concepts.
  - Constructability analysis and impact assessment of various improvement concepts.
  - Economic analysis with direct and indirect considerations of various improvement concepts.
  - Develop and support the Port to complete a community planning and stakeholder engagement process to inform improvement concepts that includes public workshops, engages Port tenants, and key stakeholders.
  - Cost estimating
  - Implement a project-area specific multi-hazard loss estimation analysis with customized inputs for piers, wharves, bulkhead buildings, shed buildings, seawall and geotechnical conditions.

### Phase 2: Preliminary Design & Entitlements (2 years)

During this phase, the consultant will advance the design of initial improvements to the 35 percent level and complete both CEQA and NEPA processes. This contract scope will require the consultant to perform analyses for CEQA and NEPA regarding specific improvement projects that emerge from the proposed contract work. However, this contract scope, in itself, does not constitute a “project” that is subject CEQA. Specific scope tasks will include:

- CEQA, programmatic and initial improvements
- NEPA, programmatic and initial improvements
- Advance design and engineering of initial improvements to 35 percent level, including plans, specifications, estimate, and supporting design and engineering documents
- Constructability review and analysis
- Value engineering
- Design and construction delivery options and recommendations
- Develop an approach to permitting pilot studies and initial improvements, develop alternatives analysis, environmental mitigation and enhancement concepts, generate information needed for construction permits; apply for permits and approvals from the San Francisco Bay Conservation and Development Commission (BCDC), State Water Resources Control Board, USACE and resource protection agencies. Finalizing environmental permits for construction is expected to continue through final design
- Continuation of stakeholder engagement

### Phase 3: Final Design and Construction (5 years)

During this phase, the consultant will support the Port as other consultants and contractors complete final design, permitting, construction, and mitigation and monitoring plans. Others will also provide construction management services.

- Review final designs and engineering studies, reports, plans, specifications, calculations, cost estimates, and construction schedules completed by the other consultant teams.
- Develop and complete a value engineering process for each project.
- Provide constructability review for each project.
- Design, engineer, and implement for pilot projects (small scale projects that may be necessary to understand design and viability of specific construction techniques).
- Assist in oversight of construction management.

## **SELECTION PROCESS**

On April 24, 2017, the Port issued the RFP for these consulting services, with submittals due on June 2, 2017. A pre-submittal meeting was held on May 3, 2017. Over one hundred people attended the pre-submittal meeting.

The Port received five responses to the RFP in advance of the submittal deadline. The following five consultant teams (identified by the lead consultant in alphabetical order) responded to the RFP:

1. AECOM Technical Services, Inc.
2. CH2M HILL Engineers, Inc.
3. Parsons Transportation Group, Inc.
4. Seawall Innovations (A Tetra Tech/GHD, Inc. Joint Venture)
5. Stantec Consulting, Inc.

Port staff determined that all five firms met the minimum qualifications specified in the RFP. CMD then reviewed the submittals for compliance with the LBE Ordinance requirements and concluded that all five firms met the requirements.

#### Evaluation Panel

A four-member evaluation panel convened to evaluate and score written proposals on June 15, 2017. The panel consisted of an Assistant General Manager from the San Francisco Public Utilities Commission (SFPUC), a Section Manager for structural engineering from San Francisco Public Works, a Deputy Director of Planning and Environmental Services from the Port, and a structural engineer from the Port. The panel was diverse in terms of race and gender and had expertise in structural engineering (marine and civil), environmental review and analysis, and planning. The Port's CMD Contract Compliance Officer approved the panel composition and attended the initial panel meeting and oral interviews.

#### Evaluation Criteria

The selection panel evaluated and scored the written proposals using the following RFP criteria:

- 30 points – project approach
- 40 points – staffing plan, organization, experience, and quality
- 30 points – firm experience and capability
- 5 points – proposer references

105 points total

Port staff forwarded all five proposers to the second phase of the evaluation process for oral interviews, which were held on June 22, 2017. Oral interviews were one hour each and included the following: a 15-minute presentation, 35 minutes to answer five standard questions that were distributed two days in advance, and seven minutes to evaluate and respond to a bonus question asked at the end of the interview. Each panel member evaluated and scored the proposers' oral interviews based upon the following criteria:

25 points – proposer's presentation - team experience  
 20 points – question 1: earthquake risk assessment approach  
 20 points – question 2: flood and sea level rise risk assessment approach  
 15 points – question 3: approach to implementable solutions for historic preservation, earthquake safety, and flood protection  
 10 points – question 4: enhance the sustainability of the Embarcadero Seawall and improve Bay ecosystem  
 10 points – question 5: project management and cost controls  
5 points – question 6: economic/merchant activity during and after construction  
105 points total

The final rankings resulting from the scoring of written proposals and the interviews are shown in *Table 1*. In accordance with the RFP scoring criteria, Port and CMD staff determined the highest-ranked consultant, CH2M, is eligible for contract award. Port staff issued a Notice of Intent to Award a contract to CH2M on June 26, 2017.

**Table 1: Seawall Communications RFP Proposal Scores**

Proposer	Written Proposal Score (Avg/Total)	Oral Interview Score (Avg/Total)	Final Total Score (Avg/Total)	Final Rank
CH2M	90/359	97/386	187/745	1
AECOM	89/357	87/348	176/705	2
Seawall Innovations (Tetra Tech/GHD JV)	84/336	89/357	173/693	3
Stantec	94/375	78/312	172/687	4
Parsons	79/315	85/339	164/654	5

*Maximum score for written proposal was 420 and oral interview was 420, for total possible points of 840.*

## **SELECTED CONSULTANT**

Based upon the final scoring, Port staff recommends awarding the planning, engineering, and environmental services contract for the Seawall Resiliency Project to CH2M.

### About CH2M HILL Engineers, Inc.

Employee-owned CH2M is a global leader in full-service consulting, design, design-build, operations and program management for public and private clients. Established in 1946, and providing services to the City and County of San Francisco since 1972, CH2M provides consulting services in the sectors of environmental, water, transportation, and energy. CH2M, has worked on numerous City and region-wide projects including the San Francisco Bay Area Water Emergency Transportation Authority Ferry Terminal, SFPUC

Water System Improvement Program, 3<sup>rd</sup> & King Street Railyard Planning, and SFPUC Biosolids Project.

Engineering News-Record (ENR) ranks CH2M as one of the top five firms in categories specifically aligned to services required for the Seawall Resiliency Project, namely: Ports and Marine Facilities (No. 2), Environmental Services (No. 1), Transportation (No. 3), Water (No. 1), Design (No. 3), Program Management (No. 2), and Construction Management (No. 3).

#### Potential Merger with Jacobs Engineering

On August 2, 2017, CH2M's executive leadership announced the possible acquisition of the firm by Jacobs Engineering. Established in 1947, Jacobs is a Fortune 500 global provider of technical, professional, and scientific services, including engineering, architecture, construction, operations and maintenance. The CH2M project team is very enthusiastic about the prospect of joining forces with Jacobs, viewing it as an opportunity to combine differentiated services and provide broader best-in-class people, solutions, technical excellence and delivery.

While an agreement for sale has been reached between the firms, it will have to go through a customary vetting process, regulatory approvals, and be approved by the company's shareholders. This process will take place over the remainder of the calendar year with a potential merger of the organizations in the first quarter of 2018. Until such time that this process is successfully completed, CH2M will continue to operate and respond as its own company and, accordingly, the proposed contract will be executed under "CH2M Hill Engineers, Inc."

CH2M reaffirmed their continued commitment to the Port of San Francisco and to the successful delivery of the Seawall Resiliency Project. The staff that CH2M-Arcadis proposed for the Seawall Project will not change and the team is ready and eager to commence work as soon as possible. If a merger with Jacobs takes place in 2018, CH2M is confident that their ability to serve the Port under this contract will be enhanced (See Attachment C).

#### Local Business Enterprise

CMD established a LBE subcontracting goal of 15 percent for this project based on the total cost of services procured through this contract, pursuant to the LBE Ordinance. CH2M bypassed the good faith outreach efforts specified by CMD by committing to a 21 percent LBE subcontracting participation goal that will be incorporated in the contract requirements.

To meet its 21 percent LBE subcontracting goal, and as identified in *Table 2*, the CH2M team includes a number of LBE and non-LBE partners, including Telamon Engineering for civil engineering and surveying, Structus Inc. for structural engineering, Hollins Consulting Inc. for construction management, Geotechnical Consultants Inc. (GTC) for geotechnical engineering, Civic Edge Consulting for community planning, Saylor Consulting Group for value/quality engineering, AGS Inc. for environmental advisory services, RDJ Enterprises for strategic advising and community outreach, BAYCAT for arts and technology, Sedway Consulting Inc. for real estate appraisals, and Square One Productions for architectural

illustrations.

**Table 2: Seawall Communications LBE Subconsultant Participation**

Firm	Portion of Work	% of Contract Work	Contract Amount <sup>1</sup>	LBE Type
AGS Inc	Environmental Advisory Services; Geotechnical Engineering	0.62%	\$181,654	MBE
BAYCAT	Arts and Technology	0.12%	\$39,959	OBE
CHS Consulting Group	Transportation & Traffic Engineering	0.13%	\$40,933	MBE
Civic Edge Consulting	Community Planning and Stakeholder Engagement/Public Affairs; Public Relations Services	0.26%	\$84,662	WBE
Geotechnical Consultants Inc	Geotechnical Engineering	3.00%	\$958,585	MBE
Hollins Consulting Inc	Construction Management; Administrative Services	3.61%	\$1,155,056	MBE
RDJ Enterprises LLC	Community Relations/Public Affairs; EEO/Affirmative Action/M/WBE Assistance; Educational and Training Services	0.63%	\$198,039	MBE
Saylor Consulting Group	Value/Quality Engineering	1.43%	\$456,435	WBE
Sedway Consulting Inc	Real Estate: Appraisers, Brokers, Agents	0.33%	\$103,847	WBE
Square One Productions	Architectural Illustrator	0.33%	\$103,847	MBE
Structus Inc	Structural Engineering; Marine Architecture and Engineering	2.60%	\$830,774	MBE
Telamon Engineering	Civil Engineering; Surveying (Land & Aerial); Utilities & Power Services; CAD	8.00%	\$2,556,226	WBE
	<b>Total</b>	<b>21.00%</b>	<b>\$6,710,017</b>	

On June 26, 2017, CMD issued a memorandum determining the Port's selection process for the Planning, Engineering, and Environmental Services RFP was compliant with the provisions of the City's LBE Ordinance.

## FUNDING & COST CONTROLS

Port staff proposes a contract award to CH2M in the amount of \$36,349,740 and authorization for staff to increase the contract amount for unanticipated contingencies by an additional \$3,634,974 (10% of \$36,349,740) for a total contract authorization not to exceed \$39,984,714. The proposed contract term is ten years with the option to extend the

<sup>1</sup> Omits \$4.4 million "Emergency Projects", which are as-needed and will be tracked separately by CMD

term for one additional year at the Port's sole discretion. Table 3, below, details the proposed funding by project phase.

**Table 3: Contract Phases & Budget**

<b>Phase</b>	<b>Budget</b>
Phase I - Planning	\$ 10,239,424
Phase II - Design/Entitlements	\$ 18,505,154
Phase III - Construction Management	\$ 7,605,162
<b>Subtotal - All Phases</b>	<b>\$ 36,349,740</b>
10% Contingency	\$ 3,634,974
<b>Total Contract Authorization Request</b>	<b>\$ 39,984,714</b>

The proposed contract services will be partially funded by the CPO-756 Seawall and Marginal Wharf Repair Project in the amount of \$6,300,000. To date, the project has received \$9,600,000 in funding through a combination of the General Fund, Port Capital funds, and contributions from the Municipal Transportation Agency and the Planning Department. The remaining amount will be funded by other project sources that the Port is currently pursuing, including the potential 2018 Seawall General Obligation Bond.

Port staff will implement cost controls during the contract by only authorizing the expenditure of funds related to specific phases and project tasks. No amount of the contract will be authorized in excess of available funding at any point within the project and contract term. One specific area that staff will monitor relates to Stakeholder Engagement, which may have overlapping scope with the Port's Seawall Resiliency Project Communications Contract to Civic Edge, which was approved by the Port Commission on May 23, 2017 through Resolution No. 17-24. Staff will work closely with CH2M and Civic Edge to balance scope of contracts and avoid duplication of services.

Separately the Port Commission awarded Civic Edge Consulting (CEC) to lead all communications, public relations, marketing and advertising, and community engagement through the Seawall Communications Contract for the Seawall Resiliency Project. This Seawall Communications Contract includes community planning work tasks that will be needed to support the CH2M consultant team in its scope to develop Seawall improvement concepts. The work from both contracts will be issued through individual contract service orders (CSO); therefore, the Port's Communications Division, led by Renée Dunn Martin, will manage the work to ensure that redundancies do not exist in the communications work between the two contracts.

CH2M chose CEC in the Seawall Engineering Contract to provide community planning work if additional needs extend beyond the scope of the Seawall Communications Contract, to engage stakeholders in the engineering and technical studies for the Seawall improvements. Communications Director Renée Dunn Martin will coordinate directly with Steven Reel, Manager of the CH2M HILL Contract, to ensure there are no redundancies in the community planning work tasks performed by CEC.

## **SCHEDULE**

The planned Project schedule is:

<u>Activity</u>	<u>Target Date</u>
Port Commission Request to Award Contract	August 8, 2017
Board of Supervisors Approval	September 26, 2017
Notice to Proceed	October 2, 2017
Contract Completion	October 1, 2027

## **CONCLUSION**

Port staff has completed the Planning, Engineering, and Environmental Services RFP evaluation and selected CH2M as the most-qualified consulting firm to provide the services described in this report. Port Staff has negotiated acceptable contract terms and conditions with CH2M for providing the contract scope of services described above, within the Port's budget and funding expectations.

Staff now requests that, subject to approval of the Board of Supervisors, the Port Commission adopt the attached resolution authorizing staff to award a contract to CH2M, in the amount of \$36,349,740 and, further authorizing staff to increase the contract amount, if needed for unanticipated contingencies, by an additional \$3,634,974 (10% of \$36,349,740) for a total contract authorization not to exceed \$39,984,714.

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For: Katharine Petrucione, Deputy Director  
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and

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## Attachments

- A: CMD LBE Pre-award Memorandum
- B: CMD Award Memorandum
- C. CH2M Ownership Change Letter

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

**RESOLUTION NO. 17-36**

WHEREAS, the San Francisco Seawall is the foundation of more than three miles of San Francisco waterfront stretching from Fisherman's Wharf to Mission Creek; and

WHEREAS, the Seawall was built over 100 years ago, and requires significant improvements in order to withstand the a major earthquake and increasing flood risk from sea level rise and climate change; and

WHEREAS, the Port of San Francisco is undertaking the Seawall Resiliency Project to plan, design, entitle, and construct one or more Seawall improvement projects that will significantly lower earthquake safety and flood damage risks; and

WHEREAS, to proceed with and complete the Seawall Resiliency Project, Port staff requires specialized planning, engineering, and environmental services for the Seawall Resiliency Project; and

WHEREAS, on March 14, 2017, the Port Commission authorized staff to issue a Request for Proposals ("RFP") to solicit and select a multi-disciplinary engineering and architecture consulting team for the Seawall Resiliency Project (Port Commission Resolution 17-14); and

WHEREAS, Port staff advertised the RFP on April 24, 2017 and received five proposals on June 2, 2017, all of which were deemed responsive to the requirements of the RFP; and

WHEREAS, Port staff obtained approval from the Civil Service Commission on May 15, 2017, to contract with a private engineering firm for these consulting services; and

WHEREAS, pursuant to the RFP an evaluation panel was convened to evaluate and score proposals, and upon completion of the evaluation process the City's Contract Monitoring Division and Port staff determined the highest ranked proposer is CH2M HILL Engineers, Inc.; now, therefore be it

**RESOLVED**, that, subject to the approval of the Board of Supervisors, the San Francisco Port Commission hereby authorizes Port staff to award and execute a professional services agreement with CH2M Engineers, Inc., in the amount of \$36,349,740, and with a term of ten years, with an option to extend the term for one additional year in the Port's discretion; and be it further

RESOLVED, that the Port Commission also authorizes Port staff to increase the contract amount, if needed for unanticipated contingencies, by an additional \$3,634,974, for a total contract authorization not to exceed \$39,984,714; and be it further

RESOLVED, that the San Francisco Port Commission hereby authorizes Port staff to introduce legislation to the Board of Supervisors seeking authorization, pursuant to San Francisco Charter Section 9.118, to award a professional services agreement to CH2M HILL Engineers, Inc., upon the terms and conditions described above and in the accompanying staff memorandum.

***I hereby certify that the foregoing resolution was adopted by the Port Commission at its meeting of August 8, 2017.***

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Secretary