Request for Proposal:
Crescent City Harbor District

moffatt & nichol

DESIGN AND EA/EIS FOR SEAWALL AND CITIZEN'S DOCK

AUGUST 14, 2023

COVER LETTER

moffatt & nichol
600 University Street, Suite 610
Seattle, WA 98101
Tel: (206) 622-0222
moffattnichol.com

August 14, 2023

Tim Petrick, CEO/Harbormaster
Crescent City Harbor District
101 Citizens Dock Road
Crescent City, CA 95531

Subject: Request for Proposals - Design and EA/EIS for Seawall and Citizens' Dock

Dear Mr. Petrick:

"Creating Vision for Tomorrow"

The Crescent City Harbor District (Harbor District) is a local treasure - a key component to the area's quality of life, a regional attraction for seaside recreation, and an important economic driver for the entire Del Norte County. The Harbor District has a unique opportunity to develop and implement a plan for a 'vision for tomorrow' Replacement of the Seawall and Citizens' Dock are among the first critical steps in this journey.

Moffatt & Nichol (M&N) is offering a team familiar with the Harbor District's existing infrastructure and an expertise in collaborating with clients to upgrade their infrastructure assets. Our team is currently collaborating with the Harbor District to develop a vision for tomorrow and can bring the needed resources to the Harbor District to implement the proposed project.

M&N TEAM BENEFITS

- **Crescent City Harbor District familiarity**
- **MARAD NEPA experience (6 completed MARAD NEPA EAs and 5 ongoing)**
- **Experienced project management team**
- **Extensive coastal engineering, NEPA, and CEQA experience**

We have assembled an exceptional team of professionals to deliver the Harbor District's "Design and EA/EIS for Seawall and Citizens' Dock" project. Our planning, permitting, and marine structural design team will be supported by subconsultants from ICF Jones & Stokes, Inc. (ICF) to provide environmental services, SHN to provide civil engineering/topographic survey services, GeoEngineers to provide geotechnical engineering services, and William Rich and Associates (WRA) to provide cultural resources services. We have worked closely with these firms on multiple recent successful projects including ongoing work for the Humboldt Bay Harbor District. Our team will effectively deliver practical and cost-effective solutions to accomplish the objectives of the Harbor District's important replacement project.

The team's knowledge will be critical to the time sensitive nature of the implementation of the Harbor District's U.S. Department of Transportation Maritime Division (MARAD) and State Coastal Conservancy (SCC)-funded Seawall and Citizens' Dock replacement projects.

Key benefits of the M&N Team are:

- **Expertise, Experience, and Knowledge at the Harbor District's Disposal.** Our team has a history working with the Harbor District and we take pride in providing regional and nationwide resources and experts to the Harbor District.
- **MARAD, NEPA, and CEQA Experience.** MARAD has unique National Environmental Policy Act (NEPA) requirements, but M&N has completed six MARAD NEPA Environmental Assessments (EAs) and is working on another five along the U.S. west coast. M&N and our teaming partner ICF have extensive experience developing California Environmental Quality Act (CEQA) documents for port projects.
- **Experienced Coastal Engineers.** M&N has the largest group of coastal engineers in the private sector in the U.S. This staff knows and understands the coastal processes on the west coast of the U.S. based on more than 75 years of experience.
- **First Hand Knowledge of the Seawall.** M&N engineer-divers conducted the recent condition assessment of the seawall and will bring that experience into design of the replacement.
- **MARAD and SCC Staff Relationships.** M&N team members know MARAD and SCC staff personally and understand environmental and design risk concerns and pre-award and post-obligation requirements.
- **Experienced Project Management Team.** Our team has extensive experience managing complex, large development port projects.

The Harbor District is an important client to M&N and we are devoted to the success of this MARAD and SCC grant implementation project. Please contact us with questions or if additional information is needed. Given our history of success, the Harbor District can expect this team to succeed again.

When the Harbor District succeeds, we succeed and the Harbor District's customers succeed!

Sincerely,

MOFFATT & NICHOL

Shane Phillips, PE
Washington Business Unit Leader / Project Director
206.501.2317 (office)/425.417.6016 (cell)
sphillips@moffattnichol.com

Younes Nouri, PhD, PE
Project Manager
206.501.2320 (office)/410.905.5119 (cell)
ynouri@moffattnichol.com

QUALIFICATIONS

SECTION 1 QUALIFICATIONS

MOFFATT & NICHOL

2023 ENR #1 MARINE & PORT FACILITIES MOFFATT & NICHOL

M&N brings more than 75 years of experience developing practical solutions on waterfront and port infrastructure projects across the nation and around the world. Founded in 1945 to provide design engineering services to the growing U.S. commercial waterfront, we enjoy serving Northern California through local offices in Arcata, Walnut Creek, and Oakland. We have more than 40 local professionals with most of our revenue coming from Port authority and terminal operator clients. As one of the larger marine and port facilities engineering firms in North America, we lead waterfront infrastructure projects and understand the technical services related to marine engineering. Our multidisciplinary, full-service waterfront professional services include:

- Marine and waterfront facilities planning
- Structural, civil, and coastal engineering
- Marine construction cost estimating and constructability assessments
- Facility inspection, rehabilitation, and asset management
- Regulatory compliance specialists, including NEPA and CEQA expertise
- Financial advisory services, including benefit/cost evaluations

We offer a comprehensive project view that reflects the relationship between the local setting and each project's unique needs. From planning and design through construction and start-up, we apply our knowledge and tools as engineers, scientists, economists, and planners, planning and designing projects where water meets land.

THE MOFFATT & NICHOL TEAM

AN EXPERIENCED TEAM

M&N has assembled a team of professionals who have a combination of specialty discipline expertise, local knowledge, and relationships with MARAD, SCC, and local regulatory agency staff. The integration of local firms with specialized expertise required for this project is the centerpiece of our teaming strategy. Our team members have partnered on other successful projects, and will work together to efficiently deliver the design , NEPA, and CEQA documents required for the Harbor District's project.

M&N has assembled a team with the experience, expertise, and resources to meet the Harbor District's needs for the Seawall and Citizens' Dock Project. The M&N team has completed planning, facility condition assessments, design, environmental documentation, permitting, and construction support services for marine infrastructure projects at waterfront facilities in California and nationwide. Our team includes staff with local knowledge; experience developing NEPA and CEQA documentation related to MARAD and SCC grants; and extensive coastal engineering experience.

In support of projects that involve MARAD funding, M&N staff have completed six recent port-related MARAD NEPA EAs and are working on another five company-wide. Margaret Schwertner, our team's MARAD/PIDP compliance lead, is one of multiple M&N professionals that have existing relationships with MARAD staff including MARAD project managers, NEPA leads, and MARAD engineers. Our direct experience crafting MARAD-compliant NEPA documents, including Categorical Exclusions (CATEX) and EAs, and knowledge of MARAD policies and processes will support successful and efficient compliance. Additionally, Adam Wagschal, our team's environmental and regulatory and documentation lead, has managed SCC grants and CEQA documents. Adam maintains a good working relationship with Joel Gerwein, the SCC manager for this project. Some of our staff have more than 30 years of experience with NEPA and CEQA, with all levels of documents up to and including NEPA Tiered Environmental Impact Statements (EIS) and CEQA Environmental Impact Reports (EIR). ICF staff authors the state's CEQA guidelines and conducts trainings for state employees regarding CEQA processes. WRA has conducted numerous archaeological and cultural resource investigations on California's North Coast and is familiar with the Tribes and resources in the area.

M&N has the largest group of coastal engineers in the private sector in the U.S. This staff knows and understands the coastal processes on the west coast of the U.S. based on more than 75 years of experience. We are familiar with conditions at Crescent City Harbor and recently completed a condition assessment of the seawall to be replaced. Our coastal engineering expertise is complimented by SHN's local civil engineering team.

Timely project initiation, reporting, and completion are critical to project success, especially for federally and state funded projects. M&N draws on our experience supporting clients with federal and state grant management to assist with pre-award and post-obligation compliance including design progress and reviews as well as reporting on costs, schedules, budgets, engineering risk registers (ERRs), and performance metrics. This knowledge and our experience will enable the team to apply the correct resources to ensure an accurate and time-sensitive solution that will allow for successful compliance with Harbor District grant and construction requirements.

M&N will provide overall project oversight and be the point contact for the Harbor District. Additionally, M&N will lead project design and NEPA documentation. As shown in the following sections, M&N has extensive experience designing coastal projects such as docks and seawalls and has recently completed six NEPA EAs associated with MARAD managed Port Infrastructure Development Program (PIDP) grants. ICF has extensive CEQA experience and will lead CEQA document development. WRA has been conducting archaeological and cultural resource assessments on the North Coast for over 40 years and is familiar with resources that must be considered and local processes to consult with Tribes and agencies.

The following are brief descriptions of the qualifications of our teaming partners.

TEAMING PARTNERS

ICF Jones & Stokes, Inc. (ICF), Role: CEQA Documentation. ICF is a professional services firm that provides consulting services addressing today's most complex environmental challenges for federal, state, and local governments. For over 50 years, ICF has been recognized within the environmental services industry as the leading expert in environmental planning, specializing in CEQA and NEPA compliance and developing innovative and comprehensive regulatory compliance strategies that balance the needs of clients with the requirements of regional, state, and federal regulatory agencies. With more than 8,000 employees worldwide and more than 600 staff in California, the firm provides clients with high-quality, objective environmental planning and natural resources management services, emphasizing compliance with the increasingly complex array of environmental laws and regulations.

ICF has a long history of supporting port work throughout the nation. They have prepared more than 150 environmental documents and provided special technical studies for a broad range of port projects in a variety of settings. ICF has supported more than 300 port projects, including projects for the Ports of Long Beach, Los Angeles, San Diego, Stockton, West Sacramento, Seattle, Portland, Vancouver, Grays Harbor, Olympia, Tacoma, and Bellingham. ICF understands maritime ports are faced with increasing challenges related to the movement of goods, while simultaneously making strides in environmental stewardship of their land and water, addressing vulnerabilities to impacts from coastal storms and sea level changes, managing supply chain issues caused by global events like the Covid-19 pandemic, and attempting to be good neighbors with communities that surround them.

ICF and M&N are currently collaborating to deliver the Humboldt Bay offshore wind (OSW) energy marine terminal project.

SHN, Role: Site Civil Engineering and Surveying. SHN is a multi-disciplinary firm meeting the needs of communities in Northern California and Southern Oregon. Founded in 1979, SHN has 110 employees who represent various disciplines, including civil/environmental engineering, surveying, planning and permitting, geosciences, environmental services, biological sciences, and materials testing/special inspection. By applying time-tested and contemporary methods, SHN offers its clients efficient, practical, sustainable solutions to challenging problems. SHN strives to contribute to a socially responsible, dynamic, and rewarding environment for its clients, employees, and community at large.

By virtue of living and conducting business on the North Coast since 1979, SHN is very familiar with regional development challenges, especially those that affect local Harbor Districts. SHN has served as District Engineer for the Humboldt Bay Harbor, Recreation and Conservation District for nearly a decade and, since 1979, SHN has worked on more than 130 regional coastal projects.

Additionally, SHN has provided multidisciplinary on-call consulting services to the City of Crescent City in engineering, planning, and environmental services since 2018. SHN has enjoyed a collaborative relationship with M&N on several recent projects, including the Multipurpose Marine Terminal (MMT) Project to support proposed OSW energy, and the Point Arena Parking Lot Repair Project (which involved repairing the damaged jetty and replacement of the concrete seawall). *SHN is also a partner with M&N and ICF on the Humboldt Bay OSW energy marine terminal project.*

GeoEngineers, Role: Geotechnical. GeoEngineers is an employee-owned earth science and engineering firm with 20 offices nationwide. For more than 40 years, GeoEngineers has been a trusted partner and advocate to local cities, counties, states, and public agencies across the west coast. Their core services include geotechnical engineering, engineering geology, performance-based design, environmental remediation, construction design services, and natural resource sciences. Their geotechnical engineering services span geotechnical evaluations, field engineering services, earthwork design services, earth retention systems, foundations and structures, and seismic design and vibrations. GeoEngineers has completed thousands of port projects regionally and internationally. They have significant experience addressing challenging soil and groundwater conditions, seismic evaluations including liquefaction, shoreline and slope stability, and habitat restoration and mitigation. GeoEngineers' knowledge of similar conditions and regulations comes from recent experience working on the Port of Ilwaco Marina Structure Replacement and British Petroleum (BP) Harbor Island Distribution Terminal Bulkhead Replacement – both in partnership with M&N. They are also managing ongoing work to provide dredge spoils management services to the Crescent City Harbor District. From planning through design, permitting, and implementation, they use practical methods to achieve results that are technically sound, environmentally conscious, and economically sensible.

William Rich and Associates (WRA), Role: Tribal and Cultural Resources. WRA is a small family-owned business, established in 2002, located in Eureka, California. Their services include all aspects of conventional cultural resources management: feasibility studies, management plans, research designs, archaeological investigations, site testing, cultural resources mapping, ethnographic research, and tribal consultation.

WRA brings decades of education and experience to the successful completion of small- and large-scale local land development and management projects, as well as, projects in the sectors of transportation, communications, civil engineering, water resources, parks, and military facilities, each with an expected outcome of regulatory compliance with Section 106 of the National Historic Preservation Act (NHPA) and CEQA.

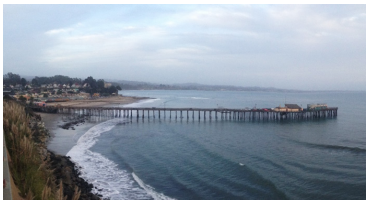
The firm has successfully completed hundreds of cultural resource management studies in close conjunction with local Native American Tribes and other stakeholders. Work in Del Norte County has included coordination with the Tolowa Dee-ni' Nation. Numerous archaeological investigations have been completed in support of large infrastructure projects, including a dam removal project along the Klamath River working with seven California tribes. The firm has also completed projects for the Wiyot, Yurok, and Karuk ancestral territory and worked with pertinent land management agencies including Redwood National and State Parks, the Bureau of Land Management, and California State Parks and Recreation. They have successfully applied for and retained federal cultural resources permits for all applicable projects. WRA is currently part of a team working with the Humboldt Bay Harbor and Recreation District, conducting archaeological monitoring for the Tuluwat Island Spartina Removal Project.

WHY THE MOFFATT & NICHOL TEAM?

TOPIC	CHALLENGE/CONSIDERATION	SOLUTION
Design to Meet Future Opportunities	Port opportunities are always shifting, and it is important to design infrastructure in anticipation of future opportunities.	M&N is a leader in the port industry, we understand opportunities that the Harbor District can capitalize on, including related to OSW development. For example, we recently authored the AB525 Port Readiness Plan related to OSW energy development.
National Leaders on Port Infrastructure Design and Policy	The right expertise for the job.	M&N has shaped the practice of marine and waterfront structural engineering. Our staff has authored design and planning manuals for the U.S. Government/American Society of Civil Engineers (ASCE) that are standards for piers and wharves, bulkhead walls, moorings, port facilities, coastal protection, and utility services. Younes Nouri, proposed project manager, is on the ASCE committee for tsunami analysis and has extensive experience with port facilities. Our team has coastal and marine experts dedicated to these types of facilities. Rob Sloop, our waterfront design lead, manages this group. Stuart Stringer and Azadeh Bozorgzadeh are national leaders on sheet pile wall design. They serve on a (ASCE-COPRI) committee developing design guidelines for the seismic design of flexible bulkhead walls. Stuart also serves on the ASCE-COPRI Committee for the Design Standards for Piers and Wharves.
Meeting Project Budget	Lack of/uncertainty in design inputs (e.g., geotechnical properties of seabed) can expand the scope of work, and therefore can require unanticipated budget. Meeting project budget can be challenging when the regulatory/environmental process includes extended reviews.	The M&N Team brings expertise regarding the Crescent City Harbor, seawall, and Citizens' Dock, and experience working with MARAD and SCC staff. Our expertise and knowledge allows us to make reasonable assumptions at this phase of the project and scale the level of effort appropriately. Early contractor involvement will inform the design and construction approach and bring efficiencies to the Harbor District.
Vision for Future	The Harbor District has a great opportunity to develop a vision for the future.	The M&N Team brings knowledge and expertise collaborating with clients from our experience with marine structures, port facilities, commercial fishing, and OSW energy.
Grant Compliance and Environmental Documentation	MARAD managed PIDP grants have unique NEPA requirements that benefit from experience. MARAD has a unique NEPA documentation process which must be completed in order to move the project into the construction phase.	The M&N Team offers substantial experience with MARAD-funded projects and has personal relationships with MARAD. This brings an enhanced level of expertise for facilitating grant compliance. Margaret Schwertner, our team's MARAD/PIDP compliance lead, has decades of NEPA experience, including with recent MARAD NEPA EAs. She knows many of the MARAD technical staff and understands the nuances of MARAD NEPA compared to other federal NEPA guidelines (for example, MARAD requires Section 7 and Section 106 to be complete before MARAD staff will review a draft EA and NEPA must be finalized before the grant will be awarded and federal funds released). Her recent successful NEPA EA in July 2023 means that she is up-to-date on new MARAD requirements and even language preferences by MARAD's legal team (e.g., more detailed quantitative air quality and traffic analysis can be avoided if facility use does not change). This helps to streamline costs, avoid unnecessary studies and analyses, and minimize unnecessary schedule delays. Margaret has also supported clients with MARAD grant compliance, and guided clients through ERRs and the completion of other MARAD requirements to complete the grant agreement. She has recently navigated the federal Build America/Buy America (BA/BA) requirements during bid preparation. Our regulatory lead, Adam Wagschal, is based in Arcata, California and has more than 20 years of experience working with regulatory documentation and processes for waterfront and port facilities as a consultant and port authority employee. Adam has good connections with agencies which will assist in facilitating the CEQA and NEPA processes.

RELEVANT PROJECTS

CAPITOLA WHARF RESILIENCY | *CITY OF CAPITOLA, CAPITOLA, CA*



Between 2017 and 2023, **M&N** provided engineering and design through bid support and environmental services to increase the resiliency of the wharf, and Beach Groin and Soquel Creek Flume. M&N designed and permitted the widening of the wharf to increase the structures' resiliency to winter storms and improve public access.

M&N completed an Initial Study (IS)/ Mitigated Negative Declaration (MND) **for compliance with the CEQA, a NEPA EA to comply with federal grant requirements,** and permit application materials for USACE, California Coastal Commission (CCC), and Regional Water Quality Control Board (RWQCB). M&N completed supplemental materials including a biological assessment and mitigation plan to support permitting. CEQA, NEPA, and permitting was completed in 2022 and construction started in June 2023

As part of the permits for this project, M&N supported the City with long-range operations and maintenance planning. M&N recommended the City request authorization of long-term as-needed maintenance activities as part of the project permits. **This has already been a great benefit to the City allowing them to quickly respond to and recover from other damage caused by the recent and damaging 2023 winter storm along the coast.**

M&N has provided civil, structural, and coastal engineering, and environmental and permitting services to the City of Capitola for various waterfront projects dating back to 1998.

RELEVANCE Marine terminal design, environmental documentation, permitting

SEAL BEACH WATER INFRASTRUCTURE CAPITAL IMPROVEMENT PROJECTS | *CALIFORNIA DEPARTMENT OF WATER RESOURCES, SEAL BEACH, CA*

M&N performed final design, prepared construction documents, and provided construction support for the two-stage project owned by the California Department of Water Resources (DWR) and operated by the California Department of Parks and Recreation. The $5 million Stage 1 project provides boating facilities for high-water surface conditions at Lake Oroville, including a boat launch ramp, access road, and accessible parking and restroom. The $7 million Stage 2 project includes facilities for lower-water surface elevations and provides a boat launch ramp, parking lot, and concrete foundation for temporary/seasonal restroom facilities. Stage 1 construction was completed in 2020, and Stage 2 was completed in 2021. Construction support was performed under separate contracts as a subconsultant to firms providing construction management to DWR.

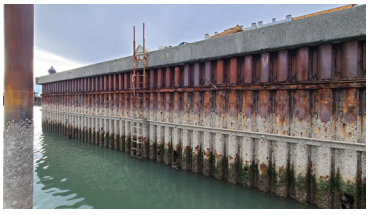
M&N was contracted by the City of Seal Beach to prepare a CEQA IS leading to a MND for seven water infrastructure facilities as part of the City's capital improvement plan (CIP). The task order-based projects included six water system maintenance, upgrades, and relocation projects and one pier project to rehabilitate the Seal Beach Pier. As a result of the City's water master plan update in 2012, the CIP projects address aging and damaged public works infrastructure in preparation for future growth and extreme events. In addition to the water system projects, the City also proposed utility upgrades and structural repairs to the Seal Beach Pier.

M&N conducted all required CEQA analyses, including air quality and biological resource impact potential for each of the seven facilities. M&N presented the draft environmental document to the City's environmental quality control board at a public meeting for discussion and approval. On behalf of the City, M&N facilitated a successful consultation with the Gabrieleno Band of Mission Indians, Kizh Nation in conformance with requirements pursuant to Assembly Bill 52. Public comments were addressed and circulation of draft and final environmental documents were managed by M&N on behalf of the City.

Regulatory permit applications for the rehabilitation activities on Seal Beach Pier were compiled by M&N and submitted to state and federal agencies, including the CCC coastal development permit, USACE Section 404/10 permit, and RWQCB 401 certification. Following permit application submittal, M&N liaised with City staff and responded to technical and follow-up requests from all regulatory agencies.

RELEVANCE Environmental documentation, coastal engineering

CITIZENS' DOCK INSPECTION | *CRESCENT CITY HARBOR DISTRICT, CRESCENT CITY, CA*



The Crescent City Harbor Citizens' Dock Seawall was originally built in the 1940s and extended during the 1960s. The seawall forms the upland yard used as a community fish market, parking area, and for equipment storage. The Citizens' Dock is accessed at the north end of the seawall and allows local fishermen to load/unload boats, fuel, and process seafood.

Constructed of driven steel sheet piles, the seawall is a tie-back system with deadman anchors providing additional lateral restraint. A reinforced concrete cap acts as a bullrail and a fixture for mooring hardware. Paving in the upland yard is primarily asphalt, with a reinforced concrete pad near a decommissioned job crane.

The seawall had been in a state of advanced deterioration for several decades, furthered by a 2011 tsunami. **M&N** performed an above-water inspection of the seawall and adjacent paving, summarizing findings and recommendations in a facility condition assessment report that included:

- Rough order-of-magnitude cost estimate for a replacement concept.
- List of opportunities and constraints to assist in planning for the greater Citizens' Dock area and immediate upland areas for various maritime uses.

RELEVANCE Project location experience, seawall inspection, condition assessment report

SAN PEDRO AND WILMINGTON WATERFRONT PROJECTS | *PORT OF LOS ANGELES, LOS ANGELES, CA*

Under an environmental on-call contract with the Port of Los Angeles, **ICF** prepared two complex documents for two large waterfront projects—the San Pedro Waterfront Project EIR/EIS and Wilmington Waterfront Project EIR. The San Pedro Waterfront Project EIR/EIS was prepared for the comprehensive redevelopment and deindustrialization of more than 400 acres along an 8-mile stretch of waterfront. It included 35 project-level detailed elements, including public waterfront and open space areas, commercial development, multimodal transportation and parking facilities, the creation of three new harbors, and a major expansion of cruise ship facilities and operations. The Wilmington Waterfront Project EIR assessed the impacts of a 94-acre waterfront development project, adjacent to the Wilmington community of the City of Los Angeles. The Port proposed to develop 150,000 square feet of industrial sites, 70,000 square feet of commercial uses, a 10-acre land bridge with a park, and a 2-mile multimodal bike/pedestrian trail and trolley line extension. ICF prepared the EIR to address the project's environmental impacts. Services included preparing CEQA IS and Notices Preparation; conducting scoping meetings and community outreach; preparing the draft and final EIRs, along with a full range of supporting technical studies; preparing a mitigation monitoring program; and preparing certification documents for the EIRs and project decisions.

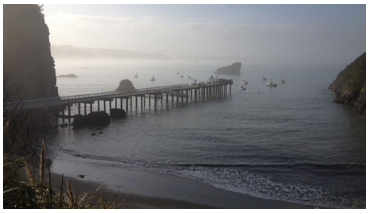
RELEVANCE Environmental documentation (EIR/EIS and technical studies), waterfront and harbor development, community outreach

YTI CONTAINER TERMINAL IMPROVEMENTS EIS/EIR | *PORT OF LOS ANGELES, LOS ANGELES, CA*

ICF prepared a joint EIS/EIR for USACE and the Port of Los Angeles for improvements to the existing 185-acre terminal to accommodate larger container vessels that were anticipated to call at the terminal. USACE was responsible for ensuring compliance with Section 10 of the Rivers and Harbors Act and Section 103 of the Marine Protection, Research, and Sanctuaries Act. An early challenge was determining the capacity of the terminal through the end of the lease period, as well as interim analysis years. After multiple iterations, the maximum capacity was identified, and key assumptions were developed for a series of alternatives. As the document was a joint EIS/EIR, ICF identified the CEQA/NEPA baselines (which were different) and conducted a co-equal analysis of each alternative against the respective baseline scenarios. The team provided evaluation of transportation impacts, biological analysis, cultural resources studies, air quality/GHGs/health risk analyses, noise studies, and visual simulations of the additional gantry cranes. The project was analyzed for consistency with the California Coastal Act, State Tidelands Trust Act, Port Master Plan, San Pedro Bay Ports Clean Air Action Plan and Water Resources Action Plan, and relevant City of Los Angeles plans and policies. During the public review process, comment letters from environmental groups and public agencies were received. The ICF team worked with Port staff to respond to the comments. ICF also worked with staff through critical mitigation language during a public hearing that helped negotiate project approvals without a lawsuit.

RELEVANCE Environmental documentation including EIR/EIS, waterfront and harbor development, community outreach, agency coordination

TRINIDAD PIER RECONSTRUCTION | *CHER-AE-HEIGHTS INDIAN COMMUNITY OF THE TRINIDAD RANCHERIA, TRINIDAD, CA*

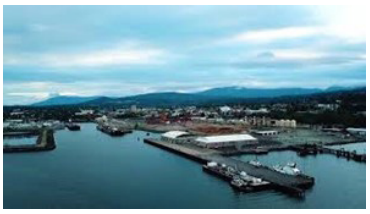


M&N provided analysis, design, and construction support for the replacement of the 500-foot-long Trinidad Pier.

Due to a compressed schedule M&N performed phased fast-track design in close coordination with the Rancheria, construction contractor, and permitting agencies to allow the project to be designed, permitted, and constructed within a six-month schedule. When difficult pile driving conditions were encountered M&N engineers were on site to develop practical solutions with the contractor and geotechnical engineer to ensure the adequacy of the piles in a manner that could be achieved and tested. During pile driving, the design and permit approval of the post-tensioned concrete cap and precast decking system proceeded, allowing construction to continue and the in-water work to be completed within the work window. Design and permit approval was completed in four months followed shortly by construction.

RELEVANCE Marine infrastructure reconstruction, waterfront structure inspection, permitting, fast track schedule

BELLINGHAM SHIPPING TERMINAL (BST) CONDITION ASSESSMENTS AND REPAIR PROJECTS | *PORT OF BELLINGHAM, BELLINGHAM, WA*



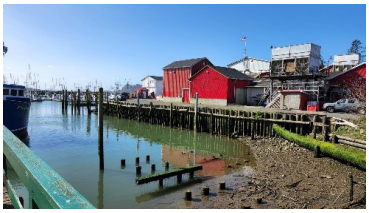
M&N completed a NEPA EA and all of the design to support the BST rehabilitation project, a MARAD-funded project, which involves maintenance dredging and rehabilitation of a portion of the existing wharf. M&N completed public notice, Section 106, and Section 7 for the project, all required by MARAD prior to NEPA EA review and issuance of a Finding of No Significant Impact (FONSI). M&N also supported the Port in completing the ERR required by MARAD prior to completion of the MARAD grant agreement, state environmental review, and obtained all federal, state, and local permits including the USACE and Section 401, and shoreline permits.

Prior to this, M&N completed inspection and condition surveys,and capacity assessments for the wharf.

Recent assessments and studies strategized the MARAD-funded wharf repairs and improvements, sinkhole repairs and utility upgrades (including stormwater) on adjacent uplands, and maintenance dredging within a Model Toxics Control Act (MTCA) cleanup site. Design efforts have included considerations for sea level rise (SLR), seismic requirements, a berthing study, and final plans, specifications and estimates (PS&E). M&N is providing bid and MARAD compliance support and construction is scheduled to begin in early fall 2023.

RELEVANCE Marine terminal facility/infrastructure repair reconstruction, waterfront structure inspection, paving adjacent uplands, MARAD NEPA compliance, permitting, and ongoing bid, construction, and MARAD reporting support

MARINE STRUCTURE REPLACEMENT | *PORT OF ILWACO, ILWACO, WA*



M&N is providing engineering design for a bulkhead and shoreline stabilization replacement based on an earlier preliminary condition assessment of the bulkhead and associated structures. The Port was awarded MARAD grant funding for the work and **M&N is also providing MARAD grant coordination and compliance support, completing a required MARAD NEPA EA along with state environmental review, and permitting for the project.** M&N completed stakeholder outreach (public notice) and Section 106 review required for NEPA compliance. M&N is also supporting permitting and engineering design for maintenance dredging at the Port of Ilwaco.

RELEVANCE Marine terminal facility/infrastructure repair reconstruction, MARAD PIDP funded, NEPA, permitting

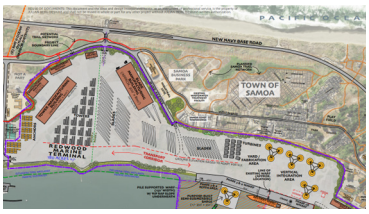
OCEAN BEACH CLIMATE CHANGE ADAPTATION PROJECT | *SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS, SAN FRANCISCO, CA*

M&N has been providing coastal engineering services at Ocean Beach since the early 90s. Working for USACE, the City and County of San Francisco (CCSF), and the San Francisco Public Utilities Commission (SFPUC), M&N has executed projects ranging from emergency revetment design as a result of storm damages to alternative forms of treatment including soil nail walls, secant pile walls, beach nourishment, and jet grout soil treatment for the 3,000-foot-long south of Sloat Boulevard reach which has involved desktop and modeling studies of the complex coastal and sediment transport processes in the region. Projects have included:

- Ocean Beach Climate Change Project
- Ocean Beach Sand Backpassing Project
- Great Highway Emergency Repair Project
- Guidance for a Beach Nourishment Study Under Section 933
- Storm Damage Protection Project
- Visual Assessments for Emergency Quarrystone Revetment
- Shoreline Variation and Sediment Transport Processes

RELEVANCE Infrastructure repair/reconstruction, coastal engineering, permitting

HUMBOLDT HARBOR WIND TERMINAL REDEVELOPMENT DESIGN, PERMITTING, AND PIDP GRANT SUPPORT | *Port of Humboldt Harbor, Eureka, CA*



M&N is the lead consultant responsible for preliminary design, regulatory permitting, and grant funding support for the Redwood Marine Terminal Redevelopment project. The project includes demolition of existing docks and buildings. Improvements include new vessel berths, a landside marine terminal, new maintenance and operations buildings, access road improvements, mitigation design development, CEQA/NEPA documentation and local, state, and federal permitting. M&N supported the Port with a MARAD PIDP grant pursuit strategy and development of documentation in compliance with USDOT requirements.

SHN is providing civil engineering for roadway, stormwater, surveying, geotechnical, and land use elements. ICF has provided CEQA and NEPA support.

RELEVANCE Marine terminal design, environmental documentation, permitting, OSW industry operational requirements

ARENA COVE FEMA DISASTER RECOVERY | *City of Point Arena, Point Arena, CA*

As the on-call City Engineer for the City of Point Arena, **SHN** provided assistance when winter storms of January and February 2017 massively damaged the Cove's parking lot and sea wall. The event was declared a federal disaster and the damage was eligible for assistance from the Federal Emergency Management Agency (FEMA).

SHN provided assistance throughout the entire recovery process. SHN responded immediately after the disaster to assess the damage with City staff and plan recovery efforts. As City Engineer, SHN attended all onsite meetings with FEMA and California Governor's Office of Emergency Services (CalOES) to document the damage, generate a list of projects, verify the damage descriptions, and review project worksheets. Following the disaster, SHN (with City direction) was instrumental in planning the recovery effort and taking the lead in communications with FEMA and CalOES.

The complex nature of the cove repairs and vulnerability of the site to future damage prompted the need for a Hazard Mitigation Proposal, in addition to the base repairs. SHN collaborated with the City to plan the recovery effort. SHN developed design plans and cost estimates (in collaboration with M&N), and obtained permit approvals for construction from the CCC, the California Department of Fish and Wildlife, USACE, and RWQCB. SHN coordinated all environmental compliance studies and documentation.

M&N provided coastal engineering support for evaluating rock revetment repairs, and rehabilitation and replacement alternatives. M&N also assisted with stakeholder and public engagement relative to the coastal processes assessment.

RELEVANCE Seawall repair, environmental compliance studies/documentation, agency coordination, plans, cost estimates, public outreach

CRESCENT CITY DREDGE SPOILS MANAGEMENT, ENVIRONMENTAL, AND GEOTECHNICAL ENGINEERING SERVICES | *CRESCENT CITY HARBOR DISTRICT, CRESCENT CITY, CA*

An estimated 90,000 cubic yards of sediment dredged from the Crescent City Harbor have been placed in an upland dredged material storage site owned and operated by the Crescent City Harbor District. Removal and disposal of the dredge spoils at an offsite disposal facility was not feasible due to the projected transportation and disposal costs. Space in the upland dredged material storage site is needed and now there is an option to remove dredge spoils and re-use them elsewhere. The RWQCB regulates the re-use and disposal of such material in the region and indicated re-use of the material from their upland dredged material storage site would require a permit issued under the RWQCB's waste discharge requirements (WDRs). **GeoEngineers** conducted a soil evaluation and prepared a report that the dredge material meets the requirements of the RWQCB for beneficial reuse. They are also providing a geotechnical engineering evaluation of the dredge material to determine compaction characteristics and amendments needed to ensure compaction.

RELEVANCE Engineering evaluation, dredging

ARENA COVE PARKING LOT REPAIR PROJECT CULTURAL RESOURCES INVESTIGATION | *CITY OF POINT ARENA, MENDOCINO COUNTY, CA*

WRA completed an archaeological investigation and reporting efforts to implement repairs to the existing public parking lot following storm damage in 2016. The work included repaving the parking lot surface, installing a concrete parapet seawall, and augmenting the existing jetty rock armoring the parking lot on the slope of the Pacific Ocean. Tribal outreach was conducted with local Pomo Tribes, and the project area was found to be sensitive for archaeological resources, while also lying adjacent to the Arena Cove Historic District (consisting of numerous buildings and structures), which was listed on the National Register of Historic Places (NRHP) in 1990 under Criterion A for its association with maritime commerce in the area. It was recommended for archaeological monitoring and tribal observer presence during ground disturbing activities associated with the parapet wall.

The investigation found the parking lot repair would aid in the maintenance and stabilization of the District, resulting in its continued integrity.

RELEVANCE Cultural and historic resources assessment, seawall, parking lot

Relevant Project Elements

Project Name	City, State	Seawall Design, Repair, Assessment	Pile-Supported Wharf Design	Tsunami-Resilient Design / Coastal Structures	NEPA	CEQA	MARAD PIDP Funding Compliance	Firms
Capitola Wharf Resiliency	Capitola, CA		●	●	●	●		M&N
Seal Beach Water Infrastructure Capital Improvement Projects	Seal Beach, CA		●	●	●	●		M&N
Citizens Dock Inspection	Crescent City, CA	●		●				M&N
San Pedro and Wilmington Waterfront Projects	Los Angeles, CA				●	●		ICF
YTI Container Terminal Improvements EIS/EIR	Los Angeles, CA				●	●		ICF
Trinidad Pier Reconstruction	Trinidad, CA		●	●		●		M&N
Bellingham Shipping Terminal (BST) Condition Assessments and Repair Projects	Bellingham, WA	●			●		●	M&N
Port of Ilwaco Marine Structure Replacement	Ilwaco, WA	●		●	●		●	M&N, GeoEngineers
Ocean Beach Climate Adaptation Project	San Francisco, CA	●		●		●		M&N
Humboldt Harbor Wind Terminal Redevelopment Design, Permitting, and PIDP Grant Support	Humboldt County, CA		●	●	●	●	●	M&N, ICF, SHN
Arena Cove FEMA Disaster Recovery	Point Arena, CA			●	●	●		SHN, M&N, WRA
Orange County Sanitation District Perimeter Tsunami Wall	Huntington Beach, CA	●		●		●		M&N
Wilmington Waterfront Promenade and Seawall	Wilmington, CA	●	●	●		●		M&N
Marina Del Rey Seawall Void Repair	Marina del Rey, CA	●				●		M&N

KEY PERSONNEL AND TEAM

SECTION 2 KEY PERSONNEL AND TEAM

KEY PERSONNEL

The Project Director responsible for oversight as well as the technical advisor for this contract is Shane Phillips, PE, D.PE, D.CE, CFM. Shane has specialized expertise in waterfront and marine facility engineering design and construction throughout the Pacific Northwest on multidiscipline teams.

Shane will provide technical advisory as well as review for the Harbor District's infrastructure improvements while working closely with Younes Nouri, the M&N Project Manager.

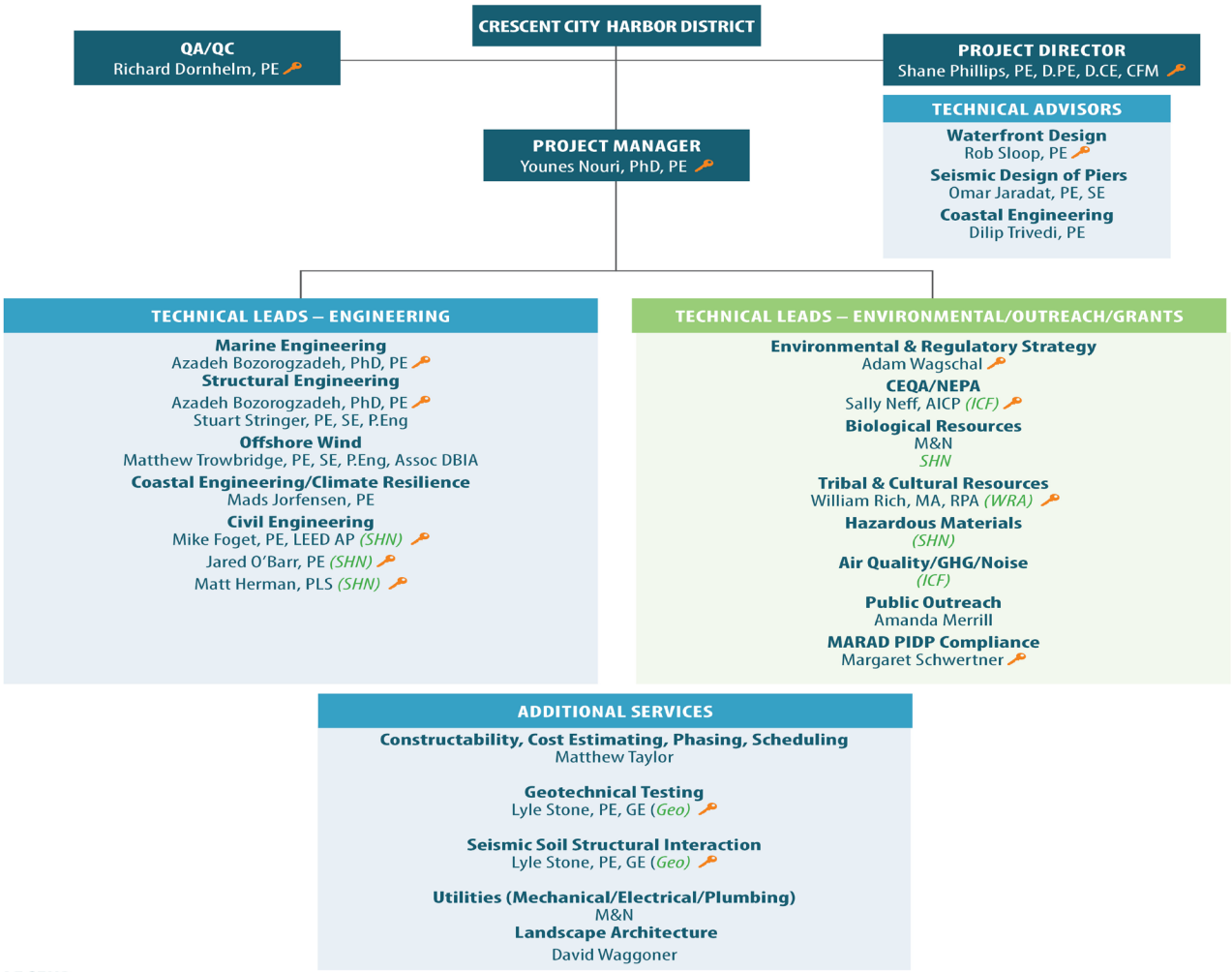
Younes Nouri will serve as the Project Manager, bringing nearly 20 years of experience managing projects that require close coordination with various engineering and environmental disciplines. He will manage the day-to-day tasks, assign technical staff, coordinate with the project team members, and supervise all project activities. His recent leadership on Harbor District projects gives him unique insight into the requirements and opportunities at the site and allow the team to have a headstart on the design.

Adam Wagschal has managed development of numerous CEQA and NEPA documents for projects in Humboldt Bay and elsewhere. He will serve as the environmental and regulatory, and document team lead and oversee overall development of the CEQA and NEPA document.

Margaret Schwertner is our in-house MARAD NEPA expert working on multiple PIDP-funded projects and will focus on MARAD compliance, especially related to NEPA.

Sally Zeff has extensive CEQA and NEPA experience throughout California and will be the CEQA lead.

The following highlights the key personnel and their experience.



moffatt & nichol

Education

- BS, Civil Engineering
- MIPM, Infrastructure, Planning & Management

Registrations/Certifications

- Professional Engineer - CA, Civil, #57552
- ASCE Diplomate in Coastal and Ports Engineering

Years of Experience: 30
Role: Project Director

Shane Phillips, PE, D.PE, D.CE, CFM, is a civil and coastal engineer with experience in coastal, ports, marine, and waterfront facilities. He leads complex, multidisciplinary teams of planners, architects, regulatory specialists, engineers, and scientists for strategic planning, stakeholder and public involvement, regulatory permitting, and final design. Shane's projects include planning studies, feasibility evaluations, facility inspections, preliminary and final designs, and construction engineering for port infrastructure, navigation facilities, nearshore restoration, waterfront public access, and small craft harbors. His projects include:

- Humboldt Bay Harbor, OSW Terminal Redevelopment, Harbor County, CA
- Port of Ilwaco, Marine Structure Replacement, Ilwaco, WA
- Point Arena, Arena Cove FEMA Disaster Recovery, Point Arena, CA
- Port of Willapa, Harbor Tokeland Commercial Marina Redevelopment Project, Tokeland, WA
- City of Depoe, Bay Marina Redevelopment Project, Depoe Bay, OR
- Saxman Harbor, Commercial Marina Project, Ketchikan, AK
- City of Warrenton, Boat Harbor Redevelopment, Warrenton, OR

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Education

- PhD, Coastal Engineering, John Hopkins University
- MASc, Coastal Engineering, University of Ottawa & Canadian Hydraulics Center
- BS, Civil Engineering, University of Tehran, Iran

Registrations/Certifications:

- Professional Engineer - CA, Civil, #83037

Years of Experience: 19
Role: Project Manager

Younes Nouri, PhD, PE, P.ENG is a senior coastal engineer specializing in analyzing and modeling tidal currents, waves, and tsunamis. His analyses help estimate floating debris loads on structures, propwash scour, passing vessel, and mooring and help with sediment transport planning. He collaborates with clients to incorporate climate change impacts on existing built and natural environment assessments. Younes is an associate member of the Tsunami Loads and Effects committee of ASCE 7-16 and brings knowledge of resiliency planning to local communities adapting for rising sea levels. In the summer of 2023, Younes will work with the City of Tacoma on a Climate Change Smart Policy Guide through a grant awarded by the Washington State Department of Ecology. His projects include:

- Crescent City Harbor District, Citizens' Dock Replacement, Crescent City, CA
- Humboldt Bay Harbor, OSW Terminal Redevelopment, Harbor County, CA
- Budd Inlet, Strategic Project Development and Remedial Design, Olympia, WA
- City of Tacoma, Tacoma Tideflats Subarea Plan and EIS, Tacoma, WA
- Metro Parks Tacoma, Ruston Way Vision and Implementation Planning, Tacoma, WA
- Northwest Seaport Alliance, Climate Hazard Profiles, Seattle and Tacoma, WA
- Port of Port Townsend, Point Hudson Marina Breakwater Rehabilitation Condition Assessment, Port Townsend, WA

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Education

- MS, Geography, Geographic Information Science, San Diego State University
- BS, Marine Fisheries, Humboldt State University

Registrations/Certifications:

- Scientific and Rescue Diver: NAUI
- Meeting Facilitation: NW Environmental Training Institute

Years of Experience: 23
Role: Environmental & Regulatory Strategy and Documentation

Adam Wagschal is a senior coastal planner working for private and public entities in aquatic biology and environmental compliance. He has worked as a consultant and a project proponent to obtain regulatory approvals under NEPA, CEQA, federal and California Endangered Species Acts, Clean Water Act, Coastal Act, and California Harbors and Navigation Code.

Adam will manage overall development of the NEPA and CEQA document and coordinate closely with the design team regarding project details. His experience includes managing development of the following:

- Trinidad Pier Reconstruction Marine Mammal Monitoring Program Management, Trinidad, CA
- Woodley Island Marina Dredging CEQA/NEPA Documentation and Permitting, Humboldt Bay, CA
- Hagfish Landing and Holding Facility CEQA/NEPA Documentation and Permitting, Humboldt Bay, CA
- Humboldt Bay Sediment Management Program CEQA Environmental Impact Report, Humboldt Bay, CA
- Humboldt Bay Mariculture Pre-Permitting Project CEQA/NEPA Documentation and Permitting, Humboldt Bay, CA
- Humboldt Bay Spartina Eradication Program State Coastal Conservancy Grant Management and CEQA Environmental Impact Report, Humboldt Bay, CA

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Education

- PhD, Structural Engineering, University of California, San Diego
- MS, Civil Engineering, University of Arizona
- BE, Civil Engineering, Sharif University of Technology, Iran

Registrations/Certifications:

- Professional Engineer - CA, Civil, #75033

Years of Experience: 15
Role: Marine and Structural Engineering

Azadeh Bozorgzadeh, PhD, PE, is a project manager specializing in marine structures with 15 years of experience in a wide range of project types, including piers and wharves, and floating and waterfront structures. Azadeh has provided project management, inspection, planning, analysis, design, construction documents (design-build and design-bid-build), construction support, and quality control review for numerous waterfront projects. She has been the lead engineer on conceptual through detailed design of a number of civil/structural engineering projects such as seawall design, fishing piers, ferry terminals, mooring structures, guide piles, and floating wharves. These projects have involved facility layout, arrangement, and concept development; detailed design of waterfront and floating structures; engineering support during construction; inspection; and cost and construction schedule estimating. She has extensive experience in the seismic analysis of structural systems, ranging from simple models to detailed finite element models using programs such as EDP, SAP, SPI, and analysis tools such as CWALLSSI and LPILE.

She brings a strong technical background in civil and structural engineering, as well as management of waterfront projects. Azadeh is active an ASCE Ports and Harbor committee member, involved in the task committee of "Guidelines in Seismic Design of Bulkhead Walls".

For this project, Azadeh will be the lead for the structural and marine engineering. Her project experience includes:

- Trinidad Pier Reconstruction, Humboldt County, CA
- Golden Gate Ferry Terminals Project, San Francisco, CA
- Water Emergency Transportation Authority, Downtown San Francisco Ferry Terminal, San Francisco, CA
- Military Ocean Terminal Concord Pier 2 Replacement DD 1391 Preparation, Concord, CA
- Port of Long Beach, Pier E Slip 3 Redevelopment, Long Beach, CA

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Education

- ME, Coastal Engineering, University of California
- MS, Sanitary Engineering, Cornell University
- BS, Civil Engineering, Cooper Union

Registrations/Certifications:

- Professional Engineer - CA, Civil, #23812

Years of Experience: 53
Role: QA/QC

Richard Dornhelm, PE, coastal engineering experience has broad applications for waterfront and marine planning and design projects. He has helped prepare numerous coastal engineering reports covering subjects such as mathematical modeling of harbor oscillations; circulation and water quality in marinas; hydraulic behavior of bays and estuaries; planning for shore protection; analysis of mooring and wave forces; and analysis of tsunami, storm surge, and wave flooding for various coastal facilities. He also performed site selection studies for various types of coastal facilities, including marine terminals and small craft harbors.

Richard will provide quality assurance/quality control (QA/QC) for the project and has been providing QA/QC for more than 30 years. He has worked on the following projects:

- City of San Francisco, Ocean Beach Climate Adaptation Project, San Francisco, CA
- Military Ocean Terminal Pier 2 Replacement, DD1391 Preparation, Concord, CA
- California Department of Boating and Waterways (DBAW), Colusa Boat Launch Facility, Colusa, CA
- San Francisco Airport (SFO) Shoreline Protection, San Francisco, CA
- Port of San Francisco, Pier 40 Revitalization and Retrofit, San Francisco, CA
- Monterey Marina Rehabilitation, Monterey, CA
- Woodley Island Marina, Eureka, CA

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Education

- ME, Coastal and Oceanographic Engineering, University of Florida
- BS, Mechanical Engineering, University of South Florida

Registrations/Certifications:

- Professional Engineer - CA, Civil, #72878

Years of Experience: 25
Role: Waterfront Design

Robert Sloop, PE, leads planning, permitting, design, and engineering teams that deliver projects for waterfront destinations that attract visitors, create opportunity, and build communities. He brings expert-level knowledge in coastal, environmental, and ecosystems, focusing on increasing the resiliency of port projects. Through creative and practical infrastructure solutions that incorporate the best of today's science, his projects consider future viability and investment value over time. He recently managed large waterfront redevelopment projects that pursued local, state, and federal grant funding.

Rob will be responsible for the resiliency planning and an advisor on waterfront design. His projects include:

- City of Avalon, Sea Level Rise Vulnerability Assessment, Avalon, CA
- City of Tacoma, Tacoma Tideflats Subarea Plan and EIS, Tacoma, WA
- City of Vancouver BC, Sea2City Design Challenge, Vancouver BC, Canada
- District of Columbia, The Wharf at the Southwest Waterfront Renewal, Washington, D.C.
- Metro Parks Tacoma, Ruston Way Vision and Implementation Planning, Tacoma, WA

Education

- MS, Aquatic and Fishery Sciences, University of Washington
- BS, Agriculture (Animal Science), University of Saskatchewan, Canada

Years of Experience: 20
Role: MARAD PIDP Compliance

Margaret Schwertner is an environmental scientist with experience completing environmental review, planning, and permitting for water- and shoreline-dependent projects including ports and commercial harbors. Margaret is experienced in completing NEPA and state reviews including CEQA. She has developed efficient permit strategies, supported alternatives analysis, tribal and stakeholder outreach, Sections 7, 106, 401, 404, and 408 reviews, and completed applications for in-water and shoreline permits. Margaret understands the nuances of MARAD NEPA guidelines for federally funded projects and has existing relationships with MARAD staff.

Margaret will be the regulatory/MARAD lead and work closely with Adam Wagschal, the environmental documentation manger (and regulatory strategist). Her project experience includes:

- Port of Bellingham, BST Condition Assessments and Repair Projects (NEPA and permitting), Bellingham, WA
- Port of Ilwaco, Marine Structure Replacement (NEPA), Ilwaco, WA
- Port of Port Angeles, Intermodal Handling and Transfer Facility Improvements (NEPA support), Port Angeles, WA
- WA DES, Capitol Lake/Lower Deschutes Estuary Long-Term Management (SEPA EIS support), Olympia, WA

Education

- MUP, Urban Planning, University of Michigan
- BA, Medievel Studies, Reed College

Registrations/Certifications:

- Certified Planner, American Institute of Certified Planners (AICP), #6100

Years of Experience: 42
Role: CEQA/NEPA Lead

Sally Zeff, AICP has experience in environmental, management, permitting, and planning consulting as well as extensive experience serving as a public agency planner. Sally has strong qualifications in utilities, energy, general plans, land use, traffic, housing, agriculture and farmland conservation, mining, and related environmental analyses. She is also experienced in preparing documentation for CEQA and NEPA compliance and permitting.

Sally provides strategic CEQA and NEPA advice for a variety of clients, helping with CEQA and NEPA streamlining, risk management, and getting the most value out of CEQA documents. As ICF's CEQA practice leader for Northern California, she advises ICF staff and clients on effective CEQA compliance, reviews CEQA documents for adequacy, develops CEQA strategies for complicated projects, and teaches internal and external CEQA and NEPA classes. Her project experience includes:

- Humboldt Harbor Wind Port Development Project, Humboldt Port District, California
- On-Call Staff Assistance and Environmental Consulting, County of Siskiyou, California
- Crystal Geyser EIR, Siskiyou County, California
- On-Call Environmental Consulting, University of California, Davis, Health, Sacramento, California
- California Tower EIR, University of California, Davis, Sacramento Campus, California
- Las Camas Solar Project EIR, EDP Renewables, Merced County, California

Education

- MS, Environmental Engineering, Washington State University
- BS, Environmental Resources Engineering, Cal Poly Humboldt

Registrations/Certifications:

- Professional Engineer - CA, Civil, #54123
- LEED Accredited Professional, Green Building Certification Institute
- Qualified SWPPP Developer (QSD)/ Qualified SWPPP Practitioner (QSP), #00315

Years of Experience: 33
Role: Civil Engineer

Mike Foget, PE, LEED AP has experience in civil and consulting engineering for public agencies and private sector clients. He has been responsible for design, review, and completion of a wide range of engineering projects, including municipal utility projects. He has prepared conceptual design, construction plans, and specifications; specified equipment and materials; and supervised contractor installation of lineal infrastructure. His design engineering experience includes wastewater treatment facilities, stormwater drainage, construction management, and analysis of drainage facilities for stormwater. Mike has secured and managed multiple state- and federally-funded infrastructure projects. He has served as the District Engineer for the Humboldt Bay Harbor, Recreation and Conservation District since 2016. Project experience includes:

- Humboldt Bay Harbor, Recreation and Conservation District, District Engineer, Humboldt Bay, CA
- Bulkhead at Tuluwat Village, Design and Construction, Humboldt Bay, CA
- Town of Scotia, Complete Infrastructure Improvements, Scotia, CA
- Trinidad Harbor, Waterfront Compliance Plan and Stormwater Improvement Project, Trinidad, CA

Education

- BS, Civil Engineering, University of Washington

Registrations/Certifications:

- Professional Engineer - CA, #8335

Years of Experience: 16
Role: Civil Engineer

Jared O'Barr, PE has experience working on municipal infrastructure and site development projects. His experience includes site grading and drainage, stormwater mitigation (Low Impact Development), site Americans with Disabilities (ADA) accessibility, municipal infrastructure design (water distribution, water storage, wastewater collection), trenchless pipe rehabilitation and installation, and roadway and bike trail design. He excels on complex projects that require collaboration between various disciplines, and takes pride in developing a collaborative and engaged approach working with his clients and project partners. Jared leads SHN's civil engineering group. His project experience includes:

- On-Call City Engineering Services, City of Crescent City, CA
- Cal Poly Humboldt, Humboldt Bay Aquatic Center Floating Dock, Eureka, CA
- CDCR, Pelican Bay State Prison Site Accessibility Improvements, Crescent City, CA
- Alice Birney and Lafayette Elementary Schools, School Parking Lot Designs, Eureka, CA

Education

- AA, Civil Engineering Technology, Santa Rosa Junior College

Registrations/Certifications:

- Professional Land Surveyor - CA, Civil, #76125

Years of Experience: 27
Role: Land Surveyor

Matt Herman, PLS has experience providing land surveying, civil engineering, and planning services throughout the California North Coast, as well as serving three years as a field surveyor for the U.S. Army. He has been the responsible surveyor in charge of field crews involved in collecting and processing raw field data into boundary, utility, and topographic maps. Matt participates in construction staking, topographic mapping, boundary determination, record searches and deed preparation, analyzing and preparing Subdivision Maps and Record of Surveys performed by staff. His project experience includes:

- Noyo Harbor, Boat Launch Ramp and Parking Facilities Project, Fort Bragg, CA
- Nordic Aquafarms, Feasibility Study, Samoa, CA
- California Conservation Corp, Campus Conceptual Design Project, Willits, CA
- County of Humboldt, Bridge Replacement Projects, Humboldt County, CA

Education

- MS, Civil Engineering, Michigan Technological University
- BS, Civil Engineering, California Polytechnic State University

Registrations/Certifications:

- Professional Engineer - CA, Civil, #72065
- Geotechnical Engineer - CA, #3066
- 40-hour OSHA Hazardous Waste Site Operations & Safety Training

Years of Experience: 18
Role: Geotechnical Engineer

Lyle Stone, PE, GE has geotechnical engineering and consultation experience with a focus on waterfront and municipal projects. He has project management experience with all phases of geotechnical design in support of waterfront, flood control, and development projects for ports and municipalities. He has provided design services for marine projects to include pile and shaft foundations; bulkhead structures including soldier piles, structural earth walls, and conventional retaining walls; marine slope stabilization; pavement design for concrete and asphalt sections as well as non-conventional methods such as soil-cement and reinforced subgrade sections; seismic analysis for piers and bulkheads; and construction support services. His experience includes:

- City of San Diego, Ocean Beach Pier Replacement; San Diego, CA
- U.S. Naval Station San Diego, Pier 8; San Diego, CA
- U.S. Naval Station San Diego, Pier 12; San Diego, CA
- Mortenson/Manson Joint Venture, Elliott Bay Seawall; Seattle, WA
- City of Des Moines, Redondo Boardwalk Replacement; Des Moines, WA

Education

- MA, Archaeology and Heritage, University of Leicester, UK
- BA, Anthropology, Humboldt State University

Years of Experience: 23
Role: Tribal & Cultural Resources

William Rich, MA, RPA has experience with CEQA and Section 106 NHPA and has completed hundreds of cultural resources projects. William actively includes local tribes at several levels of coordination and has years of successful collaboration with tribes throughout Northwest California. He completes archaeological field surveys, subsurface archaeological investigations, and site testing. Efforts also include historical research, cultural resources mapping, research design feasibility studies, cultural resources management plans, construction monitoring, and mitigation prescriptions.

His community involvement includes serving the Humboldt County Historical Society since 2009 (President, Board of Directors, 2013-2015) and City of Arcata Historic Landmarks Committee Chair. He has also been a lecturer at Humboldt State University in the Department of Anthropology. His experience includes:

- Arena Cove Parking Lot Repair Project, Cultural Resources Investigation, Mendocino, CA
- Cultural Resources Study for the Tolowa Dee-ni' Nation's Land Use and Master Planning Document and Archaeological Survey for the Xaa-wan'-k'wvt Village and Resort (XVR), Del Norte County, CA
- EnerTribe, Cultural Resources Investigation, Klamath River Rural Broadband Initiative, Humboldt County, CA

PRICING

SECTION 3 PRICING

We propose to perform the scope of work described in Section 4 at a fee of $548,047. The following summary of fees, broken down by tasks, represents our cost proposal. We also propose to have a $50,000 contingency budget to be able to address additional scope items beyond our assumptions or unanticipated scope changes. Examples of these additional scope items can include exploration of additional alternatives for the seawall/dock to address OSW industry needs, extended regulatory review times, and additional meetings with project stakeholders.

We strive to provide a complete team, scope, and fee commensurate with the Harbor District's needs as expressed in the RFP, and other information conveyed on the project to our team. We remain open, however, to recalibrate our scope and fee to ensure alignment with Harbor District needs and available budget.

We will not exceed the maximum $548,047 without Harbor District authorization for the current scope as detailed in the table below. We can initiate this scope of work immediately following your notice to proceed.

Proposed Fee

Task	Task Description	Labor Cost
1	Project Management	$27,600
2	Public Involvement and Interagency Coordination	$12,120
3	Purpose and Need Statement	$3,560
4	Create an Initial Design and Alternatives of a New Seawall	$107,780
5	Construction Plan for New Seawall	$30,647
6	Initial Design, with Alternatives, of a New Citizens' Dock	$119,921
7	Construction Plan for the New Dock	$38,912
8	Identify EA/EIS Project Scope and Boundaries	$10,830
9	Determine the Level of Analysis Required	$2,500
10	Data Collection and Analysis of the Potential Environmental Impacts	$122,907
11	Prepare a Draft EIS or EA	$20,700
12	Prepare a Draft ND or EIR	$20,700
13	Prepare Section 4(f) and Section 106 Evaluation	$9,300
14	Public and Agency Review of Draft EIS or EA	$9,170
15	Prepare Final EA/EIS Document	$11,400
	TOTAL	**$548,047**

TASKS AND TIMELINE

SECTION 4 TASKS AND TIMELINE

The M&N Team has demonstrated experience working with our clients on design, environmental documentation, and permitting of port projects. We understand the importance of having frequent check-ins with the Harbor District on scope, schedule, and budget as the work progresses through design and environmental documentation. Most importantly, we understand the timing requirements to comply with the grants and built our schedule to ensure the target dates are met.

The following is a description of our approach for project tasks.

TASK 1 PROJECT MANAGEMENT

M&N will provide the required level of contracting, oversight, accounting, invoicing, and clerical support to manage the project. Younes Nouri will serve as Project Manager and as the Harbor District's principal contact with M&N for the duration of the project.

Project management will include:

- M&N team coordination
- Meeting coordination and documentation
- Progress communications at regular intervals during the design process
- Change management - risk control
- Scheduling support through the duration of the tasks defined below

The M&N Team will also develop a schedule that incorporates Harbor District objectives and MARAD/CCC reporting needs and milestones along with other key milestones. M&N will meet, in person or remotely, with the Harbor District's project management staff every two weeks and provide project progress reports throughout the life of the project.

Quality Control. Quality control has been scheduled and budgeted for each of the scope tasks and all work products produced by M&N and our subconsultants will be reviewed by qualified peers. Subconsultants will be required to perform their own QA/QC consistent with industry standard practices. All work will be performed consistent with M&N's corporate Quality Manual. QA/QC will include checking and reviewing M&N and subconsultant work for consistency to deliver a coordinated set of documents. Typical QA/QC tasks include but are not limited to integrity checks, plan checks, and constructability checks.

TASK 2 PUBLIC INVOLVEMENT AND INTERAGENCY COORDINATION

Our team will develop a Public Involvement Plan (PIP) according to Federal Highway Administration (FHWA) and MARAD requirements. Implementation of the PIP will allow for efficient coordination with agencies and the public to quickly advance the project. We will capitalize on the existing relationships we have with MARAD, the SCC, and tribal and local agency staff. We will work closely with the Harbor District staff to maintain and update your website as the project develops. We recognize the importance of the project to the community and will ensure that this is highlighted through the project website and other public outreach.

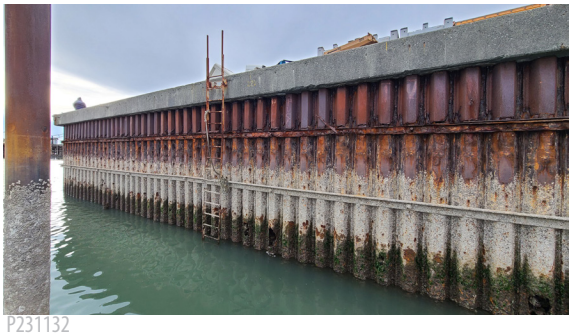
TASK 3 PURPOSE AND NEED STATEMENT

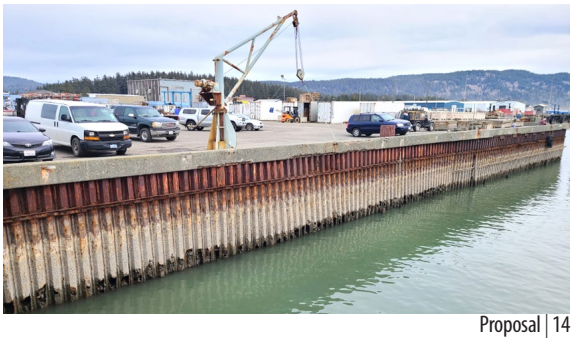
Our team will prepare a NEPA purpose and need statement that satisfies NEPA requirements. We have developed similar statements for six other MARAD PIDP grant NEPA documents. A clear purpose and need statement is important to make the NEPA document defendable from potential legal challenges.

TASK 4 CREATE AN INITIAL DESIGN AND ALTERNATIVES OF A NEW SEAWALL

Our approach to design of the seawall includes the following:

- Establish Basis of Design (BOD) for the new seawall/parking lot project. The task deliverable will be a BOD memorandum to outline the design criteria for the project. This scope includes a two-hour workshop with the project stakeholders to agree on the functional criteria of the project. The document will address the following:
  - Project background
  - Project purpose
  - Site description and location
  - Project description





  - Datum and units
  - Governing codes, standards, and references
  - Topographic and bathymetric survey
  - Functional requirements and site use summary (fishing industry, education, industrial shipping, OSW, etc.)
  - Construction phasing requirements
  - Site conditions
  - Metocean conditions (tides, SLR, tsunami, extreme water level, current, wind, wave, etc.)
  - Geotechnical conditions
  - Seismic design criteria and performance requirements
  - Design loads
  - Material properties
  - Corrosion protection requirements
  - Design life
  - Civil design criteria (stormwater, grading, finish surface)
  - Electrical design criteria (assume all-electric facility, vehicle charging, lighting, cranes, and other miscellaneous loads)

- The geotechnical Phase I effort will include review of existing information (including available subsurface data from the adjacent marina which confirms shallow bedrock/siltstone) to support development of preliminary design criteria for the structural analysis and design. Seismic design criteria will be developed along with a preliminary assessment of seismic liquefaction at the design earthquake and global stability of the bulkhead (including liquefaction and lateral spread). Recommendations for analysis and design of sheet pile bulkhead walls will be developed and lateral earth pressure diagrams for static and seismic cases, including active and passive pressures, provided. Recommendations for pile supported structures will be developed along with estimated axial pile resistances for static and seismic cases and recommended LPILE parameters for lateral pile analysis or P-Y curves for structural analysis. This phase of work will also include a preliminary pile driveability analysis to determine if piles can be safely driven or if drilling and socketing into the siltstone is required. An opinion on whether the available subsurface information is sufficient to mitigate design and construction risk will be included.
- Develop conceptual seawall layout with alternatives. The team will provide up to three conceptual seawall layouts including pros, cons, and rough order of magnitude (ROM - budgetary) construction cost estimates for each alternative. During this phase we will work closely with the Harbor District staff to ensure our design meets all the functional criteria of the project. The goal of this task will be to evaluate the pros and cons of 2-3 different design alternatives (different types of wall, material, etc.). The task deliverable will be a memo that summarizes the findings and will be followed by a workshop with the Harbor District staff to evaluate the preferred design layout for the seawall replacements.
- Develop site plans suitable for the NEPA/CEQA requirements for the selected design layout.
- Preliminary design and analysis of seawall. The preliminary design of the new seawall will consider the performance objectives of the project which include: (a) enhance the current function and (b) mitigate seismic risk/1.5 feet of sea level rise (SLR), and 100-year storm surge on the site. The seawall will be designed for static and dynamic loading conditions. The dynamic analysis of the wall (soil-structure-interaction) will be done using SAP2000 software program. This analysis to be closely coordinated between the structural and geotechnical engineers.
- Prepare demolition plans.
- An AACE International Class 5 cost estimate will be developed to an accuracy of -30% / +50%. The estimate will be created representing the developed plans for the new seawall based on historical and current data using in-house sources, information from previous studies, and budget price quotations from suppliers and contractors. The estimate approach and assumptions will be documented in an Estimate Basis report. At this level of project engineering, the estimate will be a unit price estimate. The estimate will account for annual escalation. A project schedule will be developed to a Level 1 detail including input from the Harbor District on likely timeline for obtaining permits and regulatory approvals. Deliverables are (1) Basis of Estimate Report, (2) Class 5 Cost Estimate, and (3) Level 1 Project Schedule.

TASK 5 CONSTRUCTION PLAN FOR THE NEW SEAWALL

Prepare 30% construction document which will include 30% design level plans and Class 5 construction cost estimate. The documentation will include plans and primary sections of the new seawall. All drawings will be prepared in AutoCAD. The construction cost estimate report will be included.

TASK 6 INITIAL DESIGN, WITH ALTERNATIVES, OF A NEW CITIZENS' DOCK

Our approach to design of the Citizens' Dock includes the following:

- Establish BOD for the Citizens' Dock Replacement projects. The task deliverable will be a BOD memorandum to outline the design criteria for the selected layouts. This scope includes a two-hour workshop with the project stakeholders to agree on the functional criteria of the project. The document will address the following:
  - Project background
  - Project purpose
  - Site description and location

  - Project description
  - Datum and units
  - Governing codes, standards, and references
  - Topographic and bathymetric survey
  - Site use summary (fishing industry, education, industrial shipping, OSW, etc.)
  - Functional requirements
  - Basis of Operations
  - Site phasing requirements
  - Site conditions
  - Metocean conditions (tides, SLR, tsunami, extreme water level, current, wind, wave, etc.)
  - Geotechnical conditions
  - Seismic design criteria and performance requirements
  - Operation and vehicle loading requirements
  - Design loads
  - Material properties
  - Corrosion protection requirements
  - Design life
  - Civil design criteria (fire water, potable water, sewer)
  - Electrical design criteria (assume all-electric facility, shore power, lighting, cranes, and other miscellaneous loads)

- Develop three different dock layouts. Given that one of the objectives of the Citizens' Dock replacement project is to add multi-use functionality to the dock (such as fishing industry, education opportunities, industrial shipping, and potentially OSW industry), our team will provide up to three conceptual dock layouts including pros, cons, and ROM (budgetary) construction cost estimates for each alternative. During this phase we will work closely with the Harbor District staff to capture all future potential use of this facility and local community needs. The goal of this task will be to evaluate the pros and cons of 2-3 different dock layouts. The task deliverable will be a presentation of the concepts summarizing our findings and followed by a workshop with the Harbor District staff to evaluate the preferred solution for the dock replacements.
- Develop site plans suitable for the NEPA/CEQA requirements for selected alternatives.
- Preliminary design and analysis of Citizens' Dock. The design objective of the Citizens' Dock replacement project is not only to enhance the current function but also to mitigate seismic risk/1.5 feet of SLR, and 100-year storm surge on the site. The dock will be designed considering the loading criteria developed in previous tasks such as seismic, tsunami, mooring, and berthing loads. The dock will be designed for static and dynamic loadings. The dynamic analysis of the dock (including soil-structure-interaction) will be done using SAP2000 software program. This analysis will need to be closely coordinated between the structural and geotechnical engineers. During this task the pile foundation type (e.g., steel pipe pile) and sizing (diameter, length) to support design loads will be determined. Design of the deck structure will be included in this task and typical sections and details will be developed.
- Prepare demolition plans.
- An AACE International Class 5 cost estimate will be developed to an accuracy of -30% / +50%. The estimate will be created representing the developed plans using historical and current data using in-house sources, information from previous studies, and budget price quotations from suppliers and contractors. The estimate approach and assumptions will be documented in an Estimate Basis report. At this level of project engineering, the estimate will be a unit price estimate. The estimate will account for annual escalation. A project schedule will be developed to a Level 1 detail including input from the Harbor District on likely timeline for obtaining permits and regulatory approvals. Deliverables are (1) Basis of Estimate Report, (2) Class 5 Cost Estimate, and (3) Level 1 Project Schedule.
- Prepare dredging plans, which will include a plans, sections, and quantity (optional).

TASK 7 CONSTRUCTION PLAN FOR THE NEW DOCK

Prepare a 30% construction document which will include 30% design level plans and a Class 5 construction cost estimate. The documentation will include plans and primary sections of the new Citizens' Dock. All drawings will be prepared in AutoCAD. The construction cost estimate report will be included.

TASK 8 IDENTIFY EA/EIS PROJECT SCOPE AND BOUNDARIES

The team will work with the Harbor District to ensure the environmental documents include the full scope and boundaries of the project. This includes the construction sites themselves in addition to staging/laydown areas and any other project related activities such as any necessary road improvements for site access. A map and description of the project's scope and boundaries will be developed.

TASK 9 DETERMINE THE LEVEL OF ANALYSIS REQUIRED

Based on a review of the current information, our preliminary recommendation is to develop an IS/MND for CEQA documentation of the Seawall and Citizens' Dock projects and a separate EA for NEPA documentation of only the seawall project. Our rationale for this strategy is as follows.

CEQA Strategy. The Harbor District is the project proponent for the Seawall and Citizens' Dock projects and therefore can serve as the CEQA Lead Agency for both projects. Based on our understanding of these projects and potential environmental effects, we believe that an IS/MND will provide adequate CEQA documentation. One CEQA document can be efficiently developed for both projects.

NEPA Strategy. MARAD requires NEPA documentation for projects they fund that occur within the Waters of the U.S. and therefore will require NEPA documentation for the seawall project and serve as the NEPA lead agency. Based on our understanding of the seawall project and potential environmental effects, we believe that an EA will provide adequate NEPA documentation. For the following reasons, we do not recommend inclusion of the Citizens' Dock project in the EA.

- MARAD is not funding the Citizens' Dock project and therefore does not require NEPA documentation. Involving MARAD staff in review of Citizens' Dock would create an unnecessary layer of review and approval that would increase project costs and potentially timelines.
- Including the Citizens' Dock in the MARAD led EA would subject the project to Buy America/Build America (BABA) requirements which could substantially increase construction costs.
- The USACE will require NEPA documentation associated with their permit issuance. However, the USACE NEPA process will occur after a USACE permit application is submitted and the process will be simpler than MARAD's process. Depending on design details, the Citizens' Dock project may be eligible for a USACE Nationwide Permit 3 (Maintenance) because it involves replacement of an existing structure. Since NEPA documentation is already complete for Nationwide Permits, the USACE NEPA effort required for the Citizens' Dock project will be negligible and likely addressed by USACE staff without any costs to the Harbor District. Alternatively, USACE may require development of a NEPA EA, but that process would be easier than with MARAD serving as the Lead Agency.

For this task, we will meet with the Harbor District, MARAD, and regulatory agency staff to confirm this is the ideal strategy.

TASK 10 DATA COLLECTION AND ANALYSIS OF THE POTENTIAL ENVIRONMENTAL IMPACTS

The M&N Team will collect and review existing data for the site and project elements. Any necessary steps to clarify MARAD and CCC funded project elements will be completed immediately upon notice to proceed. The following table shows the responsible team member for each NEPA/CEQA topic. Memos or brief write-ups will be developed for each topic and that information will be incorporated into the NEPA and CEQA documents. All documents will be reviewed by the M&N project manager (Younes Nouri) and environmental lead (Adam Wagschal) to ensure consistency and quality.

TOPIC	LEAD AUTHOR	TOPIC	LEAD AUTHOR
Land Use and Zoning	M&N	Endangered Species and Section 7	M&N
Land Acquisition and Displacement	M&N	Construction Impacts	M&N
Demographics	ICF	Archaeology	WRA
Community Resources	M&N	Floodplains	M&N
Environmental Justice	ICF	Wetlands	SHN
Transportation	M&N	NPDES Requirements	M&N
Utilities	M&N	Fish and Wildlife	M&N (Marine) SHN (Upland)
Cultural/Historic Resources and Section 106 support	WRA	Hazardous Waste	M&N/SHN
Visual Resources	ICF	In Air Noise	ICF
Vibration	ICF	In Water Noise	M&N
Water Quality	M&N	Air Quality	ICF
Navigable Waters	M&N	Erosion	M&N
Biotic Communities	M&N (Marine) SHN (Upland)	Cumulative Effects	M&N/ICF

TASK 11/12 PREPARE A DRAFT EIS OR EA/PREPARE DRAFT ND OR EIR

As described above for Task 9, our recommended strategy is to develop a CEQA IS for the seawall and Citizens' Dock and a NEPA EA for the seawall.

MARAD is relatively new to the management of federal funding. For this reason, their processes can be less streamlined than other federal grant programs. M&N has been involved in MARAD-funded projects since their commencement. This has resulted in a strong understanding of their overall mission and processes. MARAD wants to support waterborne commerce while minimizing risk and M&N is well-versed at this with our waterfront engineers and thorough understanding of MARAD procedures and how they relate to other existing permitting processes (e.g., CEQA, Section 7, Section 106, public notice, and outreach).

NEPA must be completed before the grant agreement between the Harbor District and MARAD can be finalized, which then leads to the "Release of Funds". A NEPA EA is often required by MARAD for any work that occurs within marine waters, even if it would otherwise be considered a CATEX. However, MARAD has recently become more open to allowing for a NEPA CATEX if different actions are deemed independent of each other. We will explore this with MARAD staff and it could reduce project costs and expedite the timeline.

As described in Task 10, our approach will be to develop memorandums that assess the environmental effects for each NEPA and CEQA resource category (e.g., biology, cultural/historic resources, air quality, etc.). The information from the memorandums will then be incorporated into the NEPA and CEQA documents, creating efficiency in document development and ensuring consistency between the NEPA and CEQA documents.

The M&N Team will prepare a MARAD compliant EA conforming with all NEPA regulations pursuant to the Council of Environmental Quality (CEQ) to assess the potential effects associated with the desired port upgrades and repairs. M&N will take the lead on writing the NEPA EA sections which are anticipated to include:

- Introduction
- Project location
- Proposed project description
- Summary of environmental laws and regulations
- Purpose and need statement
- Existing conditions
- Anticipated benefits of proposed action
- Alternatives considered will include a description of the conceptual alternatives but screened out due to fatal flaws. It is anticipated that the EA will assess one Build or Action and one No Action alternative. POI evaluations for the alternatives considered, as well as the criteria used to evaluate the alternatives, will be described.
- Affected Environment and Consequences: potential impacts to the human and natural resources will be described and potential environmental effects analyzed. Where it is not practicable to avoid impacts, potential minimization measures will be described. At this time, key human and natural resources to be discussed within the EA are assumed (please see the table above) but may change following further coordination with MARAD.
- Secondary (Indirect) Effects and Cumulative Impacts: NEPA requires consideration of the past, present, and reasonably foreseeable future actions. Indirect and cumulative impacts will be addressed pursuant to NEPA review guidelines.
- Permits: any permits required or already obtained, and the affiliated conditions and Best Management Practices (BMPs) will be described.
- Mitigative measures.
- Agency and Tribal Coordination and Public Involvement: a public meeting is not anticipated to be required by MARAD at this time. M&N will support the Harbor District in developing the language for MARAD required outreach, but it is anticipated the Harbor District will be able to post information on their website and conduct any necessary mailouts. A virtual public meeting is not included in this estimate and fee. M&N will be able to support MARAD compliant letters to Tribes to comply with Section 106.
- Appendix: given recent federal guidance restricting the length of NEPA documentation to no more than 20 pages, and past work with MARAD on NEPA EAs, M&N anticipates completing individual technical memorandums/reports to support the NEPA EA as appendices.

The M&N Team will support the Port in seeking as streamlined a NEPA process as possible. We propose to use existing site information, publicly available information about the site and region, and past or existing studies and permits to the maximum extent possible. Our team includes experts in all required fields that can be drawn on to complete the EA, supporting technical memorandums, and any affiliated desktop analysis, as applicable and defined within this scope of services.

The Draft NEPA EA will be compiled and presented to the Harbor District for review prior to submittal to MARAD.

The M&N Team will also prepare a CEQA IS, assumed to support a MND, to support the Harbor District's and other State agencies approvals for the project. Studies performed for the EA will be used in the preparation of the IS, along with the CEQA-specific studies for relevant topics, such as air quality.

The IS will analyze each affected topic at a level adequate to fully assess the potential effects and identify appropriate mitigation measures to reduce the potential impacts to a less-than-significant level. The IS will follow a topic-by-topic approach to the CEQA analysis for each resource area identified in Appendix G of the CEQA Guidelines. The analysis will be based on standard methodologies and techniques and focus on the physical effects of the proposed project on the existing environment. Should the results of the analysis identify impacts that cannot be reduced to a less than significant level through feasible mitigation, the M&N Team will advise the Harbor District immediately.

The M&N Team will complete the IS based on the Harbor District's comments on the draft IS and submit a public IS/MND for Harbor District approval.

The M&N Team will assist the Harbor District in circulating the IS/MND in accordance with CEQA. This Statement of Work (SoW) assumes the Harbor District will be responsible for preparing and mailing the Notice of Intent (NOI) to Adopt the MND to public agencies, interested parties, and surrounding property owners. The M&N Team will file the IS/MND and NOI with the State Clearinghouse (SCH) electronically and provide a receipt of the filling to the Harbor District. This SoW assumes Harbor District staff will file the NOI with the County Clerk's Office, and pay the filing fee. The M&N Team will also work with the Harbor District to provide web-ready PDFs of the IS/MND for uploading onto the Harbor District's website.

At the conclusion of the IS/MND public review period, the M&N Team will prepare a Mitigation Monitoring and Reporting Program (MMRP) based on the IS/MND. The MMRP will list mitigation measures and indicate when they will occur, who will implement them, and who will be responsible for ensuring their implementation. The MMRP will be in table format. A draft will be provided to the Harbor District for review and a final version will be submitted to the Harbor District for inclusion in the hearing materials.

TASK 13 PREPARE SECTION 4(F) EVALUATION AND SECTION 106 EVALUATION

The 4(a) assessment required for the DOT Section 4(f) (Parks/Recreational Resources) will only require a short write up (i.e., 2-4 pages) as this will not be a significant issue for this project.

WRA will conduct a cultural resources investigation for the construction of the new sea wall and dock.

As part of the environmental review process, CEQA requires that project proponents implement procedures to inventory cultural resources and assess potential impacts on these resources located within projects conducted, funded, or permitted by state agencies. Section 106 of the NHPA and its implementing regulations (36 CFR Part 800) requires that, prior to an undertaking, federal agencies or projects permitted/funded by federal agencies must take into account the effects of the undertaking on historic properties within the project's Area of Potential Effect [APE (i.e., NRHP listed or eligible)] and afford the Advisory Council on Historic Preservation (ACHP) and other interested parties a reasonable opportunity to comment on how these effects have been considered. The aim of this investigation is to demonstrate the project proponents have complied with CEQA and Section 106 of the NHPA procedures necessary for NEPA prior to project implementation.

This cultural/historic resources investigation will be designed to satisfy environmental requirements specified in CEQA and its guidelines (Title 14 CCR 15064.5) and Section 106 of NHPA by: 1) identifying and recording significant cultural resources within the project area and APE, 2) offering a preliminary significance evaluation of the identified cultural resources, 3) assessing the potential impacts to cultural resources resulting from the implementation of proposed project activities, and 4) offering recommendations designed to protect resource integrity, as warranted.

Background research will include archival research at local libraries, historical societies, and other repositories that might contain information about the project area. A formal records check of the project area with a ½ mile buffer will be conducted at the Northwest Information Center of the California Historical Resources Information System. WRA will initiate correspondence with the Native American Heritage Commission and local Native Americans to gather information pertinent to the field investigation and report preparation. Other knowledgeable individuals may also be contacted for information during this investigation.

The field survey will consist of a pedestrian reconnaissance of the entire project area. Given the scope of the project (i.e., previously existing seawall, dock, asphalt overlay, fill, etc.), it is highly unlikely that subsurface testing will occur, however, this will be dependent on the outcome of Native American coordination and record search results. All previously recorded and newly identified historic period or precontact cultural resources will be recorded on DPR 523 series archaeological site records to a standard consistent with the Department of the Interior guidelines for recording historic resources.

A final report detailing the regional precontact chronology, ethnographic background, historical background, study findings, recommendations, and Native American coordination will be prepared that will support CEQA and MARAD NEPA compliance. Maps will be provided, showing the cultural resources survey area, locations of any findings, and historical maps and images, where applicable.

TASK 14 PUBLIC AND AGENCY REVIEW OF THE DRAFT EIS OR EA

MARAD does not typically require public circulation of PIDP associated NEPA EAs and we do not expect public review will be required for this project. We will prepare the IS for the required 30-day public and agency review. After releasing the documents for public and agency review, our team will follow-up directly with agency staff to determine if they have questions and ensure they are conducting their review in a timely manner. Due to the Harbor District's aggressive schedule, we will make efforts to avoid requests from agencies or the public for extended review timelines.

TASK 15 PREPARE FINAL EA/EIS DOCUMENT

The M&N Team will support the Harbor District in responding to review comments of the Draft IS. Revisions will be incorporated into a Final IS/MND for adoption by the Harbor District. The M&N Team will finalize the EA based on MARAD and Harbor District comments and prepare the NEPA FONSI.

SCHEDULE

		Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8			
Task	Task Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
0	Notice to Proceed (NTP)	X																															
1	Project Management		O		O		O		O		O		O		O		O		O		O		O		O		O		O		O		O
	Project Management Plan			X																													
2	Public Involvement and Interagency Coordination									O								O								O							
	Public Involvement Plan DRAFT			X																													
3	Purpose and Need Statement			X																													
4	Create an Initial Design and Alternatives of New Seawall																																
	15% Design (BOD, Alternatives, Type Selection)								X																								
	30% Design																X																
5	Construction Plan for New Seawall										X																						
6	Initial Design, with Alternatives, of a New Citizen's Dock																																
	15% Design (BOD, Alternatives, Type Selection)																X																
	30% Design																																X
7	Construction Plan for the New Dock																		X														
8	Identify EA/EIS Project Scope and Boundaries																																
	Existing Environmental Conditions DRAFT								X																								
9	Determine the Level of Analysis Required			X																													
10	Data Collection and Analysis of the Potential Environmental Impacts																																
11	Prepare a Draft EIS or EA																							X									
12	Prepare Draft ND or EIR																							X									
13	Prepare Section 4(f) and Section 106 Evaluation																							X									
14	Public and Agency Review of Draft EIS or EA																																
15	Prepare Final EA/EIS Document																																X

ASSUMPTIONS

- More complex NEPA review (i.e., completion of an EIS) is not anticipated.
- The Harbor District will provide bathymetry data and recent eelgrass mapping for the project site that is adequate for project design and environmental analysis.
- Work is anticipated to include only elements described in this scope of services. If the scope of the project expands beyond this (including more detailed technical reports), additional environmental review and permitting may be necessary thereby requiring the negotiation of additional scope and fee.
- The scope of services is based on the Harbor District's direction to use existing site and project data where possible. Some desktop analysis has been included to support completion of the discipline technical memorandums. If more complex analysis, beyond that defined in this scope of services, is required by MARAD, additional scope and fee will be required.
- Additional field work or modelling is not anticipated at this time. Additional scope and fee may be required if surveys or studies (i.e., Phase II geotechnical study) outside of the tasks described in this proposal are requested by MARAD, SCC, or other stakeholders.
- Detailed seismic deformation analysis (i.e., FLAC or PLAXIS) will not be required.
- Seismic design and analysis will only be required for one design event (i.e., one return period) and a site specific analysis will not be required.
- The M&N Team will make every effort to support the Harbor District in maintaining an aggressive NEPA EA and CEQA IS schedule. However, time to obtain stakeholder and agency review letters may vary. In addition, MARAD reviews may take time and requests for additional data and analysis may arise. Additional scope and fee may be required if the permitting strategy or project schedule is modified extensively from that proposed.
- It is assumed the Harbor District will take responsibility and lead grant budget management. However, the M&N Team can provide the Harbor District with guidance on key MARAD grant requirements and process questions and provide expertise and support on specific items (i.e., engineering risk register, pre-award request support, Buy America compliance preparation, etc.).
- Preparation of technical specifications will be conducted at the later phases of design and are not required at the 30% design level/support of the permitting process.
- Up to three alternatives each will be developed for initial design of the seawall and the dock.
- Up to two M&N staff will attend public meetings in-person. It is assumed that all agency meetings are held virtually.
- Creation of up to two boards per public meeting is assumed.

moffatt & nichol

Contact:
Moffatt & Nichol
Younes Nouri, PhD, PE
Project Manager
600 University Street, Suite 610
Seattle, WA 98101
P: 206.622.0222
ynouri@moffattnichol.com

moffattnichol.com