PROFESSIONAL SERVICES CONTRACT BETWEEN
THE CITY OF HUNTINGTON BEACH AND
ANCHOR QEA, INC.
FOR
ON-CALL CIVIL ENGINEERING
& PROFESSIONAL CONSULTING SERVICES

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and ANCHOR QEA, INC., a California Corporation hereinafter referred to as "CONSULTANT."

WHEREAS, CITY desires to engage the services of a consultant to provide On-Call Civil Engineering & Professional Consulting Services; and

Pursuant to documentation on file in the office of the City Clerk, the provisions of the Huntington Beach Municipal Code, Chapter 3.03, relating to procurement of professional service contracts have been complied with; and

CONSULTANT has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

1. SCOPE OF SERVICES

CONSULTANT shall provide all services as described in **Exhibit "A,"** which is attached hereto and incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the "PROJECT."

CONSULTANT hereby designates Michael Whelan who shall represent it and be its sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. CITY STAFF ASSISTANCE

CITY shall assign a staff coordinator to work directly with CONSULTANT in the performance of this Agreement.

3. TERM; TIME OF PERFORMANCE

Time is of the essence of this Agreement. The services of CONSULTANT are to commence on _____, 20____ (the "Commencement Date"). This Agreement shall automatically terminate three (3) years from the Commencement Date, unless extended or sooner terminated as provided herein. All tasks specified in **Exhibit "A"** shall be completed no later than three (3) years from the Commencement Date. The time for performance of the tasks identified in **Exhibit "A"** are generally to be shown in **Exhibit "A."** This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONSULTANT.

In the event the Commencement Date precedes the Effective Date, CONSULTANT shall be bound by all terms and conditions as provided herein.

4. COMPENSATION

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed Two Million Dollars ($2,000,000.00).

5. EXTRA WORK

In the event CITY requires additional services not included in **Exhibit "A"** or changes in the scope of services described in **Exhibit "A,"** CONSULTANT will undertake such work only after receiving written authorization from CITY. Additional compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

6. METHOD OF PAYMENT

CONSULTANT shall be paid pursuant to the terms of **Exhibit "B."**

7. DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS

CONSULTANT agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONSULTANT shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

8. HOLD HARMLESS

A. CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONSULTANT's (or CONSULTANT's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONSULTANT, its officers, agents or employees except such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONSULTANT will conduct all defense at its sole cost and expense and CITY shall approve selection of CONSULTANT's counsel. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONSULTANT.

B. To the extent that CONSULTANT performs "Design Professional Services" within the meaning of Civil Code Section 2782.8, then the following Hold Harmless provision applies in place of subsection A above:

"CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY and its officers, elected or appointed officials, employees, agents and volunteers, from and against any and all claims, damages, losses, expenses, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) to the extent that the claims against CONSULTANT arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONSULTANT. In no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault. However, notwithstanding the previous sentence, in the event one or more other defendants to the claims and/or litigation is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, CONSULTANT shall meet and confer with CITY and other defendants regarding unpaid defense costs. The duty to indemnify, including the duty and the cost to defend, is limited as provided in California Civil Code Section 2782.8.

C. Regardless of whether subparagraph A or B applies, CITY shall be reimbursed by CONSULTANT for all costs and attorney's fees incurred by CITY in enforcing this obligation. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT.

9. PROFESSIONAL LIABILITY INSURANCE

CONSULTANT shall obtain and furnish to CITY a professional liability insurance policy covering the work performed by it hereunder. This policy shall provide coverage for CONSULTANT's professional liability in an amount not less than One Million Dollars ($1,000,000.00) per occurrence and in the aggregate. The above-mentioned insurance shall not contain a self-insured retention without the express written consent of CITY; however an insurance

policy "deductible" of Ten Thousand Dollars ($10,000.00) or less is permitted. A claims-made policy shall be acceptable if the policy further provides that:

A. The policy retroactive date coincides with or precedes the initiation of the scope of work (including subsequent policies purchased as renewals or replacements).

B. CONSULTANT shall notify CITY of circumstances or incidents that might give rise to future claims.

CONSULTANT will make every effort to maintain similar insurance during the required extended period of coverage following PROJECT completion. If insurance is terminated for any reason, CONSULTANT agrees to purchase an extended reporting provision of at least two (2) years to report claims arising from work performed in connection with this Agreement.

If CONSULTANT fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the CITY with required proof that insurance has been procured and is in force and paid for, the CITY shall have the right, at the CITY's election, to forthwith terminate this Agreement. Such termination shall not effect Consultant's right to be paid for its time and materials expended prior to notification of termination. CONSULTANT waives the right to receive compensation and agrees to indemnify the CITY for any work performed prior to approval of insurance by the CITY.

10. CERTIFICATE OF INSURANCE

Prior to commencing performance of the work hereunder, CONSULTANT shall furnish to CITY a certificate of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverage as required by this Agreement; the certificate shall:

A. provide the name and policy number of each carrier and policy;

B. state that the policy is currently in force; and

C. shall promise that such policy shall not be suspended, voided or canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice; however, ten (10) days' prior written notice in the event of cancellation for nonpayment of premium.

CONSULTANT shall maintain the foregoing insurance coverage in force until the work under this Agreement is fully completed and accepted by CITY.

The requirement for carrying the foregoing insurance coverage shall not derogate from CONSULTANT's defense, hold harmless and indemnification obligations as set forth in this Agreement. CITY or its representative shall at all times have the right to demand the original or a copy of the policy of insurance. CONSULTANT shall pay, in a prompt and timely manner, the premiums on the insurance hereinabove required.

11. INDEPENDENT CONTRACTOR

CONSULTANT is, and shall be, acting at all times in the performance of this Agreement as an independent contractor herein and not as an employee of CITY. CONSULTANT shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for CONSULTANT and its officers, agents and employees and all business licenses, if any, in connection with the PROJECT and/or the services to be performed hereunder.

12. TERMINATION OF AGREEMENT

All work required hereunder shall be performed in a good and workmanlike manner. CITY may terminate CONSULTANT's services hereunder at any time with or without cause, and whether or not the PROJECT is fully complete. Any termination of this Agreement by CITY shall be made in writing, notice of which shall be delivered to CONSULTANT as provided herein. In the

event of termination, all finished and unfinished documents, exhibits, report, and evidence shall, at the option of CITY, become its property and shall be promptly delivered to it by CONSULTANT.

13. ASSIGNMENT AND DELEGATION

This Agreement is a personal service contract and the work hereunder shall not be assigned, delegated or subcontracted by CONSULTANT to any other person or entity without the prior express written consent of CITY. If an assignment, delegation or subcontract is approved, all approved assignees, delegates and subconsultants must satisfy the insurance requirements as set forth in Sections 9 and 10 hereinabove.

14. COPYRIGHTS/PATENTS

CITY shall own all rights to any patent or copyright on any work, item or material produced as a result of this Agreement.

15. CITY EMPLOYEES AND OFFICIALS

CONSULTANT shall employ no CITY official nor any regular CITY employee in the work performed pursuant to this Agreement. No officer or employee of CITY shall have any financial interest in this Agreement in violation of the applicable provisions of the California Government Code.

16. NOTICES

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONSULTANT's agent (as designated in Section 1 hereinabove) or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONSULTANT may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

TO CITY:

City of Huntington Beach
ATTN: Director of Public Works
2000 Main Street
Huntington Beach, CA 92648

TO CONSULTANT:

Anchor QEA, Inc.
Attn: Michael Whelan
301 East Ocean Blvd., Suite 1860
Long Beach, CA 90802

17. CONSENT

When CITY's consent/approval is required under this Agreement, its consent/approval for one transaction or event shall not be deemed to be a consent/approval to any subsequent occurrence of the same or any other transaction or event.

18. MODIFICATION

No waiver or modification of any language in this Agreement shall be valid unless in writing and duly executed by both parties.

19. SECTION HEADINGS

The titles, captions, section, paragraph and subject headings, and descriptive phrases at the beginning of the various sections in this Agreement are merely descriptive and are included solely for convenience of reference only and are not representative of matters included or excluded from such provisions, and do not interpret, define, limit or describe, or construe the intent of the parties or affect the construction or interpretation of any provision of this Agreement.

20. INTERPRETATION OF THIS AGREEMENT

The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against any of the parties. If any provision of this Agreement is held by an arbitrator or court of competent jurisdiction to be unenforceable, void, illegal or invalid, such holding shall not invalidate or affect the remaining covenants and provisions of this Agreement. No covenant or provision shall be deemed dependent upon any other unless so expressly provided here. As used in this Agreement, the masculine or

neuter gender and singular or plural number shall be deemed to include the other whenever the context so indicates or requires. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provision contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no right to contract, then the latter shall prevail, and the provision of this Agreement which is hereby affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

21. DUPLICATE ORIGINAL

The original of this Agreement and one or more copies hereto have been prepared and signed in counterparts as duplicate originals, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original. Each duplicate original shall be deemed an original instrument as against any party who has signed it.

22. IMMIGRATION

CONSULTANT shall be responsible for full compliance with the immigration and naturalization laws of the United States and shall, in particular, comply with the provisions of the United States Code regarding employment verification.

23. LEGAL SERVICES SUBCONTRACTING PROHIBITED

CONSULTANT and CITY agree that CITY is not liable for payment of any subcontractor work involving legal services, and that such legal services are expressly outside the scope of services contemplated hereunder. CONSULTANT understands that pursuant to *Huntington Beach City Charter* Section 309, the City Attorney is the exclusive legal counsel for CITY; and CITY shall not be liable for payment of any legal services expenses incurred by CONSULTANT.

24. ATTORNEY'S FEES

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the nonprevailing party.

25. SURVIVAL

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

26. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

27. SIGNATORIES

Each undersigned represents and warrants that its signature hereinbelow has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify CITY fully for any injuries or damages to CITY in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

28. ENTIRETY

The parties acknowledge and agree that they are entering into this Agreement freely and voluntarily following extensive arm's length negotiation, and that each has had the opportunity to consult with legal counsel prior to executing this Agreement. The parties also acknowledge and agree that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by that party or anyone acting on that party's behalf, which are not embodied in this Agreement, and that that party has not executed this Agreement in reliance on any representation, inducement, promise, agreement, warranty, fact or circumstance not expressly set forth in this

Agreement. This Agreement, and the attached exhibits, contain the entire agreement between the parties respecting the subject matter of this Agreement, and supersede all prior understandings and agreements whether oral or in writing between the parties respecting the subject matter hereof.

29. EFFECTIVE DATE

This Agreement shall be effective on the date of its approval by the City Council. This Agreement shall expire when terminated as provided herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers.

CONSULTANT,
ANCHOR QEA, INC.

By:_____

_____
print name

ITS: *(circle one)* Chairman/President/Vice President

AND

By:_____

_____
print name

ITS: *(circle one)* Secretary/Chief Financial Officer/Asst. Secretary - Treasurer

CITY OF HUNTINGTON BEACH, a municipal corporation of the State of California

_____
Mayor

_____
City Clerk

INITIATED AND APPROVED:

_____
Director of Public Works

REVIEWED AND APPROVED:

_____
City Manager

APPROVED AS TO FORM:

_____
for City Attorney

EXHIBIT "A"

A. STATEMENT OF WORK: (Narrative of work to be performed)

Provide On-Call Civil Engineering and Professional Consulting Services. If Consultant chooses to assign different personnel to the project, Consultant must submit names and qualifications of these staff to City for approval before commencing work.

B. CONSULTANT'S DUTIES AND RESPONSIBILITIES:

See Attached Exhibit A

C. CITY'S DUTIES AND RESPONSIBILITIES:

1. Furnish Scope of Work and provide a request for proposal for each project.

2. City shall issue a task order for each project based upon scope of services, work schedule, and fee proposal submitted.

D. WORK PROGRAM/PROJECT SCHEDULE:

A project schedule will be developed for each project assigned by the City.

301 East Ocean Boulevard, Suite 1860
Long Beach, California 90802
657.227.7430

March 13, 2025

A. COVER LETTER

City of Huntington Beach, Buyer
Attn: Public Works Department
2000 Main Street
Huntington Beach, California 92648

Re: Statement of Qualifications On-Call Civil Engineering Professional Consulting Services – Category C: Ocean Engineering

On behalf of Anchor QEA, we are pleased to submit to the City the attached Statement of Qualifications (SOQ) for on-call civil engineering and professional consulting services. We would like to submit our qualifications for Item C. Ocean Engineering, and the proposal price will be valid for a period of at least 180 days.

Anchor QEA has been working with the City's Public Works Department under ocean engineering on-call contracts since 2015, and we are excited about the opportunity to continue providing professional consulting services to assist the Public Works Department. With our local experts, innovative and cost-effective solutions, and immediate response times, our staff have become a trusted resource for shoreline engineering services to the City.

Trusted Local Resource for the City
Anchor QEA is an internationally recognized environmental and waterfront engineering consulting firm with expertise in marine structure assessment and design, coastal and geotechnical engineering, and beach erosion and replenishment processes. We are currently performing similar services for several coastal cities throughout Orange and Los Angeles Counties. Our local waterfront engineers are supported by a team of dredging, sediment quality, wetlands and habitat restoration, regulatory compliance and permitting, and construction management professionals. Anchor QEA's Long Beach office—located less than 15 minutes from the City's offices—will be our lead office for this contract.

Locally Experienced Project Management
Fred Massabki, a senior engineer in our Long Beach office, has more than 15 years of experience working in Huntington Harbour and with Huntington Beach projects. He will be the project manager and single point of contact with the City and our team members. Adam Gale, a principal planner and Anchor QEA shareholder, has more than 20 years of local coastal project experience and will be our team's principal-in-charge. They will be supported by more than 20 in-house, regional engineers, planners, and biologists.

Fred Massabki, Project Manager

Local Office: 301 East Ocean Blvd., Suite 1860
Long Beach, CA 90802

Direct: 657-227-7457 | Cell: 310-903-9184

Email: fmassabki@anchorqea.com

Relevant Similar Local Experience

Our SOQ presents only a small portion of the more than 20 years of engineering, modeling, and permitting services we have provided to the Cities of Huntington Beach, Newport Beach, and Long Beach; the Counties of Orange and Los Angeles; and the Ports of Long Beach and Los Angeles. The selected examples in our SOQ are high-profile projects that we feel best represent the types of projects for which we anticipate the City may require our assistance. In addition, we have supported dozens of small businesses, marinas, and private homeowners with similar services at a smaller scale, highlighting our ability to handle a wide range of project needs.

Innovative Project Solutions

Our staff are frequently contacted to develop innovative and cost-effective solutions where others have failed. For example, after 20 years of researching potential remedies for its unique coastal erosion needs, the City of Long Beach retained Anchor QEA to find the best option, which we did at a cost that will save them considerable funds. Similarly, the County of Orange has just retained Anchor QEA to help develop a means and methodology for long-term beach protection needs at Capistrano Beach. Both are high-profile projects where clients sought out Anchor QEA staff for their capabilities to develop unique solutions.

We have reviewed the general requirements outlined in the City's SOQ request. We can provide the required certificate of insurance and have no exceptions to the City's Standard Form of Agreement, and our business license with the City, No. A291404, is current. We have received and reviewed Addendum 1, dated February 26, 2025. Thank you for the opportunity to submit this qualifications package. Please contact us if you have any questions.

Sincerely,

Michael Whelan, PE
Principal Engineer (CA No. C69833)
mwhelan@anchorqea.com

Fred Massabki, PE
Senior Managing Engineer (CA No. C70423), Project Manager
fmassabki@anchorqea.com

REQUEST FOR PROPOSAL

VENDOR APPLICATION FORM

TYPE OF APPLICANT: ☐ NEW ☒ CURRENT VENDOR

Legal Contractual Name of Corporation: Anchor QEA, Inc.

Contact Person for Agreement: Michael Whelan, PE

Corporate Mailing Address: 301 East Ocean Boulevard, Suite 1860

City, State and Zip Code: Long Beach, CA 90802

E-Mail Address: mwhelan@anchorqea.com

Phone: 303-952-4850 Fax: N/A

Contact Person for Proposals: Fred Massabki, PE

Title: Project Manager E-Mail Address: fmassabki@anchorqea.com

Business Telephone: 657-227-7457 Business Fax: N/A

Year Business was Established: 1997

Is your business: (check one)

☐ NON PROFIT CORPORATION ☒ FOR PROFIT CORPORATION

Is your business: (check one)

☒ CORPORATION
☐ INDIVIDUAL
☐ PARTNERSHIP
☐ LIMITED LIABILITY PARTNERSHIP
☐ SOLE PROPRIETORSHIP
☐ UNINCORPORATED ASSOCIATION

Names & Titles of Corporate Board Members
(Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names	Title	Phone
Po Chen	CEO	206-287-9130
Rob Howell	COO	251-626-8149
Tom Wang	Shareholder/Corporate Board Member	206-287-9130
Susan Hill, John Cowdery, Linda Larson	Corporate Board Member	206-287-9130

Federal Tax Identification Number: 91-1851322

City of Huntington Beach Business License Number: A291404
(If none, you must obtain a Huntington Beach Business License upon award of contract.)

City of Huntington Beach Business License Expiration Date: 01/31/2026

Disciplines of Civil Engineering Services Application Form

Circle all that apply

Civil Engineering Service Area	Bidding? Y/N (circle)
• Water/Sewer/Storm Water Engineering	☐ Yes ☑ No
• General Civil Engineering	☐ Yes ☑ No
• Ocean Engineering	☑ Yes ☐ No
• Environmental/Water Quality	☐ Yes ☑ No

B. BACKGROUND AND PROJECT SUMMARY SECTION

Understanding of the City

With its premier Orange County coastline, popular public beaches and recreational harbor, landmark pier, and large areas of protected coastal wetlands, the City has a definite need for strong technical support with its coastal engineering projects. Anchor QEA understands the importance of protecting the City's high-profile and valuable coastal resources in both the short and long term, and based on our current work with the City, we understand the critical issues and concerns pertaining to the City's engineering needs, which include the following:

- City-owned and maintained bulkheads, seawalls, and groins
- Bridge and overpass upgrades and repairs adjacent to harbor waters
- Sediment transfer and beach replenishment
- Public-use marine structures, such as the Huntington Beach Pier
- Public safety marine structures, such as the Marine Safety Division's docks at the Warner Avenue Fire Station
- Studies and planning to identify and address long-term preservation of the City's coastline and its waterfront assets
- Coastal wetland restoration and protection
- Beach and bluff erosion and protection
- Near- and long-term impacts and adaptation from predicted sea level rise
- Other shoreline protection measures

Understanding and Objectives of Ocean Engineering

This section provides some examples of potential project needs that we can help the City fulfill, along with examples of similar project work we have performed.

Marine Structures

City marine structures include coastline facilities, such as the Huntington Beach Pier, and in-harbor facilities, such as the French Park dock, Warner Avenue Fire Station Marine Safety dock, bulkheads, seawalls, groins, and bridge overpasses and abutments. Examples of our experience include inspection of and improvements to bulkheads and seawalls throughout Huntington Harbour for the City and homeowners' associations (HOAs). We evaluated deterioration hotspots and presented cost-effective solutions to stabilize the pile-supported bulkheads and extend their useful design lives. This innovative design approach is similar to other recent projects completed by Anchor QEA, such as the Scorpion Pier Replacement on Santa Cruz Island, the Anacapa Island Wharf Replacement, the design of pedestrian and vehicular bridges as part of the Colorado Lagoon Restoration project, and a bulkhead integrity flood-risk study for the City of Newport Beach. We are currently designing improvements to the City-owned bulkheads on Sunset Island.

Coastal Engineering

Managing coastal protection issues is one of the most critical needs for any coastal city in Southern California. Constant threats from storm and king tide events require that City staff constantly evaluate potential structural weaknesses and are prepared to make emergency repairs if needed. Anchor QEA routinely performs these services within Huntington Beach, as well as in Newport Beach and Long Beach and throughout California. Recent examples include our work at Peninsula Beach in Long Beach, where we are addressing beach protection and boardwalk repair issues, as well as our work at Colorado Lagoon, where we are implementing a large coastal restoration project that requires addressing shoreline protection and sea level rise concerns.

Permit Compliance

Permit compliance for coastal and ocean engineering projects requires a unique skill set and deep familiarity with local, state, and federal agencies; local coastal regulations; and agency staff member concerns. Our coastal permitting work is led by Adam Gale and Dr. Jack Malone. Adam has more than 20 years of permitting experience, including design and construction work. His experience includes supporting permitting for waterfront property owners in Huntington Harbour (e.g., Portofino HOA), maintaining an on-call marine engineering contract with the City of Newport Beach for more than 15 years, and working extensively along the California coast and nationally. Jack is a former regulator for U.S. Army Corps of Engineers (USACE), where he led coastal permitting projects for the Long Beach and Huntington Beach areas. Both, with the support of Marine Vié, have prepared permitting documents for HOA clients in Huntington Harbour.

Anchor QEA has become a leader in developing coastal projects, and we are the only firm to have successfully implemented innovative approaches such as the use of in-harbor confined aquatic disposal sites for dredge materials. We are currently managing the regional dredging permits for the Cities of Newport Beach and Long Beach and the Port of Long Beach.

Geotechnical Engineering

Because of California's typical sandy shoreline geology, local coastal engineering projects rely heavily on geotechnical engineering to provide stability and protection from seismic events. Anchor QEA's civil and geotechnical engineers have considerable experience with local conditions and have been designing shoreline structures such as seawalls and various pile-supported structures for more than 40 years. Recent project examples include the Rhine Channel Contaminated Sediment Cleanup for the City of Newport Beach and the Scorpion Pier Replacement on Santa Cruz Island for the National Park Service. Currently, we are working with the City of Newport Beach on a geotechnical investigation and report as part of our design effort on the Balboa Yacht Basin marina replacement project.

C. METHODOLOGY SECTION

1. Implementation Plan

Project Management Approach

Our general methodology for on-call tasks follows a proven sequence of procedures. The project implementation process begins when our project manager, Fred Massabki, PE, receives a specific task assignment from the City. He will assess the scope of work and develop a budget and schedule, which will be continuously monitored during the project. The task scope, fee, and schedule will be reviewed with the City's representative to ensure alignment before work begins.

Fred will select the appropriate key personnel from our team based on their qualifications and experience relative to the technical and regulatory requirements of the task. He will serve as the primary point of contact with the City and our team members.

For each task assignment, an internal kickoff meeting will be held with assigned team members to review the scope of work, schedule, and the City's goals. Internal team meetings will be conducted as needed to monitor progress against the budget and schedule. Fred or Daniel Shishino, our deputy project manager, will meet with City staff during the project to communicate status updates and resolve challenges as they arise.

To maximize the effectiveness of project meetings, we will prepare meeting agendas and timely meeting minutes to document discussions, action items, responsible parties, and deadlines. Our experience has shown that regularly scheduled meetings and open dialogues encourage creativity and result in successful projects.

Review Milestones for Internal and External Stakeholders

At the start of the project, Anchor QEA will coordinate with the City's project manager to establish a communication plan and review schedule. We will identify key documents requiring City input and incorporate them into the baseline schedule.

Anchor QEA will collaborate with City staff to engage external stakeholders, ensuring meeting agendas are prepared and shared in advance. Stakeholder feedback will be documented in meeting minutes and provided to City staff for review.

Project Management Strategies/Techniques

Fred is supported not only by the technical staff at Anchor QEA but also by administrative staff who monitor project budgets and schedules, providing updates to him and other project managers on project status.

We utilize Microsoft Project, Workday, and BST to manage schedules, resources, and budgets throughout the project lifecycle.

To maintain alignment with project goals, we will prepare a project charter memorandum outlining objectives, potential challenges, mitigation measures, and opportunities. With City approval, this document will guide risk management and scope adjustments.

As part of the monthly invoice, Anchor QEA will submit a cover letter and financial summary detailing the updated project schedule, cost summary, expenditures, work performed during the previous month, and any pending or outstanding items.

2. Client Satisfaction and Compliance with Scope of Work

Fred and Daniel, with Adam's support, will review the project charter memorandum and task order scope of work (SOW) to confirm alignment with the City's project expectations and ensure efforts remain within the defined SOW.

Any changes to project goals will be documented in a revised project charter memorandum and submitted to the City's project manager for review and approval.

Anchor QEA follows a well-established Quality Management System to maintain quality across all project deliverables. At project initiation, we will prepare a brief quality plan outlining deliverables, due dates, and assigned reviewers. Each deliverable undergoes a detailed check and technical review by independent reviewers, including technical experts and editors. Anchor QEA's Quality Assurance Manager conducts regular audits to ensure compliance with Quality Management System procedures throughout the project.

3. Project Schedule

As part of a project SOW proposal, Anchor QEA will define the overall project duration and, if required, provide task-specific durations along with a bar chart schedule.

Upon task order issuance, and as required by the SOW, we will develop a work breakdown structure in Microsoft Project, assigning durations and interdependencies to establish the baseline schedule. This schedule will include milestones, key completion dates, City and stakeholder meetings, and review periods.

Fred and his project management team will conduct as-needed schedule reviews to monitor project progress and keep work on track.

4. Roles and Responsibilities

Firm's Responsibilities

As part of a project SOW proposal, Anchor QEA outlines the scope of work, including tasks to be performed, exclusions, and key assumptions used in preparing the SOW.

The Anchor QEA team and organizational chart are detailed in Section D: Staffing, with key personnel selected for their local expertise in disciplines relevant to the Ocean Engineering scope of services. For each task order, Fred and Daniel will coordinate with key personnel to define Anchor QEA's SOW and allocate necessary resources.

City Staff Responsibilities

For condition assessment and design projects, the City is typically responsible for providing available record documents and notifying residents and businesses about any potential impacts. For design projects, we also

request the City's front-end specifications, including contract terms and general conditions, to incorporate into the project specifications.

While Anchor QEA can submit permit applications and coordinate with regulatory agencies, City staff must review, sign applications, and approve responses to agency comments. The City would also issue public notifications for comment periods and meetings, while Anchor QEA would provide agendas and meeting minutes.

Anchor QEA will develop project-specific coordination and communication plans to ensure effective collaboration.

D. STAFFING

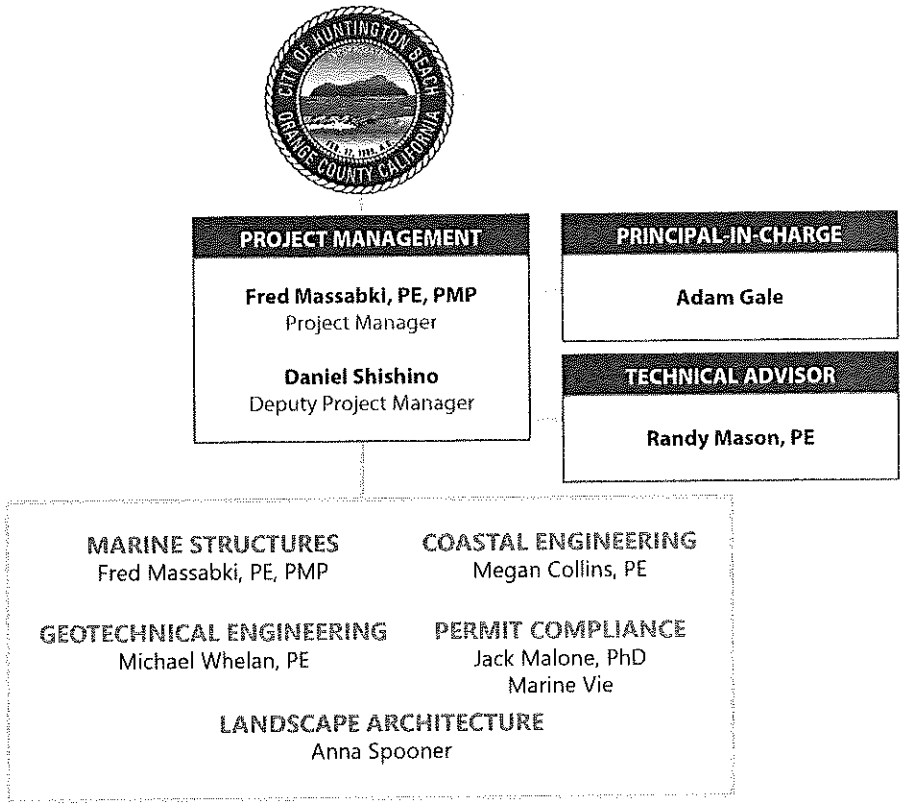
All ocean engineering tasks awarded to Anchor QEA will be led by Fred, from our Long Beach office. With 20 years of experience, including 17 years in Orange and Los Angeles Counties, Fred has managed condition assessments, marina repairs, and seawall stabilization projects throughout Huntington Harbour. He is currently overseeing City-owned bulkhead retrofits at Sunset Island and Sunset Beach.

Fred will be supported by Adam, a firm partner and principal-in-charge, who ensures project objectives are met, allocates resources, and serves as a local backup contact. Based in Irvine, Adam has 21 years of waterfront development experience, including on-call contracts with Newport Beach and Long Beach.

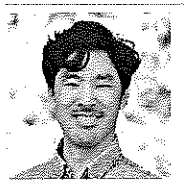
For scientific studies and sea level rise assessments, Adam has contract execution authority, while Michael Whelan, PE, holds this authority for engineering assessment and design contracts.

Daniel, a structural engineer with 8 years of experience, will serve as deputy project manager, supporting Fred in overseeing project tasks.

Fred, Adam, and Daniel have held these same roles under the City's current on-call ocean engineering contract and will be supported by the section leads outlined in the organizational chart.



Anchor QEA Key Staffing *(Resumes are included in Appendix A)*

Key Staff, Education, and License	Role and Function
 Fred Massabki, PE, PMP| 20 Years *Education: MS, Civil Engineering; Coastal Engineering Certificate* *Licenses: Professional Civil Engineer, CA (C70423); PMP, Project Management Institute (1936952)*	• Project Manager/Marine Structures, overseeing task order scope, schedule, and budget while serving as the primary client contact and engineer of record • Expertise in marine structures, ensuring technical excellence, efficient execution, and client-focused project delivery
 Daniel Shishino | 8 years *Education: BS, Structural Engineering*	• Deputy Project Manager, assisting in task order management and leading structural investigations and design • Experienced in marine infrastructure, inspections, permitting, and design
 Adam Gale | 21 years *Education: BS, Ecology and Systematic Biology*	• Principal-in-Charge, providing leadership, oversight, and contract compliance for project execution and success • Supports permit compliance and dredging operations, ensuring regulatory adherence and delivery
 Randy Mason, PE | 53 years *Education: BS, Civil Engineering* *License: Professional Civil Engineer, CA (C30661)*	• Technical Advisor, conducting structural design review and ensuring integrity, compliance, and long-term resilience • Decades of experience in Huntington Harbour, providing in-depth knowledge of bulkheads, docks, and coastal infrastructure
 Michael Whelan, PE | 35 years *Education: MS, Geotechnical Engineering and Environmental Engineering* *License: Professional Civil Engineer, CA (C69833)*	• Geotechnical Engineer, providing expert input and leading investigations to support stable, resilient, and cost-effective project solutions • Extensive experience in soil analysis and foundation design, ensuring engineering integrity and effective risk mitigation
 Megan Collins, PE | 18 years *Education: MS, Civil and Environmental Engineering; Coastal Engineering Certificate* *License: Professional Civil Engineer, CA (C78997)*	• Coastal Engineer, conducting hydraulic modeling to assess erosion, environmental loads, and shoreline dynamics for resilient coastal solution • Expert in beach restoration and dredging design, ensuring effective erosion control and sustainable coastal management
 Jack Malone, PhD | 30 years *Education: PhD, Biology*	• Permit Compliance Lead, managing regulatory applications and ensuring projects meet federal, state, and local permitting requirements • Strong agency coordination experience, facilitating efficient approvals and regulatory compliance for seamless project execution
 Anna Spooner | 17 years *Education: MLA, Landscape Architecture*	• Landscape Architect, designing shoreline improvements with sustainable, resilient, and aesthetically integrated solutions. • Expert in plant selection and bioengineered options, enhancing habitat restoration and coastal resilience

E. QUALIFICATIONS

Firm Qualifications

Anchor QEA is an environmental and waterfront engineering consulting firm that specializes in aquatic, shoreline, and water resource projects. As a firm, we have 28 years of engineering design and environmental support experience, including 24 years in California, and have assisted local cities, counties, and ports with harbor maintenance, capital improvement projects, permit entitlements, and marine infrastructure. With more than 550 employees and 27 offices nationwide, we have the bench strength to provide additional resources as needed to support this on-call contract. Our local team can meet all of the City's coastal engineering needs, including study of coastal processes; design of shoreline protection and beach nourishment projects; development of concept plans and preparation of construction documents for repair and/or construction of new waterfront structures including piers, seawalls, bulkheads, and floating docks; design and permitting support for dredging and sediment management; and construction support.

OCEAN ENGINEERING EXPERIENCE IN CALIFORNIA

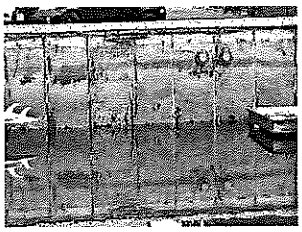
24

Years providing ocean engineering services to public entities, including the Cities of Huntington Beach, Long Beach, and Newport Beach; Counties of Orange and Los Angeles; and Ports of Los Angeles, Long Beach, and Hueneme

We understand current coastal and harbor issues and actively contribute to the industry as leaders by serving on the boards of directors of the Marina Recreation Association and Western Dredging Association and participating in the California Marine Affairs and Navigation Conference and the local chapter of the American Society of Civil Engineers' (ASCE's) Ports and Harbors Group. We have exceptional relationships with local regulators from USACE, Regional Water Quality Control Board (RWQCB), California Coastal Commission, and the resource agencies, built on years of trust earned through our continued pursuit of sound scientific approaches in order to find novel solutions that meet everyone's objectives.

Similar Project Experience and Public Agency Client References

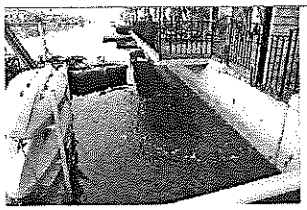
In this section we have provided some of our more recent and relevant projects that highlight our experience and technical approach for solving our clients' ocean engineering needs. These include examples with the City as well as its neighboring coastal cities.



Sunset Island Bulkhead Cap Retrofit, City of Huntington Beach *(January 2025 to Present)*

Agency Contact: Joe Fuentes, PE; jfuentes@surfcity-hb.org; 714-536-5259
Key Staff: Fred Massabki (Project Manager), Daniel Shishino, Randy Mason

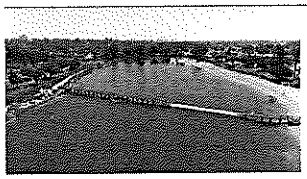
Anchor QEA is designing a retrofit of the City-owned bulkheads and caps at Sunset Island and along Pacific Coast Highway in Sunset Beach. The project is the result of our previous bulkhead study effort that assessed the general condition of all City-owned bulkheads in Huntington Harbour. The scope of work involves providing an updated assessment of the Sunset Island bulkheads and preparing construction documents for the replacement and extension of the existing bulkhead caps to address their condition as well as sea level rise. Retrofit of the bulkhead sheets with new tiebacks is also under evaluation. The work is being performed under Anchor QEA's professional ocean engineering services on-call contract.



Seagate Seawall Undermining Improvements, Westchester Bay HOA and Seagate Lagoons Association *(February 2016 to April 2023)*

Client Contact: Joshua Freeman; joshua.freeman@seabreezemgmt.com; 714-846-8177
Key Staff: Fred Massabki (Project Manager), Randy Mason, Adam Gale, Daniel Shishino

Anchor QEA performed a topside and an underwater "swim-by" survey of approximately 5,000 feet of privately owned seawall at Westchester Bay HOA and Seagate Lagoons Association in Huntington Harbour. Typical seawalls in the Harbour are L-shaped retaining walls founded on timber piles. The project identified undermining and voids along the seawall that required retrofit with pile repairs, grout fill, and toe protection. Anchor QEA prepared construction drawings and regulatory agency permit applications. Phase 1 work was completed in 2023 with future phases pending HOA funding initiatives.



Colorado Lagoon Restoration, City of Long Beach *(January 2015 to Present)*

Agency Contact: Eric Lopez, eric.lopez@longbeach.com, 562-570-5690
Key Staff: Jack Malone (Project Manager), Fred Massabki, Randy Mason, Michael Whelan, Anna Spooner

Anchor QEA is leading the development of a large remediation and restoration project at Colorado Lagoon and Marina Vista Park that will create a 25-acre habitat bank. Features include shoreline stabilization and development, park space, sports fields, roads, bridges, utilities, and landscaping. The main feature is the replacement of a box culvert with a new open channel connecting Colorado Lagoon with Alamitos Bay. Total construction costs are estimated at $30 million. Anchor QEA prepared the planning, permitting, and design and is supporting the ongoing

construction effort for this high-profile project. A previous phase of the project included dredging and sediment capping in the lagoon, habitat restoration, and reconstruction of pedestrian bridge.

Peninsula Beach Boardwalk Study, City of Long Beach *(March 2020 to April 2021)*
Agency Contact: Cory Forrester, cory.forrester@longbeach.gov, 562-570-8918
Key Staff: Randy Mason (Project Manager), Fred Massabki

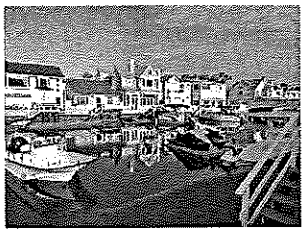
Anchor QEA prepared an assessment of a 3,500-foot-long timber boardwalk and timber plank wave deflection wall fronting residential structures that are facing beach sand and open ocean waters. The site is subject to impacts from storm-generated wave action, flooding, and high tides. The report addressed the City of Long Beach's concerns regarding the integrity of the wave deflection wall and the internal connections of the framing system supporting the timber walking deck. Anchor QEA's role included management of test pit excavation to inspect structural components, field inspection and structural assessment, technical report preparation, cost estimation, and development of retrofit recommendations.

El Dorado Park Duck Pond Rehabilitation, City of Long Beach *(January 2019 to November 2024)*
Agency Contact: Eric Lopez, eric.lopez@longbeach.com, 562-570-5690
Key Staff: Fred Massabki (Project Manager), Daniel Shishino, Jack Malone

This project involved the rehabilitation of pond components and water quality improvements through ecological and water circulation restoration. Anchor QEA initially reviewed the design documents prepared by others. City comments were addressed, and design of new project elements was added, including ADA-compatible parking stalls and access, pump house building upgrades, and a recycled water line to the adjacent golf course. Anchor QEA provided construction support services for the completed $5 million project.

Balboa Yacht Basin Redevelopment, City of Newport Beach *(November 2024 to Present)*
Agency Contact: Chris Miller, cmiller@newportbeachca.gov, 949-644-3043
Key Staff: Adam Gale (Project Manager), Fred Massabki, Daniel Shishino, Randy Mason, Michael Whelan

Anchor QEA is preparing the design for the replacement of the City of Newport Beach's 170-slip Balboa Yacht Basin marina. The concrete floating dock systems are 40 years old and have reached the end of useful life. Our work effort involves developing concept designs that maintain the general slip mix, add hand launch uses in an unused water space, and minimize replacement costs for this premier facility. Anchor QEA will support the City with securing regulatory agency permits for the preferred concept layout and will prepare complete construction documents for bid procurement.

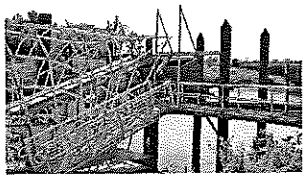


Structural Integrity Assessment of Balboa Island Bulkheads, City of Newport Beach *(August 2022 to October 2024)*

Agency Contact: Jim Houlihan, jhoulihan@newportbeachca.gov, 949-644-3319

Key Staff: Fred Massabki (Project Manager), Daniel Shishino, Randy Mason

Anchor QEA performed a condition assessment of 2.5 miles of existing bulkheads around Balboa and Little Balboa islands in Newport Beach. Work involved identification of areas at high risk for deterioration and overtopping from king tide events and sea level rise given the age of the structures (90 years old), development of design alternatives for the replacement of the bulkheads, and preparation of rough-order estimates of construction costs. The assessment and concepts were presented in a technical report.

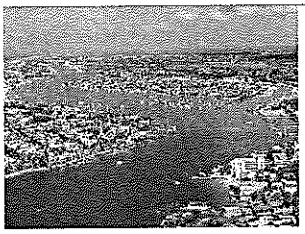


San Diego Creek Trash Interceptor, City of Newport Beach *(October 2017 to Present)*

Agency Contact: Bob Stein, rstein@newportbeachca.gov, 949-644-3322

Key Staff: Fred Massabki (Project Manager), Daniel Shishino, Randy Mason

This project involved the design and construction of a fixed pier and floating pontoon to capture up to 80% of the trash flowing down San Diego Creek and reduce the pollution impact on Upper Newport Bay and Newport Harbor. Anchor QEA was a part of the team that evaluated options and prepared the concept design for the trash interceptor modeled after an installation in Baltimore. Subsequently, we joined the team preparing the construction documents and engineered the pile-supported pier structure for rail-car mounted trash bins as well as the guide piles for the pontoon and floating booms. The structure is fully constructed, with the grand opening held in March 2025. Final testing and programming is underway.

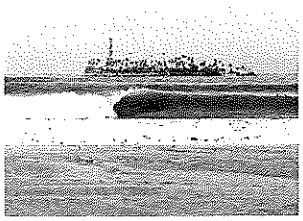


Lower Newport Bay Dredging, City of Newport Beach *(January 2010 to Present)*

Agency Contact: Chris Miller, cmiller@newportbeachca.gov, 949-644-3043

Key Staff: Adam Gale

Anchor QEA has been leading design, permitting, and construction oversight for a series of large maintenance dredging efforts in Lower Newport Bay since 2010. Included in this work was a 1.5-million-cubic-yard (cy) dredging effort in 2010 and a current program to dredge an additional 1.2 million cy of clean and contaminated sediment. Anchor QEA also has led more than 20 smaller dredging efforts in the harbor and currently manages the City of Newport Beach's regional dredging permit and eelgrass management program.



East San Pedro Bay Ecosystem Restoration, City of Long Beach *(January 2018 to Present)*

Agency Contact: Joshua Hickman, Joshua.Hickman@longbeach.gov, 562-570-5714
Key Staff: Jack Malone, Randy Mason

Anchor QEA is supporting the City of Long Beach and USACE on a habitat restoration program that includes constructing coastal structures such as nearshore reefs and islands and underwater rockpiles and stabilizing the shoreline throughout east Long Beach. Anchor QEA conducted wave and hydrodynamic flow modeling and engineering cost estimates to support the project.

Peninsula Beach Sand Management, Port of Long Beach *(January 2016 to Present)*

Agency Contact: Elvira Hallinan, elvira.hallinan@longbeach.gov, 562-570-3215
Key Staff: Randy Mason, Jack Malone

Anchor QEA is working to develop a shoreline protection program for the City of Long Beach that includes a unique approach for back-passing beach sand using a hydraulic pump. A feasibility study was conducted that led to a full-scale field pilot program to test the approach using a large Toyo-style pump and a mile of pipe.

References of Work Performed Form

(List 5 Local References)

Comany Name: Anchor QEA, Inc.

1. Name of Reference: City of Huntington Beach

Address: 2000 Main Street, Huntington Beach, CA 92648

Contact Name: Tom Herbel, PE Phone Number: 714-375-5077

Email: tom.herbel@surfcity-hb.org

Dates of Business: 10/2018 - present

2. Name of Reference: City of Newport Beach

Address: 100 Civic Center Drive, Newport Beach, CA 92660

Contact Name: Chris Miller Phone Number: 949-644-3043

Email: cmiller@newportbeachca.gov

Dates of Business: 11/2024 to present

3. Name of Reference: City of Newport Beach

Address: 100 Civic Center Drive, Newport Beach, CA 92660

Contact Name: Bob Stein Phone Number: 949-644-3322

Email: rstein@newportbeachca.gov

Dates of Business: 10/2017 to present

4. Name of Reference: City of Newport Beach

Address: 100 Civic Center Drive, Newport Beach, CA 92660

Contact Name: Jim Houlihan Phone Number: 949-644-3319

Email: jhoulihan@newportbeachca.gov

Dates of Business: 08/2022 - present

5. Name of Reference: City of Long Beach

Address: 411 West Ocean Boulevard, Long Beach, CA 90802

Contact Name: Eric Lopez Phone Number: 562-570-5690

Email: eric.lopez@longbeach.com

Dates of Business: 01/2019 - present

APPENDIX A. RESUMES

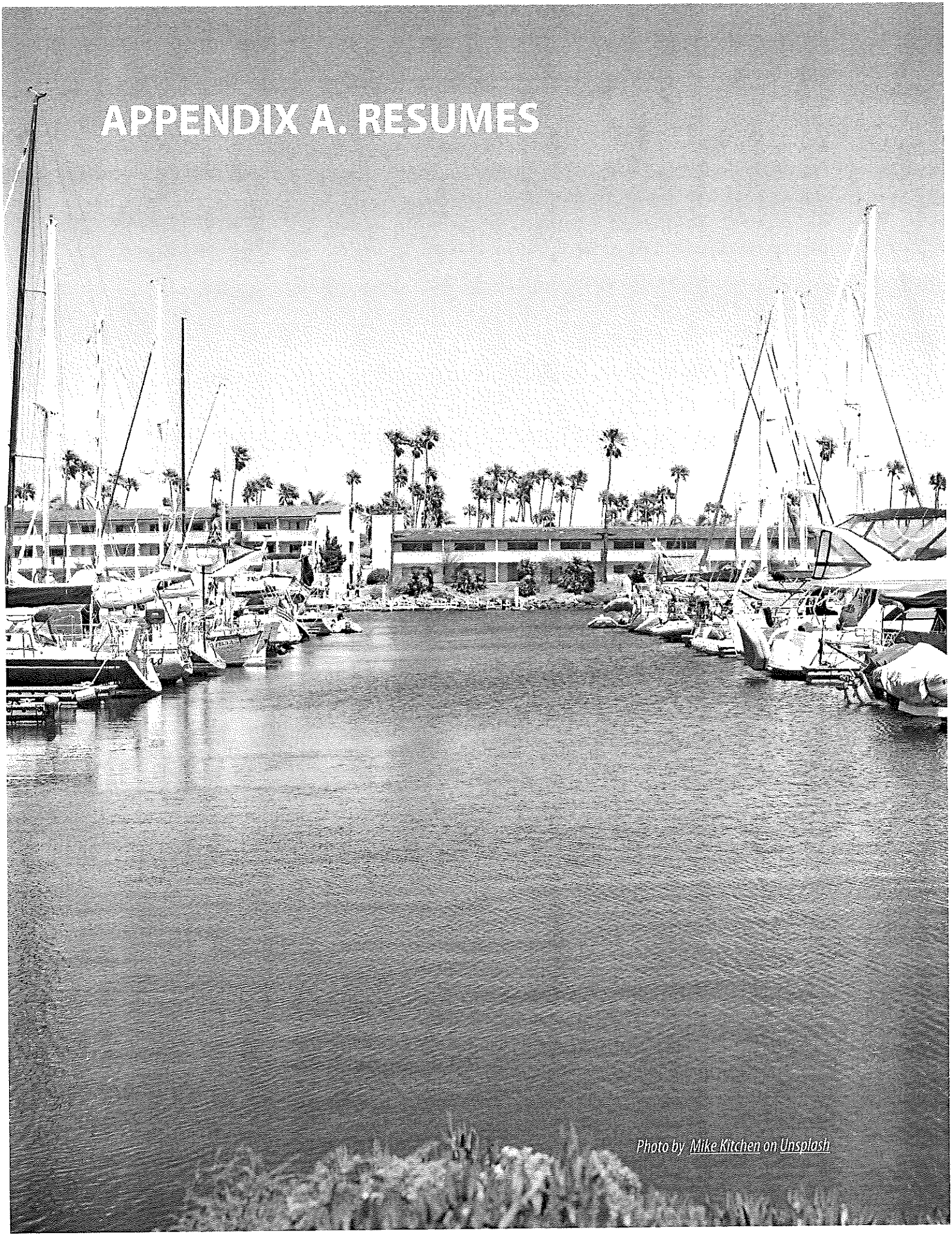


Photo by Mike Kitchen on Unsplash

Fred Massabki, PE, PMP

Project Manager/Marine Structures

Fred is a managing engineer with more than 20 years of experience supporting public agencies in waterfront facility design and infrastructure. He has worked on two Huntington Beach projects under Anchor QEA's on-call ocean engineering contract and has led more than 18 projects for Long Beach, Newport Beach, and Los Angeles Harbor. His expertise includes piers, docks, bulkheads, shoreline stabilization, and ADA compliance. He serves as project manager and principal engineer, overseeing inspections, design, permitting, and construction services for coastal and waterfront projects.

Education

MS, Civil Engineering, University of California, Los Angeles, 2004

Licenses/Certifications

Professional Civil Engineer, California, No. C70423

PMP, Project Management Institute, No. 1936952

Relevant Project Experience

City of Huntington Beach, Huntington Harbour Bulkhead Study (California)

Fred managed the scope, schedule, and budget for a condition assessment of 2,927 linear feet of City-owned bulkheads in Huntington Harbour, overseeing above-water and topside Level 1 inspections of reinforced concrete bulkheads, bridge abutments, and a beachfront gravity wall. He developed conceptual cost estimates for repairs and replacements, prepared a detailed assessment report, and led a feasibility analysis of the City's sea level rise vulnerability assessment. His work included developing bulkhead extension alternatives and estimating concrete costs to address future sea level rise impacts.

Lakeview Drive Slope Stabilization, City of Huntington Beach (California)

Fred served as project manager and principal engineer, overseeing the scope, schedule, and budget for the restoration of an eroding 600-foot lakefront shoreline. He assessed site conditions, identified risks to critical infrastructure, and collaborated with a landscape architect to develop stormwater infrastructure repairs and a bioengineered shoreline solution. He provided engineering design for stabilizing a high-voltage duct bank, sidewalk, and degraded stormwater outfall, ultimately guiding the City in selecting a rock stabilization method to ensure long-term shoreline protection.

City of Coronado, Glorietta Marina Dock C Replacement and Launch Ramp Improvements (California)

Fred served as project manager, overseeing the scope, schedule, and budget for the rebuild of an existing marina and the redevelopment of a public launch ramp. The boat launch improvements included new precast concrete panels, a wider ADA-compliant gangway, a public dock with a low-freeboard section and accessible kayak launch, and a retrofitted gangway abutment and boat wash area. Additional upgrades included parking lot, utility, and storm drain outfall improvements, all designed in compliance with Division of Boating and Waterways guidelines and grant funding requirements.

Marina del Rey Harbor Public Safety Dock Replacement, County of Los Angeles (California)

Fred managed the scope, schedule, and design development as the lead marine engineer for the replacement of undersized waterside facilities. He established minimum design requirements for domestic water, fire protection, sewage pump-out, and fuel dispensing systems, ensuring the new facilities met operational needs. He also prepared technical specifications and conducted QA/QC reviews for the design-build plans, supporting the integration of floating docks, on-dock buildings, and berthing for 14 vessels. Construction phase services are pending.

Daniel Shishino

Deputy Project Manager

Daniel is a structural engineer with 8 years of experience specializing in marine and waterfront projects. His expertise includes floating docks, piers, wharves, seawalls, bulkheads, and bridges in both steel and concrete. He performs structural analysis and design for guide piles, support piles, and fendering systems. His experience also includes on-site inspections, condition assessments, and preparing reports with recommendations, service life estimates, and cost estimates.

Education

BS, Structural Engineering, Purdue University, 2017

Relevant Project Experience

Trinidad Island Homeowners Association, Boardwalk Replacement (California)

Daniel is providing engineering oversight and site observations during the demolition and replacement of a 3,400-foot-long concrete boardwalk fronting waterfront homes. He assisted in investigating concrete distress, identifying design flaws that required full replacement. His fieldwork includes observing and documenting the epoxy injection process used to fill voids in the existing seawall and retaining wall. He ensures construction follows design intent and is executed under a phased schedule to minimize disruption to homeowners and boardwalk users.

City of Martinez, Seawall Replacement Program (California)

Daniel serves as the project engineer for the replacement of a deteriorated seawall, leading structural analyses for soil stability, wind and wave forces, and seismic resistance using Shoring Suite and RISA 3D. He developed replacement options and is now preparing design documents for the selected Type D seawall with interlocking steel sheet panels. He is also responsible for developing demolition plans for dilapidated marina docks and assisting with project permitting, ensuring compliance with regulatory requirements.

City of Newport Beach, San Diego Creek Trash Interceptor (California)

Daniel is the lead engineer supporting the design and installation of a new trash interceptor system in Upper Newport Harbor. He conducted structural analyses for the dumpster cart rail framing, gangway connection support, maintenance walkway, pipe piles, cart winch foundation, and site light post foundation. He developed project calculations using RISA 3D and Enercalc, ensuring compliance with California Building Code and ASCE design guidelines to support safe and efficient system operation.

BRIA Property Management, Waves MDR Marina Inspection (California)

Daniel is the lead engineer for the condition assessment of a 224-slip marina, evaluating floating timber docks, pontoon floats, guide piles, gangways, gates, and dock amenities. He conducts on-site visual inspections of structural components, utilities, and safety features. His responsibilities include preparing a detailed assessment report with photos, field observations, and recommendations for the repair or replacement of floats, timber dock framing, and pile guide components to ensure continued safe operation and extend the marina's service life.

Adam Gale

Principal-in-Charge

Adam is a principal environmental planner with 21 years of experience in environmental planning, permitting, design, and construction. He has worked on private marina developments and large-scale transportation projects, specializing in NEPA, CEQA, the Coastal Act, and federal environmental regulations. For more than 8 years, he has supported the City of Newport Beach, serving as the primary contact for Anchor QEA's on-call marine engineering contract, overseeing task orders and advising on seawall rehabilitation alternatives and beach nourishment permitting.

Education
BS, Ecology and Systematic Biology, California Polytechnic State University, San Luis Obispo, 2004

Relevant Project Experience

Pacific Marina Development, Marina del Rey Hotel Marina Expansion and Replacement (California)
Adam was project manager for the replacement of an existing marina, overseeing regulatory approvals from USACE Los Angeles and RWQCB and securing Section 408 approval for work within the Federal Navigation Channel. He managed the development of the NEPA environmental assessment, including the biological assessment, working closely with USACE's Planning Division to address comments. He also coordinated pre-construction compliance, including eelgrass and Caulerpa surveys and reporting requirements, ensuring all regulatory conditions were met before construction.

City of Newport Beach, On-Call Environmental Services and Regional General Permit 54 Reauthorization (California)
Adam has managed this effort since 2012, serving as an extension of the City of Newport Beach to oversee Regional General Permit 54, which streamlines maintenance dredging approvals for the City and private property owners. He led sediment sampling in 2013 and 2017, secured regulatory permits, and obtained approval for an innovative bay-wide eelgrass mitigation plan developed in coordination with USACE, California Coastal Commission, RWQCB, and NMFS. He also led permit reauthorization in 2020 and continues to support the City.

City of Newport Beach, Marina Park (California)
Adam served as environmental compliance manager throughout all construction phases of the Marina Park project, including marina basin and maintenance dredging. He was responsible for negotiating and ensuring regulatory compliance with agencies before, during, and after construction, ensuring all environmental requirements were met.

Terra Vista Management, Back Bay Landing Marina Development Plan (California)
Adam serves as project manager and team lead, overseeing marine engineering, regulatory permit strategy, technical analysis, and project scheduling. He manages the development of preliminary design alternatives, evaluates coastal hazards and sea level rise impacts, and assesses mitigation measures to address anticipated California Coastal Commission conditions.

City of Huntington Beach, Lakeview Drive Slope Stabilization (California)
Adam researched regulatory classifications to determine whether the lake qualified as waters of the United States, waters of the state, or a wetland. He provided permitting insights, identified potential regulatory hurdles, and evaluated mitigation measures to support the permit approval process.

Randy Mason, PE

Technical Advisor

Randy is a technical advisor with more than 53 years of experience, specializing in marine structures, shoreline protection, and waterfront infrastructure. With more than 36 years of work on local waterfront projects, he has provided expert guidance to Orange and Los Angeles counties and cities including Huntington Beach, Newport Beach, Long Beach, and Los Angeles. He has advised on bulkhead assessments, marina rebuilds, and erosion mitigation, including more than 50 projects in Huntington Harbour. Randy frequently consults HOAs, property owners, and public agencies on bulkhead repairs and waterfront design standards.

Education
BS, Civil Engineering, California State University, Fullerton, 1972

License/Certification
Professional Engineer, California, No. C030661

Relevant Project Experience

City of Huntington Beach, Huntington Harbour Bulkhead Study (California)
Randy served as the technical advisor for condition assessments of City-owned bulkheads in Huntington Harbour, overseeing above-water and topside inspections of standard and augmented bulkheads, bridge abutments, and a beachfront gravity wall. He contributed to the feasibility analysis of the City's sea level rise vulnerability assessment, reviewed conceptual cost estimates for repairs and replacements, and provided QA/QC on the final technical assessment report for City use.

City of Long Beach, Peninsula Beach Boardwalk Study (California)
Randy served as project manager for the assessment of a 3,500-foot-long timber boardwalk and wave deflection wall in Long Beach, evaluating its structural integrity against storm waves and high tides. He oversaw field inspections, excavation of inspection pits, structural assessments, and cost estimating, leading the development of retrofit recommendations. Randy also managed the technical report preparation and coordinated with City staff to discuss findings and alternative solutions for maintaining the structure's stability and longevity.

City of Long Beach, Colorado Lagoon Restoration – Open Channel (California)
Randy serves as the technical lead for creating an open channel connection between Colorado Lagoon and Long Beach Marine Stadium, coordinating engineering design and installation of two new box bridges, the channel, and retaining walls. He manages project phasing and provides technical guidance during structure design, ensuring alignment with project goals and site conditions.

City of Newport Beach, Balboa Island Seawall Rehabilitation (California)
Randy served as project manager, leading engineering efforts to develop rehabilitation measures for aging bulkheads on Balboa Island to mitigate overtopping and flooding from storms, high tides, and sea level rise. He used findings from a structural integrity and sea level rise study to evaluate rehabilitation options, with the preferred solution involving interlocking steel sheet piles and boardwalk elevation and widening. He managed the development of construction documents, cost estimates, and presentations to City staff, officials, and the public.

Michael Whelan, PE

Geotechnical Engineer

Michael is a civil, environmental, and geotechnical engineer with 35 years of experience leading capital improvement projects in Southern California. He specializes in dredging design, coastal remediation, restoration, and shoreline stabilization. His expertise in geotechnical and environmental engineering supports cost-effective, constructible solutions for beach nourishment, waterfront cleanup, berth deepening, habitat improvement, and material containment. Michael has managed design, implementation, and oversight for sediment and nearshore projects across the United States.

Education

MS, Geotechnical Engineering, MIT, 1995

MS, Environmental Engineering, Georgia Institute of Technology, 1992

Licenses/Certifications

Professional Civil Engineer, California, No. C69833

Relevant Project Experience

City of Long Beach, Colorado Lagoon Restoration (California)

Michael was the engineer of record for the initial project phase that removed chemically affected sediments, regraded in-water areas to create suitable shallow-water habitat for eelgrass, recontoured shoreline areas, extended an existing over-water footbridge, and created improved park amenities and public access features. Michael also led Anchor QEA's team of field engineers during construction. For the current phase, Michael is the engineer of record to create an open channel to connect the lagoon with open waters of the adjacent Long Beach Marine Stadium. His responsibilities include formulation of plans, specifications, and cost estimates through development of contractor requirements to manage environmental impacts by segregating different excavated soil types, as well as development of best management practices to comply with environmental requirements.

City of Newport Beach, Rhine Channel Contaminated Sediment Cleanup (California)

Michael was the engineer for engineering evaluations, preparation of construction bid documents, development of conceptual cost estimates, and review of structural conditions of existing waterside improvements (seawalls and docks). He co-managed daily oversight of all contractor operations including dredging, dock and gangway removals and replacements, and new guide pile installations. This project was completed ahead of schedule and under budget.

City of Santa Barbara, Andrée Clark Bird Refuge Improvement Project (California)

Michael was the lead civil and geotechnical engineer for the restoration of the Andrée Clark Bird Refuge. He developed conceptual grading and dredging plans incorporating site topographic and bathymetric data and accounting for habitat restoration goals and anticipated water quality improvements. He also led geotechnical investigations for regrading and worked closely with project biologists and restoration experts to ensure that the evaluation met City objectives for the project.

City and County of San Francisco, India Basin Shoreline Redevelopment (California)

Michael is the engineer of record for a shoreline redevelopment project south of downtown San Francisco. He is leading engineers and scientists to determine excavation depths and extents, sand cover material types and thicknesses for environmental confinement, and methods of protecting historic structures from excavation work. Michael's team has prepared design drawings and specifications.

Megan Collins, PE

Coastal Engineer

Megan is a coastal engineer with 18 years of experience specializing in dredging and beneficial reuse for public and private clients. She has expertise in design document preparation, cost estimation, field investigations, impact modeling, and permitting coordination for maritime and inland waterway projects. Megan's role includes assessing stakeholder needs, leading alternative analyses, coordinating with regulatory agencies, and integrating engineering with ecological considerations. She focuses on value engineering solutions to manage costs while ensuring sustainable and resilient coastal and dredging projects.

Education

MS, Civil and Environmental Engineering, Stanford University, 2007

Coastal Engineering Certificate Program, Old Dominion University, 2015

Licenses/Certifications

Professional Civil Engineer, California, No. C78997

Relevant Project Experience

East Bay Regional Park District, Hayward Marsh Wetland Restoration (California)

This project included preliminary restoration alternatives analysis to restore the brackish Hayward Marsh to its original design. Megan was the project engineer, coordinating site topographic and hydrographic surveys, developing dredging and levee restoration material volumes, and determining equipment access locations and equipment type to work in soft sediments. She conducted the preliminary design alternatives analysis including cost estimates. Megan presented and discussed the alternatives with stakeholders to select a preferred project.

USACE San Francisco District, Noyo Harbor and Petaluma River Dredged Material Management Plan Preliminary Assessments (California)

Megan managed the engineering design, agency coordination, and stakeholder engagement. She performed a desktop shoaling analysis to project 30 years of dredging volumes and dredging frequency. She coordinated with non-federal sponsors, regulatory agencies, and local stakeholders; summarized dredging material sediment quality analysis and suitability determinations for upland, in-bay/nearshore, and ocean disposal sites; estimated future disposal site availability and impediments to the navigation projects, including shallow-draft dredging equipment restraints and cost feasibility; and managed proposal efforts, contract negotiations, the project team, client communications, and invoicing.

California State Coastal Conservancy, South Bay Salt Pond Restoration (California)

Megan was the deputy project manager and designed a conceptual dredged material offloading and placement system to support CEQA/NEPA impact analysis. She coordinated with multiple Bay Area dredging contractors to enhance the regulatory environment for affordable, permitted beneficial reuse sites.

Port of Stockton, Regulatory Permitting and NEPA/CEQA (California)

Megan provided technical engineering expertise for the Port-wide maintenance dredging environmental permit application, including upland placement of dredged material at the Port's permitted dredged material placement sites. She led post-construction dredge survey acceptance and supported client discussions with the contractor.

Jack Malone, PhD

Permit Compliance Lead

Jack is a project manager and marine scientist with 30 years of experience in permitting, regulation, and environmental documentation for marine development, coastal infrastructure, and habitat restoration. His expertise in Southern California's marine and intertidal habitats supports effective communication with agencies, stakeholders, and project proponents. Jack has managed complex coastal projects for Long Beach, Santa Barbara, and Morro Bay. Before joining Anchor QEA, he was a regulatory project manager and marine affairs expert for the USACE Los Angeles District.

Education
PhD, Biology, UCLA, 2002
BS, Biology/Marine Sciences, University of North Carolina, Chapel Hill, 1995

Relevant Project Experience

City of Long Beach, Peninsula Beach San Management (California)
Jack supported the City of Long Beach in developing sand management alternatives for Peninsula Beach and implementing a pilot study to transport sand more efficiently along the beach. He assisted in drafting a sand management alternatives analysis for the City and a work plan to implement a pilot study to evaluate one of the alternatives. Jack met with regulatory agency staff and negotiated approvals for accomplishing the pilot study under an expedited schedule.

City of Long Beach, East San Pedro Bay Ecosystem Restoration (California)
Jack supports the City of Long Beach by providing peer review of technical studies and environmental documents prepared by USACE for this project, a local/federal partnership to restore ecological functions in San Pedro Bay. As part of this support, Jack meets with City and USACE staff and provides recommendations to them based on his technical and regulatory expertise.

City of Long Beach, Colorado Lagoon Restoration (California)
Jack is supporting restoration of Colorado Lagoon to establish a mitigation bank by leading the permitting process, supporting ecological restoration design, and supporting the City of Long Beach's regulatory and resource agency negotiations for development of the bank enabling instrument. The initial phase entailed dredging, creating intertidal and subtidal habitat, planting eelgrass and native upland vegetation, a bioswale, and a walking trail. The current phase involves creating an open channel to facilitate water exchange with the adjacent Long Beach Marine Stadium. Jack is managing civil and structural engineering, landscape architecture, and ecological restoration services as well as the permit amendment process and supporting the City's community outreach program.

City of Long Beach, Leeway Sailing Center (California)
Jack supported the City of Long Beach in replacement of the Leeway Sailing Center docks with several critical environmental compliance and regulatory requirements. He managed development of a coastal hazards analysis for the project that was accepted by the California Coastal Commission. He also managed water quality and eelgrass monitoring during construction to comply with permit requirements, attended community and stakeholder meetings, and presented project information to a stakeholder group on behalf of the City.

Anna Spooner

Landscape Architect

Anna has more than 17 years of landscape architecture, restoration design, and natural resources experience that includes work in Southern California. She has worked on water resource projects that require balancing complex site issues, including ecological process restoration, infrastructure protection, and public use. Anna also has experience in natural resource site investigations and delineations for wetlands, streams, and shorelines. She uses that knowledge to develop site-specific planting designs for marsh, dune, riparian, and maritime communities.

Education
MLA, Landscape Architecture, University of Oregon, 2008

Licenses/Certifications
Professional Landscape Architect, Washington, No. 1245

American Society of Landscape Architects

Relevant Project Experience

City of Huntington Beach, Lakeview Drive Shoreline Stabilization (California)
Anna was the landscape architect for this project to study and design methods to restore a 600-foot-long stretch of lakefront shoreline impacted by effects of sustained erosion from high lake levels due to ongoing groundwater recharge, surface runoff, and wind-driven waves. Structures included a high-voltage duct bank and adjacent sidewalk, a stormwater outfall, and a degraded overflow weir at risk for failure. She designed a new bioengineered embankment, which included replacing diseased sycamore trees with drought- and beetle-resistant species and incorporating willow trees into the lake shoreline as an erosion mitigation measure.

City of Long Beach, Colorado Lagoon Restoration (California)
Anna is leading the project's park and open space design, integrating the new open channel and habitat communities within the renovated Marina Vista Park with a multi-use pathway, viewing areas, and interpretive signage. She is also closely coordinating with the team to accommodate the placement of excavated materials within the upland park. The project will replace an undersized culvert with a new open channel and bridges to increase tidal flushing between Colorado Lagoon and Marine Stadium with the goal of improving the lagoon's water quality.

National Park Service, Alcatraz Ferry Embarkation (California)
Anna supported the alternative analysis processes for the initial sites under consideration. Anna developed conceptual and schematic designs for potential and new embarkation sites from Fort Baker and created visual resource simulations of proposed design concepts that include proposed modifications to buildings and landscapes along San Francisco's Embarcadero, an area with multiple historic designations and sensitivities.

Matthews West, Squamish Oceanfront Park (Canada)
Anna was the lead landscape architect and project manager during the final design of this new waterfront park in Squamish, British Columbia. She worked closely with stakeholders and the public to ensure the park design met expectations within a defined budget. The design includes extensive shoreline public access with a general-use public beach, a kiteboarding and windsurfing access beach, and a restored intertidal habitat beach. The design includes custom displays with interpretive signage about the site's cultural, historic, and current uses.

EXHIBIT "B"

Payment Schedule (Hourly Payment)

A. Hourly Rate

CONSULTANT'S fees for such services shall be based upon the following hourly rate and cost schedule:

Professional Title	Year 1	Year 2	Year 3
Principal	$ 343.00	$353.29	$ 363.89
Senior Managing	$ 316.00	$325.48	$ 335.24
Managing	$ 294.00	$302.82	$ 311.90
Senior Staff	$ 263.00	$270.89	$ 279.02
Staff 3	$ 230.00	$236.90	$ 244.01
Staff 2	$ 205.00	$211.15	$ 217.48
Staff 1	$ 173.00	$178.19	$ 183.54
Senior CAD Designer	$ 179.00	$184.37	$ 189.90
CAD Designer	$ 152.00	$156.56	$ 161.26
Senior Field Technician	$ 164.00	$168.92	$ 173.99
Technician	$ 153.00	$157.59	$ 162.32
Senior Technical Editor	$ 184.00	$189.52	$ 195.21
Technical Editor	$ 153.00	$157.59	$ 162.32
Senior Project Coordinator	$ 175.00	$180.25	$ 185.66
Project Coordinator	$ 145.00	$149.35	$ 153.83

B. Travel Charges for time during travel are not reimbursable.

C. Billing

1. All billing shall be done monthly in fifteen (15) minute increments and matched to an appropriate breakdown of the time that was taken to perform that work and who performed it.

2. Each month's bill should include a total to date. That total should provide, at a glance, the total fees and costs incurred to date for the project.

3. A copy of memoranda, letters, reports, calculations and other documentation prepared by CONSULTANT may be required to be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.

4. CONSULTANT shall submit to CITY an invoice for each monthly payment due. Such invoice shall:

A) Reference this Agreement;
B) Describe the services performed;
C) Show the total amount of the payment due;
D) Include a certification by a principal member of CONSULTANT's firm that the work has been performed in accordance with the provisions of this Agreement; and
E) For all payments include an estimate of the percentage of work completed.

Upon submission of any such invoice, if CITY is satisfied that CONSULTANT is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONSULTANT in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONSULTANT is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

5. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.