

City of Brisbane

Agenda Report

TO: Honorable Mayor and City Council

FROM: Randy Breault, Director of Public Works/City Engineer via City Manager

SUBJECT: Design and Permitting Consultant for Marina Dredging Project

DATE: September 2, 2014

City Council Goals:

To maintain and improve infrastructure. (#3)

Purpose:

To enter into an agreement with Anchor QEA, LLC for permitting and design services needed in advance of an anticipated June 2015 dredging project.

Recommendation:

Authorize the Mayor to sign the Professional Services Agreement with Anchor QEA, LLC in the amount of \$170,200 to perform the work described in their letter of August 19, 2014.

Background:

Nearly 15 years have passed since the Brisbane Marina was last dredged. Over the last two years, boaters have increasingly reported inadequate depths at low tides where their vessels are either stranded in the marina, or unable to safely arrive/depart the marina. A bathymetric survey completed in the summer of 2013 confirmed the locations of inadequate depths, and provided the city with a basis for calculating estimates of the total quantities needing to be removed.

Because of the somewhat lengthy time required to obtain and process sediment soil samples, and to process permits through the various regulatory agencies, we were unable to obtain permits for work in 2014. Authorizing the permitting and design contract this evening is expected to allow for our first dredging season in June 2015. (Note: the work is expected to take two seasons to complete; the first season will focus on the approach channel and docks 1-2.)

Discussion:

Staff has been consulting with Anchor QEA on this project for over a year. Anchor is a local firm with extensive experience in work of this nature, and has positive references.

There is no acceptable alternative to dredging; failing to do the work will make the marina unusable for its intended purpose; delaying the work could greatly increase the cost because the increased volume of sediment accumulated over a significant delay might result in a permit specifying a more costly disposal site.

The City Attorney has reviewed and approved the attached Agreement for Professional Services.

Fiscal Impact:

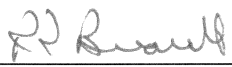
The money for the Agreement before the Council this evening will come from the Marina Fund. As this scope of work progresses we will be able to refine the costs of dredging and oversight for that work. Staff anticipates bringing a request to Council in January 2015 to issue bonds for the construction phase of the work. An increase in the monthly slip fees is expected to be required to cover the costs of bond repayment.

Measure of Success

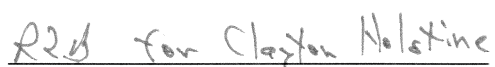
A permit that allows maintenance dredging to start in June 2015.

Attachments:

- Agreement for Professional Services with Anchor QEA, LLC
- August 19, 2014 Scope of Work from Anchor QEA, LLC



Director of Public Works/City Engineer



City Manager

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT, dated _____, is made by and between THE CITY OF BRISBANE, a municipal corporation ("City"), and ANCHOR QEA, LLC an environmental and engineering consulting firm ("Consultant").

RECITALS

A. City desires to retain Consultant for the performance of certain professional permitting and design services for maintenance dredging of the Brisbane Marina ("the Project").

B. Consultant represents that Consultant is specially trained, experienced, and qualified to provide such professional services and is willing to do so pursuant to the terms and conditions of this Agreement.

AGREEMENT

1. **Scope of Services.** Subject to the direction and approval of City through its staff that City may provide from time to time, Consultant shall perform the services described in Exhibit A attached hereto and incorporated herein by reference. All services shall be performed to the reasonable satisfaction of the City department head in charge of the Project.

2. **Time of Performance.** The services of Consultant shall commence upon the execution of this Agreement and shall be satisfactorily completed in accordance with the time schedule set forth in Exhibit A.

3. **Responsible Personnel.** The personnel acting on behalf of Consultant primarily responsible for performance of the services hereunder shall be Joshua Burnam, Senior Partner, Anchor QEA, LLC.

4. **Compensation.** As compensation for all services to be performed by Consultant under this Agreement, Consultant shall be paid the amounts set forth in Exhibit B attached hereto and incorporated herein by reference. In no event shall Consultant's total compensation exceed the sum of \$170,200 without additional authorization from City. Payment by City under this Agreement shall not be deemed a waiver of defects, even if such defects were known to City at the time of payment.

5. **Method of Payment.** Consultant shall submit billings to City describing in detail the work performed for which payment is requested, the date the services were performed, the number of hours spent and by whom, and a description of any reimbursable expenditures. Billings shall be submitted monthly, or at such other time as agreed upon between City and Consultant. City shall pay Consultant no later than 30 days after approval of the invoice by City staff. If City objects to all or any portion of the billing, City shall notify Consultant of the nature of such objection and the amount in dispute. City

shall pay when due the portion of the billing, if any, that is not in dispute. The parties will make every effort to settle the disputed billing through good faith negotiations.

6. **Maintenance and Inspection of Records.** Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, time cards, and other records or documents relating to charges for services or expenditures charged to City, for a minimum of three (3) years from the date of final payment to Consultant under this Agreement and shall make the same available to City or its authorized representatives for inspection and audit, at any time during regular business hours, upon written request by City. The right of inspection shall include the right to make extracts and copies.

7. **Assignment and Subcontracts.** Consultant acknowledges that Consultant's special skill and expertise is a material consideration for City entering into this Agreement. Consultant shall not assign, subcontract or delegate to any other party the performance of any services to be rendered by Consultant under this Agreement without the prior written approval of City. If City consents to any subcontracting of work, Consultant shall be fully responsible to City for all acts or omissions of the subcontractor.

8. **Correction of Work.** Consultant shall promptly correct any defective, inaccurate or incomplete tasks, deliverables, goods, services, or other work, without additional cost to City. The performance or acceptance of services furnished by Consultant shall not relieve Consultant from the obligation to correct subsequently discovered defective, inaccurate, or incomplete performance of Consultant's services hereunder.

9. **Ownership of Documents.** All plans, studies, documents and other writings prepared by and for Consultant in the course of performing its services under this Agreement, except working notes and internal documents, shall become the property of City upon payment to Consultant for such work, and City shall have the sole right to use such materials in its discretion without further compensation to Consultant or to any other party. Consultant shall, at Consultant's expense, provide such reports, plans, studies, documents and other writings to City upon written request. Consultant shall not be held liable for any reuse of their project materials for purposes not included under the scope of this Agreement.

10. **Independent Contractor.** Consultant is, and at all times shall remain, an independent contractor, and not an agent, officer or employee of City. As such independent contractor, neither Consultant nor any of its agents or employees shall be entitled to any salary, fringe benefits, worker's compensation, retirement contributions, sick leave, insurance or other benefit or right connected with employment by City, or any compensation other than as provided in this Agreement. Consultant shall have no power or authority to bind City to any contract or otherwise to incur any obligation or liability for, or on behalf, or in the name of City.

11. **Licenses.** Consultant represents and warrants to City that it has all licenses, permits, qualifications, insurance and approvals of whatsoever nature that are legally required of Consultant to practice its profession. Consultant shall, at its sole cost and expense, keep and maintain such licenses, permits, qualifications, insurance and approvals

in full force and effect at all times during the term of this Agreement. Consultant shall maintain a City of Brisbane business license.

12. **Compliance with Standards of Care and Laws.** Consultant shall adhere to the standard of care in its profession and shall comply with all applicable federal, state and local laws, codes, ordinances and regulations in connection with the performance of its services under this Agreement.

13. **Indemnity.** Consultant shall indemnify, defend, and hold City, its officers, officials, agents, employees and volunteers, harmless from and against any and all claims, demands, causes of action, losses, damages, injuries, expenses and liabilities, direct or indirect, including attorney's fees, arising out of or in any manner relating to the negligent performance by Consultant of its services under this Agreement or its failure to comply with any of the its obligations contained in this Agreement, and City shall not be liable for any acts or omissions of Consultant.

14. **Insurance.** Consultant, at its own expense, shall procure and maintain, for the duration of this Agreement, insurance policies which satisfy the following requirements:

(a) Type of policies and coverage:

- (1) *General Liability Coverage.* Consultant shall maintain commercial general liability insurance in an amount not less than \$1,000,000 per occurrence for bodily injury, personal injury and property damage, providing coverage at least as broad as Insurance Services Office Commercial General Liability form CG 0001 (Ed. 11/88). If the form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to the work to be performed under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit.
- (2) *Automobile Liability Coverage.* Consultant shall maintain automobile liability insurance in an amount not less than \$1,000,000 combined single limit for each occurrence, for bodily injury and property damage, providing coverage at least as broad as Insurance Services Office form CA 0001 (Ed. 12/90) Code 1 (any auto).
- (3) *Workers' Compensation and Employer's Liability Coverage.* Consultant shall maintain workers' compensation insurance as required by the State of California and employer's liability insurance in an amount not less than \$1,000,000 per occurrence, for any and all persons employed by Consultant in connection with the performance of services under this Agreement. In the alternative, Consultant may rely on a self-insurance program to provide this coverage so long as the program of self-insurance complies fully with the provisions of the California Labor Code. The insurer, if insurance is provided, or Consultant, if a program of self-

insurance is provided, shall waive all rights of subrogation against City for loss arising from work performed by Consultant for City.

- (4) *Professional Liability Coverage.* Consultant shall maintain professional errors and omissions liability insurance in an amount not less than \$1,000,000 per occurrence, covering negligent acts, errors or omissions which may be committed by Consultant in the performance of its services under this Agreement.
- (b) Endorsements: Each general liability and automobile liability insurance policy shall contain, or be endorsed to contain, the following provisions:
- (1) The City, its officers, officials, employees, agents and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of Consultant; products and completed operations of Consultant; premises owned, occupied or used by Consultant; or automobiles owned, leased, hired or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to City, its officers, officials, employees, agents or volunteers.
 - (2) For any claims related to the Project, Consultant's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by City, its officers, officials, employees, agents or volunteers shall be excess of Consultant's insurance and shall not contribute with it.
 - (3) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to City, its officers, officials, employees, agents or volunteers.
 - (4) Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
 - (5) Consultant's insurance coverage shall not be suspended, voided, canceled or reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to City.
- (c) Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by City. At City's option, Consultant shall demonstrate financial capability for payment of such deductibles or self-insured retentions.
- (d) Acceptability of Insurers. Insurance is to be placed with insurers having a current A.M. Best rating of no less than A:VII, unless otherwise approved by City in writing.

- (e) Verification of coverage. Consultant shall provide certificates of insurance with original endorsements to City as evidence of the insurance coverage required by this Agreement. Certificates of such insurance shall be filed with City before commencement of work by Consultant. At the request of City, Consultant shall provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by this Agreement.

15. **Notices.** Any notices required or permitted to be given under this Agreement shall be in writing and shall be either personally delivered or sent by certified mail, return receipt requested, addressed to the other party as follows:

To City	City of Brisbane Attn.: Director of Public Works/City Engineer 50 Park Place Brisbane, CA 94005-1310
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To Consultant	Anchor QEA, LLC Attn: Joshua Burnam 130 Battery Street, Suite 400 San Francisco, CA 94111
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16. **Litigation Expenses and Attorneys' Fees.** If either party to this Agreement commences any legal action against the other party to enforce or interpret this Agreement, the prevailing party shall be entitled to recover all costs and expenses that may be incurred in connection therewith, including court costs, expert witness fees, discovery expenses, and attorneys' fees.

17. **Termination of Agreement.** This Agreement may be terminated by either party, effective upon written notice, should the other party commit any material default in the performance of its obligations hereunder. This Agreement may also be terminated by either party, for any reason, upon fifteen (15) day's prior written notice to the other party. In the event this Agreement is terminated by City through no fault of Consultant, Consultant shall be compensated for all services performed to the date of termination.

18. **Equal Opportunity Employment.** Consultant warrants that it is an Equal Opportunity Employer and shall comply with applicable regulations governing equal opportunity employment.

19. **Miscellaneous Provisions.**

- (a) Severability. Should any portion of this Agreement be declared void or unenforceable in a final decision by a court of competent jurisdiction, such decision shall not affect the validity of the remainder of this Agreement, which shall continue in full force and effect, provided that the remainder of this Agreement can be reasonably interpreted to implement the intention of the parties.

- (b) Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes and cancels all prior agreements or understandings, whether written or verbal.
- (c) Amendments. This Agreement may be modified or amended only by a written document duly executed by both City and Consultant.
- (d) Waiver. The waiver of any breach or default under this Agreement shall not constitute a continuing waiver of a subsequent breach of the same provision or any other provision of this Agreement.
- (e) Execution. Each party warrants that the individuals signing this Agreement on its behalf have the legal power and authority to do so and to bind the party to this Agreement.
- (f) Successors and Assigns. Subject to the restriction against assignment and subcontracting, this Agreement shall be inure to the benefit of and shall be binding upon the heirs, personal representatives, successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

THE CITY OF BRISBANE

By: _____
W. Clarke Conway, Mayor

ATTEST:

Sheri Marie Spediacci, City Clerk

APPROVED AS TO FORM:

David Kahn, City Attorney

CONSULTANT:

Joshua Burnam, Senior Partner
Anchor QEA, LLC

EXHIBIT A
Description of Services

See Attached Anchor QEA Scope of Work and Cost Proposal dated August 19, 2014

EXHIBIT B
Compensation

See Attached Anchor QEA Scope of Work and Cost Proposal dated August 19, 2014



130 Battery Street, Suite 400
San Francisco, California 94111
Phone 415.230.0862

August 19, 2014

Mr. Randy Breault
City of Brisbane
50 Park Place
Brisbane, California 94005-1310

Re: Updated Scope of Work and Cost Proposal to Support Maintenance Dredging Needs at
the Brisbane Marina

Dear Mr. Breault:

Anchor QEA, LLC, is pleased to submit this revised and updated scope of work and cost proposal to support the City of Brisbane's (City's) upcoming maintenance dredging needs at Brisbane Marina. We understand that the City seeks to dredge the Brisbane Marina to a depth of -8 feet mean lower low water (MLLW), plus 2 feet of allowable overdepth; and to dredge the marina's entrance channel to a depth of -9 feet MLLW, plus 2 feet of allowable overdepth. The total volume of material estimated to be dredged is estimated at 150,000 cubic yards based on the 2013 bathymetric survey; this volume will be updated by conducting a new survey, which is required by the Dredged Material Management Office (DMMO). Given the anticipated dredging volume and the need to dredge within the established work window, we anticipate that dredging activities may need to be completed over two episodes, one in 2015 and one in 2016.

PROPOSED SCOPE OF WORK

Task 1: Bathymetric Survey

Before permitting, sediment characterization, or design work can commence, it is critical to understand baseline bathymetric information. Due to the age of the 2013 survey, the DMMO (as well as Anchor QEA) recommend updating the survey to avoid any permitting issues. Anchor QEA will work with a hydrography surveyor to perform an updated multi-

beam bathymetric survey to depict the bottom mudline elevations. A multi-beam survey is an effective technique to develop a high resolution depiction of bottom mudline elevations when working around structures. Using the survey data, Anchor QEA will develop dredging areas and calculate anticipated dredging volumes for restoring the indicated areas to their desired navigation depths, which will also be confirmed with the City.

Task 2: Permitting

Anchor QEA will prepare and submit the DMMO Consolidated Dredging Permit application to obtain permits covering the City's proposed dredging work. The following permits will be obtained for the proposed dredging work:

- 10-year permit from the U.S. Army Corps of Engineers
- 10-year permit from the San Francisco Bay Conservation and Development Commission
- Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board

To ensure that dredging can begin as quickly as possible, the permitting process will be conducted parallel to the sediment characterization effort (Task 3). We will prepare draft and final permit documents for City review and then submit complete applications to the appropriate regulatory agencies.

Assumptions for Task 2 are as follows:

- All dredging is maintenance dredging, not new work.
 - Dredging will occur within the established window of June 1 through November 30.
 - The project will qualify for the Small Dredger Programmatic Alternatives Analysis and will not require preparation of an Integrated Alternatives Analysis.
 - The DMMO application will be completed to state and federal standards.
 - Per updated California State Lands' terms for 2014, a California State Lands dredging lease will not be required.
 - The Dredge Operations Plan for the 2014 dredging episode will be completed by the contractor.
 - Anchor QEA will attend up to two meetings with the regulatory agencies, if required.
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- Anchor QEA will respond to agency comments on the DMMO application.
- The City will be responsible for all permit fees.

Task 3: Sediment Characterization and Dredged Material Management Office Coordination

Based on the preliminary volume estimate of 150,000, we expect that the two dredge areas will likely be divided into three dredge units. Proposed dredge material will be evaluated for in-Bay disposal at the San Pablo Bay (SF-10) and the Alcatraz Island (SF-11) disposal sites. Sufficient sediment will also be collected and archived to characterize sediments for disposal at the San Francisco Deep Ocean Disposal Site (SFDODS); however, testing costs for disposal at this site are not included in this proposal, and would only be addressed if required by the DMMO. If additional testing is required, or if the material is not suitable for in-Bay disposal, we will provide an additional scope of work and costs for completing additional analysis to evaluate alternate disposal locations. In addition, the number of samples and analyses may need updating, dependent on the updated bathymetric survey.

Task 3.1: Sampling and Analysis Plan

Anchor QEA will prepare a Sampling and Analysis Plan (SAP) for sample collection and analytical testing of sediments from Brisbane Marina and entrance channel. The SAP will be prepared in accordance with the following:

- *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (ITM)*
- *PN 01-01: Guidelines for Implementing the Inland Testing Manual in the San Francisco Bay Region*
- *Evaluation of Dredged Material Proposed for Ocean Disposal Testing Manual (OTM)*
- *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines*

The SAP will detail the sampling and analysis methods followed during field sample collection and laboratory analyses to determine sediment suitability for in-Bay disposal at SF-10 and SF-11. An electronic draft SAP will be submitted to the City for review, and one round of review with minimal revisions is anticipated. Ten hard copies of the final SAP will be produced and distributed; nine of which will be sent to the DMMO agencies, and one

which will be sent to the City. Prior to sampling, approval of the SAP will be requested at a DMMO meeting.

As part of Task 3.1, Anchor QEA will also develop a Health and Safety Plan that will provide background information, emergency phone numbers, route to nearest hospital, potential chemicals of concern, personal protective equipment requirements, key personnel responsibilities, and health and safety procedures.

Subtask 3.2: Sample Collection and Laboratory Analysis

Twelve sediment cores will be collected using a vibracore by Anchor QEA and our subcontractor Leviathan Environmental Services from the dredge areas. Enough sediment will be collected and archived to characterize sediments for disposal in-Bay or at SFDODS; however, the initial testing conducted will only evaluate the dredged material for suitability for in-Bay disposal. Additional testing for disposal at SFDODS may be required by the DMMO based on initial testing results, but the costs for such testing are not included in this proposal.

Individual core samples and Z-layer samples will also be archived from each core. Depending on the results of the composite sample, an individual core sample or Z-layer sample may require limited analysis by DMMO. An individual core sample would only be analyzed if there is a need to refine the dredge areas based on elevated chemistry values. A Z-layer sample would only be analyzed to characterize the newly exposed surface layer if the dredged material exhibited elevated chemical concentrations. These additional analyses would only be conducted if requested by DMMO; however, costs have been included to test the Z layer for polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) in case this information is requested by the DMMO.

In accordance with DMMO guidelines, three composite samples will be submitted for chemical analysis and biological testing to determine suitability for disposal at SF-10 and SF-11. Specific chemical constituents to be analyzed are those specified in the DMMO guidelines and include total solids, total organic carbon, grain size, metals, organotins, PAHs, organochlorine pesticides, and polychlorinated biphenyls (PCBs). Biological testing for in-Bay disposal includes one water column toxicity test and two benthic toxicity tests

conducted on the three composite samples from the dredge units and on from one sample collected from each of the disposal areas (SF-10 and SF-11). The toxicity results from the dredge unit samples will be compared to the toxicity results from the disposal areas to evaluate disposal suitability at both locations. Anchor QEA will perform data validation to ensure laboratory analyses meet the project data quality objectives.

Subtask 3.3: Sampling and Analysis Report

Anchor QEA will produce a Sampling and Analysis Report (SAR) detailing results of all testing, final sampling locations, any deviations from the SAP, and conclusions regarding the suitability of dredged material placement at SF-10 and SF-11. The SAR will be prepared in accordance with the ITM, PN-01-01, OTM, and DMMO guidelines. An electronic draft SAR will be submitted to the City for review. One review round with minimal revisions for the final document is anticipated. Ten hard copies of the final document will be produced and distributed; nine of which will be sent to the DMMO agencies, and one which will be sent to the City.

Assumptions for Task 3 are as follows:

- We have assumed three dredge units for characterization based on the previous Environmental Data Solutions-anticipated volume of 150,000 cubic yards. Our cost estimate is based on characterizing this volume of material. If the new survey shows a change in volume that requires a change in sampling approach, we will notify the City.
 - Based on the estimated volume of sediment to be dredged, it is anticipated that three composite samples created from twelve individual stations will be required to characterize sediments for in-Bay disposal. Station locations and the actual number of individual samples required will be further defined after the bathymetric data have been analyzed and approved by the DMMO. This is dependent on final volume verification.
 - Anchor QEA will spend 5 days in the field collecting sediment cores (dependent on volume). Weather conditions resulting in longer sampling periods and DMMO requests for different or additional testing strategies may affect the final cost of this
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project. Should sampling last longer than 5 days, an increase to Task 3 costs could occur. No contingency field work days have been included.

- Anchor QEA will have the ability to temporarily stage a sediment processing table on site. Access to electricity and water will be provided if needed.
- Two reference samples will be collected for in-Bay disposal testing: one from each in-Bay disposal site.
- Bioaccumulation testing will not be required for in-Bay disposal. If bioaccumulation triggers are exceeded and the City wants to pursue in-Bay disposal, additional testing and tissue analysis will be required for a reference sample.
- If we need to analyze the material for disposal at SFDODS, additional testing will be required.
- The complete analyte list for sediment composite samples will be subject to DMMO approval.
- Limited individual core sample or Z-layer sample analysis may be required depending on the results of the composite samples; however, analysis is subject to DMMO approval.
- Anchor QEA will attend one DMMO meeting to discuss the SAP and one DMMO meeting to discuss the SAR.

Task 4: Dredge Design

As part of this task, Anchor QEA will prepare design plans, technical specifications, an opinion of probable costs, and a bid form for the dredging work. Our design efforts will include defining the extents of the dredging prism, which will be developed in concert with discussions with the City to cover areas of immediate benefit to marina operations. Additional specific elements of the design process will include evaluating dredging rates, construction timelines, and potential dredging phasing options as it is expected that construction will span over two seasons. The development of these documents will occur concurrently with the permitting and sediment investigation processes as much as is feasible.

The construction plans will depict site features necessary to inform a dredging contractor, including site bathymetry; existing shorelines, docks, marine features, and structures; site mooring areas and access restrictions (if any); required extents and limits of dredging; dredging side slopes; allowable overdepth limits; and typical cross sections.

The technical specifications will include detailed requirements for dredging and disposal of material at an in-Bay disposal location, as well as any permit conditions and environmental restrictions known at the time of preparation. A bid form will be included in the technical specifications package, which will contain estimates of payable dredge quantities, potentially subdivided according to different dredging areas.

Specifications will be prepared using Anchor QEA's standard format. Should the City request that specifications be prepared in another format, we may be able to accommodate that request without budget increase if the alternate format is provided early in the design process. The technical specifications will be prepared as a separate document that can be incorporated into the City's standard bid package which contains the City's typical General Contract Terms and Conditions.

The technical drawings and specifications that we provide will need to be combined with appropriate contract documents and language (including legal terms and conditions, provisions for payment, insurance requirements, and the like) to create a full contract package that can be used to solicit bids and then to execute a construction contract between Brisbane Marina and the selected contractor. We have assumed that contract documents, aside from our drawings and technical specifications, can be provided by the City, and used to create a complete contract package, consistent with previous construction projects conducted by the City.

We will submit a draft final (95%) set of design drawings to the City for review and discussion, followed by a final (100%) set that can be distributed for bid solicitation. We assume that both deliverables will be submitted to the City in electronic format only.

Assumptions

Assumptions for Task 4 are as follows:

- Upland and shoreline topographic survey information, including location and geometry of adjacent structures, is assumed to be provided by the City in an AutoCAD-compatible format for Anchor QEA's use in developing the construction plans.
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- Similarly, we will need sufficient information regarding site conditions, access routes, the presence and location of utilities, and to the timing and nature of facility operations that may affect, or be affected by, the dredging. We therefore have assumed that such information will be provided to Anchor QEA for our review and inclusion into the construction drawings.
- If sufficient information is not available regarding the above points, then additional data gathering may be required to adequately identify site conditions, which may require additional effort and cost by Anchor QEA.
- Our understanding is that the planned dredging depths will not exceed the original design depths alongside structures and guide piles at the site. Thus, we have assumed that it will not be necessary to analyze the stability of existing offshore and nearshore structures.. If the City would like an evaluation of structural stability in response to dredging, we recommend retaining a structural engineer to perform this evaluation in conjunction with Anchor QEA's work effort.
- Sediment is anticipated to be disposed of at an in-bay disposal location (SF-10 or SF-11) rather than at an upland landfill facility. As such, a shore-side offloading or staging area is assumed to be unnecessary and thus is not part of our assumed design effort.. If any sediment needs to be disposed of at an upland location, Anchor QEA will need to expend additional effort to design appropriate offloading and on-land sediment management requirements, and reflect them in the design documents.
- Up to two meetings with the City have been budgeted and included in this scope of work: one during the design process, and a second to discuss the City's comments on the draft final (95%) submittal.

FUTURE TASKS

This scope of work will be considered complete when our final (100%) design documents have been completed and submitted to the City. However, once the design plans have been prepared, Anchor QEA can also support the City in the bidding and construction process of the project to ensure the project is being completed per the technical specification and regulatory permits. Successful construction projects are attributable, in part, to effective and thorough oversight and management of the contractor's work, and Anchor QEA's experience in this regard could be a valuable addition to this project. For example, we commonly participate in and lead pre-bid site visits, provide input to the bid review process, review

contractor pre-construction submittals, participate (in person or by phone) in selected construction meetings, and review contractor progress and post-dredge surveys. A separate scope of work and cost estimate for these tasks will be prepared once Tasks 1 through 4 are complete and the full extent of the project details are known.

PROPOSED STAFF

With the exception of the laboratory analyses, all work required to fulfill this scope of work will be completed by Anchor QEA staff located in our San Francisco, California, office. Dr. Joshua Burnam will be Anchor QEA's Principal-in-Charge and overall project manager. He will be supported by Katie Chamberlin, Managing Planner, who will be our local point of contact and agency liaison for regulatory agency permitting issues; Joanna Florer, Senior Scientist, who will manage sediment characterization efforts; and Michael Whelan, P.E., Senior Managing Engineer, who will manage engineering tasks. Other senior Anchor QEA staff will provide oversight and guidance as required.

ESTIMATED COSTS

The total cost for completing Tasks 1 through 4 is \$170,200 which is based on a time-and-materials, not-to-exceed basis. Our current rates are included as Attachment A. Table 1 shows the task-specific breakdown of costs for each task, as well as the total costs of our subcontractors.

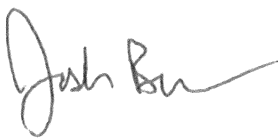
Table 1
Proposed Costs

Task	Description	Anchor QEA Costs
1	Bathymetric Survey	\$8,600
2	Permitting	\$20,200
3.1	Sampling and Analysis Plan	\$13,800
3.2	Sample Collection and Laboratory Analysis	\$76,400
3.3	Sampling and Analysis Report	\$16,200
4	Dredge Design	\$35,000
Total		\$170,200

All of our included fee assumptions are dependent on Anchor QEA performing all listed services. We feel immediate notice to proceed is needed to maximize the amount of construction that can occur during the 2015 dredging window.

We appreciate the opportunity to provide this cost proposal and look forward to beginning these project tasks. Please do not hesitate to contact me at jburnam@anchorqea.com, or at (415) 230-0862, if there are any questions or concerns with this proposal.

Sincerely,



Joshua Burnam, MPH, D.Env.
Principal Environmental Planner
Anchor QEA, LLC

ATTACHMENT A
PROJECT BILLING RATES

Anchor QEA, L.L.C.

2014 BILLING RATES

Professional Level Hourly Rates

Principal CM ¹ /Engineer/LA ² /Planner/Scientist	\$225
Senior Managing Analyst/CM/Engineer/LA/Planner/Scientist	\$199
Managing Analyst/CM/Engineer/LA/Planner/Scientist.....	\$185
Senior Analyst/CM/Engineer/LA/Planner/Scientist	\$165
Staff 3 Analyst/CM/Engineer/LA/Planner/Scientist	\$145
Staff 2 Analyst/CM/Engineer/LA/Planner/Scientist	\$130
Staff 1 Analyst/CM/Engineer/LA/Planner/Scientist	\$110
Senior CAD ³ Designer	\$115
CAD Designer	\$98
Technician	\$95
Technical Editor	\$98
Project Coordinator	\$92

Special Hourly Rates

National expert consultant.....	\$370
All work by a testifying expert.....	1.5 times professional level rate

EXPENSE BILLING RATES

Expense Rates

Computer Modeling (per hour)	\$10.00
Graphic Plots (varies with plot size)	\$3-6/sf
Mileage (per mile).....	Current Federal Standard

FEE ON LABOR AND EXPENSE CHARGES

Subcontracts/subconsultants	10%
Travel and other direct costs	10%
Field equipment & supplies.....	10%

This is a company confidential document.

¹ CM = Construction Manager

² LA = Landscape Architect

³ CAD = Computer Aided Design