



Memorandum

Date: June 20, 2017
To: Transportation Authority Board
From: Eric Cordoba – Deputy Director for Capital Projects
Subject: 07/11/17 Board Meeting: Approve a Four-Year Professional Services Contract with WSP USA, Inc. for Construction Management Services for the Yerba Buena Island Westside Bridges Project in an Amount Not to Exceed \$5,500,000, and a Two-Year Professional Services Contract with S&C Engineers, Inc. for Construction Management Services for the Yerba Buena Island Southgate Road Realignment Improvements Project in an Amount Not to Exceed \$3,000,000

<p>RECOMMENDATION <input type="checkbox"/> Information <input checked="" type="checkbox"/> Action</p> <ul style="list-style-type: none"> • Approve a Four-Year Professional Services Contract with WSP USA Inc. (WSP) for Construction Management Services for the Yerba Buena Island (YBI) Westside Bridges Project in an Amount Not to Exceed \$5,500,000 • Approve a Two-Year Professional Services Contract with S&C Engineers, Inc. (S&C Engineers) for Construction Management Services for the YBI Southgate Road Realignment Improvements Project in an Amount Not to Exceed \$3,000,000 • Authorize the Executive Director to Negotiate Contract Payment Terms and Non-Material Contract Terms and Conditions <p>SUMMARY</p> <p>The Transportation Authority will be administering the YBI Westside Bridges and YBI Southgate Road Realignment Improvements construction work. A Request for Proposals (RFP) for construction management services for both projects was issued in May, three proposals were received, and a multi-agency technical review panel recommended WSP to provide construction management services for the YBI Westside Bridges Project and S&C Engineers to provide construction management services for the YBI Southgate Road Realignment Improvements Project.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Fund Allocation <input type="checkbox"/> Fund Programming <input type="checkbox"/> Policy/Legislation <input type="checkbox"/> Plan/Study <input type="checkbox"/> Capital Project Oversight/Delivery <input type="checkbox"/> Budget/Finance <input checked="" type="checkbox"/> Contract/Agreement <input type="checkbox"/> Procurement <input type="checkbox"/> Other: <hr/>
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DISCUSSION

Background.

The Transportation Authority has been working jointly with the Treasure Island Development Authority (TIDA) and the Office of Economic and Workforce Development (OEWD) on the development of the I-80/YBI Interchange Improvement Project. The Transportation Authority is in the process of completing the YBI Ramps Improvement Project – Phase 1, which included

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constructing new westbound on and off ramps (on the east side of YBI) to the new Eastern Span of the San Francisco-Oakland Bay Bridge (SFOBB). It is now proceeding with implementation of two additional construction projects including the YBI Westside Bridges and YBI Southgate Road Realignment Improvements Projects.

Project Description.

The YBI Westside Bridges encompasses eight existing bridge structures on the west side of YBI. These structures generally comprise a viaduct along Treasure Island Road, just north of the SFOBB. The project limits along Treasure Island Road are from the SFOBB to approximately 2,000-feet northward. This stretch of Treasure Island Road includes the bridge structures and portions of “at-grade” roadway. The project purpose is to bring the bridge structures up to current seismic safety standards. To accomplish this, five structures will be seismically retrofitted and three structures will be demolished and replaced with realigned roadway, an overcrossing structure, and new retaining walls.

The YBI Southgate Road Realignment Improvements are Phase 2 of the YBI Ramps project. The YBI Ramps Project – Phase 1 consisted of replacing the existing westbound on-ramp and the westbound off-ramp located on the eastern side of YBI with a new westbound on-ramp and a new westbound off-ramp that would improve the functional roles of the current ramps. The YBI Southgate Road Realignment Improvements will increase the length of the on-ramp and off-ramp on a new alignment to allow the YBI Westbound Ramps Project to function as designed. Southgate Road as realigned would effectively function as an extension of the on- and off-ramps for the YBI Westbound Ramps Project, and would separate traffic heading to westbound and eastbound I-80, thereby eliminating queue spillback onto I-80 and the LOS F intersection. The extended ramps would provide direct access from Hillcrest Road to the westbound on-ramp, and would ensure all truck turning movements are accommodated. In addition, the eastbound off-ramp is being reconstructed.

Project Status and Schedule.

For the YBI Westside Bridges project, environmental clearance for all five bridges that will be seismically retrofitted has been completed, also known as Bridge numbers 1, 4, 7A, 7B and 8. The Categorical Exemptions were approved on December 18, 2012. The plans for seismically retrofitting these five bridges are 35% complete. Environmental clearance for the portion of the project which replaces three bridges (numbers 2, 3, and 6) with realigned roadway, ramp reconstruction, retaining walls and a culvert/tunnel structure is underway. The Area of Potential Effect map that covers the entire project area was approved in December 2015. The Southgate Road Realignment Improvements Project and the Macalla Road Reconstruction Project will need to be completed before construction of the project can begin. The Transportation Authority will be using the Construction Manager/General Contractor (CM/GC) delivery method for the YBI Westside Bridges project. Preliminary engineering has been completed and the planned milestone schedule for the remaining activities is as follows:

Activity	Completion Date
• Notice to Proceed (NTP) Pre-construction Services	August 2017
• Perform Pre-construction Services	August 2017 – December 2018
• Notice to Proceed (NTP) Construction Services	January 2019
• Perform Construction Management Services	January 2019 – December 2020

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The YBI Southgate Road Realignment Improvements Project is being fast-tracked and is required to be completed before the YBI Westside Bridges Project can be constructed. Preliminary engineering has been completed and the planned milestone schedule for the remaining activities is as follows:

<u>Activity</u>	<u>Completion Date</u>
• NTP Pre-construction Services	August 2017
• Perform Pre-construction Services	August 2017 – March 2018
• NTP Construction Services	April 2018
• Perform Construction Management Services	April 2018 – June 2019

Procurement Process.

On May 12, 2017 a RFP was issued for construction management services for these projects. A pre-proposal conference was held on May 22, 2017, which provided opportunities for small businesses and larger firms to meet and form partnerships. A total of 24 firms attended.

We took particular steps to encourage participation from small and disadvantaged business enterprises (DBEs), including outreach efforts to connect many small, disadvantaged and local businesses with potential prime consultants, and advertisements in six local newspapers. We also distributed the RFP, sign-in sheets for the pre-proposal conference, and periodic updates on the RFP to certified small, disadvantaged and local businesses, the Bay Area and cultural Chambers of Commerce, and the Small Business Councils.

On June 12, 2017 three proposals were received in response to the RFP. A multi-agency technical review panel, comprised of staff from the Transportation Authority, TIDA and San Francisco Municipal Transportation Agency evaluated the proposals based on qualifications and other criteria identified in the RFP, including the proposers' understanding of project objectives, technical and management approach, and capabilities and experience. The panel interviewed all three firms on June 22, 2017. Based on the competitive selection process, staff recommends the Board approve professional services contracts with WSP to provide construction management services for the YBI Westside Bridges Project and S&C Engineers to provide construction management services for the YBI Southgate Road Realignment Improvement Project. The panel unanimously agreed both firms were the highest qualified firms given their strong technical understanding of the projects and Caltrans related experience.

The Transportation Authority will receive federal and state financial assistance to fund these contracts from the U.S. Department of Transportation through Caltrans and will adhere to federal regulations pertaining to DBEs. We have established a DBE goal of 10.2% for these contracts. Proposals from all teams met or exceeded the DBE goal. The WSP team includes 18.74% DBE participation from four subconsultants: African-American-owned and San Francisco-based firms, Transamerican Engineers & Associates, Inc. and BioMaAS, Inc., Asian Subcontinent-owned firm, Applied Materials & Engineering, Inc., and Women-owned firm, KL Bartlett Consulting. The S&C Engineers team includes 33.73% DBE participation from three subconsultants: African-American-owned and San Francisco-based firm, Transamerican Engineers & Associates, Inc., and Women-owned firms, Inspection Services, Inc. and KL Bartlett Consulting.

Funding.

The contract for the YBI Westside Bridges project will be 100% reimbursed through a combination of Federal Highway Bridge Program (HBP), State Prop 1B and TIDA funds. The contract for the

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Southgate Road Realignment Improvements project will be 100% reimbursed through a combination of Federal HBP, State Prop 1B, and Bay Area Toll Authority funds.

As provided for in the MOA for Construction Services for the YBI Ramps Improvement Project between the Transportation Authority and TIDA, TIDA is responsible for reimbursing the Transportation Authority for all project costs and any and all costs not covered by state or federal funds. Prior to the project being advertised for construction, the Memorandum of Agreement (MOA) for Construction Services for the YBI Ramps Improvement Project between the Transportation Authority and TIDA will need to be amended to include the Southgate Road Realignment Improvements.

FINANCIAL IMPACT

The first year's activities for both contracts are included in the proposed Fiscal Year 2017/18 budget. Sufficient funds will be included in future year budgets to cover the remaining cost of the contracts.

CAC POSITION

The CAC will consider this item at its June 28, 2017 meeting.

SUPPLEMENTAL MATERIALS

Attachment 1 – Construction Management Services for the YBI Westside Bridges Project – Scope of Services

Attachment 2 – Construction Management Services for the YBI Southgate Road Realignment Improvements – Scope of Services

Attachment 1

Construction Management Services for the Yerba Buena Island Westside Bridges Project Scope of Services

The Transportation Authority will be using the Construction Manager/General Contractor (CM/GC) project delivery method for the YBI Westside Bridges project. The construction management contract for the Yerba Buena Island Westside Bridges Project will consist of a three-phase effort with Phase 1 consisting of pre-construction services; Phase 2 consisting of construction phase management services, and Phase 3 consisting of post construction phase services.

The construction management (CM) services required will include:

Phase 1 - Pre-Construction Services with CM/GC Project Delivery Method

- Resident Engineer or a small team from the CM services team will be involved in the pre-construction phase, along with other participants including Design Consultant, CM/GC and Independent Cost Estimator (ICE), Owner, etc.
- Provide ICE with the following experience construction cost estimator knowledge, skills, and experience:
 - For the Lead Structure and Civil Cost Estimator roles (may be performed by the same person), preference will be given to individuals who have:
 - Proficiency in production-based, heavy civil estimation software platforms
 - Experience performing contractor-style, production-based cost estimates for major bridge, tieback walls and soil nail walls of projects of similar scope, size and complexity to the YBI Westside Bridges project, including experience with:
 - Tall bridge piers,
 - CIDH and CISS foundations,
 - Bridge seismic retrofit,
 - Bridge demolition,
 - Large retaining walls,
 - Steep terrain,
 - Hard rock excavation, and
 - Roadway and interchange work.
 - Experience estimating costs for projects in locations that encounter geotechnical and environmental conditions similar to those encountered at the Project site.
 - Ten or more years of recent and relevant estimating experience in all trades of heavy civil and transportation, along with a knowledge of construction means, methods, and equipment in these areas.
 - Experience with identifying, assessing and pricing risk.

- Experience working on CM/GC projects and an understanding of the CM/GC delivery method, including the roles and responsibilities of the various parties (owner, CM/GC, Design Consultant, ICE, CM) involved.
 - Experience working with owners, designers, and CM/GCs, serving as an Independent Cost Estimator on a CM/GC project(s).
 - Experience working for a construction contractor estimating and/or managing construction projects that are relevant to the YBI Westside Bridges project.
 - Experience estimating projects with Disadvantage Business Enterprise (DBE) including experience in DBE outreach and pricing of DBE work in construction contracts.
- The ICE construction cost estimating scope of services to be provided includes, but is not limited to, the following:
 - Provide an early (prior to 35% Opinion of Probable Construction Cost (OPCC)) independent analysis of cost and schedule impacts for design alternatives (e.g., bridge and wall types) under consideration.
 - Provide independent cost estimates during final design, utilizing contractor style (production-based) methodologies and production-based heavy civil estimating software platforms. Cost estimates are expected to occur at three pricing milestones during the design phase (35%, 65%, 95%) and for the bid for each construction contract (work package). The bid will take place at the point in time when the Transportation Authority, the Design Consultant, and the CM/GC Contractor agree that the Project has been designed to a sufficient level of detail to allow the CM/GC Contractor to accurately bid the Project or work package.
 - Provide summary and detailed cost breakdowns and translate production-based estimates into Transportation Authority unit price estimate format. Utilize Transportation Authority standards with a demonstrated familiarity of California labor laws.
 - Bid review and assessment for recommendation in award of a construction contract.
 - Attend reconciliation meetings between the Transportation Authority and the CM/GC Contractor at pricing milestones and after bid submittal (as necessary) for each contract or work package. The CM/GC Contractor's responsibility at these meetings is to gain a common understanding of bidding assumptions (including means and methods, equipment, material costs, and risk assignment) and advise the Project Team if there are more cost effective ways of accomplishing the work.
 - Provide feedback on risk management which may include risk identification, assessment, cost quantification, and assignment of the probability of occurrence. Document cost savings and efficiencies through the risk management process.
 - Provide assistance to the Project Team with respect to determining cost impacts of: project phasing, labor availability, mobilization and site access, sequence of design and construction, and availability and procurement of equipment and materials.
 - Attend and participate in the following meetings:
 - Initial Kickoff Meeting;
 - Design workshops prior to each pricing milestone and bid;

- Risk workshops prior to each pricing milestone and bid;
- Price reconciliation meeting(s) following each pricing milestone and bid; and
- Regular Project Team meetings/conference calls (anticipated to occur each week) during the pre-construction phase of the Project to discuss work in progress, work completed, upcoming priorities, issues, and risks to the Project scope, schedule review and update, and any budget or contract issues. It is anticipated that the ICE will be required to attend, in-person, one of these meetings per month at a co-located project facility, to be determined in the San Francisco areas. The ICE will be expected to participate remotely (conference call/web) in the remaining regularly scheduled Project Team meetings.
- Maintain meeting minutes, including participation, topics, actions items, and decisions made.
- The construction of this Project will be funded, in part, by Federal Funds and will include a DBE goal for each federally funded construction contract. The CM/GC Contractor will be expected to engage in DBE outreach, including interviewing potential DBEs, to estimate the cost of construction while meeting the specified goal.
- Demonstrate practicality in approach and concentrate remarks and discussions on critical path and high-risk activities as identified in the Risk /Opportunity Register that will be developed during the Risk Workshops and maintained by the Transportation Authority and the Design Consultant.
- Provide schedule and cost analysis, as needed, for any change orders issued during the construction phase of the Project.

Phase 2 – Construction Phase Services

- Process construction contract for execution by the contractor.
- Arrange for, coordinate and conduct a pre-construction conference, including preparation of meeting minutes.
- Complete review, comment and approval of the Construction Contractor’s baseline schedule of work.
- Perform all necessary construction administration functions as required by the Transportation Authority’s Construction Contract Administration Procedures, Caltrans Standard Specifications, the project Special Provisions, and Caltrans Construction and Local Assistance Procedures Manual including:
 - Perform all required field inspection activities, monitor contractor’s performance and enforce all requirements of applicable codes, specifications, and contract drawings.
 - Provide inspectors for day-to-day on the job observation/inspection of work. The inspectors shall make reasonable efforts to guard against defects and deficiencies in the work of the Construction Contractor and to ensure that provisions of the contract documents are being met.
 - Prepare daily inspection reports documenting observed construction activities.

- Hold weekly progress meetings, weekly or as deemed necessary, between contractors, the Transportation Authority, Caltrans oversight, USCG, TIDA, the City and other interested parties. Prepare and distribute minutes of all meetings.
- Take photographs and videotape recordings of pre-construction field conditions, during construction progress, and post construction conditions.
- Prepare and recommend contractor progress payments including measurements of bid items. Negotiate differences over the amount with the contractor and process payments through the Transportation Authority Project Manager.
- Monitor project budget, purchases and payment.
- Prepare monthly progress reports documenting the progress of construction describing key issues cost status and schedule status.
- Prepare quarterly project status newsletters.
- Establish and process project control documents including:
 - Daily inspection diaries
 - Weekly progress reports
 - Monthly construction payments
 - Requests for Information (RFI)
 - Material certifications
 - Material Submittals
 - Weekly Statement of Working Days
 - Construction Change Orders
 - Review of certified payrolls
- Review of construction schedule updates:
 - Review construction contractor's monthly updates incorporating actual progress, weather delays and change order impacts. Compare work progress with planned schedule and notify construction contractor of project slippage. Review Construction Contractor's plan to mitigate schedule delay. Analyze the schedule to determine the impact of weather and change orders.
- Evaluate, negotiate, recommend, and prepare change orders. Perform quantity and cost analysis as required for negotiation of change orders.
- Analyze additional compensation claims submitted by the Construction Contractor and prepare responses. Perform claims administration including coordinating and monitoring claims responses, logging claims and tracking claims status.
- Process all Construction Contractor submittals and monitor design consultant and Caltrans review activities.
- Review, comment and facilitate responses to RFI's. Prepare responses to RFI on construction issues. Transmit design related RFI's to designer. Conduct meetings with Construction Contractor and other parties as necessary to discuss and resolve RFI's.

- Act as construction project coordinator and the point of contact for all communications and interaction with the Construction Contractor, Caltrans, USCG, TIDA, the City, US Navy, project designer and all affected parties.
- Schedule, manage and perform construction staking in accordance with the methods, procedures and requirements of Caltrans Surveys Manual and Caltrans Staking Information Booklet.
- Schedule, manage, perform and document all field and laboratory testing services. Ensure the Construction Contractor furnishes Certificates of Compliance or source release tags with the applicable delivered materials at the project site. Materials testing shall conform to the requirements and frequencies as defined in the Transportation Authority's Construction Contract Administration Procedures, Caltrans Construction Manual and the Caltrans Materials Testing Manuals.
- Coordinate and meet construction oversight requirements of Caltrans, USCG, TIDA, the City and the US Navy for work being performed within the respective jurisdictions. Construction Manager shall be responsible for coordinating with Caltrans, USCG, TIDA and the City regarding traffic control measures, press releases, responses to public inquiries, and complaints regarding the project.
- Oversee environmental mitigation monitoring performed under a separate contract by the Transportation Authority's design and environmental consultant team. Monitor and enforce Construction Contractor SWPPP compliance.
- Enforce safety and health requirements and applicable regulations for the protection of the public and project personnel.
- Facilitate all necessary utility coordination with respective utility companies.
- Provide coordination and review of Construction Contractor's detours and staging plans with Caltrans, and SFOBB construction management staff.
- Maintain construction documents per Federal and State requirements. Enforce Labor Compliance requirements.
- Quality Assurance/Quality Control (QA/QC) – Establish and implement a QA/QC procedure for construction management activities undertaken by in-house staff and by subconsultants. The QA/QC procedure set forth for the project shall be consistent with Caltrans' most recent version of the "Guidelines for Quality Control/Quality Assurance for Project Delivery". Enforce Quality Assurance requirements.

Phase 3 - Post-Construction Services

- Perform Post Construction Phase activities including:
 - Prepare initial punch list and final punch list items.
 - Finalize all bid item, claims, and change orders. Provide contract change order documentation to project designer. Coordinate preparation of record drawings (as-built drawings) by project designer.

- Provide final inspection services and project closeout activities, including preparation of a final construction project report per Federal and State requirements.
- Turn all required construction documents over to Transportation Authority and Caltrans for archiving.

General Project Administration

The Construction Manager will also perform the following general project administrative duties:

- a) Prepare a monthly summary of total construction management service charges made to each task. This summary shall present the contract budget for each task, any re-allocated budget amounts, the prior billing amount, the current billing, total billed to date, and a total percent billed to date. Narratives will contain a brief analysis of budget-to-actual expenditure variances, highlighting any items of potential concern for Transportation Authority consideration before an item becomes a funding issue.
- b) Provide a summary table in the format determined by the Transportation Authority indicating the amount of DBE firm participation each month based upon current billing and total billed to date.
- c) Provide a monthly invoice in the standard format determined by the Transportation Authority that will present charges by task, by staff members at agreed-upon hourly rates, with summary expense charges and subconsultant charges. Detailed support documentation for all Construction Manager direct expenses and subconsultant charges will be attached.

The selected Construction Manager shall demonstrate the availability of qualified personnel to perform construction engineering and construction contract administration.

The Construction Manager shall maintain a suitable construction field office in the project area for the duration of the project. Under a separate contract with the Transportation Authority, the Construction Contractor will be required to provide a construction trailer for the construction management team's use which shall include desks, layout table, phone, computers, fax machine, reproduction machine, file cabinets and for use for weekly construction meetings. The Construction Manager shall provide all necessary safety equipment required for their personnel to perform the work efficiently and safely. The Construction Manager personnel shall be provided with radio or cellular-equipped vehicles, digital camera, and personal protective equipment suitable for the location and nature of work involved.

The Construction Manager shall provide for the consultant field personnel a fully operable, maintained and fueled pick-up truck which is suitable for the location and nature of work to be performed (automobiles and vans without side windows are not suitable). Each vehicle shall be equipped with an amber flashing warning light visible from the rear and having a driver control switch.

The Construction Manager field personnel shall perform services in accordance with Caltrans and FHWA criteria and guidelines and subject to the following general requirements:

All reports, calculations, measurements, test data and other documentation shall be prepared on forms specified and/or consistent with Caltrans standards.

All construction management services and construction work must comply with the requirements of the Transportation Authority, Caltrans, USCG and TIDA. The selected Construction Manager will report directly to Eric Cordoba, the Transportation Authority's Project Manager.

The Construction Manager shall demonstrate competency in all fields of expertise required by this RFP. The Transportation Authority is undertaking this effort in its capacity as the Congestion Management Agency (CMA) for San Francisco and in cooperation with TIDA, the City's Mayor's Office, and Caltrans District 4.

Attachment 2
**Construction Management Services for the Yerba Buena Island Southgate Road
Realignment Improvements**
Scope of Services

The Transportation Authority will be using the more traditional Design-Bid-Build project delivery method for Yerba Buena Island (YBI) Southgate Road Realignment Improvements. The construction management contract for the YBI Southgate Road Realignment Improvements project will consist of a three-phase effort with Phase 1 consisting of pre-construction services; Phase 2 consisting of construction phase management services, and Phase 3 consisting of post construction phase services.

The construction management (CM) services required will include:

Phase 1 – Pre-Construction Services

- Perform constructability review of the construction contract documents (construction plans, special provisions, bid proposal and relevant information) for the project and submit a constructability report on discrepancies, inconsistencies, omissions, ambiguities, proposed changes and recommendations.
- Perform biddability review of the 100% contract documents (construction plans, special provisions, bid proposal and relevant information) for the project and submit a biddability report on discrepancies, inconsistencies, omissions, ambiguities, proposed changes and recommendations.
- Prepare a detailed CPM construction schedule including pre-construction and construction activities.
- Management of the construction contract bidding phase; and management of the pre-bid conference and bid opening procedures including review of bids, bid bonds, insurance certificates and related contractor bid proposal submittals; and assist the Transportation Authority in selecting the recommended lowest qualified bidder.
- Process construction contract for execution by the contractor.
- Arrange for, coordinate and conduct a pre-construction conference, including preparation of meeting minutes.
- Complete review, comment and approval of the Construction Contractor’s baseline schedule of work.

Phase 2 – Construction Phase Services

- Perform all necessary construction administration functions as required by the Transportation Authority’s Construction Contract Administration Procedures, Caltrans Standard Specifications, the project Special Provisions, and Caltrans Construction and Local Assistance Procedures Manual including:
 - Perform all required field inspection activities, monitor contractor’s performance and enforce

all requirements of applicable codes, specifications, and contract drawings.

- Provide inspectors for day-to-day on the job observation/inspection of work. The inspectors shall make reasonable efforts to guard against defects and deficiencies in the work of the Construction Contractor and to ensure that provisions of the contract documents are being met.
- Prepare daily inspection reports documenting observed construction activities.
- Hold weekly progress meetings, weekly or as deemed necessary, between contractors, the Transportation Authority, Caltrans oversight, USCG, TIDA, the City and other interested parties. Prepare and distribute minutes of all meetings.
- Take photographs and videotape recordings of pre-construction field conditions, during construction progress, and post construction conditions.
- Prepare and recommend contractor progress payments including measurements of bid items. Negotiate differences over the amount with the contractor and process payments through the Transportation Authority Project Manager.
- Monitor project budget, purchases and payment.
- Prepare monthly progress reports documenting the progress of construction describing key issues cost status and schedule status.
- Prepare quarterly project status newsletters.
- Establish and process project control documents including:
 - Daily inspection diaries
 - Weekly progress reports
 - Monthly construction payments
 - Requests for Information (RFI)
 - Material certifications
 - Material Submittals
 - Weekly Statement of Working Days
 - Construction Change Orders
 - Review of certified payrolls
- Review of construction schedule updates:
 - Review construction contractor's monthly updates incorporating actual progress, weather delays and change order impacts. Compare work progress with planned schedule and notify construction contractor of project slippage. Review Construction Contractor's plan to mitigate schedule delay. Analyze the schedule to determine the impact of weather and change orders.
- Evaluate, negotiate, recommend, and prepare change orders. Perform quantity and cost analysis as required for negotiation of change orders.
- Analyze additional compensation claims submitted by the Construction Contractor and prepare responses. Perform claims administration including coordinating and monitoring claims

responses, logging claims and tracking claims status.

- Process all Construction Contractor submittals and monitor design consultant and Caltrans review activities.
- Review, comment and facilitate responses to RFI's. Prepare responses to RFI on construction issues. Transmit design related RFI's to designer. Conduct meetings with Construction Contractor and other parties as necessary to discuss and resolve RFI's.
- Act as construction project coordinator and the point of contact for all communications and interaction with the Construction Contractor, Caltrans, USCG, TIDA, the City, US Navy, project designer and all affected parties.
- Schedule, manage and perform construction staking in accordance with the methods, procedures and requirements of Caltrans Surveys Manual and Caltrans Staking Information Booklet.
- Schedule, manage, perform and document all field and laboratory testing services. Ensure the Construction Contractor furnishes Certificates of Compliance or source release tags with the applicable delivered materials at the project site. Materials testing shall conform to the requirements and frequencies as defined in the Transportation Authority's Construction Contract Administration Procedures, Caltrans Construction Manual and the Caltrans Materials Testing Manuals.
- Coordinate and meet construction oversight requirements of Caltrans, USCG, TIDA, the City and the US Navy for work being performed within the respective jurisdictions. Construction Manager shall be responsible for coordinating with Caltrans, USCG, TIDA and the City regarding traffic control measures, press releases, responses to public inquiries, and complaints regarding the project.
- Oversee environmental mitigation monitoring performed under a separate contract by the Transportation Authority's design and environmental consultant team. Monitor and enforce Construction Contractor SWPPP compliance.
- Enforce safety and health requirements and applicable regulations for the protection of the public and project personnel.
- Facilitate all necessary utility coordination with respective utility companies.
- Provide coordination and review of Construction Contractor's detours and staging plans with Caltrans, and San Francisco Bay Bridge construction management staff.
- Maintain construction documents per Federal and State requirements. Enforce Labor Compliance requirements.
- Quality Assurance/Quality Control (QA/QC) – Establish and implement a QA/QC procedure for construction management activities undertaken by in-house staff and by subconsultants. The QA/QC procedure set forth for the project shall be consistent with Caltrans' most recent version of the "Guidelines for Quality Control/Quality Assurance for Project Delivery". Enforce Quality Assurance requirements.

Phase 3 – Post-Construction Services

- Perform Post Construction Phase activities including:
 - Prepare initial punch list and final punch list items.
 - Finalize all bid item, claims, and change orders. Provide contract change order documentation to project designer. Coordinate preparation of record drawings (as-built drawings) by project designer.
 - Provide final inspection services and project closeout activities, including preparation of a final construction project report per Federal and State requirements.
 - Turn all required construction documents over to Transportation Authority and Caltrans for archiving.

General Project Administration

The Construction Manager will also perform the following general project administrative duties:

- a) Prepare a monthly summary of total construction management service charges made to each task. This summary shall present the contract budget for each task, any re-allocated budget amounts, the prior billing amount, the current billing, total billed to date, and a total percent billed to date. Narratives will contain a brief analysis of budget-to-actual expenditure variances, highlighting any items of potential concern for Authority consideration before an item becomes a funding issue.
- b) Provide a summary table in the format determined by the Transportation Authority indicating the amount of DBE firm participation each month based upon current billing and total billed to date.
- c) Provide a monthly invoice in the standard format determined by the Transportation Authority that will present charges by task, by staff members at agreed-upon hourly rates, with summary expense charges and subconsultant charges. Detailed support documentation for all Construction Manager direct expenses and subconsultant charges will be attached.

The Construction Manager shall demonstrate the availability of qualified personnel to perform construction engineering and construction contract administration.

The Construction Manager shall maintain a suitable construction field office in the project area for the duration of the project. Under a separate contract with the Transportation Authority, the Construction Contractor will be required to provide a construction trailer for the construction management team's use which shall include desks, layout table, phone, computers, fax machine, reproduction machine, file cabinets and for use for weekly construction meetings. The Construction Manager shall provide all necessary safety equipment required for their personnel to perform the work efficiently and safely. The Construction Manager personnel shall be provided with radio or cellular-equipped vehicles, digital camera, and personal protective equipment suitable for the location and nature of work involved.

The Construction Manager shall provide for the consultant field personnel a fully operable, maintained and fueled pick-up truck which is suitable for the location and nature of work to be performed (automobiles and vans without side windows are not suitable). Each vehicle shall be equipped with an amber flashing warning light visible from the rear and having a driver control switch.

The Construction Manager field personnel shall perform services in accordance with Caltrans and FHWA criteria and guidelines and subject to the following general requirements:

All reports, calculations, measurements, test data and other documentation shall be prepared on forms specified and/or consistent with Caltrans standards.

All construction management services and construction work must comply with the requirements of the Authority, Caltrans, USCG and TIDA. The selected Construction Manager will report directly to Eric Cordoba, the Transportation Authority's Project Manager.

The successful Construction Manager shall demonstrate competency in all fields of expertise required by this RFP. The Transportation Authority is undertaking this effort in its capacity as CMA for San Francisco and in cooperation with TIDA, the City's Mayor's Office, and Caltrans District 04.