



# Memorandum

## AGENDA ITEM 10

**DATE:** February 17, 2023

**TO:** Transportation Authority Board

**FROM:** Carl Holmes - Deputy Director for Capital Projects

**SUBJECT:** 03/14/23 Board Meeting: Award a Construction Contract to Golden State Bridge/Obayashi Joint Venture in an Amount not to Exceed \$84,399,951 and Authorize an Additional Construction Allotment of \$15,188,818; Approve a Contract Amendment with WMH Corporation in the Amount of \$2,470,000; Approve a Contract Amendment with WSP USA, Inc. in the Amount of \$5,940,382; and Authorize the Executive Director to Execute All Other Related Supporting and Supplemental Agreements for the Westside Bridges Seismic Retrofit Project

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| <p><b>RECOMMENDATION</b>   <input type="checkbox"/> Information   <input checked="" type="checkbox"/> Action</p> <ul style="list-style-type: none"> <li>• Authorize the Executive Director to Award a construction contract to the Construction Manager/General Contractor (CM/GC), Golden State Bridge/Obayashi Joint Venture (GSB/Obayashi JV) in an amount not to exceed \$84,399,951 for the Westside Bridges Seismic Retrofit Project (Project)</li> <li>• Authorize an additional construction allotment of \$15,188,818 for the Project</li> <li>• Approve a contract amendment with WMH Corporation (WMH) to increase the contract by \$2,470,000, to a revised not to exceed amount of \$17,770,000, to perform design services during construction for the Project</li> <li>• Approve a contract amendment with WSP USA, Inc. (WSP) to increase the contract by \$5,991,292, to a revised not to exceed amount of \$11,491,292, to perform construction management services for the Project</li> <li>• Authorize the Executive Director to negotiate and modify contract payment terms and non-material terms and conditions</li> <li>• Authorize the Executive Director to execute all other related supporting and supplemental agreements for the Project</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Fund Allocation</li> <li><input type="checkbox"/> Fund Programming</li> <li><input type="checkbox"/> Policy/Legislation</li> <li><input type="checkbox"/> Plan/Study</li> <li><input type="checkbox"/> Capital Project Oversight/Delivery</li> <li><input type="checkbox"/> Budget/Finance</li> <li><input checked="" type="checkbox"/> Contract/Agreement</li> <li><input type="checkbox"/> Other:<br/>_____</li> </ul> |
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**SUMMARY**

As the project sponsor for the Yerba Buena Island (YBI) Westside Bridges Seismic Retrofit Project (Project), we will be administering construction work for the Project. The Project has significant complex technical and topographic construction challenges, and as a result in March 2018, and as authorized by Assembly Bill (AB) 2374, the Board approved the use of the Construction Manager/General Contractor (CM/GC) project delivery method. In October 2018, through Resolution 19-17, the Board awarded a professional services contract to GSB/Obayashi JV to provide the CM/GC preconstruction services for the Project. As authorized under the CM/GC delivery method, we have reached an agreement on an Agreed Price with GSB/Obayashi JV and are seeking Board approval to award a construction contract to GSB/Obayashi JV in the agreed upon amount. Additionally, contract amendments with WMH and WSP have been negotiated to complete design services during construction and construction management services for the construction phase, respectively. Execution of proposed contracts and contract amendments are contingent upon the obligation of the remaining federal and state grants to fully fund the \$115,900,288 construction phase for the Project (Attachment 1).

**BACKGROUND**

We are leading the Westside Bridges Seismic Retrofit Project (Project) on behalf of the Treasure Island Development Authority (TIDA). The Project will replace seven seismically deficient bridges and retrofit one bridge with a realigned roadway and retaining walls, a Class II bicycle facility, and a transit-only access on-ramp. This project will be challenging to implement, given its unique location along the western edge of Yerba Buena Island along steep terrain on the hillside overlooking the San Francisco Bay. In addition to the challenging location, the project presents numerous complex structural (bridge/retaining wall foundations) and geotechnical challenges (unstable soils), as well as difficult construction access (very steep terrain) and environmental constraints (construction adjacent to and above the San Francisco Bay). As such, the Project is being delivered using the CM/GC delivery method, as authorized by AB 2374 and approved by the Board in March 2018 through Resolution 18-42.

In October 2018, through Resolution 19-17, we awarded a professional services contract to GSB/Obayashi JV to provide the CM/GC preconstruction services for the Project. Under the CM/GC project delivery method, we have engaged GSB/Obayashi JV, a construction contractor, during the project design process to act in an advisory role and to provide valuable preconstruction input during design with the goal of lowering overall construction time and construction risks. GSB/Obayashi JV provided constructability reviews, value engineering suggestions, construction estimates, and other



construction-related recommendations. The Request for Qualifications issued in July 2018 required the selected Contractor to prepare and submit an Agreed Price for the labor, equipment, and materials that will be required to construct the project based on the design process, plans, specifications, and estimate packages of the Project. If the Agreed Price is accepted by the Transportation Authority, a construction contract will be issued to the Contractor after the completion of the preconstruction phase so that construction of the project can begin. As authorized by AB 2374 under the CM/GC delivery method and in accordance with our CM/GC Procedures, we have reached an agreement with GSB/Obayashi JV on an Agreed Price near the completion of the Final Design of the Project, and now we are seeking Board approval to authorize the Executive Director to award a construction contract to GSB/Obayashi JV.

The projected construction phase cost, totaling \$115,900,288, is funded with federal Highway Bridge Program and Rebuilding American Infrastructure with Sustainability and Equity (RAISE) funds, state Proposition 1B and Local Partnership Program funds, and local TIDA, Bay Area Toll Authority, Prop K sales tax funds approved through Resolution 23-22, and a federal earmark. We are pleased to report that the Project secured a significant amount of funding in the last two months, consistent with the full funding plan we presented to the Board last year. We anticipate obligation of remaining federal and state grant funds by the end of March or early April 2023 to support commencement of the Project's construction phase. The Project's construction phase funding plan is included as Attachment 1. The Project schedule anticipates beginning construction in summer 2023 and completion by the end of calendar year 2026.

## **DISCUSSION**

**CM/GC Construction Contract Negotiations and Oversight.** With the CM/GC Project Delivery Method, three estimating teams are used, the CM/GC (GSB/Obayashi JV), Armeni Consulting Services (Independent Cost Estimator), and HDR Engineering (Engineering Estimator). Armeni Consulting Services and HDR Engineering are sub-consultants under WSP's contract for construction management services. The Independent Cost Estimator estimates are not disclosed to the CM/GC. Each estimating team independently prepares a contractor-style, production-based, cost estimate that was based on the construction plans and specifications developed by the Design Engineering Team at the 30%, 60% and 100% design milestone. The estimates are referred to as an Opinion of Probable Construction Cost (OPCC). The three estimating teams are utilized in the CM/GC process to ensure the CM/GC estimate is reasonable and Caltrans headquarters and Federal Highway Administration staff participated in the OPCC process as well.

**Final Price Reconciliation Meeting.** At the 100% OPCC milestone, a Final Price Reconciliation Meeting was held. Following the submission of the estimates, Transportation Authority staff and project management consultants, the Design Engineering Team (WMH), GSB/Obayashi JV, the Independent Cost Estimator and the Engineering Estimator attended Price Reconciliation Meetings. Consistent with the Transportation Authority CM/GC Procedures, at the conclusion of Quantity and Price Reconciliation processes, we found the Contractor cost of \$84,399,951 is within the available Project budget and is within 2.7% of the Transportation Authority estimator and Independent Cost Estimator cost estimates, a reasonable threshold. A detailed bid item list is included in Attachment 2.



Consistent with Caltrans' practice for CM/GC preconstruction services, we did not establish a Disadvantaged Business Enterprise (DBE) goal for GSB/Obayashi JV for this phase of work. The construction contract established an 11% DBE Goal. During the CM/GC OPCC process, GSB/Obayashi JV developed a DBE performance plan which addressed the manner in which the CM/GC intended to meet the DBE goals and requirements, as well as address monitoring and reporting requirements during construction. GSB/Obayashi JV exceeded the contract goal of 11% and has committed to a 12.94% DBE utilization.

**Additional Construction Allotment.** In order to construct the project, we will need to enter into agreements with other agencies/entities, including but not limited to the California Highway Patrol, the San Francisco Public Utilities Commission, San Francisco Municipal Transportation Agency, San Francisco Public Works, to purchase state/agency furnished materials and for these agencies/entities to oversee select portions of the construction contractor's work. The construction phase budget includes \$6,722,777 for supplemental funds and agency furnished materials as well as finance costs. A list of supplemental work items, agency furnished materials and finance costs are included in Attachment 3. We also established an additional contingency of \$8,466,041, or 9.5% of total anticipated construction costs. The Project will fund 23 trainees, in accordance with the Federal Training Program requirements, with contingency funds. The additional construction allotment is \$15,188,818. Funding is programmed to cover this allotment and we are working on final obligation of those funds.

**WMH Contract Amendment.** In December 2010 through Resolution 11-28, we awarded a two-year contract in the amount of \$1,600,000 to WMH for engineering and environmental services to produce the necessary documentation to prepare the Seismic Strategy Reports, environmental documentation, and preliminary design for the YBI Westside Bridges Project. The original Request for Qualifications for engineering and environmental services stated that the Project was envisioned as a three-phase effort and included the option to amend the contract for Phase 2 (environmental) and Phase 3 (final design efforts, including design services during construction) based on adequate funding and satisfactory performance. From February 2012 through October 2018, we increased the contract with WMH by \$13,700,000 (Resolution 12-34, Resolution 15-18, Resolution 19-17) to conduct Phase 2 and 3 services (environmental, preliminary engineering and final design) for the project, including a re-scoping of the project as a result of Caltrans' changes to the project funding plan.

Concurrent with the recommendation to award a contract for the CM/GC construction contract, we are seeking approval to amend the WMH contract to provide Phase 3 final design services during construction for the Project. The proposed amendment to the WMH contract would increase the existing contract amount by \$2,470,000, to a total amount not to exceed \$17,770,000, and extend the contract through December 31, 2026. The proposed contract amendment scope of services is included as Attachment 4.

To date, WMH has exceeded its 12% DBE goal and maintained 14.9% DBE participation from five sub-consultants: women-owned firms ABA, David J. Powers and Associates Inc. and Haygood & Associates



Landscape Architects; and Asian Pacific-owned firms, Earth Mechanics, Inc., CVS & Associates, Inc., MGE Engineering, Inc. and Y&C Transportation Consultants. ABA is also based in San Francisco.

**WSP Contract Amendment.** In July 2017, we awarded a four-year professional services contract to WSP in an amount not to exceed \$5,500,000 for construction management services for the Project. The construction management contract consists 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 original overall WSP contract duration for Phase 1, 2, and 3 services was anticipated to be completed in 46 months, with Phase 1 lasting 23 months, Phase 2 lasting 20 months, and Phase 3 lasting 3 months. Concurrent with the recommendation to award a contract for the CM/GC construction contract, we are seeking approval to amend the WSP contract to provide construction management services for the Project.

To date, WSP has been authorized to work on Phase 1, pre-construction services only. Phase 1 services started in April of 2018 and was expected to be completed in March 2020, but the duration for providing services been extended to December 2022, duration increasing to 57 months due to a re-scoping of the project as a result of Caltrans' changes to the project funding plan. WSP's original Phase 1 budget was \$753,020 and with the increased duration and activities discussed below, the budget for WSP Phase 1 preconstruction services was increased to \$1,332,994. During the term of the Phase 1 preconstruction services, WSP provided additional pre-construction support for cost estimating services, construction sequencing analysis, risk analysis and scheduling, and RAISE Grant application support. WSP has also provided coordination activities with TIDA/YBI Developer, Right-of-Way and utility support, and project management support activities.

With respect to Phase 2 and Phase 3, during the design process, due to the construction complexity, along with geotechnical and topographically challenges, it was determined the duration of construction has increased from 20 months to 44 months. Also, the RAISE Grant requires performance measure reporting for three years after construction completion. Accordingly, WSP's original Phase 2/Phase 3 budget is increasing from \$4,746,980 to \$10,158,298.

The overall proposed amendment to the WSP contract would increase the existing contract amount by \$5,991,292 in order to complete Phase 2 and 3 tasks with construction and closeout schedule now determined, to a total amount not to exceed \$11,491,292, and extend the contract through December 31, 2029. The proposed contract amendment scope of services is included as Attachment 5.

WSP construction management services contract had an established DBE goal of 10.2% DBE participation. With this amendment, WSP will exceed the DBE goal with an estimated 13.07% participation. DBE participation will be utilized from four sub-consultants: San Francisco-based and African American-owned firms, BioMaAs, Inc. and Transamerican Engineers & Associates; Asian-Pacific American and female-owned firm, Inspection Services, Inc.; and female-owned firm, KL Bartlett Consulting.

**Budget.** The overall Project Construction Phase Budget of \$115,900,288 is shown on the following table:



**Project Construction Phase Budget**

| <b>Budget Item</b>                | <b>Budget Amount</b>  |
|-----------------------------------|-----------------------|
| Base Construction Contract        | \$ 84,399,951         |
| Additional Construction Allotment | \$ 15,188,818         |
| Construction Engineering          | \$ 16,311,519         |
| <b>Total Construction Budget</b>  | <b>\$ 115,900,288</b> |

**Schedule.** The Project schedule is projected as follows:

- Award Construction Contract – March 2023
- Execute Construction Contract – April 2023
- Issue Notice to Proceed (NTP) to Contractor – May 2023
- Forest Road Detour Opened to Traffic – June 2023
- Construction Completion – December 2026
- Performance Measurement Reporting Completed – December 2029

**Risks.** There are several items/projects that need to be completed before the Project construction contract can be awarded and construction can start. The obligation of the remaining federal and state grants to fully fund the \$115,900,288 construction phase is required before we can award the Project construction contract. The obligation of these funds is expected in late March or early April 2023. In addition, before construction can start the Forest Road Detour needs to be completed, the Department of Public Works needs to issue a construction permit, and the Southgate Road Realignment Project needs to be opened to traffic. The project team anticipates receiving the SF Public Works construction permit in March 2023 and to open the Southgate Road Realignment Project to traffic in April 2023. The Forest Road Detour is being constructed by the YBI Developer and is expected to be completed in late May 2023.

**FINANCIAL IMPACT**

The proposed construction phase contracts will be funded by the various federal, state and local funding sources, including Prop K, discussed above and listed in Attachment 1. Execution of the proposed contracts and contract amendments are contingent upon the obligation of federal Highway Bridge Program and RAISE funding, as well as state Proposition 1B funding from Caltrans, anticipated to be received by March 2023. Work will not commence until funding is obligated. In addition, we estimated \$1,915,000 in financing costs for the construction phase of the Project due to the advancement of Prop K funds to pay for Project costs. Interest will accrue on all outstanding unreimbursed Project costs until we receive reimbursements from the various funding sources noted above, which will be covered by TIDA and/or Prop K appropriation. The first year’s activities will be included in the Fiscal Year 2022/23 budget amendment, and sufficient funds will be included in future budgets to cover the remaining cost of the contracts.



## **CAC POSITION**

The CAC will consider this item at its February 22, 2023 meeting.

## **SUPPLEMENTAL MATERIALS**

- Attachment 1 - Westside Bridges Seismic Retrofit Project Construction Phase Funding Plan
- Attachment 2 – Westside Bridges Seismic Retrofit Project Construction Bid Item List
- Attachment 3 – Supplemental Work Items/Agency Furnished Materials/Finance Costs – Budgeted Costs
- Attachment 4 – Scope of Services for WMH Contract Amendment
- Attachment 5 - Scope of Services for WSP Contract Amendment

**Attachment 1**  
**West Side Bridges Construction Phase Funding Plan**

| <b>Construction Phase Funding</b>  | <b>Amount</b>         |
|--|-----------------------|
| Federal Highway Bridge Program   | \$ 59,135,737         |
| State Prop 1B Local Bridge Seismic   | \$ 7,104,551          |
| Federal RAISE grant  | \$ 18,000,000         |
| Bay Area Toll Authority  | \$ 2,000,000          |
| San Francisco share SB 1 Local Partnership Program Formula funds           | \$ 4,056,000          |
| Bay Area Toll Authority share SB 1 Local Partnership Program Formula funds | \$ 5,000,000          |
| Treasure Island Development Authority                                      | \$ 3,505,000          |
| Prop K (via OBAG fund exchange)  | \$ 14,899,000         |
| Federal Earmark  | \$ 2,200,000          |
| <b>Total funding</b>   | <b>\$ 115,900,288</b> |



ATTACHMENT 2  
YERBA BUENA ISLAND WESTSIDE BRIDGES SEISMIC RETROFIT PROJECT  
BID ITEM LIST  
Golden State Bridge/Obayashi Joint Venture

| Item No | Item Description   | Units         | Quantity     | Unit Price      | Item Total      |
|---------|--|---------------|--------------|-----------------|-----------------|
| 1       | LEAD COMPLIANCE PLAN   | LS            | 1            | \$ 17,000.00    | \$ 17,000.00    |
| 2       | PROGRESS SCHEDULE (CRITICAL PATH METHOD)                     | LS            | 1            | \$ 7,500.00     | \$ 7,500.00     |
| 3       | DEVELOP WATER SUPPLY   | LS            | 1            | \$ 110,000.00   | \$ 110,000.00   |
| 4       | CONSTRUCTION AREA SIGNS                                      | LS            | 1            | \$ 40,000.00    | \$ 40,000.00    |
| 5       | TRAFFIC CONTROL SYSTEM                                       | LS            | 1            | \$ 897,190.00   | \$ 897,190.00   |
| 6       | TYPE III BARRICADE   | EA            | 12           | \$ 125.00       | \$ 1,500.00     |
| 7       | <del>TEMPORARY TRAFFIC STRIPE (PAINT)</del>                  | <del>LF</del> | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 8       | <del>PLASTIC TRAFFIC DRUMS</del>                             | <del>EA</del> | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 9       | <del>TEMPORARY PAVEMENT MARKER</del>                         | <del>EA</del> | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 10      | PORTABLE CHANGEABLE MESSAGE SIGN (EA)                        | EA            | 2            | \$ 30,000.00    | \$ 60,000.00    |
| 11      | TEMPORARY RAILING (TYPE K)                                   | LF            | 500          | \$ 150.00       | \$ 75,000.00    |
| 12      | TEMPORARY ALTERNATIVE CRASH CUSHION                          | EA            | 2            | \$ 5,300.00     | \$ 10,600.00    |
| 13      | JOB SITE MANAGEMENT  | LS            | 1            | \$ 675,000.00   | \$ 675,000.00   |
| 14      | PREPARE STORM WATER POLLUTION PREVENTION PLAN                | LS            | 1            | \$ 10,000.00    | \$ 10,000.00    |
| 15      | MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)                 | EA            | 4            | \$ 815.00       | \$ 3,260.00     |
| 16      | TEMPORARY HYDRULIC MULCH (BONDED FIBER MATRIX)               | SQYD          | 80400        | \$ 1.90         | \$ 152,760.00   |
| 17      | TEMPORARY DRAINAGE INLET PROTECTION                          | EA            | 17           | \$ 390.00       | \$ 6,630.00     |
| 18      | TEMPORARY FIBER ROLL   | LF            | 5350         | \$ 7.50         | \$ 40,125.00    |
| 19      | TEMPORARY REINFORCED SILT FENCE                              | LF            | 1810         | \$ 20.00        | \$ 36,200.00    |
| 20      | TEMPORARY CONSTRUCTION ENTRANCE                              | EA            | 4            | \$ 12,500.00    | \$ 50,000.00    |
| 21      | STREET SWEEPING  | LS            | 1            | \$ 950,000.00   | \$ 950,000.00   |
| 22      | TEMPORARY CONCRETE WASHOUT                                   | LS            | 1            | \$ 83,000.00    | \$ 83,000.00    |
| 23      | REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE) | LF            | 2218         | \$ 6.10         | \$ 13,529.80    |
| 24      | TREATED WOOD WASTE   | LB            | 75000        | \$ 0.30         | \$ 22,500.00    |
| 25      | CONTRACTOR-SUPPLIED BIOLOGIST                                | DAYS          | 168          | \$ 1,570.00     | \$ 263,760.00   |
| 26      | VIBRATION MONITORING   | LS            | 1            | \$ 210,000.00   | \$ 210,000.00   |
| 27      | CLEARING AND GRUBBING (LS)                                   | LS            | 1            | \$ 62,000.00    | \$ 62,000.00    |
| 28      | ROADWAY EXCAVATION   | CY            | 15158        | \$ 95.00        | \$ 1,440,010.00 |
| 29      | ROADWAY EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)       | CY            | 2190         | \$ 430.00       | \$ 941,700.00   |
| 30      | STRUCTURE EXCAVATION (BRIDGE)                                | CY            | 5684         | \$ 68.00        | \$ 386,512.00   |
| 31      | STRUCTURE EXCAVATION (RETAINING WALL)                        | CY            | 9948         | \$ 491.00       | \$ 4,884,468.00 |
| 32      | STRUCTURE BACKFILL (BRIDGE)                                  | CY            | 910          | \$ 750.00       | \$ 682,500.00   |
| 33      | STRUCTURE BACKFILL (RETAINING WALL)                          | CY            | 8921         | \$ 230.00       | \$ 2,051,830.00 |
| 34      | <del>LIGHTWEIGHT BACKFILL MATERIAL (CELLULAR CONCRETE)</del> | <del>CY</del> | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 35      | SUBGRADE ENHANCEMENT GEOTEXTILE                              | SY            | 50           | \$ 20.00        | \$ 1,000.00     |
| 36      | CONCRETE BACKFILL (SOLDIER PILE WALL)                        | CY            | 672          | \$ 942.00       | \$ 633,024.00   |
| 37      | LEAN CONCRETE BACKFILL                                       | CY            | 130          | \$ 942.00       | \$ 122,460.00   |
| 38      | MOVE-IN/MOVE-OUT (EROSION CONTROL)                           | EA            | 2            | \$ 815.00       | \$ 1,630.00     |
| 39      | ROLLED EROSION CONTROL PRODUCT (NETTING)                     | SQFT          | 60300        | \$ 0.82         | \$ 49,446.00    |
| 40      | EROSION CONTROL (WIRE MESH BLANKET)                          | SQFT          | 36900        | \$ 21.50        | \$ 793,350.00   |
| 41      | HYDROMULCH   | SQFT          | 60300        | \$ 0.12         | \$ 7,236.00     |
| 42      | FIBER ROLLS  | LF            | 6275         | \$ 5.00         | \$ 31,375.00    |
| 43      | STRAW  | SQFT          | 60300        | \$ 0.20         | \$ 12,060.00    |
| 44      | HYDROSEED  | SQFT          | 60300        | \$ 0.20         | \$ 12,060.00    |
| 45      | COMPOST (CY)   | CY            | 70           | \$ 335.00       | \$ 23,450.00    |
| 46      | PERMANENT EROSION CONTROL ESTABLISHMENT WORK                 | LS            | 1            | \$ 78,000.00    | \$ 78,000.00    |

ATTACHMENT 2  
YERBA BUENA ISLAND WESTSIDE BRIDGES SEISMIC RETROFIT PROJECT  
BID ITEM LIST  
Golden State Bridge/Obayashi Joint Venture

| Item No | Item Description                                       | Units          | Quantity     | Unit Price    | Item Total      |
|---------|--|----------------|--------------|---------------|-----------------|
| 47      | CONCRETE BASE  | CY             | 2103         | \$ 600.00     | \$ 1,261,800.00 |
| 48      | <del>SLURRY SEAL</del>                                 | <del>TON</del> | <del>—</del> | <del>—</del>  | <del>—</del>    |
| 49      | HOT MIX ASPHALT (TYPE A)                               | TON            | 2680         | \$ 230.00     | \$ 616,400.00   |
| 50      | COLD PLANE ASPHALT CONCRETE PAVEMENT                   | SQYD           | 304          | \$ 95.00      | \$ 28,880.00    |
| 51      | GROUND ANCHOR (TIEBACK)                                | EA             | 251          | \$ 20,000.00  | \$ 5,020,000.00 |
| 52      | GROUND ANCHOR (SUBHORIZONTAL)                          | EA             | 117          | \$ 20,000.00  | \$ 2,340,000.00 |
| 53      | SOIL NAIL  | LF             | 11616        | \$ 145.00     | \$ 1,684,320.00 |
| 54      | STEEL SOLDIER PILE (W 14 x 68)                         | LF             | 655          | \$ 135.00     | \$ 88,425.00    |
| 55      | STEEL SOLDIER PILE (W 14 x 90)                         | LF             | 1510         | \$ 168.00     | \$ 253,680.00   |
| 56      | STEEL SOLDIER PILE (W 14 x 132)                        | LF             | 1045         | \$ 208.00     | \$ 217,360.00   |
| 57      | STEEL SOLDIER PILE (W 14 x 159)                        | LF             | 140          | \$ 263.00     | \$ 36,820.00    |
| 58      | STEEL SOLDIER PILE (HP 14 x 89)                        | LF             | 3145         | \$ 260.00     | \$ 817,700.00   |
| 59      | 24" DRILLED HOLE                                       | LF             | 555          | \$ 150.00     | \$ 83,250.00    |
| 60      | 30" DRILLED HOLE                                       | LF             | 4289         | \$ 161.00     | \$ 690,529.00   |
| 61      | PERMANENT STEEL CASING (36" X 3/4")                    | LF             | 1178         | \$ 500.00     | \$ 589,000.00   |
| 62      | PERMANENT STEEL CASING (36" X 1")                      | LF             | 2480         | \$ 700.00     | \$ 1,736,000.00 |
| 63      | 30" CAST-IN-DRILLED-HOLE CONCRETE PILING               | LF             | 451          | \$ 368.00     | \$ 165,968.00   |
| 64      | 36" CAST-IN-DRILLED-HOLE CONCRETE PILING               | LF             | 6374         | \$ 355.00     | \$ 2,262,770.00 |
| 65      | 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) | LF             | 352          | \$ 366.00     | \$ 128,832.00   |
| 66      | 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) | LF             | 2421         | \$ 355.00     | \$ 859,455.00   |
| 67      | STRUCTURAL CONCRETE, BRIDGE FOOTING                    | CY             | 77           | \$ 1,500.00   | \$ 115,500.00   |
| 68      | STRUCTURAL CONCRETE (BRIDGE)                           | CY             | 2385         | \$ 2,600.00   | \$ 6,201,000.00 |
| 69      | STRUCTURAL CONCRETE (RETAINING WALL)                   | CY             | 3093         | \$ 2,600.00   | \$ 8,041,800.00 |
| 70      | STRUCTURAL CONCRETE, RETAINING WALL-WALER              | CY             | 195          | \$ 6,500.00   | \$ 1,267,500.00 |
| 71      | STRUCTURAL CONCRETE (BARRIER SLAB)                     | CY             | 385          | \$ 3,000.00   | \$ 1,155,000.00 |
| 72      | STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N (30))       | CY             | 80           | \$ 1,650.00   | \$ 132,000.00   |
| 73      | STRUCTURAL CONCRETE, DRAINAGE INLET                    | CY             | 31           | \$ 6,315.00   | \$ 195,765.00   |
| 74      | MINOR CONCRETE (DRAINAGE CHANNEL)                      | CY             | 63           | \$ 3,250.00   | \$ 204,750.00   |
| 75      | ARCHITECTURAL TREATMENT                                | SQFT           | 19659        | \$ 48.00      | \$ 943,632.00   |
| 76      | DRILL & BOND DOWEL                                     | LF             | 487          | \$ 80.00      | \$ 38,960.00    |
| 77      | DRILL AND BOND (CHEMICAL ADHESIVE)                     | LF             | 134          | \$ 90.00      | \$ 12,060.00    |
| 78      | JOINT SEAL (MR 2")                                     | LF             | 51           | \$ 475.00     | \$ 24,225.00    |
| 79      | BAR REINFORCING STEEL (BARRIER SLAB)                   | LB             | 49141        | \$ 1.70       | \$ 83,539.70    |
| 80      | BAR REINFORCING STEEL (BRIDGE)                         | LB             | 617801       | \$ 1.50       | \$ 926,701.50   |
| 81      | BAR REINFORCING STEEL (RETAINING WALL)                 | LB             | 660429       | \$ 1.90       | \$ 1,254,815.10 |
| 82      | BAR REINFORCING STEEL (RETAINING WALL)-WHALER          | LB             | 94500        | \$ 1.80       | \$ 170,100.00   |
| 83      | BAR REINFORCING STEEL (CIDH CONCRETE PILING)           | LB             | 828917       | \$ 1.70       | \$ 1,409,158.90 |
| 84      | BAR REINFORCING STEEL (RETAINING WALL)-SHOTCRETE       | LB             | 45500        | \$ 2.30       | \$ 104,650.00   |
| 85      | STRUCTURAL SHOTCRETE                                   | CY             | 1988         | \$ 1,675.00   | \$ 3,329,900.00 |
| 86      | STRUCTURAL STEEL (BRIDGE)                              | LB             | 5003         | \$ 40.00      | \$ 200,120.00   |
| 87      | <del>FURNISH SIGN STRUCTURE (TRUSS)</del>              | <del>LB</del>  | <del>—</del> | <del>—</del>  | <del>—</del>    |
| 88      | <del>INSTALL SIGN STRUCTURE (TRUSS)</del>              | <del>LB</del>  | <del>—</del> | <del>—</del>  | <del>—</del>    |
| 89      | TIMBER LAGGING   | MFBM           | 87           | \$ 8,205.00   | \$ 713,835.00   |
| 90      | CLEAN AND PAINT STRUCTURAL STEEL                       | LS             | 1            | \$ 32,500.00  | \$ 32,500.00    |
| 91      | CLEAN AND PAINT STRUCTURAL STEEL (EXISTING BRIDGE)     | LS             | 1            | \$ 32,500.00  | \$ 32,500.00    |
| 92      | SPOT BLAST CLEAN                                       | LS             | 1            | \$ 63,000.00  | \$ 63,000.00    |
| 93      | BRIDGE REMOVAL (PORTION)                               | LS             | 1            | \$ 550,000.00 | \$ 550,000.00   |

ATTACHMENT 2  
YERBA BUENA ISLAND WESTSIDE BRIDGES SEISMIC RETROFIT PROJECT  
BID ITEM LIST  
Golden State Bridge/Obayashi Joint Venture

| Item No        | Item Description  | Units           | Quantity     | Unit Price      | Item Total      |
|----------------|---|-----------------|--------------|-----------------|-----------------|
| 94             | REMOVE RETAINING WALL (LF)  | LF              | 1179         | \$ 475.00       | \$ 560,025.00   |
| 95             | REMOVE RETAINING WALL (ABUTMENT) (LF)                             | LF              | 95           | \$ 445.00       | \$ 42,275.00    |
| 96             | REMOVE CAP BEAM   | LF              | 80           | \$ 1,600.00     | \$ 128,000.00   |
| 97             | REMOVE CRIB WALL  | LF              | 145          | \$ 375.00       | \$ 54,375.00    |
| 98             | REMOVE RETAINING WALL (PORTION) (LF)                              | LF              | 60           | \$ 255.00       | \$ 15,300.00    |
| <del>99</del>  | <del>REMOVE TREE</del>  | <del>EA</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 100            | REMOVE STRUCTURE (BRIDGE No. 2)                                   | LS              | 1            | \$ 1,940,000.00 | \$ 1,940,000.00 |
| 101            | REMOVE STRUCTURE (BRIDGE No. 3)                                   | LS              | 1            | \$ 810,000.00   | \$ 810,000.00   |
| 102            | REMOVE STRUCTURE (BRIDGE No. 4)                                   | LS              | 1            | \$ 660,000.00   | \$ 660,000.00   |
| 103            | REMOVE STRUCTURE (BRIDGE No. 5)                                   | LS              | 1            | \$ 214,000.00   | \$ 214,000.00   |
| 104            | REMOVE STRUCTURE (BRIDGE No. 6)                                   | LS              | 1            | \$ 195,000.00   | \$ 195,000.00   |
| 105            | REMOVE STRUCTURE (BRIDGE No. 7A)                                  | LS              | 1            | \$ 110,000.00   | \$ 110,000.00   |
| 106            | REMOVE STRUCTURE (BRIDGE No. 7B)                                  | LS              | 1            | \$ 210,000.00   | \$ 210,000.00   |
| 107            | REMOVE STRUCTURE (BRIDGE No. 8)                                   | LS              | 1            | \$ 367,000.00   | \$ 367,000.00   |
| 108            | COMPOSITE COLUMN CASINGS  | SQFT            | 448          | \$ 200.00       | \$ 89,600.00    |
| 109            | 8" PLASTIC PIPE   | LF              | 101          | \$ 205.00       | \$ 20,705.00    |
| <del>110</del> | <del>IMPORTED BIOFILTRATION SOIL</del>                            | <del>CY</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 111            | 12" PLASTIC PIPE  | LF              | 326          | \$ 152.00       | \$ 49,552.00    |
| 112            | 18" PLASTIC PIPE  | LF              | 2213         | \$ 167.00       | \$ 369,571.00   |
| <del>113</del> | <del>6" PERFORATED PLASTIC PIPE UNDERDRAIN</del>                  | <del>LF</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| <del>114</del> | <del>CLASS 3 PERMEABLE MATERIAL (BLANKET)</del>                   | <del>CY</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| <del>115</del> | <del>GEOMEMBRANE (WATER BARRIER)</del>                            | <del>SQYD</del> | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 116            | DRAINAGE INLET MARKER   | EA              | 20           | \$ 48.00        | \$ 960.00       |
| 117            | GRATED LINE DRAIN   | LF              | 49           | \$ 785.00       | \$ 38,465.00    |
| <del>118</del> | <del>12" ALTERNATIVE FLARED END SECTION</del>                     | <del>EA</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| <del>119</del> | <del>18" ALTERNATIVE FLARED END SECTION</del>                     | <del>EA</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| <del>120</del> | <del>TRASH CAPTURE DEVICE</del>                                   | <del>EA</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 121            | INLET DEPRESSION  | EA              | 17           | \$ 3,675.00     | \$ 62,475.00    |
| 122            | ABANDON CULVERT (EA)  | EA              | 11           | \$ 7,800.00     | \$ 85,800.00    |
| 123            | ABANDON INLET   | EA              | 3            | \$ 1,500.00     | \$ 4,500.00     |
| 124            | REMOVE CULVERT (LF)   | LF              | 1275         | \$ 42.00        | \$ 53,550.00    |
| 125            | REMOVE INLET  | EA              | 13           | \$ 1,310.00     | \$ 17,030.00    |
| 126            | REMOVE MANHOLE  | EA              | 1            | \$ 17,500.00    | \$ 17,500.00    |
| <del>127</del> | <del>CLEANOUT</del>   | <del>EA</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| <del>128</del> | <del>ROCK SLOPE PROTECTION (60 lb, Class II, METHOD B) (CY)</del> | <del>CY</del>   | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| <del>129</del> | <del>ROCK SLOPE PROTECTION FABRIC (CLASS 8)</del>                 | <del>SQYD</del> | <del>—</del> | <del>\$ —</del> | <del>\$ —</del> |
| 130            | MINOR CONCRETE (6" CITY CURB) (LF)                                | LF              | 854          | \$ 52.00        | \$ 44,408.00    |
| 131            | MINOR CONCRETE (CONCRETE PAD)<br>(MISCELLANEOUS CONSTRUCTION)     | CY              | 0.6          | \$ 2,800.00     | \$ 1,680.00     |
| 132            | REMOVE CONCRETE CURB (LF)   | LF              | 1753         | \$ 14.00        | \$ 24,542.00    |
| 133            | REMOVE CONCRETE (SLOPE PAVING)                                    | SQFT            | 41671        | \$ 5.00         | \$ 208,355.00   |
| 134            | REMOVE CONCRETE (CURB AND GUTTER) (LF)                            | LF              | 465          | \$ 17.00        | \$ 7,905.00     |
| 135            | REMOVE CONCRETE (GUTTER)  | LF              | 1033         | \$ 14.00        | \$ 14,462.00    |
| 136            | REMOVE CONCRETE (STAIRCASE)                                       | CY              | 5            | \$ 3,500.00     | \$ 17,500.00    |
| 137            | REMOVE CONCRETE (SIDEWALK)  | CY              | 8            | \$ 675.00       | \$ 5,400.00     |
| 138            | MISCELLANEOUS IRON AND STEEL                                      | LB              | 10017        | \$ 6.10         | \$ 61,103.70    |
| 139            | CITY MANHOLE  | EA              | 17           | \$ 14,200.00    | \$ 241,400.00   |
| 140            | MISCELLANEOUS METAL (BRIDGE)                                      | LB              | 21315        | \$ 8.00         | \$ 170,520.00   |

ATTACHMENT 2  
YERBA BUENA ISLAND WESTSIDE BRIDGES SEISMIC RETROFIT PROJECT  
BID ITEM LIST  
Golden State Bridge/Obayashi Joint Venture

| Item No        | Item Description                                       | Units           | Quantity     | Unit Price      | Item Total      |
|----------------|--|-----------------|--------------|-----------------|-----------------|
| 141            | MISCELLANEOUS METAL (RETAINING WALL)                   | LB              | 990          | \$ 8.00         | \$ 7,920.00     |
| 142            | BRIDGE DECK DRAINAGE SYSTEM                            | LB              | 950          | \$ 14.00        | \$ 13,300.00    |
| 143            | JOINT UTILITY TRENCH                                   | LF              | 1435         | \$ 390.00       | \$ 559,650.00   |
| 144            | LIGHTING (CITY STREET)                                 | LS              | 1            | \$ 485,000.00   | \$ 485,000.00   |
| 145            | TUNNEL LIGHTING (CITY STREET)                          | LS              | 1            | \$ 475,000.00   | \$ 475,000.00   |
| 146            | ELECTRONIC TOLL SYSTEMS                                | LS              | 1            | \$ 155,000.00   | \$ 155,000.00   |
| 147            | SURVEY MONUMENT (TYPE D)                               | EA              | 6            | \$ 3,500.00     | \$ 21,000.00    |
| 148            | RELOCATE CALTRANS CONTROLLER BOX (LIGHTING)            | LS              | 1            | \$ 12,400.00    | \$ 12,400.00    |
| 149            | REMOVE CONDUIT AND CABLE                               | LF              | 220          | \$ 58.00        | \$ 12,760.00    |
| 149A           | 12" PLASTIC PIPE (AT&T CONDUIT)                        | LF              | 200          | \$ 480.00       | \$ 96,000.00    |
| 150            | UTILITY BOX (AT&T)                                     | EA              | 2            | \$ 20,500.00    | \$ 41,000.00    |
| 151            | CHAIN LINK FENCE (TYPE CL-4, VINYL CLAD)               | LF              | 862          | \$ 70.00        | \$ 60,340.00    |
| 152            | CHAIN LINK FENCE (TYPE CL-6 Mod)                       | LF              | 680          | \$ 565.00       | \$ 384,200.00   |
| 153            | REMOVE PAVEMENT MARKER                                 | EA              | 158          | \$ 5.10         | \$ 805.80       |
| 154            | DELINEATOR (CLASS 1)                                   | EA              | 12           | \$ 52.00        | \$ 624.00       |
| 155            | GUARD RAILING DELINEATOR                               | EA              | 15           | \$ 31.00        | \$ 465.00       |
| 156            | PAVEMENT MARKER (RETROREFLECTIVE)                      | EA              | 245          | \$ 6.20         | \$ 1,519.00     |
| 157            | OBJECT MARKER  | EA              | 12           | \$ 82.00        | \$ 984.00       |
| 158            | REMOVE ROADSIDE SIGN                                   | EA              | 13           | \$ 105.00       | \$ 1,365.00     |
| <del>159</del> | <del>INSTALL SIGN PANEL ON EXISTING FRAME-</del>       | <del>SQFT</del> | <del>-</del> | <del>\$ -</del> | <del>\$ -</del> |
| 160            | REMOVE ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD) | EA              | 5            | \$ 77.00        | \$ 385.00       |
| 161            | REMOVE SIGN PANEL                                      | EA              | 4            | \$ 510.00       | \$ 2,040.00     |
| 162            | FURNISH LAMINATED SIGN PANEL (1" - TYPE A)             | SQFT            | 344          | \$ 50.00        | \$ 17,200.00    |
| 163            | FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)   | SQFT            | 180          | \$ 38.00        | \$ 6,840.00     |
| 164            | METAL (BARRIER MOUNTED SIGN)                           | LB              | 510          | \$ 16.00        | \$ 8,160.00     |
| 165            | ROADSIDE SIGN - ONE POST                               | EA              | 11           | \$ 333.00       | \$ 3,663.00     |
| 166            | INSTALL SIGN (STRAP AND SADDLEBRACKET METHOD)          | EA              | 28           | \$ 102.00       | \$ 2,856.00     |
| 167            | INSTALL SIGN PANEL ON EXISTING FRAME                   | SQFT            | 344          | \$ 36.00        | \$ 12,384.00    |
| 168            | MIDWEST GUARDRAIL SYSTEM (7' WOOD POST)                | LF              | 275          | \$ 166.00       | \$ 45,650.00    |
| 169            | VEGETATION CONTROL (MINOR CONCRETE)                    | SQYD            | 124          | \$ 94.00        | \$ 11,656.00    |
| 170            | TUBULAR BICYCLE RAILING                                | LF              | 1418         | \$ 300.00       | \$ 425,400.00   |
| 171            | CABLE RAILING  | LF              | 124          | \$ 108.00       | \$ 13,392.00    |
| 172            | TRANSITIONAL RAILING (TYPE WB-31)                      | EA              | 2            | \$ 14,200.00    | \$ 28,400.00    |
| 173            | ALTERNATIVE INLINE TERMINAL SYSTEM                     | EA              | 1            | \$ 11,000.00    | \$ 11,000.00    |
| 174            | CRASH CUSHION (SCI-70GM)                               | EA              | 3            | \$ 42,500.00    | \$ 127,500.00   |
| 175            | CONCRETE BARRIER (TYPE 60MS)                           | LF              | 355          | \$ 350.00       | \$ 124,250.00   |
| 176            | CONCRETE BARRIER (TYPE 60MSC Mod)                      | LF              | 110          | \$ 555.00       | \$ 61,050.00    |
| 177            | CONCRETE BARRIER (TYPE 60MSD)                          | LF              | 2039         | \$ 125.00       | \$ 254,875.00   |
| <del>178</del> | <del>CONCRETE BARRIER (TYPE 60F Mod)</del>             | <del>LF</del>   | <del>-</del> | <del>\$ -</del> | <del>\$ -</del> |
| 179            | CONCRETE BARRIER (TYPE 60MSD Mod)                      | LF              | 361          | \$ 195.00       | \$ 70,395.00    |
| 180            | REMOVE AND RECONSTRUCT BARRIER (TYPE 60)               | LF              | 26           | \$ 750.00       | \$ 19,500.00    |
| 181            | CONCRETE BARRIER (TYPE 836B (MOD)                      | LF              | 147          | \$ 205.00       | \$ 30,135.00    |
| 182            | CONCRETE BARRIER (TYPE 836A) (MOD)                     | LF              | 60           | \$ 500.00       | \$ 30,000.00    |
| 183            | CONCRETE BARRIER (TYPE 836A)                           | LF              | 977          | \$ 405.00       | \$ 395,685.00   |
| 184            | CONCRETE BARRIER TYPE 836 (MOD)                        | LF              | 563          | \$ 225.00       | \$ 126,675.00   |
| 185            | REMOVE GUARDRAIL                                       | LF              | 1010         | \$ 36.00        | \$ 36,360.00    |
| 186            | REMOVE CONCRETE BARRIER                                | LF              | 190          | \$ 185.00       | \$ 35,150.00    |

ATTACHMENT 2  
YERBA BUENA ISLAND WESTSIDE BRIDGES SEISMIC RETROFIT PROJECT  
BID ITEM LIST  
Golden State Bridge/Obayashi Joint Venture

| Item No        | Item Description   | Units         | Quantity     | Unit Price      | Item Total       |
|----------------|--|---------------|--------------|-----------------|------------------|
| 187            | REMOVE CONCRETE BARRIER (TYPE K)   | LF            | 380          | \$ 95.00        | \$ 36,100.00     |
| 188            | REMOVE AND RECONSTRUCT BARRIER AND RAILING (TYPE 1.5)                        | LF            | 33           | \$ 3,320.00     | \$ 109,560.00    |
| 189            | 6" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)              | LF            | 18058        | \$ 3.10         | \$ 55,979.80     |
| 190            | 8" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)              | LF            | 320          | \$ 3.55         | \$ 1,136.00      |
| 191            | THERMOPLASTIC CROSSWALK AND PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY) | SQFT          | 4154         | \$ 15.20        | \$ 63,140.80     |
| 192            | REMOVE THERMOPLASTIC TRAFFIC STRIPE  | LF            | 3033         | \$ 1.05         | \$ 3,184.65      |
| 193            | REMOVE THERMOPLASTIC PAVEMENT MARKING  | SQFT          | 151          | \$ 4.05         | \$ 611.55        |
| 194            | CONTRAST STRIPE PAINT (2-COAT)   | LF            | 2326         | \$ 1.55         | \$ 3,605.30      |
| <del>195</del> | <del>TEMPORARY LIGHTING SYSTEMS</del>  | <del>LS</del> | <del>1</del> | <del>\$</del>   | <del>\$</del>    |
| 196            | REMOVE ELECTROLIER   | EA            | 16           | \$ 885.00       | \$ 14,160.00     |
| 197            | REMOVING LIGHTING SYSTEMS (CITY)   | LS            | 1            | \$ 35,400.00    | \$ 35,400.00     |
| 198            | MOBILIZATION   | LS            | 1            | \$ 8,439,651.00 | \$ 8,439,651.00  |
| 199            | 12" WATERLINE  | LF            | 537          | \$ 2,515.00     | \$ 1,350,555.00  |
| 200            | GATE VALVE   | EA            | 1            | \$ 6,600.00     | \$ 6,600.00      |
| 201            | AIR RELEASE VALVE / BLOW OFFS  | EA            | 4            | \$ 5,000.00     | \$ 20,000.00     |
| 202            | REMOVE WATERLINE   | LF            | 300          | \$ 95.00        | \$ 28,500.00     |
| 203            | ABANDON WATERLINE  | EA            | 2            | \$ 5,949.70     | \$ 11,899.40     |
| 204            | PLANT (GROUP A)  | LS            | 1            | \$ 25,000.00    | \$ 25,000.00     |
| 205            | RETAINING WALL (WATERLINE RETAINING WALL A)                                  | LS            | 1            | \$ 300,000.00   | \$ 300,000.00    |
| <del>206</del> | <del>RESIDENT ENGINEERS OFFICE</del>   | <del>LS</del> | <del>1</del> | <del>\$</del>   | <del>\$</del>    |
| <del>207</del> | <del>LAYDOWN YARD AREA</del>   | <del>LS</del> | <del>1</del> | <del>\$</del>   | <del>\$</del>    |
| 208            | STORM WATER ANNUAL REPORT  | EA            | 2            | \$ 750.00       | \$ 1,500.00      |
| 209            | MOBILIZATION (WATERLINE RETAINING WALL A)                                    | LS            | 1            | \$ 20,000.00    | \$ 20,000.00     |
| 210            | BOLLARD (K4)   | EA            | 8            | \$ 3,900.00     | \$ 31,200.00     |
| 211            | CLASS 2 AGGREGATE BASE (CY)  | CY            | 623          | \$ 143.00       | \$ 89,089.00     |
| 212            | PRIME COAT   | TON           | 3            | \$ 1,915.00     | \$ 5,745.00      |
| 213            | CONCRETE BACKFILL (PIPE TRENCH)  | CY            | 1            | \$ 840.00       | \$ 840.00        |
| 214            | CITY CULVERT TRENCH  | LF            | 2520         | \$ 195.00       | \$ 491,400.00    |
| 215            | INLINE CONTINUOUS DEFLECTIVE SEPARATION UNIT                                 | EA            | 1            | \$ 63,000.00    | \$ 63,000.00     |
| 216            | CHAIN LINK FENCE (TYPE CL-4, VINYL CLAD, SURFACE MOUNT)                      | LF            | 165          | \$ 88.00        | \$ 14,520.00     |
| 217            | TEMPORARY PAVEMENT MARKING (PAINT)   | SQFT          | 37           | \$ 22.00        | \$ 814.00        |
| TOTAL BID      |  |               |              |                 | \$ 84,399,951.00 |

ATTACHMENT 3- SUPPLEMENTAL WORK ITEMS/AGENCY FURNISHED MATERIALS & EXPENSES /FINANCE COST -  
BUDGETED COSTS

| <b>SUPPLEMENTAL WORK ITEMS</b>       |  | <b>TOTAL</b>           |
|--------------------------------------|--|------------------------|
| 1                                    | PARTNERING   | \$ 80,000.00           |
| 2                                    | FEDERAL TRAINEE PROGRAM                              | \$ 21,544.00           |
| 3                                    | BIRD PROTECTION                                      | \$ 150,000.00          |
| 4                                    | MAINTAIN TRAFFIC                                     | \$ 250,000.00          |
| 5                                    | ADDITIONAL PAVING ASPHALT                            | \$ 100,000.00          |
| 6                                    | GROUND ANCHOR (TIEBACK)/SOIL NAIL/OVERBREAK          | \$ 125,000.00          |
| 7                                    | REMOVE UNSUITABLE MATERIAL                           | \$ 200,000.00          |
| 8                                    | REMOVE BURIED MANMADE OBJECTS                        | \$ 300,000.00          |
| 9                                    | UNFORSEEN SITE CONDITIONS                            | \$ 400,000.00          |
| 10                                   | ADDITIONAL EXCAVATION AND/OR BACKFILL                | \$ 200,000.00          |
| 11                                   | ADDITIONAL WATER POLLUTION CONTROL/Annual Permit fee | \$ 400,000.00          |
| 12                                   | STORM WATER SAMPLING AND ANALYSIS                    | \$ 50,000.00           |
| 13                                   | WATERLINE/TEMP WALL FINAL DESIGN DETAILS             | \$ 125,000.00          |
| <b>TOTAL SUPPLEMENTAL WORK ITEMS</b> |  | <b>\$ 2,401,544.00</b> |

| <b>AGENCY FURNISHED MATERIALS AND EXPENSES</b>       |  | <b>TOTAL</b>           |
|--|--|------------------------|
| 1  | COZEEP CONTRACT                            | \$ 60,000.00           |
| 2  | TRAFFIC MANAGEMENT PLAN PUBLIC INFORMATION | \$ 100,000.00          |
| 4  | RESIDENT ENGINEERS OFFICE                  | \$ 450,000.00          |
| 5  | MONUMENT DISC                              | \$ 15,000.00           |
| 6  | CONTRACTOR YARD                            | \$ 1,356,233.00        |
| 7  | SFPUC ELECTRICAL INSTALL/TRANSFORMER       | \$ 275,000.00          |
| 8  | SFPUC Waterline tie in work                | \$ 150,000.00          |
| <b>TOTAL AGENCY FURNISHED MATERIALS AND EXPENSES</b> |  | <b>\$ 2,406,233.00</b> |

|  |                         |
|--|-------------------------|
| TOTAL SUPPLEMENTAL WORK ITEMS AND AGENCY FURNISHED MATERIALS | \$ 4,807,777.00         |
| CONTINGENCY  | \$ 8,466,041.00         |
| FINANCE BUDGET   | \$ 1,915,000.00         |
| ADDITIONAL CONSTRUCTION ALLOTMENT SUBTOTAL                   | \$ 15,188,818.00        |
| CONSTRUCTION CONTRACT  | \$ 84,399,951.00        |
| <b>TOTAL CONSTRUCTION ALLOTMENT</b>                          | <b>\$ 99,588,769.00</b> |

February 16, 2023

**YERBA BUENA ISLAND WESTSIDE BRIDGES PROJECT**  
**DESIGN SERVICES DURING CONSTRUCTION**  
**SCOPE OF WORK**

**Task 1 – Design Services During Construction (DSDC)**

WMH Corporation (CONTRACTOR) and its subcontractors shall perform the following construction phase services as required up to the not-to-exceed contract limit for this Scope of Work.

1.1. Project Management and Administration

CONTRACTOR shall provide continued overall project management and administrative services in support of the construction phase work. Construction duration is assumed to be 42 months. This may include the following effort:

- a. Project organization and technical oversight. This will be based upon the contractor's construction schedule - provided to CONTRACTOR by San Francisco County Transportation Authority (SFCTA)'s Resident Engineer (RE).
- b. Direct and coordinate the work of associated firms and subconsultants to ensure timely provision of staff, resources, and responses.
- c. Prepare and submit monthly progress reports to SFCTA as part of each invoice submittal
- d. Prepare and submit monthly invoices to SFCTA.
- e. Periodic visits to the construction site.
- f. Route construction related technical correspondence utilizing the RE's SharePoint site. Record all written incoming and outgoing construction correspondence. Maintain technical project files.

1.2. Meetings

Prepare for and attend construction meetings, stakeholder agency meetings, and technical meetings.

1.3. Requests For Information

CONTRACTOR shall review and respond to written Requests-for-Information (RFIs), as defined below, and as requested by SFCTA's RE per the RE's Project SharePoint site.

RFI definition:

*RFIs may only be submitted by the Prime Contractor. RFIs may not come directly from a contractor's subcontractor. RFIs must be in writing and may only be submitted on a RFI form, which is pre-*

*approved by the SFCTA's Project Manager. The contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed. In the RFI, the contractor shall set forth their own interpretation or understanding of the requirement along with reasons why they have reached such an understanding.*

The CONTRACTOR will utilize the RE's SharePoint site to respond to RFIs as follows:

- The RE shall send an e-mail notification to the CONTRACTOR of a new RFI that is located on the Project SharePoint site.
- CONTRACTOR will evaluate the request and engage the appropriate Design Team members to respond
- The Design Team will prepare and submit a Response to the RE for the RFI, including any necessary attachments, calculations, etc.
- The RE will review the Design Team response. If the RE concurs with the response, the Design Team will sign the Response, and then the RE will forward it to the contractor via SharePoint.
- If the RE has further comments, the Design Team will reevaluate and revise the response, and resubmit to the RE.
- This process will repeat until a satisfactory response is agreed upon by the RE and Design Team.

The CONTRACTOR shall respond to each RFI within 5 working days of receipt of notification. If the CONTRACTOR requires additional time for review, then such need will be identified in the response.

CONTRACTOR shall utilize the RE's SharePoint site to communicate, route and respond to all RFIs.

CONTRACTOR shall provide design clarifications and technical support to RE, as required.

All RFI review comments shall be tracked within the RE's SharePoint Project site.



9.4. Construction Submittals

CONTRACTOR shall review and respond to construction submittals as provided by the RE. The CONTRACTOR shall respond to each submittal within 5 working days of receipt, unless otherwise stated. If the CONTRACTOR requires additional time for review, then such need will be identified in the response. All Submittal review comments shall be tracked within the RE's SharePoint Project site. The revise and concurrence process will be similar to the RFI process described above.

Submittals may include but not limited to:

- Material samples
- Mock-up samples
- Catalog cuts
- Storage handling plans
- Operation plans
- Schedules
- Shop drawings
- Temporary structure plans

9.5. Geotechnical Engineering / Hazardous Materials Support

CONTRACTOR shall provide geotechnical engineering technical support during construction. Technical support will be provided as necessary for large excavations and backfill, retaining walls, undercrossing and bridge #1.

CONTRACTOR shall provide hazardous materials technical support as necessary for excavated soil that may be placed or processed on Treasure Island, buried within the Project limits, or hauled off-site.

9.6. Contract Change Orders

The CONTRACTOR shall review and respond to contract change order proposals as provided by the RE, and agreed to by the SFCTA project manager.

The CONTRACTOR shall respond to each proposal within 5 working days of receipt. If the CONTRACTOR requires additional time for review, then such need will be identified in the response.

If the RE directs the CONTRACTOR to proceed with the contract change order, and it is also approved in advance by the SFCTA Project Manager, CONTRACTOR shall assist with the preparation of contract change order

packages, including revisions to contract plans, quantities, and technical specifications.

CONTRACTOR may be asked by the RE or the SFCTA Project Manager to review a Cost Reduction Incentive Proposal (a.k.a. Value Engineering Change Proposal) generated by the construction contractor. The CONTRACTOR shall respond to each such proposal within 10 working days of receipt. If the CONTRACTOR requires additional time for review then the need will be identified in the response.

CONTRACTOR shall prepare Contract Change Orders to incorporate relevant review comments and responses - as part of the approved City Permit design package. The CONTRACTOR requires 15 days to provide these contract change order packages following request by RE and SFCTA Project Manager to proceed.

CONTRACTOR may prepare Contract Change Orders to incorporate elements of work that were previously removed in development of the "Refined" project. The CONTRACTOR requires 15 days to provide these contract change order packages following request by RE and SFCTA Project Manager to proceed.

9.7. As-Built Plans (Record Drawings)

CONTRACTOR shall prepare final As-Built Plans electronically based upon the red-line drawings provided by the RE, in accordance with Caltrans drafting format and standards.

9.8. Closeout Activities

CONTRACTOR shall assist in performing closeout activities so that the Project may be completed in its entirety.

9.9. Miscellaneous Additional Services

The CONTRACTOR shall perform additional construction support services as directed by SFCTA. This may include the review of alternative construction methods, additional meetings, Treasure Island Community Development (TICD) coordination for adjacent projects, Hillcrest Road Widening project coordination, Multi-use Pathway project coordination, toll system integrator support, and/or assistance with Caltrans and City Agencies.

# YERBA BUENA ISLAND WESTSIDE BRIDGES PROJECT WSP CONSTRUCTION MANAGEMENT SERVICES

## SCOPE OF WORK

### 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, U.S. Coast Guard (USCG), Treasure Island Development Authority (TIDA), the City and County of San Francisco, 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.

# YERBA BUENA ISLAND WESTSIDE BRIDGES PROJECT WSP CONSTRUCTION MANAGEMENT SERVICES

## SCOPE OF WORK

- 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 and/or City 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.

# YERBA BUENA ISLAND WESTSIDE BRIDGES PROJECT

## WSP CONSTRUCTION MANAGEMENT SERVICES

### SCOPE OF WORK

- 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, and the City 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.
- Perform all construction administrative activities, including correspondence and document control in an electronic format (i.e. "Paperless" Contract Administration) utilizing SharePoint, Pavia, Bid Express, PlanGrid, and Adobe Creative Cloud. Strive to minimize paper usage.
- Perform field inspection activities, monitor contractor's performance and enforce all requirements of applicable codes, specifications, and contract drawings in an electronic format (i.e. "Paperless" Contract Administration).

# YERBA BUENA ISLAND WESTSIDE BRIDGES PROJECT WSP CONSTRUCTION MANAGEMENT SERVICES

## SCOPE OF WORK

### 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, City, TIDA and Caltrans for archiving.
  - Prepare Performance Measurement Reports Annually for RAISE Grant Reporting for three years after project completion.

### General Project Administration

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

- 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.
- 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.
- 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 office for the construction

# YERBA BUENA ISLAND WESTSIDE BRIDGES PROJECT WSP CONSTRUCTION MANAGEMENT SERVICES

## SCOPE OF WORK

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.**