STAFF REPORT FOR CALENDAR ITEM NO.: 7 **FOR THE MEETING OF:** May 8, 2014

TRANSBAY JOINT POWERS AUTHORITY

BRIEF DESCRIPTION:

Amending Contract No. 08-04-CMGC-000, authorizing Webcor/Obayashi Joint Venture (the "CM/GC") to award a Trade Work subcontract to Shimmick Construction Company, Inc. ("Shimmick") as the responsible bidder submitting the lowest responsive bid for TG18.1: Bus Ramps Package ("TG18.1"), thereby increasing authorized Direct Costs by \$56,225,056, and increasing the authorized Construction Services Fixed Fee by \$4,610,454.59, under and in accordance with Contract No. 08-04-CMGC-000, Section 00 05 20, ¶5.01B.

EXPLANATION:

On January 2, 2013, the CM/GC issued a Request for Qualifications ("RFQ") for TG18.1. On February 20, 2013, eight firms responded to the RFQ. On March 12, 2013, a selection committee consisting of representatives from the TJPA, CM/GC, and Construction Management Oversight ("CMO") and Program Management/Program Controls ("PMPC") consultants reviewed and scored each firm's qualifications for technical merit and determined the following contractors to be qualified:

- Kiewit Infrastructure West Co.
- MCM Construction, Inc.
- Myers and Sons Construction, LP
- RGW Construction, Inc.
- Shimmick Construction Company, Inc.
- Skanska Steel Constructors
- Walsh Construction Company

On November 12, 2013, the TG18.1 package was issued for bid. A pre-bid conference was held on November 19, 2013. Four addenda were issued during the bid period to provide clarifications, respond to bidders' questions, and provide updated specifications, drawings and sketches as indicated below:

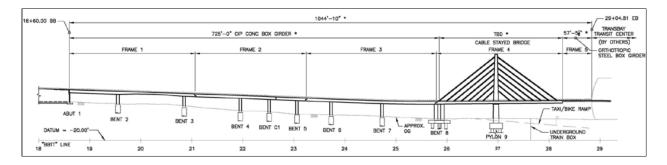
- Addendum #1 addressed review comments from Caltrans and the CM/GC and extended the bid date one month.
- Addendum #2 added Alternate #1, revised Hinge 8 seismic joint to address Structural and Seismic Review Committee ("SSRC") comments, and addressed additional review comments from Caltrans and the CM/GC.

- Addendum #3 added updated geotechnical boring information at the cable-stayed structure pylon; clarified schedule of unit prices for soil; and addressed review comments from Caltrans, the CM/GC, SSRC, and RVA team.
- Addendum #4: Administrative bulletin to incorporate responses to questions during bidding.

The scope of work under this package includes constructing the Bus Ramps structure connecting Interstate 80 to the Transbay Transit Center building. The major items of work for this package include the following:

- Cable-stayed structure
- Steel box girder sections
- Cast-in-place concrete viaducts
- Cast-in-place concrete overcrossing over Harrison Street
- Fremont off-ramp connection
- Mechanical stabilized earth wall section
- On-grade road construction
- Miscellaneous structures/works

The drawing below shows the structure's profile leading from I-80 (left) to the Transit Center.



Cost-Plus-Time: the TG18.1 bid utilized the cost-plus-time (A+B) approach whereby the total bid is equal to the sum of Part A (Cost) and Part B (Time). The total bid price was used to determine the responsible bidder submitting the lowest responsive bid. Part B (Time) is for bid evaluation purposes only, and the bid price reflected under Part B is not included in the subcontract amount. The total for Part A (Cost) becomes the subcontract amount, and the working days indicated under Part B become the contract duration.

Part A (Cost): the main scope of work includes all labor, materials, equipment, tools, transportation, disposal fees, incidentals and any other costs/fees necessary to complete work in accordance with the Contract Documents. All necessary work from mobilization to handover to the next trade subcontractor is included in the bid items.

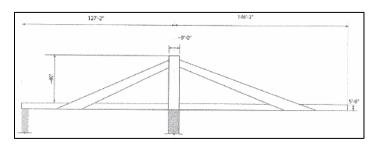
Part B (Time): the TJPA also requested bidders to bid the number of working days required to complete the work and set the cost for each working day at \$2,500/day, to ensure that each bid reflected an efficient construction period and that bidders bid the required number of working days to complete the work without adding a premium value to their bids. The engineer's estimate for the number of working days was 555 days; the range of allowable working days in the bidding documents was between 501 and 622 days.

The TJPA gave bidders the option of submitting value engineering ("VE") proposals prior to the bid date. In addition, the package included one deductive bid alternate to eliminate accent lighting on the cable-stayed structure.

On February 20, 2014, eight VE proposals were received. Between February 21 and March 6, 2014, the VE evaluation team consisting of representatives from the TJPA, Pelli Clarke Pelli Architects ("PCPA"), Arup (the PCPA subconsultant responsible for the Bus Ramps design), PMPC, CM/GC, and the CMO reviewed and evaluated the VE proposals blindly, not knowing which pre-qualified bidder submitted which VE proposal. The reviewers determined that one of the VE proposals was acceptable, a cable-stayed structure with a saddle connection. In lieu of individual support cables between the bridge deck and pylon, the proposed design uses continuous cables from one side of the bridge deck up through a saddle on pylon and back down to the other side of the bridge deck. After acceptance, it was determined that the VE proposal was submitted by Shimmick Construction Company, Inc. The accepted amount to be deducted from Shimmick Construction Company, Inc.'s bid price for the determination of its Total Bid Amount for Bid Selection is \$525,000 (\$500,000 for construction cost savings and \$25,000]).

The seven VE proposals that were not accepted are as follows:

• Construct an extradosed style bridge in lieu of a cable-stayed structure. This proposed design entailed constructing two spans monolithically connected to Bents 8 and 9 with four pre-stressed concrete fins from two columns at Pylon 9 supporting the superstructure at quarter points, as shown in the drawing below.



- Proposed savings: \$1,700,000
- Reason for rejection: the design team had concerns related to the ability of the structure to meet the seismic and blast loading criteria. In addition, the re-design effort was estimated to take 48 weeks and cost \$1,500,000.

- Construct a pre-stressed cantilever bridge in lieu of a cable-stayed structure. This proposed design entailed eliminating the Pylon 9 tower and constructing a pre-stressed cantilever box girder bridge balanced with two spans of differing lengths and depths.
 - Proposed savings: \$1,800,000
 - Reason for rejection: this design would reduce the clearance below the bridge and might not meet the required blast loading criteria. In addition, the re-design effort was estimated to take 32 weeks and cost \$1,100,000.
- Use higher grade reinforcing steel bars, reducing the number of required bars. Using higher grade 80 ksi reinforcing steel bars in lieu of 60 ksi reinforcing steel bars would reduce the amount of required steel reinforcement and create less congestion.
 - Proposed savings: \$263,000
 - Reason for rejection: design does not meet Caltrans standards. The estimated redesign cost was \$50,000.
- Rebar grade substitution. This proposed design used higher grade steel (75 ksi) at vertical bars in cast-in-drilled-hole ("CIDH") elements, which would result in increased spacing/less congestion.
 - Proposed savings: \$75,000
 - Reason for rejection: design does not meet Caltrans standards. The estimated redesign cost was \$10,000.
- Contaminated soil mitigation. This proposed design required Class 1 and 2 contaminated soil to be kept on site and placed under proposed roadway between retaining walls.
 - Proposed savings: \$250,000
 - Reason for rejection: proposal would create liability issues associated with moving contaminated soil between parcels and potentially create a hazardous landfill.
- CIDH piles at viaduct Bents 2-7. This proposed design installed CIDH piles using partial casing method in lieu of steel casings to stabilize large diameter bore hole similar to the 181 Fremont project.
 - Proposed savings: \$200,000
 - Reason for rejection: the 181 Fremont Street pile load test is not applicable to the Bus Ramps site; therefore, additional load tests would be required, and the schedule/cost impacts would exceed proposed savings. Additionally, the proposal was from a subcontractor and not a pre-qualified bidder; therefore, application of the VE proposal to the bid tabulation was not possible.
- Pylon 9 foundation design. This proposed design changed the Pylon 9 barrette pile foundation to CIDH piles.
 - o Proposed savings: "several hundred thousand dollars"
 - Reason for rejection: proposal would require repeating soil-structure analysis to determine potential impacts to the train box. The proposed savings were vague, and the proposal was from a bidder who was not pre-qualified. Therefore, the application of this VE proposal to the bid tabulation was not possible.

| | Bidder | | | | | |
|--|---------------|---------------|---------------|----------------|---------------|--|
| | Shimmick | Skanska Steel | Walsh | Myers and Sons | RGW | |
| | Construction | Constructors | Construction | Construction, | Construction, | |
| | Company, Inc. | | Company | LP | Inc. | |
| Part A, Cost Section | | | | | | |
| Base Bid | \$ 57,175,056 | \$ 64,336,160 | \$ 66,987,240 | \$ 81,874,280 | \$ 84,672,150 | |
| Accepted VE Amt | (\$ 500,000) | | | | | |
| Part B, Time Section* | | | | | | |
| Working Days | 501 | 600 | 550 | 622 | 622 | |
| (Working Days x \$2,500/day) | \$ 1,252,500 | \$ 1,500,000 | \$ 1,375,000 | \$ 1,555,000 | \$ 1,555,000 | |
| (10 VE Working Days x \$2,500/day) | (\$ 25,000) | | | | | |
| Total Bid Amount | | | | | | |
| for Bid Selection | \$ 57,902,556 | \$ 65,836,160 | \$ 68,362,240 | \$ 83,429,280 | \$ 86,227,150 | |
| Alternate No. 1**: Eliminate accent lighting on the cable- stayed structure | (\$ 450,000) | (\$ 376,000) | (\$ 790,000) | (\$ 380,000) | (\$ 320,000) | |
| Adjusted Total for Award (Part A, less VE, less Alt. No. 1) | \$56,225,056 | \$63,960,160 | \$66,197,240 | \$81,494,280 | \$84,352,150 | |

On March 6, 2014, five bids were received, opened and evaluated. Below is a summary of the bid results:

* The value of the number of working days is used for bid evaluation purposes only and is not factored into the subcontract amount. ** Alternate pricing was accepted following bid evaluation.

Shimmick submitted the lowest responsive bid, based on the Total Bid Amount for Bid Selection. The recommended award amount is \$56,225,056, which includes the sum of the base bid (\$57,175,056), the accepted VE amount (\$500,000 deduction) and Alternate No. 1 (\$450,000 deduction). Again, cost savings associated with the schedule reduction under Part B (Time) are for bid evaluation purposes only and are not included in the recommended award amount.

Shimmick included 20.2% Small Business Enterprise ("SBE") participation in its contract bid, meeting the 20% SBE goal on the package. Thirteen SBE firms are included in Shimmick's bid.

The TJPA budget for TG18.1 is \$40,424,206 (construction budget plus design contingency), and the engineer's estimate was a range of \$41 million to \$49 million. The \$15,800,850 balance between the recommended award amount and the current TG18.1 budget will be funded using Program Reserve. The current available Program Reserve funding is \$74,694,551. The remaining funding balance in the Program Reserve will be \$58,893,701 after TG18.1 is awarded. An analysis of the engineer's estimate in conjunction with the bid breakdown indicated the cost for the cable-stayed structure as the key difference between the engineer's estimate and Shimmick Construction Company, Inc.'s bid price. The bid breakdown placed the value of the cable-stayed structure at \$11.3 million over the engineer's estimate. The cable-stayed structure is clearly a unique structure, which is necessitated by the requirement to keep the adjacent train

box free of foundations, and this uniqueness manifested itself in an increased bid price for this piece of the work.

The construction duration for this package is 491 working days after issuance of Notice to Proceed, based on 501 working days submitted for Part B (Time) in the bid, and the contract time saving under the accepted VE proposal of 10 working days.

No bid protests were received during the bid protest period, which ended on March 13, 2014.

This Trade Work subcontract will be initially funded by land sales proceeds.

RECOMMENDATION:

TJPA staff recommends that the TJPA Board authorize amending Contract No. 08-04-CMGC-000, authorizing the CM/GC to execute a Trade Work subcontract with Shimmick Construction Company, Inc., as the responsible bidder submitting the lowest responsive bid for TG18.1: Bus Ramps Package, thereby increasing the authorized Direct Costs by \$56,225,056, and increasing the authorized Construction Services Fixed Fee by \$4,610,454.59, under and in accordance with Contract No. 08-04-CMGC-000, Section 00 05 20, ¶5.01B.

ENCLOSURES:

- 1. Resolution
- 2. Contract Modification

TRANSBAY JOINT POWERS AUTHORITY BOARD OF DIRECTORS

Resolution No.

WHEREAS, On March 12, 2009, the Transbay Joint Powers Authority ("TJPA") awarded a contract to Webcor/Obayashi Joint Venture as Construction Manager/General Contractor (the "CM/GC") for the Transbay Transit Center Building and Related Structures ("Contract No. 08-04-CMGC-000" or the "Contract"). Under the Contract, the CM/GC must competitively procure Trade Subcontractors. The Contract provides for the incorporation of Trade Packages by amendment to (a) authorize award of a Trade Work subcontract; (b) authorize the associated increase in allowable Direct Costs under the Contract; and (c) authorize the CM/GC to charge a Construction Services Fixed Fee invoiced at a rate of 8.2% of Direct Costs (Contract, Section 00 05 20, ¶5.01); and

WHEREAS, On November 12, 2013, the CM/GC issued an Invitation for Bids for TG18.1: Bus Ramps Package ("TG18.1") for the entire Transbay Transit Center Program to construct the Bus Ramps in accordance with the Contract Documents; and

WHEREAS, Under TG18.1, the Trade Subcontractor will perform all Bus Ramps construction related activities for the entire Transbay Transit Center Program; and

WHEREAS, On March 6, 2014, five bids were received and opened publicly; and

WHEREAS, CM/GC and TJPA have determined that Shimmick Construction Company, Inc., of Oakland, California, is the responsible bidder submitting the lowest responsive bid; and

WHEREAS, The recommended Trade Work subcontract amount to Shimmick Construction Company, Inc. for TG18.1 is \$56,225,056, which includes the accepted pre-bid value engineering proposal of \$500,000 and the alternate deduction of \$450,000 for eliminating the lighting fixture on the cable-stayed structure; and

WHEREAS, Funds for this Trade Work subcontract are available from land sales proceeds; and

WHEREAS, The time allowed for completion of the work under the Contract is 491 working days after issuance of the Notice to Proceed, which includes a deduction of 10 working days in accordance with the accepted pre-bid value engineering proposal; now, therefore, be it

RESOLVED, That the TJPA Board of Directors authorizes the CM/GC to execute a Trade Work subcontract for TG18.1 with Shimmick Construction Company, Inc., as the responsible bidder submitting the lowest responsive bid in the contract amount of \$56,225,056; and be it

FURTHER RESOLVED, That upon award of the Trade Work subcontract to Shimmick

Construction Company, Inc., the Trade Work subcontract shall be deemed part of the Contract Documents under Contract No. 08-04-CMGC-000; and be it

FURTHER RESOLVED, That Contract No. 08-04-CMGC-000 is hereby modified to incorporate the authorized amount of Trade Work subcontract awarded to Shimmick Construction Company, Inc., for TG18.1 by increasing authorized Direct Costs by \$56,225,056, and increasing the authorized Construction Services Fixed Fee by \$4,610,454.59 under and in accordance with Contract No. 08-04-CMGC-000, Section 00 05 20, ¶5.01B.

I hereby certify that the foregoing resolution was adopted by the Transbay Joint Powers Authority Board of Directors at its meeting of May 8, 2014.

Secretary, Transbay Joint Powers Authority

AGREEMENT

AMENDMENT NO. 31

BETWEEN

TRANSBAY JOINT POWERS AUTHORITY

AND

WEBCOR/OBAYASHI JOINT VENTURE

THIS AMENDMENT for AGREEMENT is entered into as of the _____day of _____, 2014 by and between the TRANSBAY JOINT POWERS AUTHORITY ("TJPA") and Webcor/Obayashi Joint Venture (the "CM/GC"). By this Amendment No. 31 the TJPA and the CM/GC hereby modify the Agreement dated March 17, 2009 (the "Agreement"), only to the extent expressly provided in this Amendment No. 31. All other terms and conditions of the Agreement shall remain in full force and effect.

Recitals

A. On March 12, 2009, the TJPA Board awarded the Agreement to the CM/GC to perform pre-construction and construction services for the Transbay Transit Center Building and Related Structures Project (the "Project").

B. As detailed in the Agreement, CM/GC is required to procure construction services through the award of Trade Packages, at which time the TJPA shall adjust the value of the Contract Sum to reflect the amount of the awarded Trade Work Subcontract plus the proportionate CM/GC's Construction Services Fixed Fee in accordance with Article 5.01 of the Agreement.

C. The CM/GC issued an Invitation for Bids for TG18.1 Bus Ramps package on November 12, 2013, and received and publicly opened five bids on March 6, 2014.

D. The lowest responsive bid for TG18.1 was determined using the cost-plus-time (A+B) approach whereby the total bid is equal to the sum of Part A (Cost) and Part B (Time) less accepted value engineering proposals. Shimmick Construction Company, Inc. was the responsible bidder submitting the lowest responsive bid in the amount of \$57,452,556, which consists of the amount of Part A, Cost (\$56,675,056, which includes a deduction of \$500,000 for the accepted value engineering ("VE") proposal), the amount of Part B, Time (\$1,227,500 based on 491 working days at \$2,500 per working day, which includes a deduction of 10 working days for the accepted VE proposal), and Alternate No. 1 (a \$450,000 deduction). The award amount to Shimmick Construction Company, Inc. of \$56,225,056 (Trade Package Direct Costs as set forth below) is based upon the sum of Part A, Cost, less the amount of the accepted VE proposal and less Alternate No. 1. Costs identified under Part B, Time, are not included in the award amount. The contract duration of 491 working days is based upon the working days set forth in Part B, Time, less the number of working days saved under the accepted VE proposal.

Terms and Conditions

1. By this Amendment the TJPA authorizes an increase in the CM/GC scope of work and the value of the Contract Sum by \$60,835,510.59 (Trade Package Direct Costs of

\$56,225,056 and CM/GC Fixed Fee, calculated at 8.2 percent of Direct Costs, of \$4,610,454.59), and the award of Trade Subcontract No. TG18.1 to Shimmick Construction Company, Inc. for performance of the construction of TG18.1 Bus Ramps.

2. The detailed scope of work and schedule incorporated by this Amendment is provided in the Contract Bid Documents dated November 12, 2013, and all associated Addenda.

IN WITNESS WHEREOF, the parties hereto have executed this contract Amendment No. 31 on the day first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY

Maria Ayerdi-Kaplan Executive Director

| Transbay Joint Powers Authority | |
|---------------------------------|--|
| Board of Directors | |
| Resolution No. | |
| Adopted: | |
| Attest: | |

Secretary, TJPA Board

Approved as to Form:

By: _

TJPA Legal Counsel

WEBCOR/OBAYASHI, JOINT VENTURE

Authorized Signature

Printed Name

Title