# EXHIBIT A - Trade Subcontractor Bid Package Manual and Forms – Contract #301000600

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Trade Package # TG06.0: Below Grade Structural Concrete Substructure, Waterproofing, Mechanical, Electrical and Plumbing Package (BGP); dated **September 7, 2012, Rev C** 

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### I. BIDDER QUALIFICATION PROCESS

If the Bidder is not previously qualified and other than the prequalified contractors/joint ventures listed below, the Bidder shall submit a Request for Qualification (RFQ) package no later than <u>2:00pm</u> Pacific time on <u>June 26, 2012</u>. The following prequalified contractors/joint ventures do not need to submit a RFQ package at this time.

### Prequalified Subcontractors/Joint Ventures for TG06:

- Balfour Beatty Infrastructure, Inc.
- Charles Pankow Builders, Ltd.
- Kiewit Pacific Co.
- Shimmick Construction Company, Inc.
- Tutor-Saliba Corporation

Notification of the qualification will be provided to the Bidder prior to bid date. Bids submitted by non-qualified Bidders will not be accepted or opened. Non-qualified Bidders assume all risk and costs associated with submitting a bid if they are deemed not qualified.

Trade Subcontractors looking to qualify during the bid period must use "Request for Qualifications TG06" form available on the TJPA website (http://transbaycenter.org/tjpa/doing-business-with-the-tjpa/current-contract-opportunities), posted 11/19/2011. Trade Subcontractors looking to qualify shall also familiarize themselves with the RFQ Questions & Answers posted to the same website.

<u>No Conflict of Interest</u>: Webcor/Obayashi Joint Venture and the TJPA shall disqualify any respondent to this Bid Package that has a conflict of interest under Section C8.105 of the San Francisco Charter, Government Code Section 1090, et. seq., the Political Reform Act (Government Code Section 87100 et. seq.), or any other applicable conflict of interest laws. Any false, incomplete, or otherwise unresponsive statements made in connection with a proposal may be cause for its disqualification at Webcor/Obayashi Joint Venture and the TJPA's sole discretion.

END OF BIDDER QUALIFICATION PROCESS

### II. KEY DATES FOR BIDDING PROCESS

Each bidder shall submit their "Bid Form", "Schedule of Bid Prices", and other applicable sections and forms in Specification and Project Bidding Manual. Required submittal documents for the bid are listed at Bidding Checklist (BCL) in Project Bidding Manual.

<u>Package Issuance Timeline</u>: Starting <u>May 14, 2012</u> IFB packages, except the drawings and specifications, will be available for download from the TJPA website (<a href="http://transbaycenter.org/tjpa/doing-business-with-the-tjpa/current-contract-opportunities">http://transbaycenter.org/tjpa/doing-business-with-the-tjpa/current-contract-opportunities</a>); or by contacting Webcor/Obayashi Joint Venture by e-mail at TransbayBidding\_TG06@webcor-obayashi.com, or fax at <a href="mailto:B10101">B...</a> (510) 748-7805. <a href="mailto:LB">LB</a> Information regarding how to obtain the drawings and specifications will be posted on the TJPA website on <a href="mailto:May 14, 2012">May 14, 2012</a>.

<u>Pre-Bid Meeting</u>: A pre-bid conference for Trade Subcontractors interested in submitting bids will be held on <u>May 22, 2012</u>, at 2:00 pm in Conference Room Charlie at the Webcor/Obayashi Joint Venture Office at 175 Beale Street, San Francisco, California 94105. The pre-bid conference is mandatory for Bidders. It is optional for subcontractors to Bidders.

### <u>A...</u>

<u>Pre-Bid Job Walk</u>: A pre-bid job walk for Trade Subcontractors interested in submitting bids will be held on <u>June 27, 2012</u>, at 3:00 pm at the Webcor/Obayashi Joint Venture Office at 175 Beale Street, San Francisco, California 94105.

<u>Questions/Clarifications</u>: Questions or clarifications regarding the Bid <u>must be</u> submitted in writing to Webcor/Obayashi Joint Venture no later than **2:00 pm** Pacific time on <u>August 27, 2012</u>. The Questions On Bid Documents (QBD) form in the Project Bidding Manual shall be used for questions or clarifications. Refer to "Communication with Webcor/Obayashi Joint Venture" for contact information.

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**<u>Bid Submittal:</u>** Bid submissions must be signed under penalty of perjury in the manner designated at the end of the form, by an individual who has the legal authority to bind Trade Subcontractor on whose behalf that person is signing. If any information provided by a Trade Subcontractor becomes inaccurate, Trade Subcontractor must immediately notify Webcor/Obayashi Joint Venture and provide updated accurate information in writing, under penalty of perjury.

<u>Financial Responsibility</u>: Webcor/Obayashi Joint Venture and the TJPA accept no financial responsibility for any costs incurred by a firm in responding to this Bid Package. Submissions to Webcor/Obayashi Joint Venture will become the property of the TJPA and may be used by the TJPA in any way deemed appropriate.

<u>No Waiver</u>: No waiver by Webcor/Obayashi Joint Venture and the TJPA of any provision of this Bid Package shall be implied from any failure by Webcor/Obayashi Joint Venture and the TJPA to recognize or take action on account of any failure by a Respondent to observe any provision of this Bid Package.

<u>No Representations or Warranties</u>: The information presented in this Bid Package and in any report or other information provided by Webcor/Obayashi Joint Venture and the TJPA to respondents is provided solely for the convenience of the interested parties. It is the sole responsibility of interested parties to assure themselves that the information contained in this Bid Package or other documents are accurate and complete. No representations, assurances or warranties pertaining to the accuracy of such information are or will be provided by the TJPA or its advisors.

<u>A...</u>

**Notification of Intention to Award Contract:** October 2012

TJPA Board Vote to Approve the Contract Award: October 11, 2012 (October Board Meeting)

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### <u>A...</u>

### **Package Timeline:**

Bid Package Issued: May 14, 2012

 Pre-Bid Meeting:
 May 22, 2012 (2:00 pm)

 Pre-Bid Job Walk
 June 27, 2012 (3:00pm)

 QBD's Due:
 August 27, 2012 (2:00 pm)

QBD Responses Posted: June 20, 2012

Qualifications Submitted: June 26, 2012 (2:00 pm)

Addendum #1 Issued June 26, 2012

Addendum #2 Issued <u>**B...**</u> August 22, 2012 <u>...**B**</u>

<u>C...</u>

Addendum #3 Issued September 7, 2012 ... C

Bid Packages Due: September 13, 2012 (2:00 pm)

Protest Period: September 14 – September 21, 2012

Notification of Intention to Award Contract: October 2012

TJPA Board Vote to Approve the Contract Award: October 11, 2012 (October Board Meeting)

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### END OF KEY DATES FOR BIDDING PROCESS

### III. COMMUNICATION WITH WEBCOR/OBAYASHI JOINT VENTURE

At no time during the bid process (defined as the time between issuance of this IFB until issuance of the Notice of Intent to Award to Trade Subcontractor) shall Trade Subcontractors contact any person(s) or staff of the TJPA, TJPA Program Management/Program Controls (PMPC) team, Webcor/Obayashi Joint Venture, CM Oversight (CMO), or other TJPA Consultants regarding this IFB. The only contact is for submission of questions using the contact directions below.

<u>B...</u> Submit questions using the Question On Bid Documents (QBD) form through Webcor/Obayashi Joint Venture. See Project Bidding Manual for QBD form. ... **B** 

E-mail Webcor/Obayashi Joint Venture at TransbayBidding\_TG06@webcor-obayashi.com.

Fax Webcor/Obayashi Joint Venture at (510) 748-7805.

END OF COMMUNICATION WITH WEBCOR/OBAYASHI JOINT VENTURE

### IV. CONTRACT ASSIGNMENT

B... A... The TG06.1 Geothermal Loop and TG06.2 Grounding System packages were issued for bid prior to the Below Grade Package bid. The TG06.1 and TG06.2 Trade Subcontractors will initially be contracted directly to Webcor/Obayashi Joint Venture under a Long Form Subcontract Agreement in the form attached hereto as referenced in Section VIII CONTRACT DOCUMENT LIST. All contractual work will be managed by Webcor/Obayashi Joint Venture until such a time that the TG06.0 Below Grade Package Trade Subcontractor executes the Long Form Subcontract provided with the bid package. Upon execution of the Long Form Subcontract, the Long Form Subcontract Agreements between the TG06.1 and TG06.2 Trade Subcontractors and Webcor/Obayashi Joint Venture will be assigned from Webcor/Obayashi Joint Venture to the TG06.0 Below Grade Package Trade Subcontractor, at which time the TG06.0 Below Grade Package Trade Subcontractor shall assume all of Webcor/Obayashi Joint Venture's rights, duties and obligations under the Long Form Subcontract Agreements with the TG06.1 and TG06.2 Trade Subcontractors, and Webcor/Obayashi Joint Venture shall be released of any further obligations, liabilities or responsibilities with respect to the Trade Subcontracts for TG06.1 Geothermal Loop and TG06.2 Grounding System packages. TG06 Below Grade Package Trade Subcontractor shall assume all responsibilities for TG06.1 and TG06.2 described in Section "VIII. Contract Document List". By submitting a bid for this work, the awarded TG06.0 Below Grade Package Trade Subcontractor is expressly agreeing to accept such assignment under the terms and conditions set forth above at no additional cost.  $\underline{...A}$   $\underline{...B}$ 

END OF CONTRACT ASSIGNMENT

### V. SCOPE OF THE PACKAGE AND BID ITEM INFORMATION

TG06.0 Below Grade Structural Concrete Substructure, Waterproofing, Mechanical, Electrical and Plumbing Package (BGP):

### A. Package Scope Summary

The scope of work for the Below Grade Structural Concrete Substructure, Waterproofing, Mechanical, Electrical and Plumbing Package (BGP) is described in the Contract Documents. Scope of work includes all labor, materials, equipment, tools, transportation, disposal fees, incidentals and any other costs/fees necessary to complete the work in accordance with the Contract Documents. All necessary work from mobilization to handover to the next Trade Subcontractor shall be included in the Bid items.

The major items of the work for this package will consist of the following elements:

- Concrete Protection Slab
- Waterproofing System
- Structural Concrete Substructure including rebar, dowels, couplers, anchor bolts, base plates, water stops, seismic expansion joint, forms, supports, scaffoldings and all required hardware at the locations in the below:
  - Mat Slab including pits
  - Concrete Foundation Walls in Platform Level
  - Concrete Columns and Structural Walls in Platform Level
  - Lower Concourse Slab
  - Concrete Foundation Walls in Lower Concourse Level
  - Concrete Columns and Structural Walls in Lower Concourse Level
  - <u>B...</u> Vehicle/Bike Ramp Structure
  - Couplers for future work ...**B**
- All Mechanical, Electrical and Plumbing (MEP), and telecommunication and connections required in the Contract Documents.
- TG06.1 Geothermal Loop Package
- TG06.2 Grounding System Package

Engineers Estimated Value of this Subcontract is anticipated to be valued at approximately between **\$65,000,000** and **\$75,000,000**.

Trade Subcontractor is required to review the Contract Documents and Site Conditions in accordance with all requirements set forth in the Prime Contract as respects its scope of work (See Document 00 07 00 – General Conditions, Article 3.03). This shall include, without limitation, the obligation to carefully review the appropriate portions of the Contract Documents a minimum of 35 days in advance of the Work to be executed for the express purposes of checking for any manifest errors, omissions, discrepancies or ambiguities and notifying CM/GC in writing promptly within this time period upon discovery of errors, omissions, discrepancies or ambiguities so that the CM/GC can properly notify the TJPA within the time period prescribed in Document 00 07 00 – General Conditions, Article 3.03.C.

In addition, if Trade Subcontractor performs work that it knows, or reasonably should have known, to be contrary to the Code or other applicable laws, statutes, ordinances, rules and regulations without written notice to CM/GC, Trade Subcontractor shall assume responsibility for such Work and shall bear all costs of correction (See Document 00 07 00 – General Conditions, Article 3.08.E).

### B. General Work

All necessary general work shall be included in this package. As needed by Trade Subcontractor, the general work shall include, but shall not be limited to, site preparation, site safety, crane/rescue baskets, temporary water facilities, temporary lighting for night work, temporary lighting for traffic/pedestrians, temporary toilets, weather mitigation, surveying, clean-up, dump permits and fees, and small tools and equipment specific for this work package. "IV. Trade Subcontractor Requirements" in Project Bidding Manual and the Contract Documents shall be referred to for more information.

 $\underline{C...}$  Trade Subcontractor is responsible for the general work in each Zone, beginning at the start of mobilization for that Zone. See Section VI – Construction Schedule and Milestones for specific information. ... C

At the start of mobilization in each Zone, Trade Subcontractor shall take over existing general work facilities left by other trade subcontractors, or as directed by Webcor/Obayashi Joint Venture or the TJPA. Trade Subcontractor is responsible for maintaining facilities in and around the Zone from the start of mobilization until completion and acceptance of the work in the Zone.

Trade Subcontractor is responsible for protection of adjacent properties and noise and vibration mitigation measures and monitoring, as specified in the Contract Documents.

Trade Subcontractor's cost of the general work, overhead, office cost, applicable permits/legal fees, administration, bonds, insurances, contingency, profit and other necessary activities for this project shall be included in the bid amount and distributed into the Bid Items.

The following items for this package are discussed in detail in section "IV. Trade Subcontractor Requirements" in Project Bidding Manual. Additional requirements and/or clarifications that are specific to the current Trade Subcontractor are included below.

### A. General Information – Supplemental Instructions

### 13. Protection of Work

Temporary covers for all openings, in addition to temporary covers detailed in the Construction Documents, shall be maintained until final acceptance of the work by the Owner and Webcor/Obayashi Joint Venture.

### 17. Temporary Power

- a) <u>B...</u> The Site Temporary Power/Skids locations are shown in Attachment 2 Logistics. At initiation of the contract, responsibility for all temporary power skids will be transferred from TG05.2R Trade Subcontractor to the TG06 Trade Subcontractor. Trade Subcontractor will make themselves available for a mutually scheduled transfer of ownership and salvage rights of temporary power skids.
- b) Power usage fee (PG&E Invoice), which is necessary to complete the contract work and approved by TJPA, will be reimbursed by TJPA and shall not be included in the Bid Price. PG&E Invoices will be paid for and managed by Webcor/Obayashi Joint Venture.
- c) Trade Subcontractor is responsible for conducting scheduled maintenance for all temporary power skids and related facilities until completion of Work. All gear, materials and installations upon conclusion of scheduled maintenance will be abandoned. Systems are to remain 100% operational unless outages are caused by others. Shutdown of any kind requires one week advance notice to Webcor/Obayashi Joint Venture field superintendents.

- d) Trade Subcontractor shall provide assistance with power hook-up at distribution panels for its subcontractors and other trade subcontractors. Trade Subcontractor shall include service interface and coordination with other trade subcontractors requiring temporary power connections directly in or on switchgear assemblies. ...B
- e) In the event power unexpectedly fails due in any part to the negligence of Trade Subcontractor, cost impacts incurred by Webcor/Obayashi Joint Venture or any other trade subcontractor(s) on-site whether contracted to Webcor/Obayashi Joint Venture or directly to the TJPA, will be passed onto Trade Subcontractor.
- f) At the end of the maintenance terms for each skid, Trade Subcontractor shall perform final maintenance and conduct a mutually scheduled transfer of ownership and salvage rights of Temporary Power Skid Systems to future electrical trade subcontractor per Webcor/Obayashi Joint Venture direction. Transfer of final skid to future electrical trade subcontractor will result in the conclusion of responsibility for Temporary Power scope.

### 18. Temporary Lighting

- a) Trade Subcontractor shall be responsible for installing and maintaining temporary lighting along the perimeter of the site at 50'-0" O.C. and installed in such a manner that it does not interfere with the structure and at all walkways utilized by their workers and the public, as required to provide code-minimum lighting at egress paths, as well as sufficient foot candle lighting levels to safely perform the work at all times. Trade Subcontractor shall include temporary poles at street level perimeter every 50'-0" O.C. Temporary lighting work item includes, but is not limited to, installing lighting poles, lights, all hardware, switch boxes, breakers, conduit, power from temporary skids to poles and maintenance required for temporary lighting work. In addition to the lighting, temporary poles shall include installation of additional conduit and power terminating at pole top for future use. Trade Subcontractor is responsible for maintaining the temporary lighting and related facilities for each zone until completion of work. Upon completion of the work all gear, materials and installations will be transferred to future electrical trade subcontractor.
- b) Trade Subcontractor is responsible for maintaining the temporary lighting and related facilities until completion of the work.
- c) At the end of the maintenance terms for each skid, Trade Subcontractor shall perform final maintenance and conduct a mutually scheduled transfer of ownership and salvage rights of Temporary Power Skid Systems to future electrical trade subcontractor per Webcor/Obayashi Joint Venture direction. Transfer of final skid to future electrical trade subcontractor will result in the conclusion of responsibility for Temporary Power scope.

### 25. Sidewalk and Street Coordination

- a) Include cost to furnish, install, maintain, and remove perimeter rail, traffic/pedestrian barricades, safety cable, gates, and wheel stop at top of all excavated conditions, and shored conditions for Trade Subcontractor's work. Access Trestle and Temporary Bridge perimeter railing will be as required by the Contract Documents.
- b) Existing fences left by TG03 Buttress, Shoring and Excavation Subcontractor shall be taken over and added/modified/reinforced by Trade Subcontractor as required to construct the traffic/pedestrian barricades.
- c) Trade Subcontractor shall have full responsibility (maintenance, repair, etc.) for those facilities after their Notice to Proceed. Trade Subcontractor is responsible for maintaining those facilities including street cleaning and graffiti control until completion of the work and turn over to the next trade subcontractor.
- d) Trade Subcontractor shall coordinate installation and maintenance of pedestrian walkways at cross-streets at all times. All ramps required for connection of pedestrian

walkways to existing sidewalks shall meet all codes including applicable ADA requirements. Trade Subcontractor shall check walkways, ramps and other pedestrian facilities throughout the workday for potential safety issues.

### 26. Cranes/Hoisting

a) The Access Trestle is shown in Attachment 2 – Logistics. All cranes/hoisting shall operate from the Access Trestle until it is removed.

### <u>B...</u>

b) Trade Subcontractor shall include and coordinate all necessary crane mobilizations for TG06.1 and TG06.2 contractors ... **B** 

### 27. Personnel/Material Access

Trade Subcontractor shall include in their scope of work all required access for all trade subcontractors to the work typically defined as, but not limited to stairs/stair platforms, and ladders as needed and required by OSHA/code, until completion of the work. Personnel/Material hoists will be provided by others.

### 29. Project Supervision and Management

- a) At minimum, Trade Subcontractor shall have one (1) General Superintendent. Trade Subcontractor shall provide a minimum of one (1) full-time field Superintendent and Assistant Superintendent for each work zone, from the start of their work in that zone until the full completion and acceptance of their work in that zone. These field Superintendents shall answer to Trade Subcontractor's General Superintendent in charge of the entire project.
- b) An approved fluent English speaking field Superintendent that is able to act on direction from Webcor/Obayashi Joint Venture shall be provided at all times while workmen are on site. The designated field Superintendents shall be non-working and shall be equipped with a cellular phone at no cost to Webcor/Obayashi Joint Venture to expedite jobsite communications between Webcor/Obayashi Joint Venture and Trade Subcontractor.

### <u>B...</u>

- Trade Subcontractor shall provide construction cameras, as specified in Attachment 4. ...B
- $34.\ Construction\ Stormwater\ Pollution\ Control/Compliance\ Plan$

Refer to Exhibit K for Construction Stormwater Pollution Control/Compliance requirements.

### 45. Quality Control

- a) Trade Subcontractor shall provide a minimum of one dedicated Quality Control (QC) manager. The QC Manager shall have no other duties other than full time quality control and shall be the QC Manager as approved in Trade Subcontractor's CQC Plan. Trade Subcontractor shall provide full-time QC staffing in each separate work Zone while work is being performed.
- b) Trade Subcontractor shall also provide a designated alternate QC manager to perform duties in the absence of the QC Manager. The QC Manager or designated alternate must be on site at all times work is performed. These QC Managers must have completed NAVFAC USACE or equivalent training in Quality Management. Any equivalent certification must be approved by Webcor/Obayashi Joint Venture.

### <u>B...</u>

54. Noise Mitigation

- a) Refer to Attachment 3, Exhibit N for Noise Mitigation and Monitoring requirements.
- b) Trade Subcontractor shall comply with the sound control and monitoring requirements as specified in the Contract Documents, and clarified in Attachment 3.

...B

### B. Safety

Refer to Exhibit H for Safety Requirements.

D. Small Business Enterprise (SBE) Program

SBE participation for this Trade Subcontractor will be no less than 17% of the total value of Trade Subcontractor's bid value.

### E. Coordination

Trade Subcontractor shall coordinate their work, including temporary work, with all other trade subcontractors. Trade Subcontractor shall be responsible for coordination of safe access for other trade subcontractors in a manner that does not impact other trade subcontractors' work.

Removal of Access Trestle will be performed by TG03 Buttress, Shoring and Excavation and TG07.1 Structural Steel Trade Subcontractors. Removal of Temporary Bridges, Internal Bracing and Rebracing will be performed by TG03 Buttress, Shoring and Excavation. Removal of Dewatering System will be performed by TG03 Buttress, Shoring, and Excavation.

### F. Logistics

a) Trade Subcontractor will provide their site logistics plan as a submittal for review by Webcor/Obayashi Joint Venture. As the project site changes, Trade Subcontractor will provide periodic logistics plan updates.

### <u>B...</u>

b) Trade Subcontractor shall furnish and install new perimeter barrier, in accordance with the Contract Documents, along gridline A, approximately between grid lines 18-26. Webcor/Obayashi Joint Venture shall provide direction to Trade Subcontractor when the barrier is to be installed. ... *B* 

### C. Base Bid Item Scope

# Below Grade Structural Concrete Substructure, Waterproofing, Mechanical, Electrical and Plumbing Package Scope of Work

This section is only supplemental information used to describe how the Bid pricing is to be broken down and to generally describe the scope of the work defined in the Contract Documents. All necessary work from mobilization to handover to the next Trade Subcontractor shall be included in the Bid items.

### 1. Mobilization

This bid item includes all mobilization, demobilization, and other preparation costs described in the "SECTION 01 15 05 – Mobilization" in the Specifications. The Mobilization amount shall not exceed 5% of the Total Bid amount.

### 2. Waterproofing System

The Waterproofing, including, but not limited to, embedded assemblies shall be completed in accordance with the Contract Documents. This work item includes, but is not limited to, preparatory work including concrete surface preparatory finish work, membrane welding, protection of membrane during construction, waterproofing at all existing areas that must penetrate the waterproofing membrane such as at pin piles, tie-downs, dewatering pipes, micropiles, geotechnical monitoring instrumentation, and all other activities necessary to complete this work item as specified in the Contract Documents. Trade Subcontractor shall provide waterproofing overlap per the manufacturer's recommendation to allow for tie-in by future trade subcontractor(s). Trade Subcontractor shall reference the TG03 BSE Trade Subcontractor's Contract Documents for details of the mud slab concrete surface and finish (see Section IX, Supplementary Documents). If any temporary shoring and/or supports are required specific to this work item, Trade Subcontractor bid price shall include its cost. Trade Subcontractor shall coordinate their work with the TG03 BSE Trade Subcontractor's schedule and sequence of the excavation and placement of the mud slab pours, bracing removal, re-bracing. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 3. Concrete Protection Slab

A Concrete Protection Slab, including, but not limited to, embedded assemblies shall be completed in accordance with the Contract Documents. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 4. Mat Slab, including Steel Reinforcement and Embedded Assemblies

The Mat Slab, including, but not limited to, steel reinforcement and embedded assemblies, shall be completed in accordance with the Contract Documents. All couplers shall be covered or capped. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 5. Concrete Walls and Chamfer, including Steel Reinforcement and Embedded Assemblies

The Concrete Walls and Chamfer, including, but not limited to, steel reinforcement and embedded assemblies shall be completed as specified in the Contract Documents. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation,

disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 6. Concrete Columns including Steel Reinforcement and Embedded Assemblies

The Concrete Columns including, but not limited to, steel reinforcement and embedded assemblies shall be completed in accordance with the Contract Documents. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 7. Lower Concourse Slab and Beams, including Steel Reinforcement and Embedded Assemblies

The Lower Concourse Slab and Beams, including, but not limited to, steel reinforcement and embedded assemblies shall be completed in accordance with the Contract Documents. All couplers shall be covered or capped. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 8. Plumbing Work

All plumbing work shall be completed in accordance with the Contract Documents. <u>A...</u> Any overhead costs for managing TG06.1 Geothermal Loop Package shall be included in this bid item. <u>...A</u> All termination points and pipes shall be clearly identified and labeled for future connections to be performed by other trade subcontractors. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 9. Electrical Work

All Electrical work shall be completed in accordance with the Contract Documents. <u>A...</u> Any overhead costs for managing TG06.2 Grounding System Package shall be included in this bid item. <u>...A</u> All termination points, conduits, and boxes shall be clearly identified and labeled for future connections to be performed by other trade subcontractors. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 10. Fire Alarm and Telecommunication Work

All Fire Alarm and Telecommunication work shall be completed in accordance with the Contract Documents. All termination points, conduits, and boxes shall be clearly identified and labeled for future connections to be performed by other trade subcontractors. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 11. C... Light Column and Steel Column Base Plates and Anchor Bolts

The Light Column and Steel Column Base Plates and Anchor Bolts shall be completed in accordance with the Contract Documents. Trade Subcontractor shall install the light column and steel column base plate **templates** and anchor bolts, furnished by the TG07.1 Structural Steel Trade Subcontractor. The TG07.1 Structural Steel Trade Subcontractor shall inspect and approve the installation of the base plate **templates** and anchor bolts prior to this Trade Subcontractor's placement of concrete. The amount paid for this item shall include full compensation for furnishing

all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.  $\dots C$ 

### 12. B... Vehicle/Bike Ramp Concrete, including Steel Reinforcement and Embedded Assemblies

The Vehicle/Bike Ramp shall be completed in accordance with the Contract Documents. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work. ....B

### 13. Seismic Expansion Joints

The seismic expansion joints shall be constructed in accordance with the Contract Documents. Trade Subcontractor is responsible for the entire Seismic Joint up to the horizontal joint at the ground floor. Trade Subcontractor is responsible for the seismic expansion joint located above the delineation line of this package, including any necessary inspections. The remaining vertical portion of the wall shall be completed by the TG07.2 Superstructure Concrete Trade Subcontractor. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 14. <u>High-Congestion Mock-Up Construction and Disposal</u>

A full-scale high-congestion area mock-up shall be constructed off-site at a location designated, approved, and reimbursed, if applicable, by the TJPA, prior to the start of permanent construction and in accordance with the Contract Documents. After Owner acceptance and approval to remove the mock-up, Trade Subcontractor shall demolish and dispose of the mock-up as directed by Webcor/Obayashi Joint Venture. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 15. Cutting and Disposal of CDSM Shoring Wall located at the top of the Taxi/Bike Ramp

The cutting and disposal of the CDSM shoring wall located at the top of the Taxi/Bike Ramp shall be completed in accordance with the Contract Documents. Trade Subcontractor shall provide and maintain safe construction access in and out of the structure until the permanent access is completed. The amount paid for this item shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fees, incidentals, all patch work including multiple mobilizations/demobilizations as required, and any other costs/fees necessary to complete this work.

### 16. Allowance: 10B Traffic Officers

Trade Subcontractor shall be paid for the use of 10B Traffic Officers in accordance with the Contract Documents and as approved by the TJPA. Trade Subcontractor shall provide a monthly schedule for proposed use of 10B Traffic Officers to be reviewed and approved by the TJPA prior to scheduling the work. Refer to the Contract Documents for details and procedures.

A... DELETED

...A

### END OF SCOPE OF THE PACKAGE AND BID ITEM INFORMATION

### VI. B... CONSTRUCTION SCHEDULE ...B

### <u>B...</u> <u>A...</u>

<u>C...</u> The Trade Subcontractor must pay particular attention to all other subcontractors whose work interfaces with the work of this Trade Subcontractor. This Trade Subcontractor will be responsible for any impacts to other subcontractors whose work this Trade Subcontractor impacts in either the development of this Trade Subcontractor's schedule or as a result of this Trade Subcontractor's operations during the performance of its subcontract.

**DELETED** Pursuant to the Contract Documents, including, but not limited to:

- 1. Specification section 01 13 10 Progress Schedule
- 2. Specification section 01 13 00 Submittals
- 3. Specification section 00 07 00 General Conditions
- 4. The latest issued revision of the Transbay Transit Center Project Bidding Manual.
- 5. Exhibit-I Concept Schedule
- 6. The Project Milestones (Paragraph 2, below).
- 7. In the event of a conflict amongst documents the most stringent requirement shall apply.

In the event of any dispute between Webcor/Obayashi Joint Venture and Trade Subcontractor, Trade Subcontractor will not stop work but will prosecute the work diligently to completion, the dispute to be submitted for resolution in accordance with section 17 of the Long Form Subcontract Agreement.

Trade Subcontractor shall meet with Webcor/Obayashi Joint Venture to review the Trade Subcontractor's Schedule. If necessary, Trade Subcontractor shall provide revised schedule(s) until acceptable to Webcor/Obayashi Joint Venture and the TJPA, which will be then implemented into the Project Schedule. No progress payments will be made to the Trade Subcontractor until acceptance of the Trade Subcontractor's schedule by both Webcor/Obayashi Joint Venture and the TJPA.....C

Within 15 calendar days, subsequent to the Trade Subcontractor's receipt of the Notice of Intent to Award, the Trade Subcontractor shall submit:

- 1. <u>C...</u> A detailed Trade Package Progress CPM Schedule using Primavera P6, based on Webcor/Obayashi Joint Venture's scheduling conventions, outlining all lead times and tasks beginning from the date of NTP #1 (award of contract) to the projected completion. ... C
  - a. Trade Subcontractor shall utilize a WBS and Activity ID convention to allow the Trade Progress Schedule to be implemented in the Webcor/Obayashi Joint Venture's Project Schedule. Activity ID numbers shall be alphanumeric using "PS" (submittals and procurement) and "BG" (construction activities) as prefixes and a seven digit alphanumeric suffix (Example: BG-A100000). Trade Subcontractor shall structure their Trade Package Progress Schedule utilizing the following WBS at the highest level but not limited to:
    - i. Procurement (Submittal Schedule & Material Procurement)
    - ii. Installation of Waterproofing System, Protection Slab, Mat Slab, Wall, Columns and other required construction specified in the Contract Documents.
- 2. DELETED Trade Subcontractors Schedule shall include the following distinct Finish Milestones for the work in each Zone for the coordination with other trade subcontractors' required activities.

Milestone Names (MS)	<del>Definition</del>	Duration from
		NTP
		(Calendar Days)
NTP#01	Issued at Notice of Intent to Award	
NTP#02	Zones 1 & 2	<del>485</del>
NTP #03	Zone 3	<del>359</del>
NTP #04	Zone 4	<del>392</del>

### ...A

### **DELETED** a. It is mandatory that each Milestone date be met.

- b. The Zone NTPs and durations control the schedule and shall not be overridden by trade flow. If added time to a trade activity has been granted in one Zone, it shall not impact another Zone's activities. The Zones are to remain independent and may require to be executed concurrently. Trade Subcontractor is responsible to include all scope within the Contract Documents while adhering to the provided Zone durations.
- c. At the time NTP is issued for a Zone, within plus or minus 90 days of the date indicated in the schedule, Trade Subcontractor assumes responsibility for the security, safety, and all liability associated with the Zone in accordance with the entire set of the Contract Documents.
- **2.** In addition to the information specified under specification section 01 13 10.1.4.B.1-9, on every schedule, baseline and update, the Trade Subcontractor shall indicate by activity the number of personnel, excluding office staff, non-working supervisors, safety, and quality personal, required to perform each activity.
  - a. If the TJPA or Webcor/Obayashi Joint Venture requests a recovery schedule pursuant to specification section 00 07 00.7.01.G, said schedule shall be person-loaded as described in paragraph 2 above.
  - b. In addition to the information required in the Trade Subcontractor's Daily Report, per section IV.A.4.b.1-6 of the Project Bidding Manual, the Trade Subcontractor shall delineate its crew by the last submitted update schedule activity ID excluding office staff, non-working supervisors, safety, and quality personal. The Daily Report is to include a list of those schedule activities that are being worked on with remaining duration to complete activity. The Daily Report is also to include a list of those activities that are scheduled to be worked on, that are not started or underway with an accompanying explanation as to why this work is not being completed.
- 3. The TG06 Trade Subcontractor's schedule shall assume performing all work, with the exception of large monolithic pours as required by technical specifications, during the "Regular Working Hours" as defined in specification section 00 07 00.1.01.62.
- 4. Trade Subcontractor's Schedule shall be sequenced so that it shall not impact any succeeding activities, Milestones, and/or the critical path of the Project Schedule.
- 5. Trade Subcontractor shall coordinate with other trade subcontractors for detailed work schedules and all costs associated with the schedule coordination shall be included in the Contract Amount.
- 6. The Trade Subcontractor's Schedule shall include a full submittal schedule per Specification Section 01 13 00.1.4 Submittal Schedule.
  - a. Please note Section IV.A.35.F of the Project Bidding Manual shall take precedence over specification section 01 13 00.1.4.C. All preconstruction submittals are to be submitted to Webcor/Obayashi Joint Venture within 60 30 days of Notice of Intent to Award. Resubmittal pursuant to specification section 01 13 00.1.4.C may be required.

7. To assist the Trade Subcontractor in the development of its Construction Schedule, Webcor/Obayashi Joint Venture has included a concept schedule, for reference only (see Exhibit I). The concept schedule is to clarify preceding and succeeding activities to this Trade Package work, as approved by the TJPA for bidding. The schedule activities in Exhibit I between the date of the Notice to Proceed and the Completion date of each Zone and Area should not be assumed to be a complete or a binding work plan. Assume the schedule activities may change sequence and to start plus or minus 90 calendar days from the date indicated on Exhibit I.

The concept schedule is to clarify preceding and succeeding activities to this Trade Package work, as approved by TJPA. Assume the schedule activities may change sequence and to start plus or minus 90 calendar days from the date indicated on Exhibit I. Webcor/Obayashi Joint Venture has the right to re-sequence work activities to mitigate delays and warrants no specific performance sequence.

The Trade Subcontractor is responsible for liquidated damages, when the Trade Subcontractor delays:

- 1. The Milestones specified under the aforementioned Paragraph 2 and/or
- 2. The Project Schedule's critical path.

Liquidated damages are to include, but are not limited to:

- 1. As specified in Specification Section 00 05 20.4.02
- 2. Webcor/Obayashi Joint Venture's extended costs
- 3. Other affected trade subcontractors' extended costs.

The Trade Subcontractor shall include all work for this Trade Package, including all issued addendum, in the bid price to meet the Milestone and Project Schedule requirements.

Subsequent to an impact, the Trade Subcontractor is eligible for a time extension to:

- 1. The Project Schedule if successfully applied for under, to include, but is not limited to specification section 00 07 00.7.02, or
- 2. The Trade Package or Zone Schedule, which may or may not be on the Project Schedule's Critical path. If an impact is not on the Project Schedule's Critical Path the Trade Subcontractor must demonstrate to the satisfaction of Webcor/Obayashi Joint Venture:
  - a. The purported impact is genuine in scope and time assessment.
  - b. The purported impact is on the Trade Package or Zone(s) critical path.

No time extension to the Trade Package or Zone Schedule will be entertained by Webcor/Obayashi Joint Venture unless both above items a. and b. are satisfied. ... B

Prior to submission the Trade Subcontractor shall meet with Webcor/Obayashi Joint Venture to review the Trade Subcontractor's Schedule. If necessary, Trade Subcontractor shall provide revised schedule(s) until acceptable to Webcor/Obayashi Joint Venture and the TJPA, which will be then implemented into the Project Schedule. No progress payments will be made to the Trade Subcontractor until acceptance of the Trade Subcontractor's schedule by both Webcor/Obayashi Joint Venture and the TJPA....*C* 

END OF B... CONSTRUCTION SCHEDULE ... B

### VII. INSURANCE REQUIREMENT

The insurance requirements outlined below supersede the related requirements in the Specification Section 00 05 20 and Section 16 of the Long Form Subcontract.

### 1. TRADE SUBCONTRACTOR'S LIABILITY INSURANCE

Trade Subcontractor shall maintain in full force and effect, for the period covered by the Subcontract, the following liability insurance with the following minimum specified coverage or coverage as required by laws and regulations, whichever is greater:

- A. Workers' Compensation in the statutory amount, including Employers' Liability coverage with limits not less than \$1,000,000 each accident, injury, or illness, including coverage for U.S. Long Shore and Harbor Workers' Act benefits, and Jones Act benefits, and Federal Employers Liability Act.
- B. Commercial General Liability insurance with limits not less than \$100,000,000 each occurrence combined single limit for bodily injury and property damage, including coverage for Contractual Liability, Independent Contractors, Explosion, Collapse, and Underground (XCU), Personal Injury, Broadform Property Damages, and completed operations. Notwithstanding Section 16.7 of the Long Form Subcontract, the requirement to maintain \$100,000,000 in Commercial General Liability Insurance shall apply ONLY to the bidding Trade Subcontractor. Sub-subcontractors / Lower-Tier Subcontractors shall maintain the levels of Commercial General Liability Insurance set forth in Section 16 of the Long Form Subcontract agreement.
- C. Commercial Automobile Liability insurance with limits not less than \$1,000,000 each occurrence combined single limit for bodily injury and property damage, including owned, hired or non-owned vehicles, as applicable.

### 2. ADDITIONAL COVERAGES

- A. Professional Liability Insurance: In the event that Trade Subcontractor employs professional engineer(s) or land surveyor(s) for performing Pre-Construction Services, field engineering, or preparing design calculations, plans and specifications, Trade Subcontractor shall carry or shall require its retained engineers and land surveyors to carry professional liability insurance with limits not less than \$25,000,000 each claim with respect to acts, errors, or omissions in connection with professional services to be provided under this Contract, with any deductible not to exceed \$250,000 each claim. With respect to land surveyors only, Trade Subcontractor or its retained engineers should only have to evidence \$1,000,000 in professional liability insurance covering that scope of work, consistent with the standard requirements set forth in Article 16 of the Long Form Subcontract.
- B. Environmental Pollution Liability Insurance: Trade Subcontractor, or its Subsubcontractors, who perform abatement of hazardous or contaminated materials removal shall maintain in force, through the term of this Contract, Trade Subcontractor's pollution liability insurance with limits not less than \$5,000,000 each occurrence combined single limit (true occurrence form), including coverage for on-site or off-site third party claims for bodily injury and property damage.

### 3. INSURANCE FOR OTHERS

For general liability, environmental pollution liability and automobile liability Trade Subcontractor shall include as additional insured, the Contractor, TJPA, its board members, and all authorized agents and representatives, and members, directors, officers, trustees, agents and employees of any of them.

### 4. FORMS OF POLICIES AND OTHER INSURANCE REQUIREMENTS

- A. Workers' Compensation Insurance shall be submitted to the Contractor before the commencement of any of the Work on Site.
- B. Before commencement of the Work of this Contract, certificates of insurance in form and with insurers acceptable to Contractor, evidencing all required insurance and with proper endorsements from Trade Subcontractor's insurance carrier identifying as additional insureds the parties indicated under Article 1.4 above, shall be furnished to Contractor with complete copies of policies in accordance with the Project Bidding Manual.
- C. Approval of the insurance by the Contractor shall not relieve or decrease the extent to which Trade Subcontractor or subcontractors of any tier may be held responsible for payment of any and all damages resulting from its operations. All policies of insurance and certificates shall be satisfactory to Contractor.
- D. Trade Subcontractor and its Subcontractors shall comply with the provisions of California Labor Code section 3700. Prior to commencing the performance of work, Trade Subcontractor and all of its Subcontractors shall submit to the Contractor a certificate of insurance evidencing liability for workers compensation or proof of selfinsurance in accordance with the provisions of the California Labor Code.
- E. Liability insurance, except for professional liability insurance, shall be on an occurrence basis, and said insurance shall provide that the coverage afforded thereby shall be primary coverage (and non-contributory to any other existing valid and collectable insurance) to the full limit of liability stated in the declaration, and such insurance shall apply separately to each insured against whom claim is made or suit is brought, but the inclusion of more than one insured shall not operate to increase the insurer's limits of liability.
- F. Trade Subcontractor shall maintain professional liability coverage continuously throughout the term of this Contract, and without lapse, for a period 3 years beyond the Contract Final Completion date to the effect that should occurrences during the Contract term give rise to claims made after expiration of the Contract, such claims shall be covered by such claims-made policies.
- G. Each such policy shall provide that no cancellation or non-renewal shall occur without the carrier giving to Contractor at least 30 days' written notice prior thereto.

All notices shall be made to:

Webcor/Obayashi Joint Venture 1751 Harbor Bay Parkway, Suite 200 Alameda, CA 94502

- H. Trade Subcontractor, upon notification of receipt by Contractor of any such notice, shall provide Contractor a certificate of the required new or renewed policy at least 10 days before the effective date of such cancellation, change or expiration, with a complete copy of new or renewed policy, if requested.
- I. If, at any time during the life of this Contract, Trade Subcontractor fails to maintain any item of the required insurance in full force and effect, all Work of this Contract may, at Contractor's sole option, be discontinued immediately, and all Contract payments due or that become due will be withheld until notice is received by the Contractor as provided in the immediately preceding Paragraph 1.5G that such insurance has been restored to full force and effect and that the premiums thereof have been paid for a period satisfactory to the Contractor.
- K. Any failure to maintain any item of the required insurance may, at Contractor's sole option, be sufficient cause for termination for default of this Contract.

### 5. QUALIFICATIONS

Trade Subcontractor must provide coverage from insurance companies who shall be legally authorized to engage in the business of furnishing insurance in the State of California. All insurance companies shall have a current A.M. Best Rating not less than "A-, VIII" and shall be satisfactory to Contractor.

END OF INSURANCE REQUIREMENT

### VIII. CONTRACT DOCUMENT LIST

The Contract Documents for this Trade Package include the following:

<b>Document Name</b>	Description	Revision Name	Issue Date
Long Form Subcontract		<u>C</u> <u>B</u> <u>A</u> Rev. C	2012-09-07A BC
Specification Division 00 and Division 01	Division 00 and Division 01 defined in Specification Section 00 01 10	<u>C</u>	2012-09-07 <i>C</i>
Technical Specifications	Technical Specifications defined in Specification Section 00 01 10	C B A Revised and Reissued for Bid - Below Grade Package	2012-08-28 <u>A</u> <u>B</u>
Drawings	Defined in Specification Section 00 01 15	<u>B</u> <u>A</u> Issued for Bid – Below Grade Package	2012-08-17 <u>A</u> <u>B</u>
Sketches	<u>C</u> Addendum 3 Scope Matrix and Sketches <u>B</u> DELETED		B 2012-08-29 C
Design Built Documents	Not Applicable		
Project Bidding Manual		<u>C</u> <u>B</u> <u>A</u> Rev. 16	2012-09-07A BC
Exhibit A	Trade Subcontractor Bid Package Manual and Forms – Contract #301000600	<u>B</u> <u>A</u> Rev. B	2012-08-31 <u>A</u> BC
Exhibit B	Warranty		2010-09
Exhibit C	Lien Releases	<b>B</b> Rev. 07/2012	2012-08-22 <b>B</b>
Exhibit D	Sample Certificate of Insurance and Additional Insured Endorsement		
Exhibit E	LEED Subcontractor Submission Letter and Data Sheet		2012-04
Exhibit F	BIM Breakdown Sheet	Rev. 1	2010-10-11
Exhibit G	Subcontractor Payment Requisition		2012-04-03
Exhibit H	Site Specific Safety Plan	<u><b>B</b></u> <u>A</u> Rev. 6	2012-08-22A B
Exhibit I	Concept Schedule	<u>C B A</u> Rev. C	2012-09-07A BC
Exhibit J	Contractor Quality Control Plan	Rev. 3	2012-03-31
Exhibit K	Sediment and Erosion Control Plan		2011-02
Exhibit L	Hazardous Materials Management Plan	Rev. 1	2011-03-11
Exhibit M	RFI Q&A Log	<u><b>B</b></u> Rev. 08/21/2012	2012-08-22 <u><i>B</i></u>

Document Name	Description	Revision Name	Issue Date
Exhibit N	Noise & Vibration Mitigation Management Plan	<u>C B</u> Rev. 4	2012-09-07 <b>B</b> <b>C</b>
Exhibit O	Air Quality Management Plan	Rev. 5	2012-01-16
Exhibit P	Construction Waste Management Plan	Rev. 5	2012-02-23
Exhibit Q	Apprenticeship Program	Rev. 0	2012-03-23
Exhibit R	Survey Information	Rev. 0	2012-03-23
Exhibit S	Traffic Control Plan	<u><b>B</b></u> Rev. 2	2012-08-22 <b>B</b>
A Exhibit T	Supplemental Virtual Building BIM Information	Rev. 0	2012-06-16A
Exhibit W	Waterproofing		2011-05
TG06.1 Contract	TG06.1 Geothermal Loop Contract	Issued for Bid	2012-04-03
Documents	Documents		
TG06.2 Contract Documents	TG06.2 Grounding System Contract Documents	Issued for Bid	2012-04-03

<u>A...</u> Information on how to obtain the TG06.1 Geothermal Loop Package and TG06.2 Grounding Systems Package Contract Documents is available on the TJPA website:

http://transbaycenter.org/tjpa/doing-business-with-the-tjpa/current-contract-opportunities

And also available for download on the following website:

https://webcor.box.com/shared/5406c85f4d614d3eeda3

PASSWORD: WebcorBid! (Case Sensitive) ...A

### END OF CONTRACT DOCUMENT LIST

### IX. SUPPLEMENTARY DOCUMENTS LIST

The Supplementary Documents for this Trade Package include the following:

<b>Document Type</b>	Document Type Description		Issue Date
Supplementary	TG03 BSE Contract and As-Built		2012-05-14
Document	Documents		
<b>B</b> Supplementary	TG03 BSE Contract and As-Built		2012-08-22 <b>B</b>
Document	Documents Addendum #2		
<b>B</b> Supplementary	TG05.3 Personnel and Material Hoists	Rev. 0	2012-08-09 <b>B</b>
Document	Request for Proposals Documents		
<b>B</b> Supplementary	TG05.2R Temporary Power Exhibit A	Rev. 0	2011-03-03 <b>B</b>
Document	Drawings		
<b>B</b> Supplementary	Information from TJPA "Transbay Mat		
Document	Slab Trial Batch Concrete Shrinkage and		
	Compressive Strength Test Results		
	(Summary)"		
<i>C</i> Supplementary	Executed TG06.1 Geothermal Loop Long		2012-07-05 <i>C</i>
Document	Form Subcontract (Addendum#3)		
C Supplementary	Executed TG06.2 Grounding System		2012-07-05 <i>C</i>
Document	Long Form Subcontract (Addendum#3)		

The Supplementary documents are available for download on the following website:

https://webcor.box.com/shared/5406c85f4d614d3eeda3

PASSWORD: WebcorBid! (Case Sensitive)

### END OF SUPPLEMENTARY DOCUMENTS LIST

### ATTACHMENT 1 BID FORM AND SCHEDULE OF BID PRICES

### TO THE TJPA EXECUTIVE DIRECTOR

In response to the Advertisement for Bids for the following public work:

### TG06.0 - Below Grade Package (BGP)

The undersigned Bidder hereby proposes and agrees to execute the required contract, shall it be awarded to said Bidder, and to do all the work and furnish all the materials therefor, all in accordance with the Specifications and Drawings referred to in said Advertisement for Bids and at the prices named in the attached Schedule of Bid Prices.

The undersigned declares: That it is the Bidder (or by holding the position below indicated is authorized to execute this Bid Form on behalf of the Bidder); that said Bidder submits this Bid; that said Bidder has not, nor have any of its agents, officers, representatives or employees, been guilty of collusion with any officer or representative of Webcor/Obayashi or the TJPA, or with any other party or parties in the submission of this Bid; nor has said Bidder received any preferential treatment by any officer or employee of Webcor/Obayashi or the TJPA in the making or submitting of this Bid. The undersigned declares under penalty of perjury that all representations made on this Bid Form are true and correct.

	Executed on	20
Telephone Number	Name of Firm or Corporati	on
	Bidder or Authorized Repre	esentative
	Position in Firm or Corpora	ation
S.F. Business Tax Registration	Address of Firm or Corpora	ation Zip Code
Certificate Number	Contractor's California Lice	ense No.:
	License Expiration Date: _	

BOND OR CHECK REQUIRED: There is herewith attached, as required by law, bid security in accordance with Project Bidding Manual.

NONDISCRIMINATION IN CONTRACTS AND SMALL BUSINESS ENTERPRISE PROGRAM: Provisions of chapter 12B (including its implementing Rules and Regulations) of the San Francisco Administrative Code, and the TJPA Small Business Enterprise Program are incorporated herein and by reference made a part of the Bid Sections as though fully set forth. The Bidder and all lower-tier Subcontractors and suppliers shall comply with these provisions and shall submit all required sections in a timely manner. All Bidders are required, and lower-tier Subcontractor and suppliers are strongly encouraged to take part in pre-bid and pre-award conferences.

# <u>C...</u> <u>B...</u> <u>A...</u> SCHEDULE OF BID PRICES TG06.0 – Below Grade Package (BGP)

Name of Bidder:	

The undersigned, having examined all referenced documents and the Drawings, understanding the terms and conditions of the Contract Documents and the local conditions affecting the performance and costs of the Work, and having fully inspected the Site in all its particulars, hereby proposes and agrees to fully perform the Work as indicated on the Drawings and in accordance with the requirements of the Contract Documents within the time stated therein, and for the following price(s):

No ·	Item Description	Unit of Measure	Est. Quantity	Bid Rate per Quantity	Bid Price
01	Mobilization	LS	Lump Sum	Lump Sum	
02	Waterproofing System	LS	Lump Sum	Lump Sum	
03	Concrete Protection Slab	LS	Lump Sum	Lump Sum	
04	Mat Slab, including Steel Reinforcement	LS	Lump Sum	Lump Sum	
05	Concrete Walls and Chamfer, including Steel Reinforcement and Embedded Assemblies	LS	Lump Sum	Lump Sum	
06	Concrete Columns including Steel Reinforcement and Embedded Assemblies	LS	Lump Sum	Lump Sum	
07	Lower Concourse Slab and Beams, including Steel Reinforcement and Embedded Assemblies	LS	Lump Sum	Lump Sum	
08	Plumbing Work	LS	Lump Sum	Lump Sum	
09	Electrical Work	LS	Lump Sum	Lump Sum	
10	Fire Alarm and Telecommunication Work	LS	Lump Sum	Lump Sum	
11	Light Column and Steel Column Base Plates and Anchor Bolts	LS	Lump Sum	Lump Sum	
12	Vehicle/Bike Ramp Concrete, including Steel Reinforcement and Embedded Assemblies	LS	Lump Sum	Lump Sum	
12	Seismic Expansion Joints	LS	Lump Sum	Lump Sum	
14	High-Congestion Mock-Up Construction and Disposal	LS	Lump Sum	Lump Sum	

No ·	Item Description	Unit of Measure	Est. Quantity	Bid Rate per Quantity	Bid Price
15	Cutting and Disposal of CDSM Shoring Wall located at the top of the Taxi/Bike Ramp	LS	Lump Sum	Lump Sum	
16	Allowance: 10B Traffic Officers	Allowance	Allowance	Allowance	\$1,500,000
17	12" reinforced concrete wall @ 29' high	LF	320		
18	Embedded couplers in slab for reinforced concrete walls	LF	922		
19	Embedded couplers in slab for reinforced CMU walls	LF	330		
20	Reinforced Concrete Beams similar to CB19 at Lower Concourse Level	LF	1252		
21	12" x 24" opening in suspended reinforced concrete slab	EA	4		
22	10" sleeve in suspended reinforced concrete slab	EA	2		
23	3" sleeve in suspended reinforced concrete slab	EA	15		
24	36" x 36" opening in reinforced concrete wall	EA	3		
25	24" x 24" opening in reinforced concrete wall	EA	2		
26	12" x 18" opening in reinforced concrete wall	EA	2		
27	3'-6" wide x 8'-6" high single door opening in reinforced concrete wall	EA	2		
28	Double door rough opening 6'-6" wide x 8'-6" high in reinforced concrete wall	EA	2		
29	6" sleeve in reinforced concrete wall	EA	20		
30	Floor drain with clean out and vent pipe complete with 30' of pipe included	EA	4		
31	Floor drain in suspended slab	EA	11		
32	Additional pipe to complete floor drain and vent	LF	40		
33	Lower sump pits at escalator	EA	14		
34	Lower elevator pits, thicken mat slab	EA	2		

...A ...B ...C

No ·	Item Description	Unit of Measure	Est. Quantity	Bid Rate per Quantity	Bid Price	
35	Lower sump pits at mechanical room – (Item # 17 in the TTC wall & coupler matrix)	EA	3			
36	Lower sump pits at mechanical room –(Item # 18 in the TTC wall & coupler matrix)	EA	1			
37	Lower sump pits at mechanical room —(Item # 19 in the TTC wall & coupler matrix)					
	TOTAL BID PRICE					

### Unit Price Note:

- 1) The following unit prices shall include all markups. No additional cost shall be added on to this price for change order pricing.
- 2) The unit price can be applied to any of the work scopes as shown in the "Transbay Transit Center Below Grade Package Wall and Coupler Modifications" matrix, specification section 01 10 20/API, SKA-2438R2 and SKA-2439R2.

Bidder shall furnish a price for all Bid items in the Bid Schedule and failure to do so will render the Bid as non-responsive and will be cause for its rejection. In determining the successful Bidder, only the total of all Bid items will be considered. No award will be made based on individual bid items.

In case of discrepancy between the sum of Bid item amounts and the Total Bid Price, the sum of said amounts shall prevail. In case of discrepancy between words and figures, the words shall prevail.

Bidder acknowledges and agrees that this Bid, if not withdrawn prior to the scheduled time for receipt of Bids, shall not be withdrawn for a period of 90 days thereafter.

Total Bid Price: \$			
In Written Words: _			

Bid submitted by:	
	(seal)
Name of Firm, Corporation, Partnership or Joint Venture	•
Names of All Partners, if Partnership	State of Incorporation, if Corporation
Signature of Bidder or Authorized Representative	Date of Bid
Name and Title of Authorized Representative	

Note: If Bidder is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership. A corporate authority document which indicates individual is authorized to execute bid documents on behalf of the Firm, Corporation, Partnership or Joint Venture shall be attached.

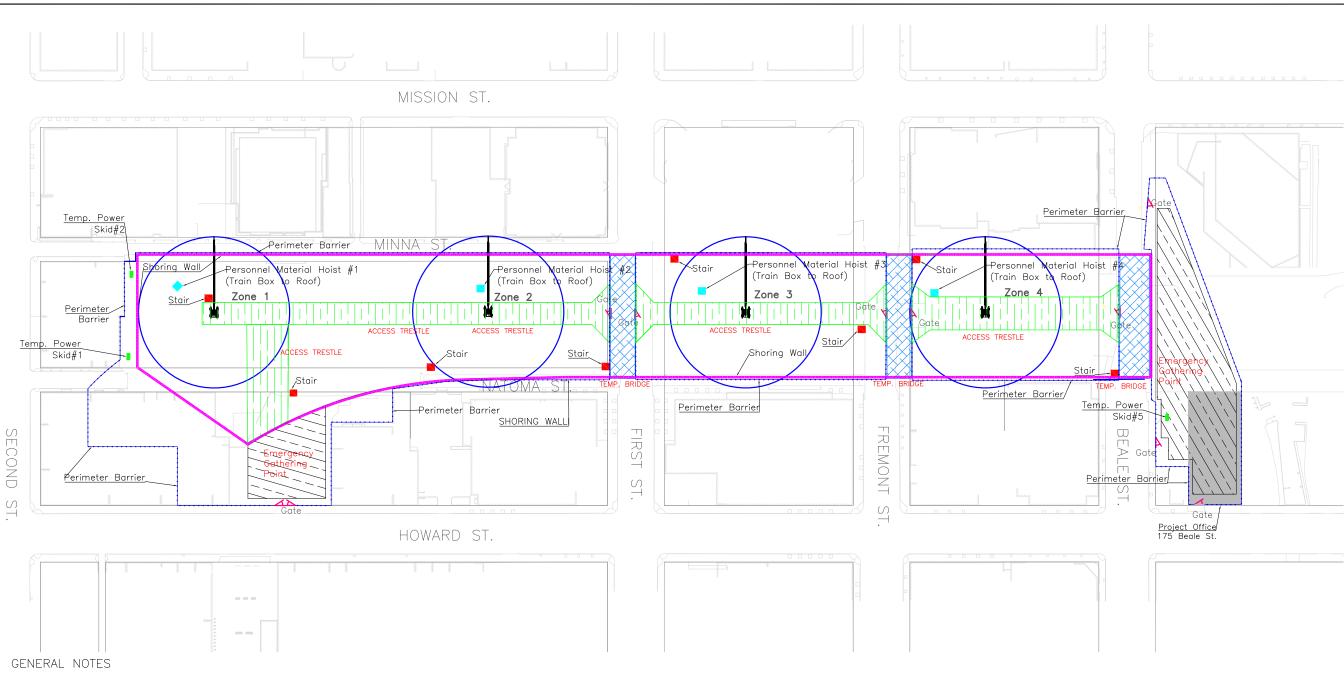
END OF BID FORM AND SCHEDULE OF BID PRICES

### **LOGISTICS ATTACHMENT 2**

The following attached drawings present the conceptual logistical as-built plans:

 $\underline{B...}$   $\underline{A...}$  SL-001 Site Logistics Plan  $\underline{...A}$  SL-002 Site Truck Routing Plan SL-025 Construction Zones and Areas ...B

### **END OF LOGISTICS**



- 1. No jobsite parking available.
- 2. No loading or unloading of materials on city streets at any time. Violators will be cited and fined.
- 3. All deliveries must be coordinated with Webcor/Obayashi.
- 4. Storage of materials in Staging Areas must be coordinated with Webcor/Obayashi.
- 5. All visitors must check in at the Webcor/Obayashi project office.
- 6. Perimeter barrier location is for reference only. Each trade subcontractor shall identify the required perimeter barrier locations in the contract documents.

- 7. Location, size, and width of access trestles and temporary bridges to be designed per the requirements in the construction documents. Actual Locations are subject to change.
- 8. Personnel Material Hoists and stair locations are diagrammatic in nature and do not depict placement of hoists and stairs in the BSE package. Location to be coordinated with and approved by Webcor/Obayashi.
- 9. For staging areas, locations, and availability, see the latest issued revision of spec 01 14 19 — Restriction of Use to Site Areas. Usage of these areas will be at the discretion and assigned by Webcor/Obayashi. Refer to Contract Documents.

10. Location and configuration of gates are for reference only. For location and design refer to contract documents.



NOT FOR CONSTRUCTION

IMPORTANT NOTE:



1751 HARBOR BAY PARKWAY SUITE 200 ALAMEDA, CA 94502 Phone: (510) 748-1900 Fax: (510) 748-7829

175 BEALE ST SAN FRANCISCO, CA 94105 415-978-5700 510-748-7830

# TRANSIT CENTER

SAN FRANCISCO,

	٦				
Revision Block					
Rev. No.	Desc	cription		Date	
01	BSE Phase			07-30-1	
02	Updated Man & Material Hoists			08-13-1	
D	Updated for TG03 BSE Addendum 03			09-27-1	
E	Updated for TG4.3/TG04.4 RUP			10-12-1	
F	Updated for TG03 BSE Addendum 05			10-20-1	
G	Updated for TG06.1 & TG06.2			03-22-1	
н	Updated for TG06 Below Grade IFB		FB	05-10-1	
1	Updated for TG06 Below Grade Addendum 01			06-22-1	
J	Updated for TG06 Below Grade Addendum 02			08-22-1	
Drawn By	RC	Date	-	10-20-10	
Checked By	MP	Date	10-20-10		

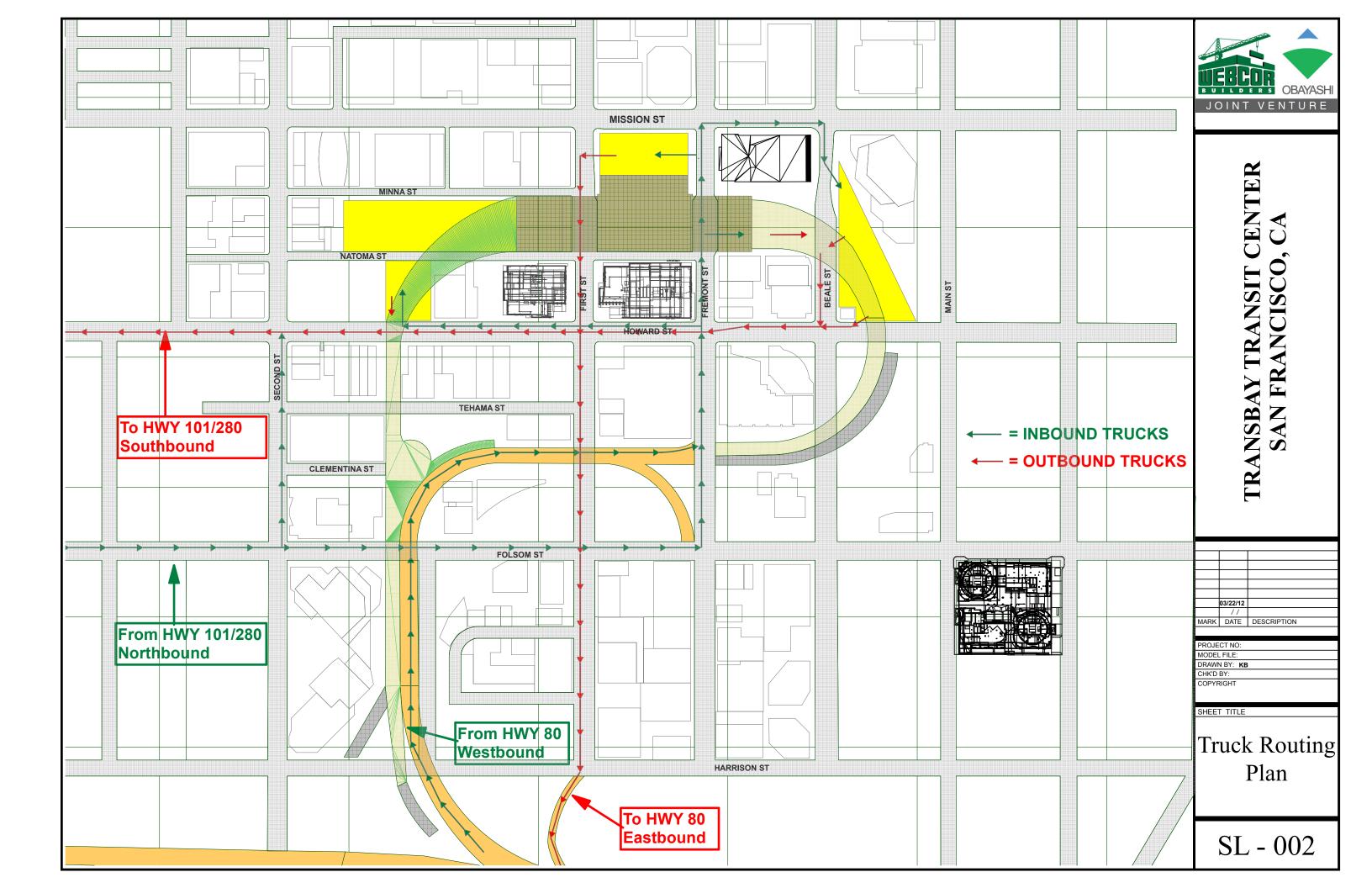
Job No.: 30100

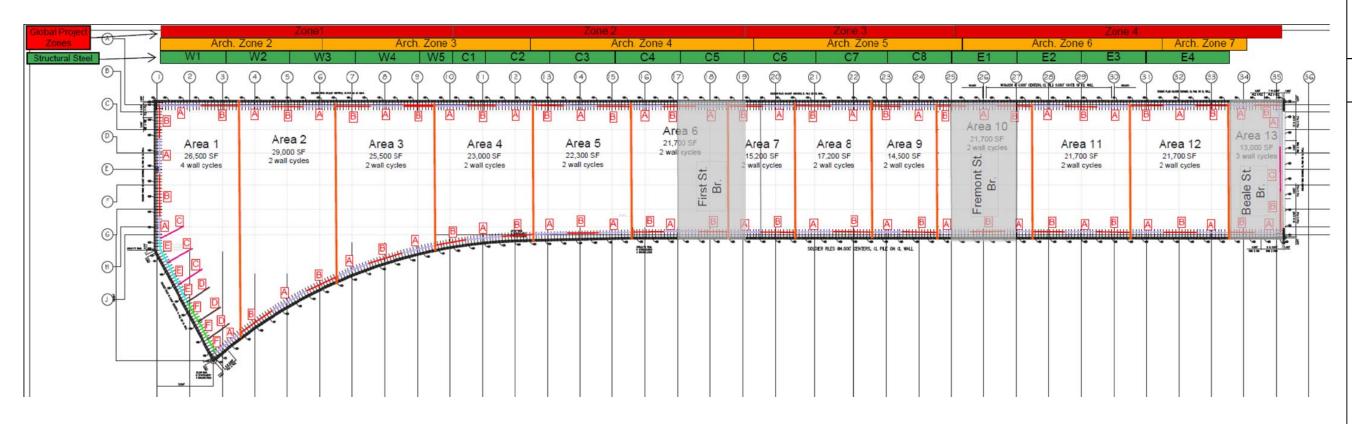
TRANSBAY

Site Logistics

SCALE: N/A

**SL-001** 







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# TRANSBAY TRANSIT CENTER

SAN FRANCISCO, CA

Revision Block

 
 Rev. No.
 Description
 Date

 01
 Updated for TG06 Below Grade Addendum 02
 08-22-12

 01
 Addendum 02
 08-22-12

 02
 Drawn By
 DH
 Date
 08-22-12

 03
 Drawn By
 DH
 Date
 08-22-12

 Checked By
 SR
 Date
 08-22-12

Job No.: 3010

Construction Zones and Areas

SCALE: N/A

SL-025

NOT FOR CONSTRUCTION

IMPORTANT NOTE:

THESE DRAWINGS ARE NOT INTENDED TO REPLACE
THE DESIGN ARCHITECTURAL AND STRUCTURAL
DRAWINGS. ALL DIMENSIONS, LOCATIONS, AND
ELEVATIONS SHOWN ON THIS DRAWING ARE TO BE
CHECKED ON-SITE AGAINST THE LATEST DESIGN AND
DOCUMENTATIONS.

# ATTACHMENT 3 $\underline{B...}$ SOUND CONTROL AND MONITORING REQUIREMENTS

The following is to clarify specification section(s) 01 35 65.1.2.E, 01 35 65.1.8.E.4, and 01 35 65.1.8.8.

### **Summary**

This work includes developing a sound control plan, implementing sound control measures, and monitoring sound levels during construction.

### **Submittals**

At least (30) days prior to commencing operations at the job site, Trade Subcontractor shall submit a Sound Control Plan (SCP) to Webcor/Obayashi Joint Venture ("W/O") pursuant to include, but is not limited to specification section(s) 01 13 00 – Submittals, 01 35 65 – Mitigation Measures and Monitoring, and the Project Bidding Manual.

The SCP must include:

- 1. Work to be performed, including planned work durations.
- 2. Type and location of stationary construction equipment and facilities.
- 3. Type and quantity of mobile construction equipment.
- 4. Estimated sound levels throughout the operating cycle of stationary and mobile construction equipment reported at a distance of 50 feet from the equipment.
- 5. Proposed sound control measures to satisfy the project noise criteria.
- 6. Calculations approved by the Trade Subcontractor's Acoustical Engineer demonstrating that the Trade Subcontractor's operations utilizing the equipment and sound mitigation methods identified in this SCP are expected to satisfy the project noise criteria.
- 7. Contingency measures to be implemented in the event that Trade Subcontractor's operations do not comply with the project noise criteria.
- 8. Detailed information on proposed procedures to conduct the sound monitoring.
- 9. Documentation demonstrating how the Trade Subcontractor will comply with the "Additional Construction Noise Requirements" specified under 01 35 65.1.8.E.1-7.

### **Independent Acoustical Engineer**

Trade Subcontractor shall provide an independent acoustical engineer, acceptable to the Design Team, having at least 3 years of demonstrated experience in noise engineering.

The acoustical engineer shall be responsible for:

- 1. Developing the sound control plan.
- 2. Monitoring compliance with the sound control plan.
- 3. Monitoring sound levels during construction.

### **Materials**

Noise Monitoring Stations, five (5) in total to be spotted by W/O.

Each monitoring station contains the noise monitoring instrumentation:

- Be Type 1 integrating-averaging sound level meters that comply with ANSI S1.4-1983 (R2006), "American National Standard Specification for Sound Level Meters," and ANSI S1.43-1997 (R2007), "American National Standard Specification for Integrating-Averaging Sound Level Meters."
- 2. Be housed in a weather-resistant enclosure.
- 3. Have an exterior weather-resistant microphone and windscreen.
- 4. Have an internal time clock.

- 5. Be capable of running continuously.
- 6. Have wireless networking capability.
- 7. Have a modem and antenna.
- 8. Have a solar panel with controller.
- 9. Have a back-up battery and support chassis.

Service sound level meters before each measurement period at least on a weekly basis for the first month and then at least on a monthly basis following the first month to verify proper operation, including acoustical calibration. Replace or repair inoperative or malfunctioning sound monitors within 48 hours, and note the acoustical data management system accordingly. Synchronize and set the time clocks of all sound level meters per local job site time.

### **Monitoring & Reporting**

### **Noise Monitoring Plan**

General:

Install / maintain / retrieve semi-permanent automated continuous noise monitoring on this project; each station shall be equipped with a modem for communicating with a central server set up for the project. The Web database software shall collect all data from the field and provide automated creation of reports and graphic diagrams as required. Reports shall be submitted to W/O weekly and shall include a written summary of the monitoring results, as well as the graphic diagrams for the week. The central server will manage and back up all the data from the site, which will be available on the Internet, providing authorized project stakeholders with instant access to the processed data. Programing of instruments, website establishment and service, and data communication services for the internet, shall be included in this otherwise turn-key design build system. Trade Subcontractor shall monitor and report for the entire project upon receipt of the first NTP continuously until Notice of Final Completion as defined by specification section 01 17 00.1.4.B.6.

### **Notifications**

The system shall automatically generate alarms if thresholds are reached. It shall send emails and or text messages to a predefined list of recipients that may differ, depending on the type of threshold, in addition to an audio file of the event that triggered the alarm.

Procedures for Corrective Measures:

- 1. Notifications shall be sent to a pre-defined list of stakeholders when noise levels are approaching 90% of threshold, which shall include the following:
  - a. W/O and Trade Subcontractor Project Manager(s)
  - b. W/O and Trade Subcontractor Superintendent(s)
  - c. W/O and Trade Subcontractor Field / Office Engineer(s)
- 2. Upon notification of noise levels at 90% of thresholds, Trade Subcontractor shall continuously check the noise levels to ensure levels do not exceed the established thresholds.
- 3. If the established noise thresholds are exceeded, then exceedance alert notifications shall be sent out to the following:
  - a. W/O and Trade Subcontractor Project Manager(s)
  - b. W/O and Trade Subcontractor Superintendent(s)
  - c. W/O and Trade Subcontractor Field / Office Engineer(s)
- 4. When the specified noise level(s) is exceeded and or in the event of a neighboring complaint, W/O reserves the right to stop the Trade Subcontractor's noise generating work. Trade Subcontractor remains responsible for the resulting shut down cost(s) and or adverse schedule impacts until rectified. Prior to resuming work, Trade Subcontractor shall submit a Corrective Action Plan accounting for the incident that occurred while including a revised SCP detailing new, revised, or additional measures, to mitigate the noise. Do not resume work until W/O has

received and reviewed the Corrective Action Plan and returned it to Trade Subcontractor. The reviewed Corrective Action Plan shall be implemented within 24-48 hours of an exceedance alert.

END OF B... SOUND CONTROL AND MONITORING REQUIREMENTS ...B

### ATTACHMENT 4 <u>B...</u> CONSTRUCTION CAMERA REQUIREMENTS

### **SUMMARY**

The intent of the following specification section is for the Trade Subcontractor to furnish and install two (2) turn-key / utility independent camera positions, at locations determined by Webcor/Obayashi Joint Venture ("W/O"), to clearly record the construction phases within each zone. Trade Subcontractor shall be responsible for all design, labor, material, hardware, software, service, and any other required cost for a fully functional integrated system further described below.

### **SUBMITTALS**

- A. Equipment cut sheets.
- B. Condition specific, professionally engineered camera system, to include solar panel(s), mounting details and calculations.
- C. Operations and maintenance manuals.

### **SYSTEM REQUIRMENTS**

- A. The indoor/outdoor live streaming video camera system shall consist of a weather resistant engineered plastic upper dome with aluminum wall mounting bracket and high-impact UV protected polycarbonate lower dome to be mounted as a fixed pole, wall, parapet or non-penetrating roof. The camera system shall include a video encoder built into an all-weather enclosure.
- B. Cable entry through access channel in mounting bracket.
- C. The camera shall have the ability to take digital still images every 15 minutes, depending on service package, as well as provide live video.
- D. The camera shall upload the still images over a wireless cellular modem.
- E. The content shall be sent to a secure, password protected website with an Interface and Online Software features provided by the vendors as a Managed Service.
- F. The system shall operate on a fully integrated solar power supply.

### **DURATION**

The Video camera system shall be the responsibility of the Trade Subcontractor upon receipt of the first NTP continuously until Notice of Final Completion as defined by specification section 01 17 00.1.4.B.6.

### **EQUIPMENT**

- A. Robotic Camera: Integrated robotic camera and lens assembly consisting of a charge coupled device (CCD) camera with a remotely controlled focal length lens with the following features:
  - 1. Imager: 1/4" CCD.
  - 2. Resolution: 704 x 576 pixels.
  - 3. Minimum illumination: 0.3 lux (color mode), 0.006 lux (black/white) at F1.4, 30IRE.
  - 4. Pan range: +170° to -170°.
  - 5. Tilt range: -30° to -90°.

- 6. Lens: F/1.3 F/3.0.
- 7. Zoom: 4.1mm 73.8mm,18x optical, 12x digital.
- 8. Video compression: Motion JPEG and MPEG-4.
- 9. Image Settings: Day/night, white balance, back light compensation, contrast, brightness.
- 10. Communication: 10BASE-T/100BASE-TX Ethernet, IP addressing: dynamic or static.
- 11. Thermostatically controlled heater.
- 12. Operating temperature:  $-20^{\circ}$ F to  $+120^{\circ}$ F ( $-29^{\circ}$ C to  $+49^{\circ}$ C).
- 13. Dimensions: 14.7" H x 8.2" W x 14.5" D (37.4cm H x 20.8cm W x 36.9cm D).
- 14. Weight: 11.9 lbs (5.4 kg).
- B. Data Connection:
  - 1. Operate cameras via built-in cellular data connection provided and maintained by the system vendor.
- C. Modem: A wireless data modem with heavy duty outdoor antenna and power supply.
  - 1. Current Draw: Dormant connection: 40ma at 12 VDC
  - 2. Data Connector: Ethernet Interface: RJ-45 connector.
  - 3. Radio Dim: 4.6" x 1.4" x 2.5"
  - 4. Temp Range: Required to operate normally in San Francisco.
  - 5. Operating Frequency: EV-DO, TCP/IP, UDP/IP, DHCP, HTTP, SMTP, SMS, MSCI, Modbus, and many more.
- D. Fully integrated solar power supply designed for site loads requiring 12 volts DC. System includes:

110 watt solar panels, solar data charge controller and (3) 12 volt 120 amp hour sealed batteries.

Solar system shall provide safe and reliable power without the need and expense of installing utility power. The sealed, maintenance free batteries are designed for deep cycle operation and extended life in solar applications. The solar system shall be designed to withstand rugged transportation to remote sites. Integrated with the vendor's control center software, the solar system shall come with additional solar data center that provides vital system information about battery usage, voltage, and temperature, both current and historical. Additionally the solar data center shall keep the user informed of system faults and alarms.

### INTERFACE AND ONLINE SOFTWARE

- A. Remote Access: Contractor's system vendor shall provide an internet based interface and online software as a managed service, to allow the viewing of all high-definition digital still images captured and stored from any location with internet access via a secure password protected website.
  - 1. Maintain images on the system vendor's website for reference available at all times during the life of the project and for not less than 60 days after completion.
  - 2. All images will be protected on servers owned and operated by the system vendor and located in secure area at the system vendor's location.
- B. Online interface features shall be:
  - 1. Software delivered by vendor as a managed service.
  - 2. Displays company logo and project name.

- 3. Capable of viewing live video.
- 4. Picture in Picture to view live video, while viewing high definition images.
- 5. Robotic pan, tilt, zoom control of camera system.
- 6. Calendar based navigation system for selecting specific images.
- 7. Multifunction image browsing.
- 8. Pan, tilt and zoom capability within a high definition image.
- 9. A multiview screen to view all of the cameras on a project at the same time.
- 10. Graphical mark-up tools for detailing and creating overlays on images.
- 11. Graphical weather applet displaying ten points of local weather data and 48-hour forecast.
- 12. Remote solar monitoring screen displaying the DC amperage output of solar panels.
- 13. Remote battery monitoring screen displaying battery voltage, temperature and status.
- 14. Remote cellular monitoring screen displaying connectivity, network traffic and modem temperature.
- 15. Remote wireless radio monitoring screen displaying connectivity, network traffic and Google Map features including wireless radio locations.
- 16. Share image tools: save, print, email and post to message board or mobile devices.
- 17. Automated progress reports in Power Point, Open Office and PDF formats.
- 18. Map, aerial and satellite view by Google.
- 19. Time lapse features include Instant time lapse play back by day, week, month or year.
- 20. Machine to machine self-healing technology that automates maintenance of camera up to 288 times daily.
- 21. Account security features include Four levels of password protection, IP address block/ permission and SSL protection of the user login password.
- 22. All images are the copyright of the client and protected on secure servers owned and operated by the system vendor.

### **EXECUTION**

### **PREPARATION**

A. Unpack camera system components and save packing materials (box and foam) for future shipment of camera system including associated appurtenances and mounting equipment to Owner or Manufacturer as required.

### **INSTALLATION**

- A. General:
  - 1. Install camera system in accordance with manufacturer's printed instructions, State and Municipality codes and requirements and approved submittals.
  - 2. Install units plumb and level and at proper angle to provide maximum field of view of on-site operations.
  - 3. Securely and rigidly anchor products in place.
  - 4. Connect cameras to power.
- B. Position camera so that field of view of approximately 55° horizontal and 41° vertical covers intended area of site. Camera views to be confirmed by W/O.
  - 1. Install camera at elevation that will provide uncompromised visual coverage.

2. Install camera so that the sun or any man made light sources will not be in the direct field of view of the camera at any time during construction.

### FIELD QUALITY CONTROL

- A. Pre-installation Testing: Test camera on-site at ground level prior to mounting unit in its intended elevated position.
  - 1. Contact the system vendor not less than 24 hours in advance of installation for testing.
  - 2. Connect unit.
  - 3. After 30 minutes, contact the system vendor and require system vendor to remotely confirm camera is operating properly.
  - 4. Install cameras in approved locations identified by W/O.

### **CLEANING**

- A. Clean installed items using methods and materials recommended in writing by manufacturer.
- B. Clean camera system components, including camera-housing windows, lenses, and monitor screens.

### **INSTRUCTION**

- A. Engage a factory-authorized service representative to instruct contractor's personnel in procedures to adjust and maintain camera equipment. Assume (2) training sessions in different calendar months.
  - 1. Instruct personnel on procedures and schedules for troubleshooting and maintaining equipment.
  - 2. Explain methods of determining optimum alignment and adjustment of components.

### OPERATION, TERMINATION, AND REMOVAL

- A. Maintenance: Maintain camera equipment in good operating condition on a 24-hour basis until removal including battery replacement.
- B. Termination and Removal: Removal of camera system when instructed by the W/O.
  - 1. Camera system including associated appurtenances and mounting equipment are property of Owner.
  - 2. Patching as required of abandoned camera mounts will be the responsibility of the Trade Subcontractor.

### WARRANTY

Warrant devoid of additional cost the design, labor, material, hardware, software, service, specified above for the specified duration in use.

### END OF Error! No bookmark name given. ... B

### C... ISSUANCE LOG

REV No.	ISSUE	DATE
0	Issued For Bid TG06.0	05/14/2012
A	Revised and Reissued for Addendum #1	06/26/2012
В	Revised and Reissued for Addendum #2	08/22/2012
C	Revised and Reissued for Addendum #3	09/07/2012

<u>...C</u>

### **END OF EXHIBIT A**