# EXHIBIT A - Trade Subcontractor Bid Package Manual and Forms – Contract # 301000801

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Invitation for Bid Package #
TG08.1: Glazing Design/ Build
Construction Services dated
June 3, 2011 Addendum # 1
dated July 22, 2011 ...B



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#### I. KEY DATES FOR BIDDING PROCESS

Bidders shall submit their "Bid Form", "Schedule of Bid Prices", and other applicable sections and forms in Specifications and Project Bidding Manual (PBM). Required submittal documents for the bid are listed in "Bidding Forms Checklist (BCL)" located within the PBM.

<u>List of Prequalified Bidders</u>: Based on the final stage of the Request For Design Proposals (RFDP) submission process, and qualification letters issued by Webcor/Obayashi Joint Venture on April 15, 2011, the following bidders are the only authorized Trade Subcontractors allowed to bid the TG08.1 scope of work. Bids from any other Trade Subcontractor will be rejected:

- Enclos Corp.
- Josef Gartner USA, a division of Permasteelisa North America Corp.
- NEC of California, Inc., dba Mero/NEC

<u>Package Issuance Timeline</u>: Starting June 3, 2011, Invitation for Bid (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>). Information regarding how to obtain drawings and specifications will be posted on the TJPA website by June 3, 2011.

<u>Pre-Bid Conference</u>: A mandatory pre-bid conference for Prequalified Bidders will be held on June 21, 2011, at 1:00 pm in the TJPA offices at 201 Mission Street, Suite 2100, San Francisco, California, 94105.

**B...** Questions/Clarifications: Questions or requests for clarifications regarding the IFB <u>must be</u> submitted in writing no later than 2:00 pm on <u>June 24 August 5</u>, 2011, to Webcor/Obayashi Joint Venture, 183 Fremont Street, San Francisco, CA, 94105 via email (<u>TransbayBidding TG08@webcorobayashi.com</u>) or fax at (510) 748-7805. Answers will be posted on the TJPA website noted above. Questions or requests for clarifications submitted after <u>June 24 August 5</u>, 2011, may not be responded to. Questions on Bidding Documents (QBD) form in the PBM shall be used for questions or requests for clarifications.

<u>Bid Due Date</u>: Each Trade Subcontractor shall submit sealed bids to the TJPA offices at 201 Mission Street, Suite 2100, San Francisco, CA, 94105 by 2:00 pm Pacific time on <u>August 10</u> **September 15**, 2011. No bids will be accepted after 2:00 pm on the bid due date ... **B** 

<u>Clarifications</u>: Webcor/Obayashi Joint Venture at its own discretion may seek Bid clarifications from any or all of the Bidders if required by TJPA and/or Webcor/Obayashi Joint Venture.

B... Notification of Intention to Award Contract: On or about September 5 October 5, 2011

TJPA Board Vote to Approve the Contract Award: September 8 October 13, 2011 ... B

END OF KEY DATES FOR BIDDING PROCESS

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

At no time during the bid process (defined as the time between issuance of this IFB until award of Subcontract 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/GC), CM Oversight (CMO), or other TJPA Consultants regarding this IFB. The only contact is for submission of questions using the contact directions below.

Submit questions using the QBD form through Webcor/Obayashi. QBD form can be found in Project Bidding Manual.

E-mail Webcor/Obayashi Joint Venture at TransbayBidding\_TG08@webcor-obayashi.com.

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

END OF COMMUNICATION WITH WEBCOR/OBAYASHI JOINT VENTURE

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

TG08.1 – Design/Build Glazing Systems Package, Labeled Systems W-1, W-3, W-4, W-8 & W-10:

#### A. Package Scope Summary

The scope of work for the Design/Build Glazing Systems Package includes all glazing systems currently labeled in the bidding documents as W-1, W-3, W-4, W-8, and W-10 and as described in the Contract Specifications. Include all costs for engineering, administration, labor, material, equipment, deliveries, staging, placement, supplies, and supervision required to provide a complete system. Complete all work in accordance with the Contract Documents included within this scope of work.

Bids will be based upon Bidders' proposed designs as have been submitted to the TJPA and which have been qualified by TJPA's comments. Notwithstanding TJPA's comments and notwithstanding the fact that a Bidder has been prequalified to submit a bid, it shall be incumbent upon the Bidder to submit a bid that results in complete, functional glazing systems that fully comply with the Issued for Bid and Contract Documents.

Where there is a conflict between the Issued for Bid and Contract Documents and the submitted design proposal documents as submitted by prequalified Trade Subcontractors on March 29, 2011, the Issued for Bid and Contract Documents shall take precedence.

Major scope elements for this package will consist of, but are not limited to, the following:

- Perform services including the preparation of glazing system design documents, engineered calculations, and detailed coordination shop drawings with associated 2-D & 3-D modeling. Trade Subcontractor to provide coordination, constructability reviews and sequence of installation advice to assist Architect in finalizing the construction documents where glazing systems interface with other aspects of the building (i.e., structural steel, security systems, lighting, etc.). The process shall be collaborative where all members of the design and contracting team mutually refine and update their respective construction documents to illustrate the full design intent.
- Provide all calculations including the verification of blast requirements as specified in the Contract Documents. Provide all necessary system component and supporting data for testing criteria and all specified test results from blast analysis.
- Engineer, prepare, coordinate, conduct and complete all specified on- and off-site testing and mockups.
- Coordinate all other trade scope system interfaces with W systems (i.e., future fixtures, LEDs, security, signs, etc.) as shown and specified in the Contract Documents.
- Fabricate and install all systems and system structures (i.e., all structural and support assemblies that are welded and/or bolted to primary building structure, etc.). Bolted assemblies and their location on primary structures require additional coordination with steel fabricators in conjunction with continuous on- and off-site quality control, shop drawings review and coordination, review and confirmation of all of bolted assemblies including, but not limited to, on-site coordination during fabrication at fabricator facilities.
- **B...** Furnish and install all specific glazing assemblies and components per bidding documents, including but not limited to all required frit patterns, laminate(s) types, edge treatment, tempering, gaskets, and sealants and all associated graffiti resistant glass film. ... **B**
- Furnish and install all associated aluminum and stainless steel panels, enclosures, escutcheons, trim profiles and any/all aluminum and stainless steel flashing, closure plates and backing assemblies as shown for each W system. All paneling and trims at floor finish levels require coordination with

- finish floor assemblies and locations. Coordination of receiving trims adjacent to finish flooring requires properly sized and fabricated receiving trims, panels and caps.
- Furnish and install all system expansion joints and subassemblies where specified; all bird deterrent systems; all smoke seals and fire safeing at slab edges; all architectural, structural and fire caulking at joint locations, to adjacent surfaces and to all dissimilar materials where shown and/or specified and by code; vapor barriers; specified protective coatings; welded or bolted plate assemblies to structural steel and/or embedded in concrete and all miscellaneous iron in direct support of glazing systems
- Furnish and install all waterproofing and associated backing plates and support assemblies as
  specified. All waterproofing assemblies require detailed, systematic coordination and scheduling
  for proper sequencing of other trades and waterproofing applications. Installation requires multiple
  mobilizations and non-sequential installations for areas where detailed system interface requires
  multiple trades to work in tandem in achieving required installations.
- Coordinate and provide support structures requiring interface with other trades (i.e., future lighting, signage, exit signage, etc.).
- Design, provide and install all associated system embeds including, but not limited to, field layout, verification of control, grouting and all necessary concrete pour watch manpower.
- Coordinate, design and install integral fall protection components for W-8 and W-10 systems only.

Trade package value is estimated to be in excess of \$40,000,000.

The majority of the TTC is naturally ventilated and the temperature range and comfort level is controlled by a combination of airflow and glazing selection. Analysis and modeling during design has led to the glass specified in the TG08.1 Bidding documents. Final verification through future analysis and modeling by the design team will occur along with the completion of the construction documents early in 2012. The glass types may require revisions based on this final verification.

Temperature comfort during day and night throughout the year to the transit users and visitors of the TTC are of paramount importance to the TJPA. The TJPA does not want a station that will be uncomfortably hot due to sunlight heat penetrating the glass. While specifications have been provided for the glazing assemblies, the TJPA welcomes the bidders' assistance in alternate glazing selections that will achieve the TJPA's requirement of temperature comfort should the future analysis and modeling warrant.

Trade Subcontractor is required to review the Contract Documents and Site Conditions in accordance with all requirements set forth in the Prime Contract with respect to its scope of work (See Section 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 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 the CM/GC can properly notify the TJPA within the 30 day time period prescribed in Section 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 or regulations without written notice to CM/GC, Trade Subcontractor shall assume responsibility for such Work and shall bear all costs of correction (See Section 00 07 00 – General Conditions, Article 3.08.E).

#### B. General Work

All necessary general work shall be included in this package. The general work shall include, but not be limited to, site preparation, temporary work surfaces and scaffolding, temporary access platforms,

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temporary power for welding equipment, temporary water distribution from point of connection (POC), lighting for night work, all general task lighting, traffic/pedestrian lighting, traffic/pedestrian barricades and k-rails as necessary at temporary glazing work zones, fencing and all associated logistical mobilizations, flagging for deliveries and off-haul, pedestrian protections, crane/rescue baskets, temporary toilets, as-built surveying and modeling, weather mitigation, clean-up, traffic control planning and approval, traffic police, potable water, dumpsters, dump permits and fees, site safety, pedestrian protection, flagging for deliveries, safety & safety overhead work (labor & material), material protection and small tool/equipment required for this work package.

Any work requiring modifications to, or relocations of, barriers (i.e., perimeter fencing, k-rails, gates, etc.) shall be the responsibility of this Trade Subcontractor. If perimeter barriers are moved, modified, relocated or other, this Trade Subcontractor will be responsible to relocate all lighting, signage or any other systems using perimeter barriers for support, protection or other. When altering or relocating perimeter site fencing and barriers, the minimum perimeter barrier requirements are continuous 9-foothigh chain link fence with green plastic slats and barbed wire. Fencing shall include a minimum of two (2) 16-foot gates at discrete fenced areas and is dependent on level of relocations required for each required staging and erection area.

Provide all necessary working platforms for scheduled testing, inspection, structural and architectural field observation reviews of all W systems. Platforms consist of but are not limited to OSHA-compliant scaffolding platforms and/or lift equipment. Nonscheduled inspection and field observation reviews shall be accommodated within reasonable expectations. Provide a minimum of 72 hours advance notice when disassembling and/or demobilizing access platforms.

If operations occur after dark this Trade Subcontractor shall be responsible for, if required, installing and maintaining temporary lighting at perimeter barriers and pedestrian walkways as required to provide code-minimum lighting for egress pathways, as well as sufficient foot candle lighting levels to safely perform work at all times. Temporary lighting includes, but is not limited to, safety lighting, task lighting, mobile lights, temporary light poles and all associated rough-in to accommodate new and/or relocated lighting. Noise ordinance compliance associated with night work (if required) and all associated administrative, permitting and logistical work is by this Trade Subcontractor.

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 throughout Bid Items.

Specific W System Scope requirements in addition to Package Scope Summary detail (above):

#### W-1 System

- 1. Furnish and install a complete W-1 system, per the Issued for Bid Documents.
- 2. Furnish and install all cross bracing tension cable assemblies complete to primary structure.
- 3. Furnish and install all system embeds complete with field layout, and as-built surveying.
- 4. Fabricate all primary and secondary system components to accept future LED lighting and associated electrical and data wire pathways as specified.

### W-3 System

- 1. Furnish and install a complete W-3 system, per the Issued for Bid Documents.
- 2. Furnish and install all miscellaneous galvanized steel support and associated blockouts and embeds for Doors/Sliders/etc. complete.

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- 3. Furnish and install integral light gauged stud wall systems complete (i.e., drywall, insulation, sealant, air barriers, taping, etc). Coordination required with other trades for complete field assembly.
- 4. Furnish all exterior storefront doors and sliders within the W-3 systems including all associated hardware complete including construction cores for CM/GC use. This includes, but is not limited to, all ADA-compliant devices, mounts, and pedestals and all controller installations and closure calibrations.
- 5. Furnish and install all actuation devices for operable glass vents. Coordinate power/data routing and POC with electrical trade. Power/data routing shall be determined during design coordination and shop drawing project phase.
- 6. Furnish and install all stainless steel backing plates for waterproofing support. Extend all backing plates to concrete substrates.
- 7. Fabricate and install all primary and secondary system components to accept future interior and exterior fixtures, can lighting and exit signage. Coordinate with electrical trade for required electrical rough-in and POC. This scope requires specific design coordination with the Architect for final lighting and exit sign configuration and layouts.
- 8. Furnish and install all vapor barriers and waterproofing as specified. Include the complete waterproof barrier of the entire storefront door and slider entries assemblies require a complete and uninterrupted vertical and horizontal barrier (excluding structural deck waterproofing).
- 9. Coordinate with future electrical trades on the routing of wiring for future security, access control and fire alarm controls.
- 10. Coordinate all paneling at floor levels with finish floor assemblies and locations. Close coordination of receiving trims adjacent to finish flooring requires properly sizing and fabricating receiving trims, panels and caps.

#### W-4 System

- 1. Furnish and install a complete W-4 system, per the Issued for Bid Documents.
- 2. Furnish and install complete paintable closure items adjacent to all GFRC Ceiling assemblies.
- 3. Furnish and install "Shadowbox" and associated insulated panels.
- 4. Fabricate all primary and secondary system components to accept future lighting and exit signage. Coordinate with electrical trade for required electrical rough-in and POCs.
- 5. Furnish all slider doors systems including all associated hardware complete including construction cores for CM/GC use. This includes, but is not limited to, all ADA-compliant devices, mounts, and pedestals and all controller installations and closure calibrations.
- 6. Furnish and install complete bracket for future LED Scrim panel.
- 7. Furnish and install all integral and matching cover trims and caps in preparation of future electrical conduit installation of LED lighting.
- 8. Coordinate with future electrical trades on routing of wiring for future security, access control and fire alarm controls.
- 9. Furnish and install all waterproofing to interface delineations between other waterproofing systems. Close coordination of installation details and scheduling thereof is paramount. This Trade Subcontractor is to initiate coordination between all required trades for waterproofing interface.
- 10. Furnish and install all system insulated panels.
- 11. Furnish and install all stainless steel backing plates for waterproofing support. Extend all backing plates to concrete substrates.
- 12. Special consideration and effort are required for the design coordination and field sequencing of all interface details with the W-12 system (by others). Both systems are integral to the other and assemblies require special coordination and identification within shop drawings, scheduled material deliveries and non-sequential field installation activities.

#### W-8 System

- 1. Furnish and install a complete W-8 system, per the Issued for Bid Documents.
- 2. Complete fabrication and installation of all structural and miscellaneous iron components (i.e., all assemblies that are bolted and/or embedded into the primary building structure).
- 3. Furnish and install all door support assemblies.
- 4. Furnish and install exterior doors including all associated hardware and thresholds complete including construction cores for CM/GC use. This includes, but is not limited to, all ADA-compliant devices, mounts and pedestals and all controller installations, calibrations, electrical POC hook-up and testing.
- 5. Furnish and install all system embeds and associated grouting complete with field layout, concrete pour watch and as-built surveying in finalizing fabrication.
- 6. Fabricate all primary and secondary system components to accept future lighting and exit signage. Coordinate with electrical trade for required electrical rough-in and POC.
- 7. Coordinate with future electrical trades on the routing of wiring for future security, access control and fire alarm controls.
- 8. Furnish and install all actuation devices for system operable glass vents. Coordinate power/data routing and POC with electrical trade. Power/data routing shall be determined during design coordination and shop drawing project phase
- 9. Fabricate and install all primary and secondary system components to accept future interior fixtures and signage. Coordinate with electrical trade for required electrical rough-in and POC. This scope requires specific design coordination with the Architect for final lighting and exit sign configuration and layouts.
- 10. Design, furnish and install integral fall protection assemblies.
- 11. Furnish and install complete gutter system (piping and pipe connection is by others).
- 12. Furnish and install all stainless steel backing plates for waterproofing support. Extend all backing plates to concrete substrates.
- 13. Special consideration and effort are required for the design coordination and field sequencing of all interface details with the W-12 system (by others). Both systems are integral to one another and assemblies require special coordination and identification within shop drawings, scheduled material deliveries and non-sequential field activities.

#### W-10 System

- 1. Furnish and install a complete W-10 system, per the Issued for Bid and Contract Documents.
- Complete design, fabrication and installation of all structural components and embeds including, but not limited to, the structural steel ring assemblies for the two small W-10 skylight canopies.
   The large center skylight structural scope will only include clip and angle welding to structural ring steel (provided by others).
- 3. Design, furnish and install integral fall protection assemblies.
- 4. Furnish and install miscellaneous iron backing plate for waterproofing support. All miscellaneous iron backing to be continuous for uninterrupted waterproofing substrate support.
- 5. All stainless steel trims, flashing and closure are to be included, but are not limited to, closure angle and system trim as shown in 1/A1-8404, but not limited to 1/A1-8404.

Trade Subcontractor shall protect its work in place and is responsible for all repair costs, if damage occurs. The contract amount paid for all the above items shall include full compensation for furnishing all labor, materials, equipment, tools, transportation, disposal fee, incidentals and any other costs/fees necessary to complete the work items.

#### **EXCLUSIONS:**

The following work scopes are by other Trade Subcontractors and excluded from this work package:

- Intumescent coatings.
- Cementitious fireproofing.
- All glazing systems not designated above (except required coordination for W-12 system)
- LED light fixtures and associated rough-in installations (See Alternates # 6 & 7).
- Light gauged galvanized sheet metal flashing.
- Stainless steel gutter and grate assemblies located within landscaping (example: 1/A1-8404).
- Exit signs and their installation (design coordination and rough-in coordination is required).
- Any glass handrail support or interfacing details within or adjoining the W-8 system.
- Stone, ceramic, precast or terrazzo door thresholds. Provide coordination for installation of dissimilar material only.
- Temporary Construction Water POCs will be provided every 300 feet along the construction site perimeter only. Hoses or additional piping to extend water distribution beyond POCs is by this scope.
- Temporary Power single phase 110/208 at spider boxes placed every 100 feet will be provided. 3-phase power will not be provided and this Trade Subcontractor is responsible to provide its own power source for welding machines and any heavy equipment too large for spider box capacity.

#### **SBE Program**

Webcor/Obayashi Joint Venture has established an SBE utilization goal of 20% of the total value of Trade Subcontractor's bid value. The TJPA SBE Program accepts certifications from the following as SBEs: California Unified Certification Program, California Department of General Services, and the San Francisco Human Rights Commission. The SBE Program is further defined in Contract Specification Section 00 08 21.

Webcor/Obayashi Joint Venture recommends that Proposers review the TJPA's SBE Program, available on the TJPA website: <a href="http://www.transbaycenter.org">http://www.transbaycenter.org</a> > TJPA > Doing Business with the TJPA (http://transbaycenter.org/tjpa/doing-business-with-the-tjpa).

#### **Ouestions Regarding SBE**

Written questions concerning SBE and nondiscrimination requirements shall be submitted per Section II, Communication with Webcor/Obayashi Joint Venture.

A two-part SBE outreach session will occur immediately following the 1:00 pm June 21, 2011, pre-bid conference until 5:00 P.M. and will continue the following morning June 22, 2011, from 9:00 A.M. to 12:00 P.M. Both outreach sessions will occur in the same conference room, and all prequalified bidders are required to participate. Each Bidder shall staff a table and provide an opportunity for one-on-one networking with the potential subcontractors in attendance. Each of the prospective Bidders should complete a review of the scope of work prior to the event and identify specific bidding opportunities the Bidder will make available for small business participation. For additional information on sub-tiered SBE/DBE subcontractor participation contact Mr. William Dennis of Business Development, Inc. Telephone: 415-671-2150 or Cell: 415-694-2013.

#### C. Base Bid Item Scope

This section is supplemental information only, used to describe how the Bid pricing is to be broken down and should not be used as definition of the scope of the work. All necessary work from mobilization to handover to the next Trade Subcontractor, or to Webcor/Obayashi Joint Venture and TJPA, shall be included in the Bid items.

#### 1. Mobilization

This bid item includes all mobilization, demobilization, and other preparation costs described in Section 01 15 05 – Mobilization.

## 2. Engineering, Design Coordination, Calculations, Shop Drawings,

Provide as a defined line item all design services for the entire project. Provide all costs to complete system designs from design coordination and engineering to final detailing via 2-D and 3-D modeling through final acceptance of design from architects/engineers/owner and other required design scopes and services needed for a complete package. Include all shop drawing and product data production and submittals.

## 3. Off- and On-Site Mockups and Testing

Provide as a defined line item all necessary procurement, fabrication and testing of all on-site and off-site mock-ups per specified criteria. This includes, but is not limited to, all administrative and travel costs (see Specification 01 10 20/APH) and all other ancillary costs associated with mock-up testing.

#### 4. Material Procurement and Fabrication for W-1 System

Provide as a defined line item all necessary procurement and fabrication of noted systems to meet design intent.

#### 5. Material Procurement and Fabrication for W- 3 System

Provide as a defined line item all necessary procurement and fabrication of noted systems to meet design intent.

## 6. <u>Material Procurement and Fabrication for W- 4 System</u>

Provide as a defined line item all necessary procurement and fabrication of noted systems to meet design intent.

#### 7. Material Procurement and Fabrication for W-8 System

Provide as a defined line item all necessary procurement and fabrication of noted systems to meet design intent.

#### 8. Material Procurement and Fabrication for W-10 Systems

Provide as a defined line item all necessary procurement and fabrication of noted systems to meet design intent.

#### 9. Delivery and Installation of W-1 System

Furnish and install complete, specified system fabricated to meet the design intent.

#### 10. Delivery and Installation of W-3 System

Furnish and install complete, specified system fabricated to meet the design intent.

#### 11. Delivery and Installation of W-4 System

Furnish and install complete, specified system fabricated to meet the design intent.

#### 12. Delivery and Installation of W-8 System

Furnish and install complete, specified system fabricated to meet the design intent.

#### 13. Delivery and Installation of W-10 System

Furnish and install complete, specified system fabricated to meet the design intent.

#### D. ALTERNATES (See Specification Sections 01 10 30 and 01 10 30/APA for more detail)

Alternate No 1: Alternate to change specified glass type for W-1.

Alternate No 2: Alternate to change specified glass type for W-3.

Alternate No 3: Alternate to change specified glass type for W-4.

Alternate No 4: Alternate to change specified glass type for W-8.

Alternate No 5: Alternate to change specified glass type for W-10.

Alternate No 6: LED Dot Lighting System (W-1) installation requires inclusion of all materials, labor, tools, fixtures and equipment installation for the complete LED system installed from equipment racks to the routing of all wiring inside glazing assemblies to lighting termination points. This includes, but is not limited to, installing all conduit and wire from the W-1 system to all specified nodes and connecting to furnished and installed equipment and associated equipment racks located in specified IDF rooms. All conduit pathways and node placement require detailed shop drawing coordination with the Architect.

Alternate No 7: LED Dot Lighting System Patch Plate (W-1) installation requires fabrication of all system components to accept future wiring and LED Dot Lighting required under Alternate # 6. If Alternate # 6 is activated, removal and replacement of the base bid patch plate cover with the Alternate # 6 LED Dot Lighting will be required.

END OF SCOPE OF THE PACKAGE AND BID ITEM INFORMATION

#### IV. CONSTRUCTION SCHEDULE AND MILESTONES

Upon Notice of Award, the Trade Subcontractor shall submit a detailed Trade Package Progress CPM Schedule, based on Webcor/Obayashi's scheduling conventions, using Primavera P6, outlining all lead times and tasks beginning from the date of NTP # 1 to projected completion of Trade Subcontractor's work. The Trade Subcontractor's Progress Schedule shall be submitted to the CM/GC within 15 calendar days from Notice of Award. The Schedule shall be in accordance with, but not limited to, Specification Section 01 13 10, Progress Schedule; the latest issued revision of the Transbay Transit Center Project Bidding Manual; and the Project Milestones listed below. If there is a conflict between the documents, the most stringent shall apply. Within the Trade Subcontractor's Schedule, the Trade Subcontractor shall include a full submittal schedule in accordance with Specification Section 01 13 00, paragraph 1.4, Submittal Schedule.

A concept schedule is provided 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. Assume schedule activities will occur plus or minus 90 calendar days from the date indicated in the Exhibit I TG08.1 Concept Schedule.

The Trade Subcontractor's Schedule shall be sequenced so that it shall not impact any succeeding activities and/or the critical path of the project. The schedule activities in Exhibit I between the date of the Notice to Proceed and the Completion Date of each Zone should not be assumed to be complete or a binding work plan. However, it is mandatory that each Completion Date be met so as not to impact follow-on Trade Subcontractors or the critical path of the project. The Trade Subcontractor is responsible for including all scope within the IFB documents while adhering to the durations provided in the milestones below. Within 24 hours of a breakdown or failure, this Trade Subcontractor will be required to replace or repair any piece of its equipment or materials working on a critical path activity. Failure to do so will result in progress payments being withheld from future payments until any lost time is recovered.

The Trade Subcontractor's Schedule shall include, but is not limited to, the following milestones and activities:

- Distinct Start & Finish Milestone for design coordination and shop drawing submittals.
- Distinct Start & Finish Milestone for all mock-ups and testing (on- and off-site).
- Distinct Start & Finish Milestone for each W system fabrication and installation.

The Trade Subcontractor shall utilize a WBS and Activity ID convention to allow the Trade Package Progress Schedule to be implemented in the CM/GC's Master Schedule. Activity ID numbers shall be alphanumeric using "PS" (submittals and procurement) and "SX" (construction activities) as prefixes and a six-digit alphanumeric suffix (Example: SX-A100000). The Trade Subcontractor shall structure its Trade Package Progress Schedule utilizing the following WBS at the highest level:

- DESIGN/DRAWINGS
- MOCK-UPS AND TESTING
- PROCUREMENT & FABRICATION (Submittal Schedule & Materials Procurement)
- SYSTEMS INSTALLATION
  - o Deliver & Install W-1 System
  - o Deliver & Install W-3 System
  - o Deliver & Install W- 4 System
  - o Deliver & Install W-8 System

#### o Deliver & Install W- 10 System

The Trade Subcontractor shall meet with the CM/GC to review the Trade Subcontractor's Schedule. If necessary, the Trade Subcontractor shall provide a revised Schedule that is acceptable to the CM/GC, which shall be implemented into the CM/GC's Master Schedule. The Trade Subcontractor is to include any and all costs required to meet the Completion Milestones as noted below. Acceptance of progress payment applications is contingent upon CM/GC and TJPA acceptance of the Trade Subcontractor's schedule submittal.

#### Milestones:

NTP # 1: Engineering/Coordination/Shop Drawings: The CM/GC will provide the Trade Subcontractor with NTP # 1 to commence with all engineering, design coordination, shop drawings and submittals. Trade Subcontractor shall immediately begin the submittal and procurement activities required for Trade Subcontractor's Baseline Schedule. Complete submittal schedule required by the CM/GC within 10 days of NTP # 1. Shop drawings and submittals must be completed for W-1 and W-10 Systems first, followed by shop drawings and submittals for W-8, W-3 and W-4, in that order.

NTP # 2: Mock-ups/Testing: Initiate all specified on- and off-site mock-ups and testing. All field mock-ups are to be designed and ready for installations when scheduled or when field conditions allow.

NTP # 3: Material Procurement/Fabrication W-1 and W-10 Systems Only: The CM/GC will provide NTP # 3 to commence procurement and fabrication of all glazing systems as required by schedule.

NTP # 4: Material Procurement/Fabrication W-3, W-4 and W-8 Systems Only: The CM/GC will provide NTP # 4 to commence procurement and fabrication of all glazing systems as required by schedule.

NTP # 5: Deliver/Install W-1 System: The CM/GC will provide NTP # 5 to commence with delivery and installation of the W-1 system complete.

NTP # 6: Deliver/Install W-10 System: The CM/GC will provide NTP # 6 to commence with delivery and installation of the W-10 system complete.

NTP # 7: Deliver/Install W-8 System: The CM/GC will provide NTP # 7 to commence with delivery and installation of the W-8 system complete.

NTP # 8: Deliver/Install W-3 System: The CM/GC will provide NTP # 8 to commence with delivery and installation of the W-3 system complete.

NTP # 9: Deliver/Install W-4 System: The CM/GC will provide NTP # 9 to commence with delivery and installation of the W-4 system complete.

Trade Subcontractor shall be responsible for the liquidated damages specified in the Specification Section 00 05 20, Agreement, and the CM/GC's and other affected Trade Subcontractors' extended costs when Trade Subcontractor delays the above required milestones and/or project critical path.

Trade Subcontractor shall include all work for this Trade Package in the bid price to meet the Milestone Requirements.

#### END OF CONSTRUCTION SCHEDULE AND MILESTONES

#### V. INSURANCE REQUIREMENT

The insurance requirements outlined below supersede the related requirements in the Specification Section 00 08 05 and Section 16 of the Long Form Subcontract. For any conflicts of coverage the greater coverage requirement shall govern. Specific revision to Specification and Long Form Subcontract requirements is demonstrated below.

#### 1. TRADE SUBCONTRACTOR'S PROFESSIONAL LIABILITY INSURANCE

- 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 \$5,000,000 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 \$50,000 each claim. With respect to land surveyors only, the 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. 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.

END OF INSURANCE REQUIREMENT

# VI. CONTRACT DOCUMENT LIST

#### Reference Documents consist of:

Document Name	Description	Revision Name	Issue Date
Long Form Subcontract		Rev G	06/03/2011
00 01 10 Table of Contents		N/A	05/12/2011
<b>B</b> 01 10 10 Table of Contents		Rev 2.B	07/21/11 B
Consolidated Drawing List		N/A	05/12/2011
Narrative of Revisions		N/A	05/31/2011
Specifications	General Requirements 00 & 01	Rev 2	12/13/2010
Specifications	Stage Two Design/Build Glazing	N/A	05/12/11
	Systems Specification – Volumes 1, 2, 3, & 5		
B Specifications	Addendum No. 1 Division 00 to 49 Inclusive	Rev B	07/06/11 B
Drawings	Defined in Specification (DWF, DWG and PDF formats)	Rev A	05/12/11
B Drawings	Defined in Specification	Rev B	07/06/11 B
3D Model – Revit & Rhino		N/A	05/12/2011
Project Bidding Manual		Rev 10	02/11/2011
Exhibit A	IFB Package – Contract 301000801	0	06/03/2011
Exhibit B	Warranty	Rev 9	2010
Exhibit C	Lien Releases	N/A	07/09
Exhibit D	Sample Certificate of Insurance and Additional Insured Endorsement	N/A	11/18/2010
Exhibit E	LEED Subcontractor Submission Letter and Data Sheet	N/A	07/30/2010
Exhibit F	BIM Breakdown Sheet	N/A	07/30/2010
Exhibit G	Trade Subcontractor Payment Requisition	N/A	07/21/2010
Exhibit H	Site Specific Safety Plan	Rev 3	02/14/2011
Exhibit I	Concept Schedule	0	05/31/2011
Exhibit J	Quality Control Program	N/A	03/09/2011
Exhibit K	SWPPP Program	N/A	01/2011
Exhibit W	Waterproofing Commissioning Procedures and Guidelines	Version 1	2008

## END OF REFERENCE DOCUMENT 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:

#### TG08.1 - Design/Build Trade Work Package, Glazing Systems Labeled W-1, W-3, W-4, W-8 and W-10

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 therefore, 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 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 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 Corporation
	Bidder or Authorized Representative
	Position in Firm or Corporation
S.F. Business Tax Registration Certificate Number	Address of Firm or Corporation Zip Code
Certificate (vuilibe)	Contractor's California License No.:
	License Expiration Date:

BID BOND OR CHECK REQUIRED: There is herewith attached, as required by law, bid security in accordance with Section 00 04 30 – BID BOND.

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

SCHEDULE OF BID PRICES

EXHIBIT A 06/03/2011

# TG08.1 - Design/Build Trade Work Package, Glazing Systems W-1, W-3, W-4, W-8 & W-10

Name of Bidder:		
Bidders must bid on all Bid Items and Alternates selected by Web	cor/Obayashi Joint Venture.	
By signing the Bid Form, the Bidder, having examined all reference models, and the Specifications understanding the terms and conditional conditions affecting the performance and costs of the Work I perform the Work as indicated on the Drawings and in accordance Documents within the time stated therein, and for the following processing the performance and costs of the Work I perform the Work as indicated on the Drawings and in accordance Documents within the time stated therein, and for the following processing the performance and costs of the Work I perform the Work I performance and costs of the Work I perform the Work I performance and costs of the Work I performance	tions of the Contract Documents hereby proposes and agrees to fu with the requirements of the Co	and the
TOTAL BID PRICE (BASE BID):	(\$	)

D: I	TT 1.	5:17	Ed. (1	TT 1.	H 45D :	D.
Bid Item	Unit Format	Bid Item Description	Estimated Quantity*	Units	Unit Price	Extension
	Code					
1	B2020	Mobilization	LS			1
1	B2020	Modifization	LS			1
2	B2020	Engineering, Design	LS			2
		Coordination, Calculations and Shop Drawings				
		Shop Drawings				
3	B2020	On- and Off-Site Mockups and	LS			3
		Testing				
4	B2020	W-1 System Material	LS			4
		Procurement & Fabrication Only				
5	B2020	W-10 System Material	LS			5
		Procurement & Fabrication Only				
6	B3020	W-3 System Material	LS			6
		Procurement & Fabrications Only				
7	B2020	W-4 System Material	LS			7
	B2020	Procurement & Fabrications Only	25			,· <u> </u>
8	B2020	W-8 System Material	LS			8
0	B2020	Procurement & Fabrications Only	Lo			6
	D2020	W.1.C. A. H.	T G			
9	B2020	W-1 Systems Installation	LS			9
10	B2020	W-10 Systems Installation	LS			10
11	B2020	W-8 Systems Installation	LS			11
12	B2020	W-3 Systems Installation	LS			12
				l		

Bid Item	Unit Format Code	Bid Item Descri	iption	Estimated Quantity*	Units	Unit Price	Extension
13	B2020	W-4 Systems Installat	ion	LS			13
14		Allowance (Section 01 10 20/AP)	H)	AL	1	\$50,000	\$50,000
	TOTAL BID PRICE (Summation of Bid Items 1 through 14 above.)				\$		

\*Note: LS = Lump Sum, EA = Each, LF = Linear Feet, LS = Square Feet, AL = Allowance

Bidder acknowledges that quantities are not guaranteed and final payment will be based on the actual quantities determined as provided in the Contract Documents.

Webcor/Obayashi Joint Venture reserves the right after opening Bids to reject any or all Bids, and to waive any minor irregularity in a Bid. In case of discrepancy between the sum of Bid item amounts and the Total Bid Price, the sum of said amounts shall prevail. In the case of discrepancy between words and figures, the words shall prevail. In case of discrepancy between unit prices Bid and extensions thereof, said unit prices shall prevail.

ALTERNATES: The following alternates will be selected by Webcor/Obayashi Joint Venture in a specific descending order of priority which will be announced immediately before the opening of the Bids. The amount available in the construction budget will be announced immediately before the opening of the Bids.

The Contract, if awarded subject to Webcor/Obayashi Joint Venture's right to reject all bids, will be awarded to the responsible Bidder who submits the lowest responsive Bid based on the lowest overall cost to Webcor/Obayashi Joint Venture for the Total Bid Price (Base Bid) with or without additive alternate(s) selected by Webcor/Obayashi Joint Venture in a descending order of priority as follows:

- 1. If the Total Bid Price of the responsible Bidder who submits the lowest responsive Bid does not exceed the construction budget amount, then the Contract will be awarded to the responsible Bidder who submits the lowest responsive Bid and whose Total Bid Price and greatest number of additive alternates selected by Webcor/Obayashi Joint Venture in a descending order of priority do not exceed the construction budget amount.
- 2. If the Total Bid Price of the responsible Bidder who submits the lowest responsive Bid exceeds the construction budget amount, then the Contract will be awarded to the responsible Bidder who submits the lowest responsive Bid.

Webcor/Obayashi Joint Venture reserves the right to award to the responsible Bidder who submits the lowest responsive Bid based on:

1. The Total Bid Price and all alternates in the event that the Total Bid Price and all alternates exceeds the construction budget amount, or

2. the Total Bid Price without alternates in the event that the Total Bid Price exceeds the construction budget amount and there are no selected alternates.

The Bidder further proposes and agrees that if the Alternate is incorporated in the Contract within four (4) months after the date of Webcor/Obayashi Joint Venture's written notification of award of the Contract, the Contract Sum will be adjusted by the addition of the Alternate Price bid for the selected Alternate.

Alternate No.	Alternate Description	Amount
1	Add/Alternate # 1 (W-1 System)	\$
2	Add/Alternate # 2 (W-3 System)	\$
3	Add/Alternate # 3 (W-4 System)	\$
4	Add/Alternate # 4 (W-8 System)	\$
5	Add/Alternate # 5 (W-10 System)	\$
6	Add/Alternate # 6 (LED Lighting)	\$
7	Add/Alternate # 7 (LED Patch Plate)	\$

#### Notes:

- Alternates shall cover all costs of alternate Work as indicated on the Bid Documents only and shall not include Work of Base Bid or any Bid items of the Total Bid Price. Alternate price shall include markups for overhead and profit.
- 2. Webcor/Obayashi Joint Venture will make the actual addition of the Alternate to the Total Bid Price (Base Bid). In case an additive Alternate amount does not include a plus or minus sign, the amount will be presumed to be additive to the Total Bid Price (Base Bid).

Time allowed for completion of all Work shall be the number of calendar days specified in the Bid Documents, regardless of whether the Contract is awarded under the Total Bid Price or on the basis of the Total Bid Price and any Alternate or any combination of Alternates.

# **B...** Bid Package TG08.1 **Addendum 1 ...B** Glazing Design-Build Construction

#### TRANSBAY TRANSIT CENTER PROJECT San Francisco, CA

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.

Bid Grand Total: \$	(from Total of BID ITEM LIST)		
n Written Words:			
Bid submitted by:			
Name of Firm, Corporation, Partnership or Joint Ventu	(seal)		
•			
N. CAND			
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

#### ATTACHMENT 2 – LOGISTICS

The following attached drawings present the conceptual logistical plan for the TG08.1 scope of work:

SL-002 Site Logistics Truck Routing, Revision date July 30, 2010

SL-003 Site Logistics Temp Power Plan, Revision date July 30, 2010

SL-004 Site Logistics Construction Zones, Revision date July 30, 2010

#### **General Logistics**

- In the first 180 days from contract execution, all logistical plans for execution of work shall be presented for review and approval. The Trade Subcontractor's logistics planning shall address all considerations regarding street use, hours of operation, off-hours work, site restrictions, traffic control, erection and staging access, loading and unloading, proposed equipment use and mobilizations, material staging, pedestrian protection, lighting, etc.
- Webcor/Obayashi Joint Venture reserves the right to accept or reject any erection access and/or staging plan presented.
- All site and offsite staging/access will be coordinated and mutually agreed upon on a case-bycase basis throughout the project duration. There are no pre-assigned staging or access areas prior to bid.
- 20 calendar days prior to initiating any logistical operation, this Trade Subcontractor shall request a pre-installation coordination meeting with Webcor/Obayashi Joint Venture to review previously approved logistical plans, review plan updates (where applicable), and review all applicable permitting requirements.
- Use of any equipment (cranes, lifts, rigging, etc.) requires Webcor/Obayashi Joint Venture review and approval. Trade Subcontractor is responsible for providing technical data for all proposed equipment.
- If traffic control planning and coordination is required for any phase of the work, this Trade Subcontractor is to coordinate with and provide all planning details in CAD or other agreed to formats to Webcor/Obayashi Joint Venture for incorporation in to the master traffic control plan. Failure to provide properly prepared and coordinated plans and to submit them in a timely fashion prior to starting any phase of scheduled work requiring traffic control may lead to plan rejection and possible schedule delay.

#### Specific System Logistical considerations

#### A. W-1 System Installations

- The Roof and Bus Deck are not available for the staging, storing or assembling of materials for W-1 system installation. Only personnel, small tools and light rigging equipment will be allowed on any deck for W-1 installation at Webcor/Obayashi Joint Venture discretion. The only exceptions, but subject to Webcor/Obayashi Joint Venture approval, are system structural members that may require partial deck use at points of installation.
- No hoisting equipment will be allowed on deck for the W-1 system.
- Provide specific, detailed planning for all work over Fremont, First, Beale, Minna and Natoma streets. Plans must clearly demonstrate proposed equipment use and clearances, deliveries, access, site restrictions (if any) and details for any proposed scaffolding or work platforms.

#### B. W-3, W-4, W-8 and W-10 Installations

- If installation requires special rigging or work platforms to properly execute the work, they must be fully designed and detailed for review and approval prior to final acceptance of any logistics plan for individual W system work.
- Partial, short-term deck staging in preparation of immediate installations is allowed but subject to Webcor/Obayashi Joint Venture approval.
- All staged materials must be pre-planned, approved and dispersed in accordance with structural criteria on maximum loading capacities.
- If work requires high capacity cranes or lifts, they must be identified in pre-planning of General Logistic as noted above.

# END OF ATTACHMENT 2 - LOGISTICS

#### **B...** ISSUANCE LOG

REV No.	ISSUE	DATE
A	Issued for Bid TG08.1	06/03/2011
В	Addendum # 1	07/22/2011

...B

END OF EXHIBIT A