

## Transbay Transit Center San Francisco, CA CM/GC Contract No. 08-04-CMGC-000 Project No. 30100

# BID PACKAGE TG10.5 ADDENDUM # 6

**DATE:** 08/13/2014

TO: All Qualified Bidders

FROM: Webcor/Obayashi Joint Venture

BID DUE DATE: August 19, 2014 at 2 p.m.

### COMMUNICATION WITH WEBCOR/OBAYASHI JOINT VENTURE

At no time during the bid process (defined as the time between issuance of the IFB until award of Subcontract to Trade Subcontractor) shall Bidders 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 the IFB. The only contact is for submission of questions using the contact directions as described in Exhibit A, Section III. "Communication with Webcor Obayashi Joint Venture".

The QBD submission time frame expired on Monday, August 4, 2014 at 2:00 p.m.

Bids are due on Tuesday, August 19, 2014 at 2:00 p.m. to the Webcor/Obayashi Joint Venture site office at 175 Beale Street, San Francisco, CA 94105

Reference the Project Bidding Manual, Section III.B.1 regarding document availability and how to obtain the documents.

#### MODIFIED DOCUMENTS PER ADDENDUM # 6

The items listed below make up the TG10.5 – Fire Protection and Fire Suppression Bid Package Addendum #6. This Addendum shall supersede all previously issued Bidding Documents. All other conditions and requirements remain unchanged.

- a. Exhibit A Trade Subcontractor Bid Package Manual and Forms Subcontracts #301001005, dated 08/13/2014.
  - 1) Revise Section V. "Construction Schedule"
  - 2) Revised Section VII. "Contract Document List"
- b. Project Bidding Manual Rev. 26, dated 08/12/2014.
- c. Long Form Subcontract Rev B, dated 08/13/2014.
- d. Exhibit F BIM Requirements Rev. 2, dated 08/13/2014
- e. Questions on Bid Documents (QBD) Responses
  - 1) The attached IFB Questions and Answers are incorporated into the Bid Documents by this Addendum.

### END OF ADDENDUM # 6

## TG10.5 – Fire Protection and Suppression

Questions are numbered in the order received. Numbers missing in the sequence will be answered in a future response set.

Question	Submission Date	Drawing No.	Document/ Spec. No.	Question	Response
TG10.5- 001	4/29/2014	P1-5040, P1-5041, P1-5042	Paragraph B4 21 13 19	This spec section mentions Deluge system density requirements. The fire protection piping diagram on plumbing drawings do not show any locations for deluge systems. At this time we believe the deluge system is dedicated for the fixed guideway transit system located at the passenger platforms. Please confirm? Please provide details and locations of platforms, as well as the locations for the valves, and locations for the manual release for deluge systems.	The deluge systems are future work and are not part of this contract.
TG10.5- 002	4/29/2014		1.3.B.2, 2.8.B, 2.8.C 21 13 19	<ol> <li>Some hydraulic design area parameters of section 21 13 19-1.3.B.2 are in conflict with the requirements of FM Global datasheets. Which design area parameters should we use?</li> <li>Some sprinkler orifice sizes of sections 21 13 19-2.8.B and 21 13 19-2.8.C are in conflict with the requirements of FM Global datasheets. Which orifice sizes should we use?</li> </ol>	Follow the requirements in Specification Section 21 13 19. References to Factory Mutual Insurance Company requirements will be removed from the specifications in a future addendum.

## **TG10.5** – Fire Protection and Suppression

Questions are numbered in the order received. Numbers missing in the sequence either have been answered in a previous response set or will be answered in a future set.

Question No.	Submission Date	Drawing No.	Document/ Spec. No.	Question	Response
TG10.5- 003	6/3/2014		3.4A 21 20 00	<ul> <li>Please confirm that required operational training is:</li> <li>1.) To assume one training session only for one shift; or,</li> <li>2.) assume three independent shifts with one training session for each; or</li> <li>3.) another training session arrangement.</li> </ul>	Required operational training shall be one training session for one shift only.
TG10.5- 004	7/18/2014	A1-4502 -07 & A1-4402- 07		The ceilings at 2nd and Bus Levels are mainly the Aluminum (W-14) ceilings. The Ceiling sprinklers need to penetrate Aluminum Ceilings in the locations shown on the referenced RC plans. Will the penetrations be provided by the ceiling contractor?	Penetrations in metal ceilings are to be coordinated with sprinkler design drawings and within sufficient time to allow ceiling panels to be pre-punched by the ceiling subcontractor prior to their installation. There will be occasional instances where field punching is required and it is the TG10.5 Trade Subcontractor's responsibility to work with the ceiling subcontractor to ensure correct hole placement.
TG10.5- 005	7/18/2014		2.16 / B 21 13 19	Please clarify the fire pump controller starting method? Is it across the line, part Winding, or soft start?	The controller starting method is soft start.
TG10.5- 006	7/18/2014		Section, 1.3/B/2(1),(2),(3) & 2.8/F 21 13 19	Spec Section 2.8/F provides criteria for Extended Coverage heads but Sections 1.3/B/2(1),(2), & (3) provide limitations on the maximum area per sprinkler head that would Prevent their use. Are Extended Coverage Sprinklers acceptable in Light and ordinary hazard Occupancy areas?	Extended coverage sprinklers are acceptable; however, the reflected ceiling plans that show sprinkler locations take precedence.

Question No.	Submission Date	Drawing No.	Document/ Spec. No.	Question	Response
TG10.5- 008	7/29/2014		Division 21, Exhibit A, Access Doors, Page 14	Page 14 of Exhibit A, Access Doors says "Installation by others with one exception" Where or how many, are there door frames or unitized door assemblies that are not poured monolithically with concrete walls, decks or vaults?	Question cannot be definitively answered until the Fire Sprinkler system is fully designed and coordinated. Currently, it does not appear the sprinkler system will require monolithically poured access door frames, so the issue may be moot for the TG10.5 scope. The Exhibit A access door scope is there to inform bidders that if the exception does exist for sprinkler systems, it is the TG10.5 Trade Subcontractor's responsibility to furnish and install said frames.
TG10.5- 009	7/29/2014		Division 21, Exhibit A, Exclusions, #5 Painting	Will painting of pipe be required for signage or pipe identification? If painting is required, would we be able to use pipe id markers similar to Seton in order to avoid painting?	Systems identification shall follow the requirements in Specification Section 21 05 53.
TG10.5- 010	7/29/2014		Division 21	Does the Fire Sprinkler Contractor include costs for Preaction Alarms and Detection as well as the FM-200 Systems?	Yes, include all devices specified for fire suppression systems excluding interlocks, dampers and shunt-trip breakers.
TG10.5- 011	7/29/2014		Division 21	Has an opening through the exterior concrete wall been provided for the new fire service into the building?	The structural wall will be sleeved by others as shown in the Contract Documents. The shoring wall outside of the structural wall will require coring/demolition through to the structural wall for piping access. See Addendum #5 Exhibit A, Section IV. Scope of the Package and Bid Item Information for scope description.
TG10.5- 013	7/29/2014		Division 21	Fire Protection Services requires new connection to city main in addition to another new connection for one fire hydrant, typically our scope of work begins at the curb line. Does our work start at the city main? If so, who pays for the city connection fees, asphalt removal and replacement?	All offsite utility work for fire service and hydrants including trenching and asphalt replacement is by the TG10.5 Trade Subcontractor. See Exhibit A, Section IV. Scope of the Package and Bid Item Information for scope description. Fees for the connection are reimbursable; refer to Specification Section 00 05 20A.

Question No.	Submission Date	Drawing No.	Document/ Spec. No.	Question	Response
TG10.5- 017	7/29/2014		Division 21	Will pour watches be required on overtime?	In general, concrete pours will occur during normal work hours; however, occasionally pours either will run long or be done during night shift operations. These are exceptions, and any overtime, if required, would be nominal for the TG10.5 Trade Subcontractor.

## TG10.5 – Fire Protection and Suppression

Questions are numbered in the order received. Numbers missing in the sequence have been answered in a previous response set.

Question	Submission	Drawing	Document/		
No.	Date	No.	Spec. No.	Question	Response
TG10.5- 007	7/29/2014		Division 21, Penetrations, Exhibit A, Sub Para G	What type of additional support and/or reinforcement would be required at single pipe penetrations through CMU or Concrete Walls? Would renforcement need to be designed by a Structural Engineer?	All wall penetrations larger than 4" in diameter have been indicated. There are details for penetrations smaller than 4" in diameter. Any additional penetrations 4" or larger in diameter will be reviewed by the Transbay Transit Center project structural engineer.
TG10.5- 012	7/29/2014		1.3A1 21 05 48	Specification section 21 05 48 - 1.3A1 states that seismic calculations have to be stamped by a structural or civil engineer vs spec section 21 05 48 - 3.2B requires that seismic restraint be in accordance with NFPA 13 and 14 which is our standard. Structural engineers to not necessarily recognize NFPA13 seismic standards which is an approved system (NFPA) allowing fire sprinkler contractors holding a C-16 license to self perform seismic calculations without the need for a structural engineer. The only time we engage a structural engineer with seismic calcs is if were proposing to use a bracing system that does not conform to NFPA standards. If a professional stamp other than a C-16 is required would an FPE stamp suffice?	<ol> <li>The seismic bracing assemblies and attachments to the building structural members (beams, floor slabs, etc.) shall be submitted with calculations stamped by a California Structural Engineer (per Specification Section 21 05 48, paragraph 1.6.A).</li> <li>An FPE (Fire Protection Engineer) stamp is not an acceptable substitute for the Structural Engineer stamp.</li> </ol>
TG10.5- 014	7/29/2014		Division 21	Should an allowance be carried for pipe penetrations through beam if they should be required? If so, how much?	No, steel beam penetration costs are by others, however, to avoid steel beam penetrations, the overall design requires all primary and secondary horizontal piping distribution within the steel structure to remain below beams wherever possible. Concrete beam sleeving is the responsibility of the TG10.5 Trade Subcontractor unless the condition meets the criteria as set forth in Exhibit A, Section IV. Scope of the Package and Bid Item Information, Part 3, under Deck and Wall Coring and Cutting.

Question	Submission Date	Drawing No	Document/	Question	Response
TG10.5- 015	7/29/2014		Division 21	Do Drawings A1-8501 through 8529, A1- 8219, 8891, 8110 and 6012 Exist? If so what addendum were they issued in?	Drawings A1-8501 thru A1-8524, A1- 8219 and A1-8891 are located in the Addendum #3 IFC set dated 3/31/14. A1-6012 was issued under ASI 119 as SKA-3650. Drawings A1-8525 through A1-8529 and A1-8110 were not issued for MEPS TG10 package bidding.
TG10.5- 016	7/29/2014		Division 21, Exhibit A : Skylights and Glazing Systems	This specification states that the Fire Sprinkler Contractor is responsible for custom painting to match the glazing system at the Skylights. Can you issue a list of painting contractors that are qualified and bidding this project? Or Can painting be removed from our scope?	Painting of skylight sprinkler piping is deleted from the TG10.5 scope of work . However, the TG10.5 Trade Subcontractor is responsible to coordinate painting efforts with the onsite painter and to ensure that final pipe installation and painting is clean and smudge free from handling and installation activities. This will include providing pipe in advance of installation to the painter for priming and first coat prior to installation.
TG10.5- 018	7/31/2014		Para: 1.6.B.4 21 20 00	Specification 21 20 00 paragraph 1.6.B.4 requires resumes to be submitted with bid. Please confirm this is not required for bidding but is required as a post bid submittal.	Resumes may be submitted after the bid date.
TG10.5- 019	7/31/2014		Para: Para 4.02 00 05 20	Please confirm if liquidated damage amounts specified in Spec Section 00 05 20, Paragraph4.02 apply to Trade Subcontractors	Although liquidated damages (LDs) within the Agreement are between the TJPA and CM/GC, LDs are universal and will be proportionally applied based on a trade subcontractor's comparative fault for delay. See Section 7 of the Long Form Subcontract boilerplate for a more detailed explanation.
TG10.5- 020	7/31/2014		PROJECT BIDDING MANUAL,V., C. BID BOND FORM (BB)	Please confirm name and address of whom bid bond is to be issued to.	All information for submitting Bid Bond is on Page 13 under Section III.D.4, Bid Security, and under C. Bid Bond Form on page 43 of the Project Bidding Manual, Revision #25.

Question	Submission	Drawing	Document/	nt/	
No.	Date	No.	Spec. No.	Question	Response
TG10.5- 021	8/4/2014		1.8/C EPSMS 21 12 00	The EPSMS is a FIKE panel that is designed to interface with a FIKE system only. This would give a FIKE Distributer an unfair advantage in bidding this project. Is there a reason We have to use FIKE products or will an alternative product such as the Tripmaster XL by DIT Inc. be an acceptable replacement. Product data can be found at www.darwellit.com	The specification includes a complete system with elements that work with each other. The Trade subcontractor may submit a request for substitution in accordance with the contract documents.
TG10.5- 022	8/4/2014		Rev. B 21 20 00	It seems Revision B dated 3-21-14 has eliminated the use of HFC gases like FM200 Or Ecaro. Please confirm?	These clean agents were not eliminated, refer to Specification Section 21 20 00, paragraph 2.1.B.1.
TG10.5- 023	8/5/2014	Reflected Ceiling Plans, Ceiling/W14		Can we use flexhead drops in the W14 Ceiling? Who cuts our holes for our drops?	<ol> <li>If Flexhead drops are code-complaint for the condition and do not conflict with contract requirements, they can be used.</li> <li>Holes in metal ceilings are by others. See the response to TG10.5-004 in response set 2.</li> </ol>
TG10.5- 024	8/5/2014		Para 2.13, Pipe Hangers 21 13 19	Can single band ring hangers be used in lien of clevis type hangers?	No, refer to Specification Section 21 13 19, paragraph 2.13.A.
TG10.5- 025	8/5/2014	P1-2405 & 2406 , Second Level Fire Sprinkler Piping Plan	21 05 01	P1-2406 show two control valves and two bulk main in parallel supplying the 2nd level zone between columns 20 & 26. Is there any reason why the two parallel mains shown on P1-2406 couldn't be reduced to a single bulk main down stream of both control valve assemblies?	The concept is to bring two bulk mains to the sprinkler zone between grid lines 20 and 26 since there is no stair or other architectural element that can house the combination standpipe sprinkler risers and respective sprinkler control assemblies. This way we can achieve a zone system that is fed from two risers.
TG10.5- 026	8/5/2014	P1-2003, Zoning	21 05 01	Stair 201 A in the left of the column line 1 is shown as a separate zone. Based on P1-2004 it appears this zone is fed by a control valve on the bus deck level. Is stair 201 A zoned by floor or is it one zone for the entire stair shaft and elevator? Which valve on the bus deck level supplies this zone?	<ol> <li>Stair 201A is not zoned by floor, it is one zone for the entire stair from ground level to roof park.</li> <li>Currently, Stair 201A is part of bus deck zone that extends to grid line 9. This zone is supplied by combination standpipe sprinkler risers FSP-A4 and FSP-A5.</li> </ol>

Question	Submission	Drawing	Document/		
No.	Date	No.	Spec. No.	Question	Response
TG10.5- 027	8/5/2014	P1-2302 through 2307, Ground Level Zoning P1- 2003	21 05 01	P1-2302 through 2307 show a total of 12 control valve assembly on the ground level. P1-2003 ground level zoning plan shows a total of 4 zones excluding stair 201A to the left of column line 1. If there are 4 Zones between columns 1 and 34. What zones do the remaining 4 control valve assemblies feed?	This is correct. There are four extra sprinkler control valve assemblies, which will be deleted, one from each of the following risers: FSP-B2, FSP-B7, FSP- D3 and FSP-D6, at the ground level.
TG10.5- 028	8/5/2014	P1-2102 thru 2506, Fire Sprinkler Zoning P1- 2003 thru 2004	21 05 01	P1-2102 thru 2506 show approx 65 control valves feeding various sprinkler zones throughout the project. The riser schematics on P1-5040 thru 5042 only show 33 such valves. Each zone is supposed to be fed by two control valves, can the control vales shown on P1-2102 thru 2506 be labeled as to which zone each valve is to supply?	Refer to the attached sketches: SKP1-2003 SKP1-2004 SKP1-2102 SKP1-2104 SKP1-2105 SKP1-2303 SKP1-5040 SKP1-5041 SKP1-5042
TG10.5- 029	8/5/2014		TG10.5 , Exhibit A-D , Page-14- 16, Item 1a-b- &c	On page 16 there is references to electrical conduits by electrical trade subcontractor. Please confirm all conduit, boxes, labor and material for the installation of the below ground level fire protection and fire suppression systems for line voltage and low voltage conduits is to be supplied by electrical sub contractors.	Scope as defined in Exhibit A is clear in its requirements and includes both the Electrical Trade Subcontractor and the TG10.5 Trade Subcontractor. All line voltage material and installations between panels and/or devices is by the Electrical Trade Subcontractor, but low voltage is a combination of the Electrical and TG10.5 Trade Subcontractors' scopes of work: The Electrical Subcontractor installs the pathway, but the TG10.5 Trade Subcontractor installs low voltage wiring.



8 9 10 11 12		18 19 20 21 22 23		$9 \overline{)} \overline{30} \overline{)} \overline{31} \overline{)} \overline{32} \overline{)} \overline{33} \overline{)} \overline{34} \overline{)} \overline{35}$	36 37 38 39 40 41 42 43 44 4
	FIRE PROTECTION ZONE BOUNDARY				FIRE PROTECTION ZONE BOUNDARY
		i / P1 + 2105 i i	P1-2106		$ = \frac{1}{2} = \frac$
B2-B-1	B2-B-2	B2-C-1		B2-D-2	
FIRE PROTECTION ZONE BOUNDARY	FUTURE SMOKE EXHAUST ZONE DIVIDING LINE	FIRE PROTECTION ZONE BOUNDARY	PROTECTION E BOUNDARY	PROTECTION E BOUNDARY	FUTURE SMOKE EXHAUST
ZONE BOUNDARY					



8 9 10			19 20 21 (	22 23 24 25	26 27 28 29	(30)(31)(32)(33)(34)(35)	5 (36) (37) (38) (39) (40) (41)	42 43 44 4
	FIRE PF ZONE E		FZ	IRE PROTECTION ONE BOUNDARY	FIRE PROTEC			
403	P1-24	404	P1-2405		P1-2406	P1-2407	P1−2408	
		2-B-1		2-C-1	2-1			
ROTECTION FIR	E PROTECTION NE <u>BOUND</u> ARY	FIRE PROTECTION ZONE BOUNDARY		TION FIRE PROTECTION DARY ZONE BOUNDARY		PROTECTION		

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