



ADDENDUM TO BID PACKAGE #10

LAX – BRADLEY WEST GATES

ADDENDUM NUMBER 03

MARCH 23, 2010

Addendum Issue Date: March 23, 2010

Purpose: The purpose of this Addendum is to make changes, additions, deletions, and revisions to the bidding documents dated November 20, 2009 for the above referenced project. Bidders shall review the Addendum work and requirements in detail and incorporate any effects the Addendum may have in their bid price.

Acknowledgement: Bidders must acknowledge receipt of any and all Addenda in the space provided on the Bid Form. Failure to do so may result in rejection of the Bid.

Note: All requirements of the bidding documents remain unchanged except as cited herein.

Part 1 - Amendments to Bid Documents

- Modifications to "Bid Form"
 - Multiple changes, see attached.
- Modifications to "List of Bid documents" drawings and specs
 - Spreadsheet indicating whether drawing/spec is a valid bid document or void and not to be incorporated in the bid.
- Modifications to "Subcontract Agreement (Exhibit A - Terms and Conditions)"
 - Redline changes attached.
- RFI responses received and to be incorporated in the bid
 - Part 3 of this Addendum.
- Narrative:
 - Building Automation System (BAS) 23 0910
 - LAWA has directed WAJV to provide the BAS per the current Design Documents.
 - Under 2.1 A, the designated manufacturers are indicated as Alerton Controls, Automated Logic, Siemens and Johnson Controls.
 - Within the revised Bid Form under 2. BID DETAIL in Bid Package 10, the breakout designated Section 230910, BMS Controls is to include all of the costs to provide a complete and fully functional Building Automation System for the North and South Concourses for the Bradley West New Generation Aircraft Gates.
 - For initial operation, the North portion of the Concourse shall be operable in a stand alone fashion with a full operator's station located within the North Concourse as indicated on M6000 and including the operation of the PCA Chillers along with the necessary condenser water heat rejection through interface to the CUP and the heating service from heat exchangers interfacing to the CUP heating source. Final operation of this contract will

include the South Concourse and communication with the CUP as defined on drawing M6000. Include for the operation of the South Concourse a temporary communication path through the Core portion to be under construction at the time when the equipment in the South Concourse may need to be operating as indicated on M6000. Should the CUP not be available, BAS programming and equipment will be included to monitor and operate the temporary Hot Water Boilers, temporary Cooling Towers and temporary Air Cooled Chillers as listed in the equipment schedule on M0011N.

- All BACNet controllers, whether furnished as part of Section 23 0910 or furnished as part of the equipment furnished under Divisions 21, 22, 23, 26, 27 or 28 shall be fully programmed and operational under the Division 23 Section 23 0910 specifications. All control operations and functions are to be included as described or identified within Division 23 or as indicated on the Mechanical drawings.
 - The scope of BAS shall include all programming and the interfaces both graphic and other as per the specifications 23 0910, including but not limited to the Sequence of Operation in Part 4 of 23 0910 and the Control Diagrams on M6000, M6001, M6002, M6003, M6004 and M6005.
 - Provide all equipment and sensors to be mounted and connected by others to the manufacturers responsible for the factory mounting and connecting of those devices in accordance with the schedule requirements of the equipment manufacturers.
- Clarification of Smoke Dampers - Smoke control dampers shall be powered controlled and monitored as indicate on Division 26 Electrical drawings and Division 28 Fire Detection and Alarm drawings. Division 23 Heating Ventilating and Air Conditioning shall be responsible to provide and install smoke control dampers as indicated on the Division 23 drawings.
 - Temporary Heating and Cooling Equipment
 - RFI 244 (see attached RFI 0244) has directed WAJV not to procure the temporary equipment at this time.
 - On M0011N, the bidders shall not include CT 1 & 2 in the Temporary Cooling Tower Schedule - North Concourse, TCH-1 thru TCH-6 in the Temporary Air Cooled Chiller Schedule - North Concourse and B-1 thru B-3 in the Temporary Hot Water Boiler Schedule - North Concourse. This equipment is indicated on several drawings including portions of M0030, M21N2, M23N1, M23N2, M43N1, M43N2, M6002, M6003, M6005 and M7002.
 - The piping to connect the above equipment has been deleted beyond Five Feet from the Building. The connection points, isolation valves, caps and piping within the Building is to remain in the Scope of Work for this Bid Package. In general, the piping East of the Building as depicted on M0030, M43N1 and M43N2 will be deleted. The 10" HWS and HWR along the East face of the Building, although within 5 feet, will be deleted.
 - Piping within 5 feet on M41N1A, M41N1B, M41N1, M41N2 and M43N1A will remain, except as noted specifically above, as it runs back into the Building and will serve as the points of connection for the future.
 - The Bid Form has been changed to reflect the above changes.

Part 2 - Attachments

- Revised Bid Form dated 3/23/2010
- Revised spreadsheet dated 3/22/2010 listing Bid document drawings and specs indicating whether drawing/spec is a valid bid document or void.
- Revised and redlined Subcontract Agreement dated 1/22/2010 Version 2.1 (Exhibit A)

Part 3 - Questions from Potential Bidders

Question: Refer to BWG Spec Section 23 6416 dated 12/11/09. Specification section 23 6416-17 2.12.D does not specify a sound criteria limit or sound level for the sound barrier material. WAJV will instruct the subcontractors to install the specified material in section "D" for the chiller's attenuation. Is this acceptable?

Answer: The sound barrier cover shall have a minimum STC rating of STC=25.

Question: Refer to BWG Drawing sheets M0011N & M5000 dated 01/08/2010: WAJV will not include all the temporary equipment required to provide temporary cooling, heating and condensing as outlined on sheet M0011N in Bid Package 10. WAJV has included all necessary connections, cross ties, temporary cooling tower, boilers and power requirements as shown on M5000 to bring on line the PCA chillers. Any additional equipment including, but not limited to, skid mounted air cooled chillers and power requirements downstream from the switchgear, will be carried as an allowance by the owner to meet any temporary cooling requirements. Is this acceptable?

Answer: No. The Temporary Cooling Towers and the Temporary Boilers shall also be carried as an allowance by the owner to meet temporary heating/cooling needs.

Question: Mechanical equipment schedules designate specific quantities of temporary chillers, boilers and cooling towers. These specific quantities restrict the cost savings options for the temporary equipment. Can the temporary equipment quantities vary from the scheduled quantities provided that the temporary system performance requirements are met.

Answer: See RFI answer above.

Question: Drawing M6000 indicates a conduit through the TBIT Core for the BAS architecture connection between the north and south concourses. Will this conduit be provided by the TBIT core contractor for the use of this contract, or is this conduit to be included in the division 23 scope of work? In addition, please clarify the point of connection to the TBIT Core communications network.

Answer: Conduit will eventually be provided by the TBIT Core contractor at a date to be determined. Do not include the conduit and cable through the Core, but include connection and activation of a temporary cable and determination for the final cable on the condition that you are still on the project when the final switch over is made.

Question: Specification section 23 0900-22, part 2.9, J, 2 allows plenum rated cable (without conduit), while drawing M6000 - control note #2 states that all control wiring, fiber, etc. shall be in conduit. Please confirm if plenum rated cable above accessible ceilings is acceptable.

Answer: 23-0900 has been deleted per Design Package 5, Bulletin 2.

Question: Refer to BWG specification section 237313-2.6A dated 2/15/2010. On the Modular Indoor Central-Station Air Handling Unit, the Coil Section does not indicate the construction of the coils or the coil casing. Are copper coils, copper, fins, and 316 stainless steel casings the required materials of construction for the AHU coil section?

Answer: The coil shall be copper/ copper fins (0.008 inches thick) with stainless steel or copper casing.

Question: Refer to BWG drawing M7001 dated 2/15/10. Detail 15 on drawing M7001 is for a 2-way control valve VAV box reheat coil connection and detail 16 on the same drawing is for a 3-way control valve VAV reheat coil connection. Do the bid documents indicate which coil detail is used for a specific VAV Box coil connection? If so, where?

Answer: 3-way control valves are required at the farthest VAV, FC, etc. Refer to Design Package 5, Bulletin 2 floor Plans for 3-way valves requirements called out as notes on floor plans.

Question: Refer to BWG specification section 23 8219 dated 12/11/009 and drawing M0010N dated 1/8/10. Specifications 23 8219 defines the parameters for the fan coil units. Section 23 8219-4 2.2.I & I.1 specify the motors to be belt driven and ECM type. Drawing M0010N defines the static pressure on the fan coil units to have a range of 0.5" to 2". To meet the design static pressure in M0010N the fan coil unit motors must be belt driven to meet this performance. The three manufacturers specified in section 23 8219-4 2.3.A do not make a fan coil unit with an ECM motor that meets the design static pressure requirements. WAJV will instruct the bidders to bid belt driven fan coil units with the appropriate motor. Is this acceptable?

Answer: Belt drive is acceptable.

Question: Refer to BWG spec section 23 7313 dated 12/11/09. Specification 23 7313-5.2.2A does not list Trane as a manufacturer. Can Trane be added as an acceptable manufacturer?

Answer: 1. Trane Custom Air Handler will be considered. 2 Please submit under "substitution" per Div 23 General Requirements

Question: Refer to BWG drawing sheet M0000 dated 1/8/10. Acoustical Note 2 indicates to provide internal liner 125 ft. upstream and downstream of air handler units. Does this note indicate to line the main duct only, or should the branch duct that is within 125 ft. of the air handler be lined as well?

Answer: Note 2 Refers to Lining the Mains ONLY.

Question: Refer to BWG drawing sheet M0000 dated 1/8/10. Acoustical Note 2 indicates ductwork to be lined with 2" - 5 lb. density. This liner does not exist. Standard internal 2" duct liner is 1-1/2 lb. density and 2" ductboard is 3 lb. density. Which internal duct liner would be required?

Answer: Please provide 2" thick 1-1/2 lb density duct liner.

Question: Refer to BWG specification section 237313 – 2.7.B.3 dated 2/15/2010. Specification section calls for galvanized steel filter holding frames. Should we match the material of the unit liners which are 316 stainless steel?

Answer: Filter frames shall be stainless steel.

Question: Many locations on the mechanical drawings show ductwork penetrations through fire rated assemblies without either a fire damper or combination fire/smoke damper. One example is shown on drawing M42N2 at gridline N14RE between RE-1 and RE-2 where the fire rated assembly shows once duct penetrating with a CFSD and one without either an FD or a CFSD. Please Clarify.

Answer: Subcontractor will coordinate with all contract documents including the architectural drawings that delineate rated assemblies. This subcontractor will provide the necessary FD and/or CFSD to meet code for any ductwork that penetrates any rated assembly.

Question: BAS specification 23 0910-63, part 5.1A states "The contractor shall be responsible for system design and installation." Specification section 23 0910-63, part 5.1B states "The fire detection systems providing control input or output signals to mechanical smoke control systems...smoke control systems shall include provisions for verification." Is the division 23 BAS contractor to provide UL864 UUKL equipment, controllers, devices, conduit and supervised wiring for the smoke control system? Please define the division 23 contractor's scope of responsibility?

Answer: The passive smoke control dampers are monitored and controlled by Division 28 paragraph 3100 (Fire Alarm).

Question: Refer to BWG drawing M0000 dated 2/15/10 and specification section 23 3113 - 16.G dated 12/11/09. Acoustical note #2 states SA/RA ducts to be lined with 2" thick liner, 5 lb density, while Specifications call out for 1" thick liner (no density specified). Which thickness and density should be used?

Answer: Provide 2" thick 1.5lb density.

Question: Refer to BWG drawing M7000 dated 1/8/2010. Detail "Double Suction Pump Installation (with inertial based mounting)" does not show an inertia based mounting even though it is titled this way. The detail does not show flexible pipe connectors; will they be required?

Answer: 1.Please provide inertia pads and flexible connectors. 2.Refer to Div 23 for additional requirements.

Question: Refer to BWG drawing M7000 dated 1/8/2010. Detail 1 on drawing M7000 is for a 3-way control valve fan coil unit connection and detail 2 on the same drawing is for a 2- way control valve fan coil unit connection.

1. Where do the documents indicate which coil detail is used for a specific fan coil unit? Also note that the accessory components for the piping details, regardless of control valve type, are different.
2. Should the details for component accessories be the same for both details?
3. The fan coil unit equipment schedule notes have different piping component requirements than shown on the details; which is correct?

Answer: 1. 3-way valves shall be used at end of piping runs. Refer to DP5-B2 for locations.

2. Provide accessories per schedules and details. Griswold Flex Hose kit is acceptable. In addition provide Pete's plugs (T&P), flex connection, shut off etc.

3 .The details specs and schedules are complimentary and all accessories shall be provided.

Question: Refer to BWG drawing M4605 dated 12/11/2010. Are any of the "non-deferred" support details shown in the M7000 series drawings applicable for the hanging of this piping at the PCA central plant? If so, which ones?

Answer: 1.The pipe supports shall be design-built and compliant with specification, section 23 0529.

2.DWGSM7000 series provide typical details that can be used throughout the project subject to applicable loading and condition. The following details can or may be used with isolation! Details 9 & 13 M7001. Details 6 & 12 M7001.

3.All pipes in the PCA and within 50ft of the PCA room shall be provided with vibration isolators type hangers.

Question: Refer to BWG drawings M23S2 and M23S5 dated 2/15/10. M23S2 shows that VAV S2.7 & S2.8 are associated with AHU S12 and not with AHU S2. Should the tag numbers be changed to VAV S12.7 & 12.8? M23S5 shows VAV S14.4, S14.5, S14.6, & S14.7 are associated with AHU S15, not AHU S14. Should their tag numbers be changed as well?

Answer: Concur. VAVs will be tagged with associated AHUs.

Question: Refer to BWG Mechanical drawings. There are many locations where piping laterals are not shown to VAV boxes scheduled with reheat coils. As an example, on drawing M43S2, VAV boxes S12.1, S12.2, & S12.3 do not indicate piping laterals feeding these VAV boxes even though these boxes are scheduled to have reheat coils. Then there are locations where laterals are shown to a VAV box that has no scheduled reheat coils (reference drawing M43N2, VAV box N7.14). These are just examples and occur throughout all of the mechanical piping drawings; there are too many occurrences to list. Are these drawings going to be completed and corrected prior to bid? If so, when?

Answer: 1. Provide HWS/R piping to all VAVs scheduled with reheat coil.
2. Refer to DP5-B2 drawings for more clarification.

Question: Refer to BWG drawing M0000 dated 2/15/10. Note 2 states that all louvers will be provided with motorized smoke dampers. This requirement is not reflected on the plan view mechanical drawings (i.e. - reference any of the exterior perimeter louvers on level 03 – smoke dampers not shown). Will the louvers that require motorized smoke dampers and/or combination fire smoke dampers be specified? If so, when?

Answer: 1. Note 2 Refers to smoke dampers associated with the smoke control
2. Refer to package 5 (dated 12/11/09) for smoke dampers associated with smoke control:
-Sheets M27N1 thru M27N3
-Sheets M27S1 thru M27S6

Question: Refer to BWG specification section 22 1316 dated 2/15/2010. Rod sizes for waste & vent piping as indicated in the referenced specification 221315-3.6F are excessive for the service and hanger spacing. This is far in excess of that required by MSS SP-69 for pipe sizes 4" and larger and at the spacing required for this service. Are these rod sizes correct?

Answer: The rod sizes for waste and vent piping are based on Table 3 and 4 of MSS SP 69 (RFI 0485 - see attached Tables 3 & 4) and are correct for 4" pipe and larger. Spacing of hangers for no-hub cast iron pipe shall be at each side of coupling on pipe lengths greater than 4 feet and per Section 314.0, Tables 3-2 in the CPC. Specification section 22 1216-3.6F will be revised to reflect hanger spacing of 10' maximum in lieu of every 5'-0".

Question: Refer to BWG drawing M2700 dated 10/16/09. On drawing M2700 the GCHWS/R, HWS/R CHWS/R is shown continuing on M4502, we cannot find this drawing. Is this reference correct?

Answer: Please refer to Design Package #5(DP5), DP5-B1 & DP5-B2 for piping plans. (10/16/09) is not applicable).

Question: Refer to BWG specification section 23 2115 - 3.6.E.2 dated 2/15/2010. This section calls for all piping runs greater than 20' long to be provided with roller hangers and vibration spring isolation hangers. Virtually every pipe run for the project will fall under this category. Is it the intent to vibrationally spring hang all piping?

- Answer: 1. The intent of section 23 2115-3.6.E.2 is to provide vibration isolation if spacing between hangers exceeds 20’.
2. a. Spring isolation is required on all piping within the PCA Chiller Room and within 50’ of the PCA room regardless of size and spacing of hangers.
- b. Spring isolation is also required with 25’ of any rotating mechanical equipment (AHUs, FCs, EFs, etc...)

Question: Refer to BWG specification section 23 0710 - 3.18.B dated 12/11/2010. Does all the piping designated on drawings as GCHWS/R reference ethylene glycol water only?

Answer: All piping designated on drawings and designated as GCHWS/R reference propylene glycol not ethylene.

Question: Refer to BWG specification section 23 0710 - 3.18.B.2.c dated 12/11/2009. Mineral-fiber comes with a factory applied (ASJ) white reinforced vapor retarder facing and allows for a water vapor permeance or .02 perm max. (See attached data sheet). Would you still require a PVDC jacket in addition to the factory all service jacket?

Answer: Yes, PVDC jacket in addition to the factory all service jacket is required.

Question: Refer to BWG drawings M0010N, M0010S & M6001 dated 2/12/2010. Monitoring of the Outside Air is required for LEED credits and per note 16 on the Air Handling Unit Equipment Schedules on M0010N and M0010S. There are separate minimum and maximum Outside Air Dampers. The Ebtron airflow monitoring stations do not say if it's for the minimum fresh air or for the entire air intake. On M6001, the AHU control diagram indicates a FMS at the outside air intake. Is that FMS intended to cover both the minimum and maximum Outside Air Dampers?

Answer: The Ebtron Airflow Station shall measure the minimum fresh air within 10% accuracy.

Question: Refer to BWG drawing M7002 dated and specification section 23 6500 dated 12/11/2009. On M7002, note 2 indicates to see specifications for the size of the plume heaters. The specifications, 23 6500, do not indicate any size for the plume heaters. Will the size of the plume heaters be provided? If so, when?

Answer: In reply to our question, Syska informed us today that the electric plume heater are not needed for the cooling towers and will be eliminated from the specs. Therefore, no electrical connections will be required for these heaters.

End of Addendum 03

WALSH AUSTIN JOINT VENTURE CONTACT INFORMATION

400 Continental Blvd, 6th Floor - Suite 69 | El Segundo, CA 90245

Phone: (310) 426-2892 | Fax: (310) 426-2888

James Augustyn – Procurement Manager