September 30, 2016

Control Wing Basement and Chiller/Cooling Tower Modernization
Los Angeles ARTCC, Palmdale, California

Pre-Bid RFIs

1. Sheet m201 note #1 calls out to seismically brace 4" to 12" cwr/s and ctr/s, and 6" rv piping. Does this apply to all the existing piping? All new piping shall be seismically braced as well as any existing piping that is not currently braced to current code (which is pretty much all of it). Although most of the piping is between 4" and 12", there is also some smaller piping. Per Drawing M501, brace pipes 1 ¼" and larger (new and existing).

2. Sheet m201 note #7 states to replace the refrigerant purge unit on existing chillers to remain. Please provide the make and model of the existing chillers to remain. This is needed to provide pricing. Make: York Model: YTG3A2C3-CKH

3. Sheet m201 note #16 states to provide a control panel with bacnet communication interface for the existing chillers to remain. Please provide the make and model of the existing chillers to Remain. This is needed to provide pricing on factory bacnet module. Make: York Model: YTG3A2C3-CKH. Please also refer to chiller specifications for manufacture panel upgrade.

4. Sheet m202 note #1 Calls out to seismically brace 4" to 6" hwr/s and gas piping. Does this apply to all the existing piping? All new piping shall be seismically braced as well as any existing piping that is not currently braced to current code (which is pretty much all of it). Per Drawing M501, brace pipes 1 ¼" and larger (new and existing).

5. Mechanical drawings state to use mason flex connectors braided stainless steel. The Specifications describe a flex loop. However, the model sfdej is a dual sphere rubber connector. Please clarify what is to be used. Notes 22/M201, 2/M202, 9/M205, 14/M707 10/M708, 12/M709, 11/M710 state to use Mason SFDEJ connectors. Dual braided stainless steel connectors as specified in 23 21 13 2.7B may be used as an alternate to the Mason connectors, but the Mason SFDEJ connector shall be used unless extenuating circumstances require a substitute. Note that Specification 23 21 13 2.7B.3 requires ¾" misalignment, which is clarified that the connector allow ¾" movement under operating pressure without overstressing the pipe, supports, or equipment connected to it.

6. Specification section 23 21 13-8, 3.1, h calls for 304l schedule 20 stainless steel for Condensate drains. Is copper type l acceptable for this application? Schedule 40 stainless steel piping may only be used if threaded connections are used. Otherwise, condensate piping shall be schedule 10 welded stainless steel. Alternate: Type L Copper with wrought copper fittings and soldered or brazed joints.

7. Sheet m202 note #9 states to provide a toxic and combustible gas detector for monitoring carbon monoxide and hydrocarbon gases. Please provide a specification for the make and model of what is required. Gas detector shall be Honeywell E^{3}Point Toxic and Combustible Gas Detector (or approved equal). Gas Detector shall be able to detect carbon monoxide, hydrogen sulfide, Nitrogen Dioxide, Methane (CH_4), and Propane. Accuracy shall be plus or minus 3 percent full scale. For methane, resolution shall be 0.5 % LEL, Range shall be 0-100 % LEL, and alarms shall be triggered at 25 %, 50 %, and 90 % LEL. Detector shall have two DPDT relay outputs and 4-20 ma output. Operating temperature range shall be 0 degrees F to 122 degrees F (minimum range). Gas detector shall be UL listed (UL 61010-1).

8. Sheet m202 note #17 states to provide a gas pressure sensor. Please provide a specification

for the make and model of what is required. Gas pressure transmitter shall be Foxboro (Eckardt) IGP20 Intelligent Gauge Pressure Transmitter or approved equal. Span shall be 0.125 psi to 7 psi, and range shall be -7 to 7 psi. Accuracy shall be plus or minus 0.07 % of span. Ambient temperature effects: plus or minus 0.2 % URL per 100 degrees F of change. Analog output shall be 4-20 ma. Gas pressure transmitter shall be constructed for electrical connection to conduit.

9. Specifications state that evapco and marley for the cooling towers. Is bac an acceptable Alternate? BAC is not an acceptable alternate; therefore Evapco and Marley are the only acceptable options.

10. Please confirm that all the construction materials are to follow the buy american act. Refer to the Contract Solicitation, DTFAWN-16-R-01814. It incorporates FAA Contract Clause 3.6.4-3 Buy American Act - Construction Materials (October 2014).

11. Sheet m205 note #6 and #7 state to use schedule 10 stainless steel piping for the condenser water and blow down piping. The specifications state that condenser water piping, aboveground, Nps 2-1/2" and larger states to use schedule 20 stainless steel. Please confirm what schedule pipe is to be used. As indicated in drawings schedule 10 stainless steel piping shall be used for this application. The specifications should have read schedule 10 instead of schedule 20.

12. Spec section 23 07 19-3.18-b.1 the specified .024 stainless steel outdoor field applied jacket cannot be applied to the condenser water pipe insulation diameters exposed to weather at the towers. The manufacturer's recommendation for the job diameters is .010 thick. Please advise if .010 stainless steel is acceptable or if the use of a comparable .024 gauge aluminum jacket is acceptable. Most reputable jacketing providers can provide .010, .016, .022 or .024 stainless steel jacketing in either corrugated or smooth finish. The thinnest jacketing at .010 is not acceptable. The specified .024 jacketing shall be used.

13. Spec section 23 07 19-3.17-d.1 is the specified pvc jacket that is color coded required or can the standard white colored pvc jacket be used on all systems specified? All pvc jacket must be color coded as required within the specification with the exception of piping for AHU-104, 106, 107, and 108 (Drawing M204) since existing pipe is white in that area.

14. Spec section 23 07 19-3.13 the following equipment is not listed in the schedule to insulate. Please advise if they are required, and if so, please provide the insulation type, thickness, and method:
Chw pumps Provide insulated box to match existing.
Hhw pumps No insulation required.
Temporary and new exposed to weather condenser water pumps No insulation required
Chw heat exchanger Factory insulated per equipment schedule on sheet M603.

15. Per Door Schedule Note 2 on sheet A 801, "Retain the FAA's security system design integration (SSDI) contractor to relocate and provide as required access control door hardware." This applies to hardware groups 1, 2, 3, 15 & 16. It is not clear what new access control equipment will be required and what will be allowed to relocate. Please confirm whether access control apparatus for the hardware groups above shall be priced for all new equipment, relocate all existing equipment or price all new equipment as an alternate. Refer to Electrical Sheets E202, E203, E204, E401, E402, and E403 for information regarding access control card readers. For other access control hardware, assume the hardware will be replaced as part of the work.

16. Specification section 05 12 00 regarding Structural Steel Framing require the fabricator and the installer to be AISC Certified. The AISC certification for fabricators and installers is generally reserved for major structural steel projects i.e. high rises, major bridges etc. Specification sections 05 50 00 regarding Metal Fabrications & 05 51 13 Metal Pan Stairs allow AWS D1.1/D1.1M and AWS D1.3/D1.3M. Will fabricators and installers with qualifications under the AWS structural welding code be acceptable for work performed under this project? All work will conform to the AISC code per note E1 under Structural General Notes on sheet S001.
    For steel fabrication, Contractor shall be AISC certified for fabrication as specified, or, Contractor shall be L.A. (city of Los Angeles, CA) City Certified for LWS, MWS, or USS fabrication. For steel erection, installation qualifications per Code, including qualifications per the applicable AWS codes, will be acceptable.

17. Will it be allowable for the site superintendent to also carry the roles of quality control manager and safety and health officer? Reference Specification 01 31 00, Section 1.5A: "For this job, The SSHO (Site Safety and Health Officer) and QC (Quality Control) officer positions could be held by one or more qualified workers **other than the superintendent** or foreman, as designated by Contractor's management." Therefore, the Superintendent shall not carry the roles of quality control manager and safety and health officer.