



**Southwestern Community College District
RFP 1415-147 Building 210 IT Hot/Cold Aisle Energy Project**

Addendum No. 3
February 9, 2015



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Southwestern Community College District

2/9/15

Date

Note

All documents remain unchanged except sections or parts added to, revised, deleted and clarified by this addendum. This addendum consists of responses to RFI's that needed additional time to compile and an attachment containing a more legible copy of sheet M6.

1. Please confirm the maximum server room load anticipated is 5 tons, as stated at the job walk, and that there is no requirement to provide spare cooling capacity and that the design-build team does not need to perform a load study with the IT department. This is important because if the heat rejection would ever exceed 5 tons the HVAC system will not be providing full redundancy at a total of 10 tons capacity. Also confirm if the capacity requirement is (a) the nominal equipment size, (b) the rated sensible capacity at the operating conditions, or (c) the rated total capacity. Note there appears to be an error in the Computer Room Unit schedule on Sheet M1 in which the scheduled sensible capacity exceeds the scheduled total capacity.

Response - The anticipated cooling load based on initial estimates performed during the scoping process is 5 tons. The design-build team's engineer of record will be required to perform a detailed cooling load study to verify that the system design includes sufficient redundancy. Server room operations will not be impacted during construction and as such cooling must be provided to assure server operations.

2. Item 5 under "Proposal Format and Submission" indicates that "the proposer must provide an analysis of the energy efficiency and savings to be derived through the life cycle of this project." Has previous analysis been conducted for the schematic design? If so, please provide any energy analysis that has already been performed.

Response - Schematic energy efficiency estimates resulted in estimated annual savings of 95,153 kWh due to the airside economizer, high return air temperature and VAV fan operation.



3. Under the Mechanical Scope of Work, item "g" monitoring of the CRAC unit alarms and server room temperature is required through the campus building automation system network. Please specify what type of system the campus has (i.e. manufacturer) and what the protocol is (i.e. bacnet or lon). Also, please confirm where the POC is to the BAS (where in building 210 OR elsewhere).

Response – *The installed equipment shall communicate using native BACnet components. For purposes of this proposal assume the POC is located where the chilled water piping is plumbed to building 210.*

4. Is the contractor responsible for graphics and programming of the campus building automation system? If so, is there a controls contractor under contract to maintain the system.

Response - *Yes, the design-build team will be responsible for building automation system graphics and programming.*

5. Under the Electrical Scope of Work, items b and c, rework of the light fixtures serving the server room is required due to removal of t-bar ceiling. Is the intent to re-install the existing fixtures or provide new? Touching these lights will require compliance with T24 for lighting, at least for this room. Likely for the newly created office area adjacent to the server room.

Response – *Refer to drawing A1 for electrical scope regarding light fixtures. The indicated scope includes re-circuiting and remounting existing light fixtures.*

6. Is Title 24 compliance and documentation required for this project?

Response – *Yes, per the 2013 Building Energy Efficiency Standards.*

7. Item 6.b.iv in the "Project Description and Criteria" calls for an Infrared humidifier in the CRAC unit. The 2013 Title 24 California Energy Code section 140.9(a) 3 prohibits nonadiabatic humidification (e.g. steam, infrared). Please confirm if humidification is required and, if so, please confirm that an adiabatic method (ultrasonic, direct evaporative) will be accepted.

Response – *Humidification will be required. Adiabatic humidifiers are acceptable.*



8. The specified manufacturer of the CRAC unit cannot provide a humidifier internal of their unit that meet the current Title 24. Will a humidifier external to the unit located within the room be acceptable?

Response – Yes.

9. Are the server racks to remain in their current locations? What about the cable and cable ladder above? Has the existing layout been determined to work with the plans for ceiling compartmentalization and addition of a partition wall?

Response – Refer to architectural sheets A1 and A2 for planned relocation of server racks. The contractor shall plan and work closely with Southwestern College IT staff to provide a partition between hot and cold aisle.

10. Does the current room have sprinklers or are there any alternate forms of fire suppression systems? The compartmentalization of the ceiling and creating of the new partition wall would require modifications to any sprinkler or other suppression system.

Response – The existing server room does not have sprinklers or a fire suppression system. No fire suppression system related work is anticipated under this project.

11. Given the age of the building, has any testing been done to confirm that asbestos is not present in the construction materials of the existing walls or roof? Please confirm that any testing, abatement and disposal of hazardous materials (asbestos, lead, etc.) found within the existing construction is outside the scope of this project.

Response – Asbestos testing has been accomplished. Minor amounts of asbestos material were found in one wall that is not anticipated to be disturbed by any aspect of construction. If asbestos abatement is necessary for construction this will be accomplished by SWC and the site will be released for construction.

12. Will full record architectural, structural, and MEP drawings be made available to the design team after award? Are these drawings available in pdf or CAD format?

Response – The original construction drawing prepared in 1977 have been included “as reference documents only”. It is expected the Engineer of Record will perform due diligence in any design for this installation.



13. Are book specifications required?

Response - *The design build team may use their preferred method for project specifications.*

14. What is the age of the roof and the length of it warranty?

Response - *The single ply roof is approximately 12 years old and has a 15 year warranty*

15. Is there an existing fire suppression system for the computer room that we need to integrate with the new CRAC unit?

Response – *Refer to response of question 10.*

16. Please confirm that there is sufficient power available for the new equipment and where the panel located?

Response - *The as-built documentation “for reference” is provided with RFI responses. It is assumed that the building has adequate electrical capacity as the server room cooling capacity is not changing. However, the design build team and Engineer of Record will be required to confirm adequate utility capacities during the design phase of the project.*

17. The drawings state the openings in the slab are 24”x24”. They appear to be different in the field. What are the correct existing opening dimensions in the slab?

Response - *The slab opening sizes and locations per as-built drawings are identified in schematic drawings. Actual slab opening dimension can be measured after the removal of existing CRAC units and will need to be incorporated into the final design by the Engineer of Record.*

18. The specified CRAC unit’s discharge does not match up with the existing slab openings. Are we required to cut and patch the slab to meet the size of the new unit’s discharge?

Response – *The proposed CRAC unit is indicated to have a floor stand on sheet M1. The intent is that the floor stand will cover 2 of 3 openings as shown on M1. The successful design build firm will take these into consideration during the design phase and will accommodate existing conditions, the installed unit, and final conditions.*



19. The RFP mechanical plans show one multi-zone unit on the roof and associated ductwork below. Based on the job walk there are two single zone package units on the roof. Are there any updated plans indicating the current existing equipment and the current ductwork below the roof?

Response – *The multizone unit, MZ-1, serving server room area (ROOM -218C) is shown in drawing M3. The multizone unit, MZ-2 and the duct work serving north side of the building is not shown in the schematic drawings.*

20. Paragraph G of Specification 238123 indicates that an electric resistance heating coil is required for the new CRAC unit.

- a. Please confirm if the existing CRAC units to be removed have electric heating. The reason we ask is concern that the existing electrical system has capacity to serve the replacement equipment without modification.

Response - *Per the name plate data, existing CRAC units have 10kW of reheat.*

- b. The 2013 Title 24 California Energy Code section 140.9(a)2 requires controls to prohibit reheating air that has been previously cooled. Please confirm that a reheat coil is still required

Response – *The schematic drawings have been revised to remove the requirement for electric reheating to conform to Title 24 standards. The design build team shall ensure that the server room is maintained in the temperature and humidity range recommended for Class A1 in the ASHRAE 2011 Thermal Guidelines for Data Processing Environments – Expanded Data Center Classes and Usage Guidance.*

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