

VETERAN AFFAIRS MEDICAL CENTER
REPLACE HVAC BLDG 110A RADIOLOGY &
BUILDING 110 1-WEST CHAPLAIN SERVICE AREA
BUILDING 110B (590-12-127)
HAMPTON, VIRGINIA
S&HA PROJECT NUMBER (9690.190)

SHRIVER & HOLLAND ASSOCIATES
ARCHITECTS

PRE-BID QUESTIONS FOR SOLICITATION RESPONSE NO. 01

June 30, 2014

1. Regarding Section 23 09 23, Water Flow Measuring Devices - DIRECT-DIGITAL CONTROL SYSTEM FOR HVAC insertion turbine meters -- what is the application data for these meters?
 - a. **Water flow measuring devices shall not be required. Remove water meter references from section 23 09 23. See Addendum No. 1.**
2. Will this project require flow meters for monitoring steam flows?
 - a. **No, steam flow meters shall not be required. See Addendum No. 1.**
3. Will this project require flow meters for monitoring condensate flows?
 - a. **No, steam condensate flow meters shall not be required. See Addendum No. 1.**
4. Reference Sheet M-103, Note 2 states the existing AHU to remain in operation throughout construction, then over the weekend tie in the new ductwork to the new AHU. However, the new ductwork routing is shown where existing ductwork is currently located. Is it acceptable to run the ductwork in a different route? Or should the contractor provide temporary HVAC?
 - a. **The existing ductwork will need to be demolished prior to tying in the new ductwork, hence the need for an outage over a weekend. Do not route ductwork in a different route. The radiology department's HVAC system shall be at fully operational and at normal operating conditions during occupied hours. See "PHASING NOTES" in Addendum No 1 for further details.**
5. What work will be required on the existing sprinkler piping in the penthouse during demolition of the mechanical equipment?
 - a. **See Addendum No. 1.**
6. On Drawing 110-M-601, the schedule for AHU-1 indicates the supply fan shall provide 9810 CFM. The cooling section for the cold deck requires 194.6 MBH total capacity and 138.6 MBH sensible capacity. The air temperature entering is given at 78.0/65.3 FDB/FWB and leaving as 52.2/51.9 FDB/FWB. The control drawing 110-M-701 indicates that the airflow leaving the fan splits between the cold and hot deck. The issue is that the schedule does not indicate the minimum and maximum air flow rates for either coil. If sized based on the capacity, the coil will not be able to condition the full 9810 CFM (389 MBH total / 277 MBH sensible would be

required). Based on our review, it would appear that only 4900 CFM is required for the cold deck. Can you indicate/confirm the maximum required airflow for each coil?

- a. **See Addendum No. 1 Sketch SKM-1 for revised AHU-1 schedule.**
7. On the control drawing 110-M-701 it is shown that AHU-1's fan VFD will be controlled by static pressure. Supply dampers are not shown in the new work for the AHU. We are assuming the existing individual terminal units have dampers to limit the airflow. Does the AHU need supply dampers to balance the airflow to the cold and hot decks? As shown on the plans, the airflow balance to the cooling and steam coils will be controlled by the terminal devices.
 - a. **The existing dual-duct terminal units are equipped with pneumatically-controlled hot- and cold inlet dampers. The AHU shall require neither hot-deck nor cold-deck dampers for airflow modulation; the airflow balance to the cooling and steam coils shall be controlled by the existing terminal devices and the static-pressure sensor-controlled supply fan VFD. See Addendum No. 1 for clarifications on the sequence of operation.**
8. What is the make and model of the existing HVAC DDC control system?
 - a. **There is no existing DDC control serving the existing air handling on the 5th floor or the fan coil units in the chaplain's area. The control vendor point of contact is Richard Roberts at Johnson Controls, Norfolk. 757-852-3157**
9. What is the make and model of the existing Fire Alarm system?
 - a. **The existing fire alarm system is manufactured by Edwards Systems Technologies. The system is maintained by Beta Systems of Virginia, (757) 487-6856.**
10. Demolition note #1 on sheet 110-MD102 refers to a temporary AHU-1. What are the performance specifications for the temporary AHU? Please advise.
 - a. **Delete all references to "temporary." See Addendum No. 1.**
11. Will the furniture be vacated from the area of work in the Chaplain's Offices?
 - a. **The furniture will stay. The office may not be vacated fully since there is no swing space for the Chaplain staff. Therefore, expect to work in phases/off-hour shifts to allow the Chaplain staff to continue to operate during normal business hours. See Addendum No. 1.**
12. Will the elevators be available to the contractor for removal of debris and stocking of material?
 - a. **The Contractor must provide a pre-approved chute for hauling debris from penthouse. The Contractor may use wheeled trash bin from Chaplain space on the ground level, but must be covered. See Addendum No. 1.**