



WASHINGTON STATE
UNIVERSITY

Addendum No. 1
9/7/2023

Re-Bid Dodgen Research Facility
Nuclear Science Center HVAC Renewal
Washington State University
Pullman, WA

Project No.1687-2022
Washington State University
Facilities Services, Capital

**Addendum No. 1
9/7/2023**

**Project title
Washington State University
Pullman, WA**

Bid Date:9/12/2023

1. This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated August 15th, 2023 and any prior addenda, as noted below.
2. Please acknowledge receipt of this addendum on the Form of Proposal.

This Addendum consists of 11 total pages including the following Attachments:

Pre-Bid Meeting 8/31/2023: Meeting Minutes
Pre-Bid Meeting 8/31/2023: List of Attendees
SECTION 26 09 16 Electric Controls and Relays

Changes to prior Addenda:

N/A

Changes to Bidding Requirements:

N/A

Changes to Specifications:

SP 1-1. SECTION 00 01 10 – Table of Contents

Item 1. Delete: 01 71 23 Project Identification Sign

SP 1-1. SECTION 26 09 16 – Penetration Firestopping

Item 1. Delete the section in its entirety. See attached revised section dated 9/7/2023.

Approved Substitution Requests:

N/A

Changes to Drawings:

N/A

END OF ADDENDUM No. 1

PRE-BID MEETING

WSU Project: Dodgen NSC HVAC Renewal (1687-2022)

Meeting Date: August 31, 2023

Time: 13:00 AM

Meeting Location – McCluskey 190D (meet at McCluskey for general overview and then travel to Dodgen for site walk)

Bid Deadline: September 12, 2023 prior to 2:00 pm

Recorded by: Phil Johnson

1. Introductions:
 - a. WSU Facilities Services Project Manager: Phil Johnson (philjohnson@wsu.edu 509-335-9029)
 - b. WSU Facilities Services Construction Manager: Brian Funke (bfunke@wsu.edu 509-335-4209)
 - c. WSU Occupant/Customer: Nuclear Science Senter (Corey Hines – Director)
 - d. Design Engineer: MSI Engineers; Aaron Donnelly (Mechanical), Ben Jennings (Electrical)
 - e. Attendance: Please identify yourself during the meeting and provide your name, company and phone number in an email to contracts@wsu.edu.
 - f. The Owner's meeting minutes will be routed to project plan holders as part of an addendum.
 - g. Send all questions regarding this project to the Facilities Services Project Manager, with copy to Facilities Services Construction Manager:
 - i. All questions must be received no later than, Tuesday, September 5, 2023.
 - ii. All requests for substitutions must be received by Tuesday, September 5, 2023.
 - h. Addenda will be forwarded to all plan holders. Addenda will be issued no later than COB on Friday, September 8, 2023.
 - i. Note that section 01 71 23 is shown in the table of contents, but does not apply to this project and will be removed via addendum.
 - ii. Note that section 26 09 16 incorrectly references section 00 01 10 in the header. The content is correct and the header will be corrected via addendum.
 - i. This is an active campus. There are students, faculty and visitors who either will not be aware of construction or will be distracted. Contractors must routinely work around the pedestrian population on campus as well as control noise and other construction related activities to minimize the effect on the campus. WSU is committed to a completely accessible campus. This means that when construction activities interfere with accessible pathways, that the General Contractor is responsible for putting in place temporary facilities (ramps, pathways, etc.) to assure that all pathways are available. Harassment in the workplace is not tolerated at WSU. All trades are required to conduct themselves such that harassment, real or perceived, does not occur. Offending individuals will be permanently removed from the project.
2. Project Description:

This project at the Dodgen Research Facility will renew HVAC and electrical components serving the pool and beam rooms. Demolition and new construction will take place throughout the facility with most occurring in the mechanical penthouse. General scope includes, replacing aging HVAC fans, ductwork, dampers, heating coil, controls, and an obsolete motor control center. On-site work scheduling must be coordinated with the WSU Construction Manager and NSC staff. General work that does not require a shutdown or interfere with facility operation can be done during

PRE-BID MEETING

regular business hours (8am to 5pm M-F) throughout the year. Work that does require a shutdown or will interfere with facility operation must be done during facility down-time (approximately November to March). Project must be substantially complete by March 29, 2024. Proposals MUST BE based on these Contract Time constraints.

- a. Location: 2840 NE Roundtop Dr., Pullman, Washington, 99164
- b. Access/Haul Routes: Site access will be from E. Grimes Way. Lay-down area available at lower ramp on the east side of the facility or at flat area on the southwest corner of the facility. Coordinate exact haul route and lay-down specifics with WSU Construction Manager. Contractor to provide site logistics plan with pre-con submittals. Contractor shall provide seven days prior notice for any restrictions or closure for scheduled deliveries or installations. Any restrictions or closures will require traffic control.
- c. Occupied Area: Owner will be occupying this facility during construction. Reference 01 31 23, section 1.05.A for all access and security protocols.
- d. Existing Hazards: The Dodgen Research Facility has radiological and chemical hazards present at the facility in the form of radioactive materials and chemicals securely stored onsite. The Dodgen Facility will provide contractors with free release documentation for any areas and/or equipment in restricted areas. Free release documentation provides assurance that the area and/or equipment is free of radiological and chemical hazards prior to interaction with the equipment and/or area. Area and/or equipment will be determined for free release by established procedures and documentation including radiological surveys and swipe samples. (00 72 00 General Conditions; Attachment A: Good Faith Hazardous Material Survey)
- e. Owner-Furnished Contractor Installed Equipment: Air-Handling Unit (F-4) and Condensing Unit (CU-4) as shown in the design drawings will be owner-furnished and contractor installed. Each unit is expected to be delivered according to the following schedule:
 - i. F-4 in mid-January, 2024
 - ii. CU-4 in mid- December, 2023
 - iii. Reference the design drawings for further clarification and unit specifications
- f. Schedule Constraints: Substantial completion is due by March 29, 2024. Primary construction work and any work requiring a shutdown can only be performed during the facility's offseason (approximately beginning of November through end of March). Secondary construction (e.g., "behind the scenes" scope) can be done year round with approval from WSU Construction Manager and NSC Director. Contractor to coordinate schedule for primary and secondary construction activities with WSU Construction Manager and NSC staff. Submittal and scheduling activities to begin as soon as notice to proceed is issued.
- g. Parking. Parking on campus is enforced 24 hours a day, every day. It is the bidder's responsibility to obtain parking permits to attend pre-bid meetings, site visits, and bid openings. Go to www.parking.wsu.edu for more information about visitor parking permits. Labor force parking and permits: Minimal parking will be available onsite. Workers will need to park in existing lots on campus. In an attempt to minimize impact on annual permit holders, Contractors and sub-contractors will be able to park on the mall by purchasing a commercial mall service permit. The quantity of vehicles should be limited whenever possible. They can buy daily, 10 day or monthly permits through Transportation Services. Work that requires on site vehicles can be accommodated by parking within the site fence with a contractor permit.

PRE-BID MEETING

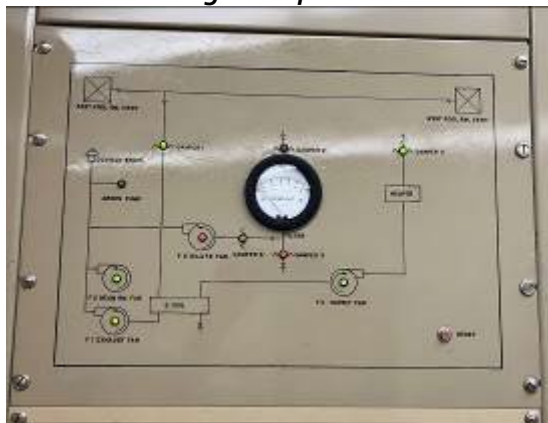
- h. ADA. ADA access must remain open during construction. Contractor to develop and submit plan for temporary ADA access if necessary.
- 3. Estimated Base Bid, not including taxes, is approximately: **\$600,000 to \$650,000.**
- 4. Expected Notice to Proceed date: **September 22, 2023.**
- 5. Estimated Contract duration after Notice to Proceed: **Substantial completion required by March 29, 2024.**
- 6. Bidders should review the complete version of the bid instructions in the Contract Documents and in any forth coming addenda. Especially note the following:
 - a. Bids shall be made upon the form of proposal in the Contract Documents.
 - b. All information requested on the bid form shall be filled out completely and entirely to include:
 - i. Base Bid amount – Required
 - ii. Alternate amount(s) as required – N/A
 - iii. Unit Price amount(s) as required – N/A
 - iv. Acknowledgement of each addendum received – Required
 - c. The bid should include a bid security bond.
 - d. Bids shall be prepared and submitted according to the instructions in specification section 00 21 13.
 - e. The bidder is responsible for submitting the documents by the time noted in the bid specifications.
 - f. Bids will be received prior to 2:00 p.m.; September 12, 2023. Bids will be received either by email to contracts@wsu.edu or in hard copy at Facilities Services, McCluskey Services Building, 2425 East Grimes Way, Pullman, WA 99164-1150. Proposals will then be publicly opened and read aloud at 2:30 p.m. by ZOOM <https://wsu.zoom.us/j/99215211063?pwd=c2hjbFh5d1lScGFRcldZU3dMSG5BQT09> or Phone 253-215-8782 and entering Meeting ID : 992 1521 1063 and Passcode: 6000971. Attendance in person is not allowed.
 - g. Bidder Responsibility Mandatory Criteria: It is the intent of the Owner to award a contract to the low responsible bidder. Prior to awarding a contract, the apparent responsive low bidder must submit documentation demonstrating compliance as per Section 00 21 13, Part 1.17 – Low Responsible Bidder. Be prepared to submit the required documentation with 48 hours of receipt of request.
- 7. Summary of Construction Administration Requirements:
 - a. For complete project administrative requirements refer to Division 1 and the General Conditions of the Contract Documents and addenda.
 - b. Prior to starting work; the contractor will be required to submit a Schedule of values and a construction progress schedule in a critical path method format for review and approval.
 - c. Weekly progress meetings will be conducted during the course of the project unless otherwise approved by the owner.
 - d. Material information and/or shop drawings shall be submitted to the Owner for approval. The construction progress schedule shall include time for the submittal review and distribution process.

PRE-BID MEETING

- e. O&M Manuals and As-built drawings shall be submitted prior to substantial completion and the final application for payment and shall be identified as activities on the construction progress schedule.
8. Discussion/Remarks/Concerns:
 - a. **City of Pullman Permit has been approved. Contractor to pick-up permit and pay fees prior to October 13, 2023.**
 - b. New AHU (F-4) is realtively heavy. Note that drawings call for existing equipment and concrete pads to be removed and new structural steel support base installed to support this AHU.
 - c. Existing ventilation wiring is complex (see detail 4/E-603 for additional information). Contractor to work closely with WSU Facilities Services and NSC Staff during removal/installation.
 - d. Contractor to work closely with 3rd party commissioning agent (hired by WSU).
 - e. Electrical shop drawings shall include a full ladder diagram, panel layouts with bill of materials. Labeling and tagging are critical.
 - i. Contractor to coordinate with electrical engineer (MSI) to find appropriate controls specialist for the project. Potential contacts for consideration:
 1. Control Freek, Spokane WA – Adam@controlfreak.com
 - f. Control panels need to reuse existing switches.

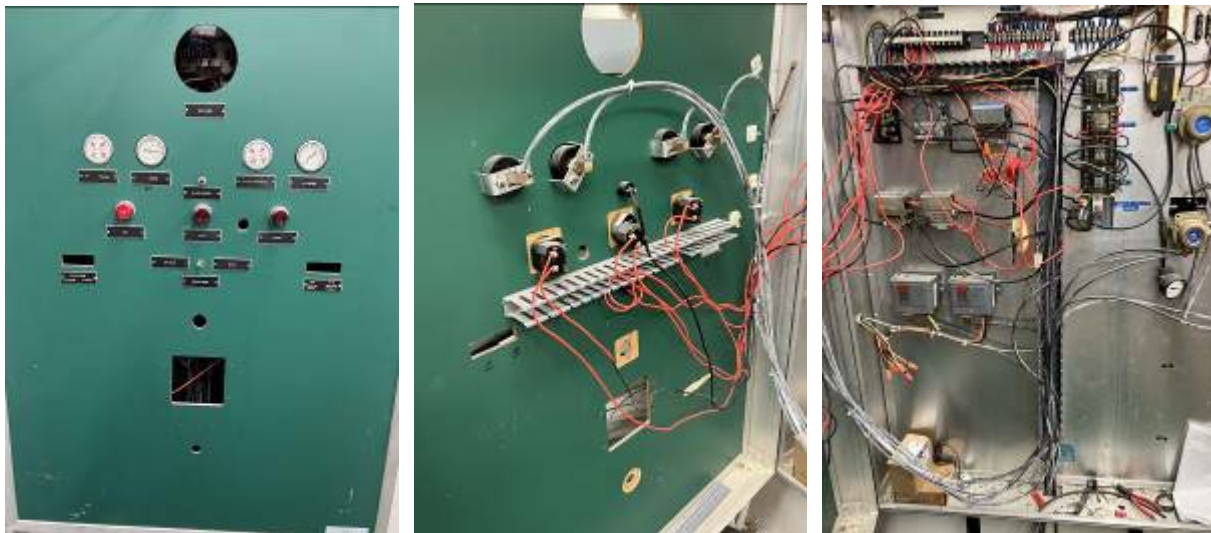
Questions from potential bidders (**WSU response in bold**)

1. E-601, the pilot lights that are shown (also on the following page) will all come on because they are all tied together to PB1. Is the intent for PB1 to be a “test light”? Could we instead buy PTT pilot lights and wire them for push to test?
 - a. **The intent of PB1 is to test all of the LED/lights with a single test button.**
2. E-602, For the Display Graphic, can we get dimensions? How tall and wide is the plate? How much depth between the back of the graphic and the panel behind it that the terminal blocks will be mounted to?
 - a. **The display is on a standard rack 19” wide by 14” tall. Depth available for use is 16”. Color needs to match existing. See photo below.**



PRE-BID MEETING

3. E-603, does the new enclosure need to match dimensions and color of existing?
 - a. ***There is additional space around the existing panel so dimensions aren't critical as long as they are within reason (e.g., a 4'x4' panel would be too large). Any panel color is ok, but the LED lights must be red, yellow, green.***
4. Provide pictures of the mezzanine level existing control panel.
 - a. ***See pictures below***



5. What is the maximum downtime allowable during the November-March time frame? There was mention of 48 hours to 2 weeks. The main concern I see is taking out existing F-4 which provides warm air to the pool room and potential outside temperatures that could be below freezing at the time the equipment is being swapped out.
 - a. ***The maximum downtime allowed between the November to March time frame is 2 weeks. Contractor shall work to minimize the downtime as much as possible and must coordinate timing with the WSU Construction Manager and NCS staff. Contractor shall be responsible to provide temporary heating to the pool room as necessary to maintain critical operations.***
6. On sheet M-401 Detail 7 it calls for a 24" welded steel exhaust duct, is this to meet a certain duct static pressure rating? If so would it be acceptable to use a heavier gauge spiral duct that would meeting the SMACMA pressure requirements?
 - a. ***Galvanized spiral low pressure (2"wg) duct is acceptable.***

PRE-BID MEETING

7. Will the roof adjacent to the penthouse (out the man door) be available to stage demolished ducts to be picked off with a crane to allow room in the penthouse to move in new duct and equipment?
 - a. ***Yes, the roof adjacent to the penthouse can be used remove demolished ducts and move in new equipment. The contractor must:***
 - i. ***Protect the existing roof from damage and repair/replace any damaged components.***
 - ii. ***Ensure that the weight of any material/equipment will not exceed the load capacity of the roof.***
8. Sheet M-202 Note 6 states continuous steel channels be used for the supports on F-4. With the limited space in the penthouse it will be very difficult to move the 24' channels into place in one piece. Would it be acceptable to split the long side rails into two pieces and splice them with plates and bolts?
 - a. ***Continuous steel channels are required, unless physically impossible. If continuous steel channels are not possible, then it may be possible to split channels into two 12' sections and connect them with a third 12' section using a combination of bolts and field welds. Final detailing to be determined during pre-construction.***
9. Provide picture of the existing ductwork and filter housing at the ground level.
 - a. ***See picture below.***



End of Meeting

PRE-BID MEETING ATTENDANCE RECORD

[illegible]

PART 1 - GENERAL

1.01 SUBMITTALS

- A. Shop Drawings: Submit to NEMA ICS 1 indicating control panel layouts, wiring connections and diagrams, dimensions, support points.
- B. Product Data: Provide for each component showing electrical characteristics and connection requirements.

1.02 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.

PART 2 - PRODUCTS

2.01 COMPONENTS

- A. Control Switches and Stations:
 - 1. Contacts: NEMA ICS 2, Form Z.
 - 2. Contact Ratings: NEMA ICS 2, A150.
 - 3. Pushbutton Operator: Unguarded type.
- B. Magnetic Control Relays: NEMA ICS 2, Class A300.
- C. Solid-State Relays: NEMA ICS 2.
 - 1. Contacts: NEMA ICS 2, Form Z.
 - 2. Contact Ratings: NEMA ICS 2, Class A150.
 - 3. Coil Voltage: 24 volts, 60 Hz, AC.
- D. Control Power Transformers: Machine tool transformer with isolated secondary winding.
 - 1. Voltage Rating: 120 volts primary; 24 volts secondary.

2.02 ENCLOSURES

- A. Control Station Enclosures: NEMA ICS 6; Type 1.

- B. Relay Enclosures: NEMA ICS 6; Type 1.
- C. Fabrication: Shop fabricate control panels to NEMA ICS 1, using cabinets and terminal blocks furnished in accordance with Section 260533.16.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install individual relays and time-delay relays in enclosures.

END OF SECTION 26 09 16