

Project: 568A4-21-708 EHRM Training and Admin Space Support – Hot Springs, SD

Statement of Work

Contractor shall furnish all supervision, tools, labor, materials, equipment, transportation, incidentals and testing necessary for the following services at Hot Springs VAMC, 500 North 5th Street, Hot Springs, SD, 57747:

- Contractor shall provide and install temporary power and fiber utilities for 3-4 modular office trailers that will be located near building 66 on the Hot Springs SD VA campus at 500 North 5th Street.
- Contractor will likely have four phasing milestone events to implement:
 - 1: Setup electrical/fiber infrastructure near trailer placement.
 - 2: Connect electrical/fiber to modular training trailers.
 - 3: Fiber install (daisy chain or home run) to support a new telecommunications room (TR) location
 - 4: Disconnect electrical/fiber to trailers while leaving key infrastructure for future use.

Note: See figures 2 and 3 for example trailer configuration. Exact style/configuration/manufacture will not be known till they are installed on the Hot Springs campus. Images have been provided for concept purposes only.

Work includes, but is not limited to, general construction, alterations, mechanical and electrical work, utility systems, necessary demolition and removal of existing features and certain other items necessary completion. All work shall be performed in accordance with solicitation/contract terms and conditions, specifications and drawings, and all applicable VA and local codes.

Period of Performance will be 120 calendar days after issuance of Notice to Proceed. Final connections cannot be made until modular trailer units are delivered around December 2022. All work done prior to modular trailers arrival shall not block modular install path of travel. Removal of trailers is expected around 2023-2024.

General:

- 1) Contractor shall provide skilled trades to include general construction and qualified electrician and fiber cable tester/terminator.
- 2) Contractor shall complete All OSHA workplace safety training before the project starts. See 010000 General Requirements.
- 3) Contractor shall get Contracting Officer Representative (COR) approval of submittals via email prior to procurement and installation for all items.
- 4) Submittals shall be compliant with Section 508 of the Rehabilitation Act (29 U.S.C. '794 d); information on the requirements for accessible media can be found at VA Section 508 website <https://www.section508.va.gov/>.
- 5) Contractor laydown area is tentatively planned just outside the helicopter pad area and/or parking lot behind building 66. See figure 1 below.
- 6) Contractor shall provide COR a 3-workday notice for work outside of the regular hours of 7:00 am to 5:00 pm government workdays so that arrangements can be made. This notice is

separate from any notices required for utility shutdown described in the later in 010000 General Requirements.

- 7) Contractor shall provide drawings/sketches with survey detail including but not limited to:
 - a. Any new or existing utility that is uncovered and/or exposed shall be physically located by survey. Contractor is responsible for providing coordinates(x,y,z) to the COR. All coordinates shall be in UTM13 NAD83-2011 NAVD88 goid12B USFT, with secondary Z for grade features.
 - b. During the construction period through completion, provide photographic documentation of construction progress and at selected milestones
- 8) Contractor removal of power & data between trailer around August 2023.
- 9) Contractor shall coordinate all activities with the COR.
- 10) Contractor shall provide COR provide Six (6) Delineator Posts similar to <https://www.grainger.com/product/GRAINGER-APPROVED-Delineator-Post-1EKU7>
- 11) Contractor shall provide the COR barricade tape similar to https://www.grainger.com/product/GRAINGER-APPROVED-Barricade-Tape-4A416?opr=OAPD&analytics=relltems_1EKU7
- 12) Contractor shall install Two (2) re-closeable Storage Ring, (24" diameter) similar to <https://www.leviton.com/en/products/48900-ofr>
- 13) Contractor shall provide COR security devices compatible with the existing Hot Springs Johnson Controls security system. Setup shall be similar to attached email quote from Johnson Controls, see Attachment 2 for compatibility with existing infrastructure.
- 14) Contactor shall procure and install the following per the drawings and specifications to include but not limited to:
 - a. 400 amp disconnect at the transformer, fused. Installation of equipment and pad per NEC/NFPA code is required.
 - i. NEMA Rating: 3R
 - b. Panelboard:
 - i. Voltage 208V
 - ii. 3-phase
 - iii. Fault current 20,000
 - iv. Main circuit breaker
 - v. Amp rating: 400
 - vi. Service Entrance Rated: yes
 - vii. Bottom Feed
 - viii. NEMA Rating: 3R
 - ix. Copper Buss in panel
 - x. How many circuits total: 42
 - xi. Branch breakers factory installed: (4) 208V 100A 2P or 3P, depending on trailer configuration, confirm prior to order
 - xii. Size of lugs: MCB
 - xiii. Installation of equipment and pad.
 - xiv. Special options: Lightning protection, rigid 90-degree sweeps, copper wire
 - c. Electrical conductors: Includes (2) 4#3/Ø THWN in support of 400amp.
 - d. High Density Polyethylene (HDPE) conduit.
 - e. Fiber and appropriate fiber innerduct/conduit for all seasons. Fiber quality and capability shall align with attached specifications in support of the campus backbone (building to building) throughput.
 - f. Six bollards.

Phase 1: Power & Data Service (begins at notice to proceed (NTP)):

1. Contractor shall locate ground infrastructure around building 66 to end destination along curb.
 - a. Air conditioner.
 - b. Water pipes.
 - c. Electrical wires, parking lot lights, transformer, etc.
 - d. Data.
2. Contractor shall install new secondary connection to the existing transformer (primary is 3-phase 12,470V secondary is 3-phase 208V).
3. Contractor shall furnish and install a new 3-phase 400A weatherproof disconnect by the transformer.
4. Contractor shall furnish and install a new 3-phase 208V 400A panelboard by the trailers (see drawing). At a minimum it will contain 4 circuits at 100A each to support the (4) modular trailers.
5. Contractor shall minimize safety risks including but not limited to open trenches for an extended period of time.
6. ***** Contractor shall be substantially complete in phase 1 to ensure minimal work and time to complete the remaining tasks. *****

Phase 2: Power & Data Service (begins once trailers are on campus)

1. Contractor shall extend conduit pathway for power and fiber:
 - a. HDPE size shall match largest hole in electrical panel, disconnect, equipment etc.
 - b. Fiber shall be in EMT conduit in building 66 from TR to exterior wall. It is preferred underground conduit (HDPE or PVC) is utilized from TR to trailers but the COR is not certain if existing below grade infrastructure will allow this, hence contractor will maximize on the fiber protection when possible. If routed aboveground, armored cable or other means of protection shall be used, routing shall be approved by the COR prior to installation, and coordination with the location of the future TR shall be performed.
2. Contractor shall install connect power to the (4) trailers.
3. Contractor shall install 120/208v (single or three phase) power from 100-amp circuit breaker to each modular unit and terminate power to existing panels located on each modular building.
4. Utilities shall be brought to a special junction box at one/middle trailer or can be distributed to exterior of each modular trailer unit. Trailer size configuration is not understood at this time.
5. Contractor shall route and terminate 24 count single mode fiber (OS2) from building 66 TR to 1-4 modular trailer IT rack locations. Rack count per or trailer(s) is not understood at this time, but likely to be just 1 rack for all 4 trailers.
6. Contractor shall install fiber junction box in the old TR and patch fiber cords to the switch.
7. Contractor shall test fiber for compliance and provide test report.
8. Contractor shall complete phase 2 tasks in (14) calendar days during normal VA hours.

Phase 3: Fiber install (daisy chain or home run) to support a new TR location (begins between phase 2 and 4 when the data switch moves).

Note: The existing switch will migrate to a new room at building 66. Date of this effort is not understood and is a best guess. See figure 4 for an overview.

1. The contractor shall route and terminate 24 count single mode fiber (OS2) fiber from the new TR to the old TR fiber junction box and cross connect to the previous installed fiber to support the trailers in phase 2. Alternately the contractor may install a home run from the new TR to the

trailers, to complete the connection pending the timing of the switch move. The new home run shall be installed and tested prior to removal of the Phase 2 fiber.

2. Contractor shall install fiber junction box and storage rings in the new TR and patch fiber cords to the switch.
3. The contractor shall coordinate with the COR regarding any fiber connections with equipment.
4. Contractor shall complete phase 3 task in three (3) calendar days during normal VA hours.

Phase 4: Power & Data Service (begins just prior to removal of trailers, estimated end of life around August 2023)

1. Contractor shall remove installed fiber and power infrastructure from the trailers back to the weather rated panel(s)/similar. The intent is to allow easy access/use of the installed infrastructure for future modular trailer utilization. All removed infrastructures will be reviewed by the COR to determine if the VA takes ownership or if the contractor must properly dispose of it.
2. Contractor shall utilize fiber ring(s) for long term storage of the fiber.
3. Contractor shall complete phase 3 tasks in (14) calendar days during normal VA hours.



Figure 1- Laydown area overview near building 66



Figure 2 - EHRM training trailers used at other VA sites, exact style/configurate is subject to change.

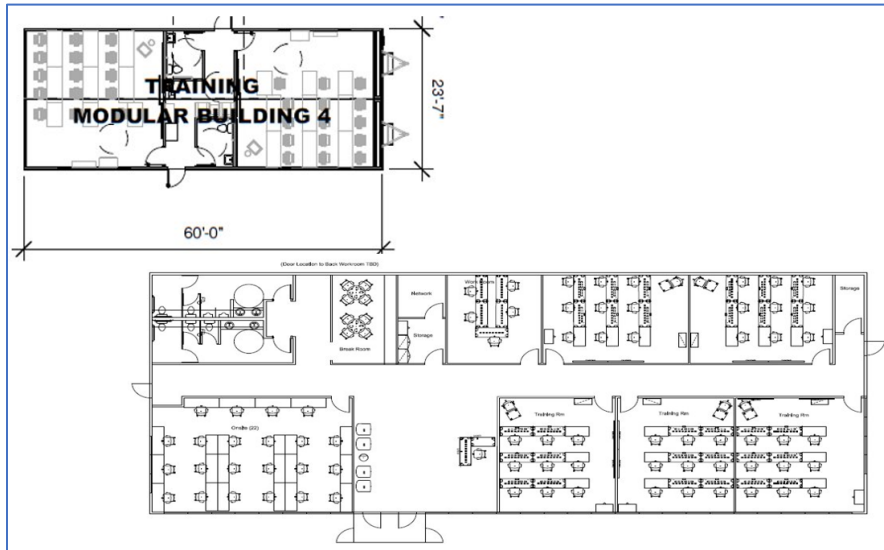


Figure 3 - Example configuration, subject to change.

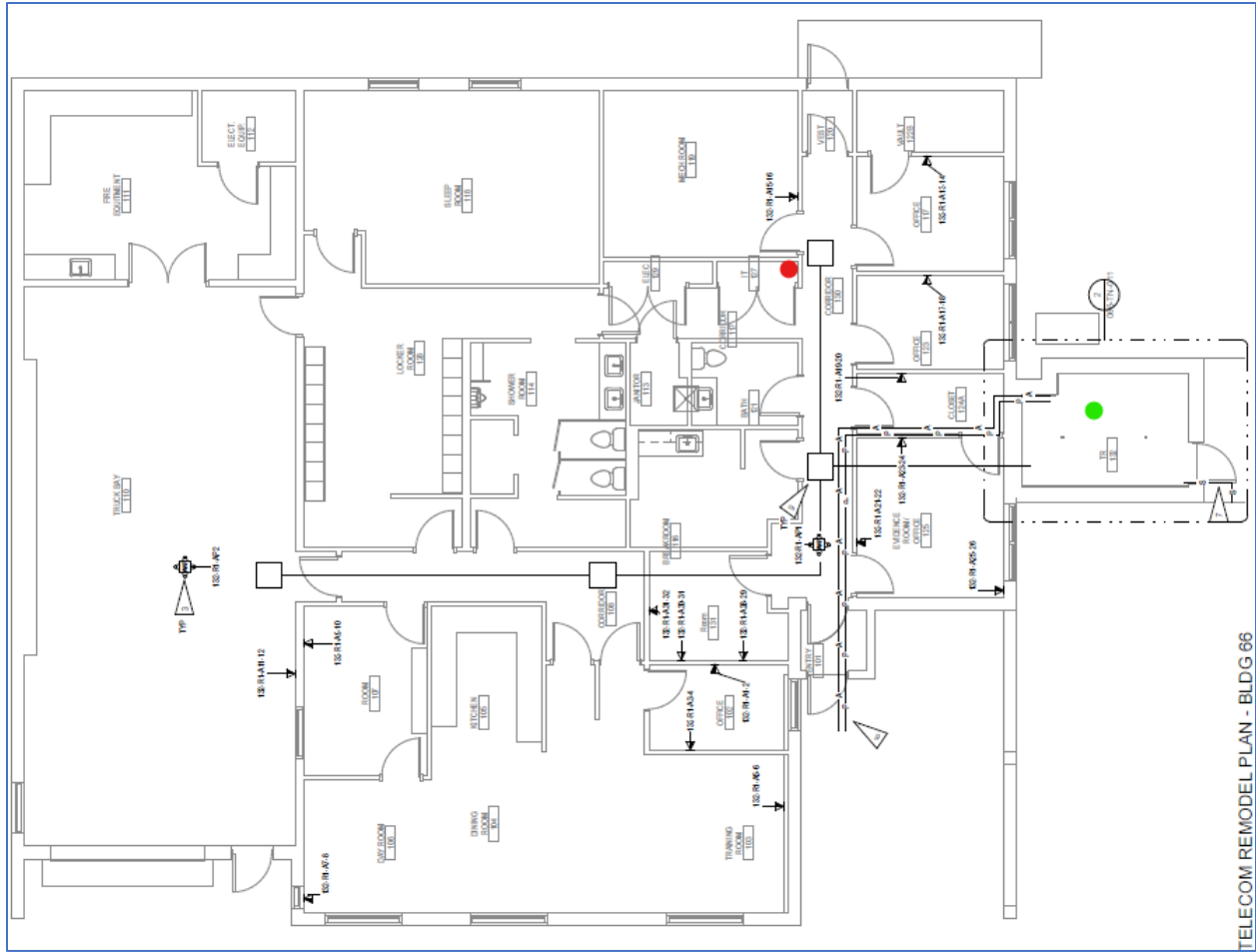


Figure 4 - Old TR (RED), New TR (GREEN)

Attachments:

SOW Att 1 – Specifications v2
SOW Att 2 – Security for Mod Trailers Quote
SOW Att 3 – Dir 0058 VA Green Purch Prog
SOW Att 4 – Electrical Design Manual 2019 Dec 1
SOW Att 5 – Fire Protection
SOW Att 6 – Tele and Special Tele Design Manual
SOW Att 7 – Building 65 66 and 68 Electrical One-Line
SOW Att 8 – Sitepark
SOW Att 9 – Transformer Duct Bank Street Lighting
SOW Att 10 – 2013 Google Earth
SOW Att 10 – Building 66 1
SOW Att 10 – Building 66 2
SOW Att 10 – Building 66 3
SOW Att 10 – Building 66 4
SOW Att 11 – 202107 Drone imagery
SOW Att 11 – Building 66 5
SOW Att 11 – Building 66 6
SOW Att 11 – Building 66 7
SOW Att 11 – Pipe Bollard
SOW Att 11 – Proposed Trailer Location Water Lines
SOW Att 12 – Infrast Standard for Telecom Spaces
SOW Att 13 – AUSH Visitation Memo
SOW Att 14 – VHA Supp Contract Req for COVID
SOW Att 15 – VA Handbook 6500.6 Appendix C
SOW Att 16 – Limit on Subcon Cert of Comp for Constr
SOW Att 17 – Site Visit

SOW Att 18 – Contractor Safety and Env Rec Eval Form

SOW Att 19 – Justification and Approval

SOW Att 20 – Constr Wage Determination