



## **Scope of Work for Replace HVAC Controls, Barracks, B2833 B2834**

DPW Project Number: 44508  
Fort Benning Building Number: B2833  
B2834 Period of Performance: 360  
Job Walk: TBD  
Proposal Due: TBD  
Bid Process: MATOC

### **Submissions by DPW**

1. Scope of work w/construction specifications
2. As-built PDFs

### **Submittals from Contractor**

1. Project Schedule
2. Schedule of Values (SOV)
3. QC Plan
4. Accident Prevention Plan (APP)/Safety Plan
5. Environmental Protection Plan (EPP)
6. Materials/Equipment
7. Design Drawings/As-Built Drawings
8. Specifications
9. Testing/Adjusting/Balancing/Commissioning Reports
10. CD with all Record Document Submittal Documentation

### **Existing Building Data**

B2833

Built: 1954  
Story: 5 Floors  
Building area: 52,242 SF  
Construction type: Type II-B (Assumption)  
Roof construction: Not rated  
Sprinkler system: NFPA 13  
Fire alarm system: Yes

B2834

Built: 1954  
Story: 5 Floors  
Building area: 55,261 SF  
Construction type: Type II-B (Assumption)  
Roof construction: Not rated  
Sprinkler system: NFPA 13



Fire alarm system: Yes

### **Scope of Work**

The objective of this mechanical scope is to replace the existing field controllers, communications trunk and integrate all points into the UMCS. The buildings will be occupied. Phasing will not be required. The lower floor of these buildings will have restricted access and coordination with user will be necessary throughout the project. The sleeping bay areas will not have restricted access. The following scope states the key objectives that must be met. Ensure field changes meet all the necessary codes/standards.

#### **Scope of Work for Demo in 2833/2834**

1. Mechanical Demolition
  - a. Remove all LON based field controls.
  - b. Remove LON trunk.

#### **Scope of Work for New Work in 2833/2834**

1. Mechanical New Work
  - a. Install new BACnet MS/TP Distech field controllers (Or approved equivalent) on all devices previously controlled using LON
  - b. All low voltage and control wiring shall be sealed in conduit if exposed.
  - c. Assume no Fort Benning base maintenance controls support. If controls support is approved, provide a minimum of 2 weeks of notice of when you will need Fort Benning controls support.
  - d. All equipment points and existing control points shall be brought onto the UMCS and have their graphics designed per Fort Benning's programming and graphics standards. All Controls and Graphics integration shall be brought onto the building JACE, and finally at the Niagara 4 (N4) server. All Controls and Graphics must be made visible/controllable at Fort Benning's UMCS Building 497 through the N4 server. The final "master system integration" (From Bldg. JACE to N4 Server) will require a DoD 8570 IAT Level II credentialed person with access to the server. Coordinate with NEC for CAT5 drops, ports, IP/mac address, and switch installations.
  - e. Size provide and install non-proprietary open JACE 9000 series. Total number of used device/points shall not exceed 80% of installed JACE9000 series capacity.
  - f. Any new JACE install shall be support by uninterrupted power supply (UPS) and be protected with (TSS).

### **CODES AND STANDARDS:**

All work shall be completed in accordance with the most recent editions of all applicable codes and standards published at the time of contract award including, but not limited to:

#### **United Facilities Criteria (UFC)**

##### **General**

1. UFC 1-200-01 DoD Building Code, with Change 1



2. UFC 1-200-02 High Performance and Sustainable Building Requirements
3. UFC 1-300-01 Criteria Format Standard
4. UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard, with Change 3
5. UFC 1-300-07A Design Build Technical Requirements
6. UFC 1-300-08 Criteria for Transfer and Acceptance of DoD Real Property, with Change 2
7. UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings

#### Mechanical

1. UFC 3-400-02 Design: Engineering Weather Data
2. UFC 3-401-01 Mechanical Engineering, with Change 1
3. UFC 3-410-01 Heating, Ventilating, and Air Conditioning Systems, with Change 8
4. UFC 3-410-02 Direct Digital Control for HVAC and Other Building Control Systems, with Change 2
5. UFC 3-470-01 Utility Monitoring and Control System (UMCS) Front End and Integration

#### **United Facilities Guide Specifications (UFGS)**

##### DIVISION 01 - GENERAL REQUIREMENTS

1. UFGS 01 42 00 SOURCES FOR REFERENCE PUBLICATIONS

##### DIVISION 02 - EXISTING CONDITIONS

1. UFGS 02 41 00 DEMOLITION AND DECONSTRUCTION

##### DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING

1. UFGS 23 03 00.00 20 Basic Mechanical Materials and Methods
2. UFGS 23 05 48.00 40 Vibration and Seismic Controls for HVAC Piping and Equipment
3. UFGS 23 08 00.00 20 Commissioning of Mechanical [and Plumbing] Systems
4. UFGS 23 09 00 Instrumentation and Control for HVAC
5. UFGS 23 09 13 Instrumentation and Control Devices for HVAC
6. UFGS 23 09 23.02 BACnet Direct Digital Control for HVAC and Other Building Control Systems
7. UFGS 23 09 33.00 40 Electric and Electronic Control System for HVAC
8. UFGS 23 09 53.00 20 Space Temperature Control Systems
9. UFGS 23 09 93 Sequences of Operation for HVAC Control
10. UFGS 23 52 00 Heating Boilers
11. UFGS 23 65 00 Cooling Towers and Remote Evaporatively-Cooled Condensers
12. UFGS 23 72 00.00 10 Energy Recovery Systems
13. UFGS 23 73 13.00 40 Modular Indoor Central-Station Air-Handling Units
14. UFGS 23 81 00 Decentralized Unitary HVAC Equipment
15. UFGS 23 81 47 Water-Loop and Ground-Loop Heat Pump Systems

#### **International Code Council (ICC)**

1. 2024 International Building Code (IBC)
2. 2024 International Existing Building Code (IEBC)
3. 2024 International Mechanical Code (IMC)

#### **National Fire Protection Association (NFPA)**

1. NFPA 70 National Electric Code
2. NFPA 13 Automatic Sprinkler Systems

#### **Miscellaneous Codes and Requirements**

1. American with Disabilities Act (ADA) Compliance Guide
2. Fort Benning Installation Design Guide
3. Fort Benning UMCS and N4 Control System (Graphics and Programming and Standard), most current.
4. Fort Benning BAS Design Guide, most current.
5. Fort Benning NEC Standards, ISP-OSP TTP, Dec 2022 v1.6



6. Fort Benning Installation Planning Standard, Feb 2016
7. Fort Benning Fire Protection Requirements, effective 11 May 2023
8. Fort Benning Environmental considerations as listed on the FB-144R.
9. Georgia Environmental Protection Division rules, laws, and codes.
10. Fort Benning Environmental Management Division (EMD) Standards. If there is a conflict with the EMD Standards, the more stringent standard shall be used.
11. Comply with all Local, State, and Federal National Pollutant Discharge Elimination System (NPDES) laws and guidelines.
12. United States Army Corps of Engineers, Safety and Health Requirements Manual EM 385-1. Applicable edition at award.
13. TM 111 Guidance provided in U.S. Army Training and Doctrine Command (TRADOC) Force Protection Program (FPP): Unified Facilities Criteria (UFC) for buildings.
14. Compliance with Buy American Act (BAA). Provide BAA letter/Mfrs. Certificate of Compliance with all required material submittals.
15. ANSI/ASME A13.1 (Pipe Identification Standard)
16. ASHRAE - Standard 90.1-2022 - Energy Standard for Buildings Except Low-Rise Residential Buildings
17. ASHRAE 62.1/62.2 - 2022
18. Local utility specifications
19. All state and local standards and environmental codes and regulations
20. Manufacturer's written instructions

**Implied specifications:** When specifications are not furnished the standards of work shall be in accordance with industry standards.



### **Anti-Terrorism (AT) Level I Training**

All contractor employees, to include subcontractor employees, requiring access Army installations, facilities and controlled access areas shall complete AT Level I Awareness training within 30 calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. The contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee, to the COR or to the contracting officer, if a COR is not assigned, within 30 calendar days after completion of training by all employees and subcontractor personnel. AT level I Awareness training is available at the following website: <http://jko.jten.mil>.

### **Access and General Protection, Security Policy, and Procedures**

Contractor and all associated subcontractor employees shall provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Contractor workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel) as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in contractor security matters or processes.

### **Contractor Employees Requiring a Common Access Card (CAC)**

Only the Contractor's key personnel will be issued a CAC. Before CAC issuance, the Contractor employee requires, at a minimum, a favorably adjudicated National Agency Check with Inquiries (NACI) or an equivalent or higher investigation IAW Army Directive 2014-05, *Policy and Implementation Procedures for Common Access Card Credentialing and Installation Access for Uncleared Contractors*. The Contractor employee will be issued a CAC only if duties involve one of the following: (1) Both physical access to a DoD Facility and access, via logon, to DoD networks on-site or remotely, (2) Remote access, via logon, to a DoD network using DoD-approved remote access procedures, or (3) Physical access to multiple DoD Facilities or multiple non-DoD Federally Controlled Facilities on behalf of the DoD on a recurring basis for a period of six (6) months or more. At the discretion of the Sponsoring Activity, an initial CAC may be issued based on a favorable review of the Federal Bureau of Investigation (FBI) fingerprint check and a successfully completed NACI at the Office of Personnel Management. For contractors that do not require CAC, but require access to a DoD facility or installation. Contractor and all associated sub-contractors employees shall comply with adjudication standards and procedures using the National Crime Information Center Interstate Identification Index (NCIC-III) and Terrorist Screening Database (Army Directive 2014-05/AR 190-13), applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative).

### **iWATCH Training**

The Contractor and all associated sub-Contractors shall brief all employees on the local iWATCH Army program (training standards provided by the requiring activity ATO). This local developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. This training shall be completed within 30 calendar days of contract award and within 30 calendar days of new employees commencing performance with the results reported to the COR NLT 10 calendar days after contract award.



### **Contractor Employees Requiring Access to Government Information Systems**

The Contractor, to include associated sub-Contractor employees, with access to a Government info system must be registered in the ATCTS (Army Training Certification Tracking System) at commencement of services, and must successfully complete the DOD Information Assurance Awareness prior to access to the information system and then annually thereafter.

### **Operations Security (OPSEC) Training**

IAW AR 530-1, *Operations Security*, all personnel, to include Contractor employees and associated sub-Contractor employees must complete Level I Operations Security (OPSEC) training which is composed of both initial and continual awareness training (annually). All personnel within the first thirty (30) calendar days of arrival in the organization (or TO start date) must receive initial training to include a briefing on the organizations critical information, read/sign the OPSEC Individual User Compliance Agreement form, and send completion to the COR via electronic copy. The end state of initial and continual awareness training is that each individual should have the requisite knowledge to safeguard critical information. Level I OPSEC training is available at the following website:

<https://securityawareness.usalearning.gov/opsec/index.htm>.

### **OPSEC Standing Operating Procedure/Plan**

The Contractor shall adhere to the Government's Operations Security (OPSEC) Standard Operating Procedure (SOP)/Plan during the entire period of performance.

### **Contractor Employees Requiring Information Awareness / Information Technology (IA/IT) Training and Certification.**

The Contractor, to include associated sub-Contractor employees, performing IA/IT functions shall comply with DoD and Army training requirements in DoDD 8570.01, DoD 8570.01-M and AR 25-2 within six (6) months of appointment to IA/IT functions. All contractor employees and associated subcontractor employees shall complete the DoD IA awareness training before issuance of network access and annually thereafter. IAW DoD 8570.01-M, DFARS 252.239.7001 and AR 25-2, the contractor employees supporting IA/IT functions shall be appropriately certified upon contract award. The baseline certification as stipulated in DoD 8570.01-M must be completed upon contract award.