



149TH CIVIL ENGINEER SQUADRON
1413 BILLY MITCHELL RD, BUILDING 970
JBSA – LACKLAND AFB, TEXAS 78236-0101

STATEMENT OF WORK (SOW)

CONSTRUCT MISSION TRAINING CENTER FACILITY

August 23, 2023

PROJECT #: KELL189014

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PART 1: PROJECT INFORMATION

1. APPLICABLE CODES AND REFERENCES (CURRENT EDITIONS):

- 1.1. Major codes and standards, which are applicable to all Air National Guard (ANG) projects, are indicated below. This listing is not intended to be all-inclusive, and it is the Contractor's responsibility to adhere to all applicable codes and standards. Applicable codes and standards can be found in The Whole Building Design Guide website by the National Institute of Building Sciences at: <https://www.wbdg.org/>
- 1.1.1. The Contractor must abide by all the applicable regulations, publications, manuals, and local policies and procedures. The codes are listed below in order of precedence.
- 1.1.2. United Facilities Criteria (UFC): <https://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc>
- 1.1.3. UFC 1-200-01 DoD Building Code:
https://www.wbdg.org/FFC/DOD/UFC/ufc_1_200_01_2016_c2.pdf
- 1.1.4. International Building Code (IBC). Use the nationally recognized building code with state and local amendments. <https://www.iccsafe.org/codes-tech-support/codes/2018-i-codes/ibc/>
- 1.1.5. Unified Facilities Guide Specifications (UFGS): <http://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs>
- 1.1.6. National Fire Protection Association (NFPA): <https://www.nfpa.org/>
- 1.1.7. NFPA 70: National Electric Code (NEC): <https://www.nfpa.org/NEC>
- 1.1.8. ASHRAE: <https://www.ashrae.org/>
- 1.1.9. National Roofing Contractors Association (NRCA): <http://www.nrca.net/>
- 1.1.10. American Society of Civil Engineers (ASCE): <http://www.asce.org/>
- 1.1.11. American Concrete Institute (ACI): <https://www.concrete.org/>
- 1.1.12. Architectural Barriers Act (ABA) Standards:
<http://www.wbdg.org/FFC/USAB/ABASTandards.pdf>
- 1.1.13. ASTM International: <https://www.astm.org/>
- 1.1.14. Air Force Regulations. Apply as directed. <https://www.wbdg.org/ffc/af-afcec>
- 1.1.15. Air National Guard Regulations: <https://www.wbdg.org/ffc/ang/>
- 1.1.16. ANGETL 01-1-1 - ANG Design Policy
- 1.1.17. ANGETL 32-1018 - Specifications for Electronic Data Deliverables.
- 1.1.18. ANGI 32-1023 Criteria and Standards for Air National Guard Design and Construction:
https://www.wbdg.org/FFC/ANG/ANGI/ANGI_32-1023.pdf

2. SITE LOCATION

- 2.1. The Project is located near the south side of Building 937, 149th Fighter Wing, JBSA Lackland AFB. The building is located inside a secured area with vehicle and pedestrian gate access.

3. CURRENT CONDITION

- 3.1. The installation requires a facility to support a new Formal Training Unit (FTU) 4-ship F-16 Mission Training Center (MTC) simulator capable of housing 4 simulator bays, training rooms, administrative support areas, storage, and latrine space, certified to ICD/ICS 705 standards. Each simulator bay must be large enough to accommodate an eight channel, 360-degree field of view) display with sufficient space to facilitate installation, removal, operation, and servicing. Additional briefing and support spaces are required to support the additional student load for the FTU.

4. DESCRIPTION OF WORK

- 4.1. The contractor will construct a 15,198 square foot FTU 4-ship F-16 Mission Training Center (MTC) facility in accordance with applicable Federal, State and Local codes, Project Specifications, Project Drawings, Antiterrorism Report, and Structural Interior Design. The facility should be compatible with applicable DoD, Air Force, and base design standards. In addition, local materials and construction techniques shall be used where cost effective. This project will comply with DoD antiterrorism/force protection requirements per unified facilities criteria. Special Construction Requirements: Raised flooring as required, high bay area for simulators, and Secure Compartmentalized Information Facility (SCIF) specifications and construction in accordance with ICD/ICS 705 is necessary for most of the facility.
- 4.2. A portion of the proposed building is located on the existing vehicle parking lot for Building 937. This parking will be demolished. A new vehicle parking lot will be constructed to the west of Building 937 and the new facility such that it can accommodate parking for both buildings as well as any future construction planned to occur further west.
- 4.3. Construct permanent fencing prior to completing any other work, including existing fence removal.
- 4.4. If discrepancies are found between various codes or construction documents, the order of precedence is as follows:
 1. [Applicable Codes and References](#)
 2. Architect and Engineer Project Specifications (Attachment A)
 3. Architect and Engineer Project Drawings (Attachment B)
 4. Architect and Engineer Project Structural Interior Design (Attachment C)
 5. Architect and Engineer Antiterrorism Report, and Structural Interior Design (Attachment C)
- 4.5. Provide a price for the following option line items (Reference Specification Vol 1 Section 00 22 13.00 20):
 - 4.5.1. Option Line item #1- Permeable Pavements at parking lot I.L.O. Bituminous Pavements.
 - 4.5.1.1. Furnish and install in accordance with the Contract Documents, including all material, equipment and labor.
 - 4.5.2. Option Line item #2- Landscaping
 - 4.5.2.1. Provide and install all work in connection with Landscaping, trees, shrubs & ground cover as shown on drawings LP-100 and LP-500 I.L.O grass, complete. Furnish and install Landscaping in accordance with the Contract Documents, including all material, equipment and labor.
 - 4.5.3. Option Line item #3- Simulator Bay Finishes – Epoxy Floor Coating (Reference Design Drawings AE601, IN102)
 - 4.5.3.1. Provide and install all work in connection with approximately 5,048 SF of Epoxy Resinous Floor in lieu of Epoxy floor paint.
 - 4.5.4. Option Line item #4- Restroom Finishes- Porcelain Wall Tile (Reference Design Drawings AE402, AE601)
 - 4.5.4.1. Provide and install approximately 435 Square feet of porcelain wall tile lieu of painted walls.
 - 4.5.4.2. Provide and install approximately 30 Square feet of porcelain tile wall accent.
 - 4.5.4.3. Provide and install approximately 139 Linear feet of porcelain tile base.
 - 4.5.5. Option Line item #5- Restroom Finishes- Porcelain Floor Tile (Reference Design Drawings AE402, AE601, IN102)
 - 4.5.5.1. Provide and install 516 Square feet of porcelain floor tile in lieu of concrete.
 - 4.5.6. Option Line item #6- Additional Under Floor Drains (Reference Design Drawings P-101)
 - 4.5.6.1. Provide and install eleven (11) access floor drains.
 - 4.5.6.2. Provide and install eight (8) floor cleanouts.

- 4.5.6.3. Provide and install approximately 160 Linear feet of 2” dia. sanitary sewer piping.
- 4.5.7. Option Line item #7- Illuminated Insignia Signage (Reference Design Drawings AE201, Specification Vol 1 Section 10 14 01)
 - 4.5.7.1. Provide and install all work in connection LED Illuminated signage.
- 4.5.8. Option Line item #8 – Fixed seating with tablet arms in Classroom 114 and MOC 121 (Reference Design Drawings AE305, Specification Vol 1 Section 12 61 13)
 - 4.5.8.1. Provide and install all work in connection fixed seating with table arms on rooms 114 and 121.

5. PERFORMANCE PERIOD

- 5.1. All work will be completed within **540** calendar days from the notice to proceed (NTP) date to include conducting training and providing closeout documents. Contractor must provide a project progress schedule. The Contractor will not begin any work until the NTP is given to them by the Contracting Officer (KO).

PART 2: GOVERNMENT FURNISHED PROPERTY AND EQUIPMENT

6. GOVERNMENT FURNISHED ITEMS

6.1. FACILITIES

- 6.1.1. The government shall not furnish or make any facilities available to the Contractor, including the use of restrooms.

6.2. MATERIAL

- 6.2.1. All government material must remain on government property unless otherwise directed by Contracting Officer.

6.3. EQUIPMENT

- 6.3.1. The government shall not provide the Contractor the use of any government owned equipment unless approved by the Contracting Officer.

6.4. UTILITIES

- 6.4.1. The government will furnish all reasonable amounts of water and power at existing outlets required for the work to be performed under the contract at no cost to the Contractor.

6.5. EXISTING DRAWINGS

- 6.5.1. Drawings of existing facilities and infrastructure will be provided to the Contractor as requested.

PART 3: CONTRACTOR FURNISHED ITEMS

7. CONTRACTOR FURNISHED ITEMS

7.1. SUBMITTALS

7.1.1. The contractor provide a completed itemized submittal inventory on an **AF Form 66**, *Schedule of Material Submittals*, with each required submittal item given a distinct identification number. Requests for approval of submittals are to be submitted on an **AF Form 3000**, *Material Approval Submittal*, and shall match the corresponding identification number. Each submittal shall include information as described in the technical specifications or as shown on the drawings. The approval process for submitted materials will be provided in accordance with the contract or prescribed procedures.

7.2. O&M MANUALS

7.2.1. Complete Operation and Maintenance manuals shall be provided at no later than 80% construction completion containing original data for all materials, systems, components, and equipment installed as a part of this project. This shall include information on all systems such as Mechanical, Plumbing, Electrical, Fire Protection, Security, Communications and Roofing, etc. Additionally, information on all building materials (windows, doors, hardware, brick, block etc.), equipment (generators, air compressors, vaults, etc.) and all building finishes (tile, vinyl wall finishes, ceiling tile, paints, wood materials, stains and finishes, colors used, etc.) shall be included. Manuals must be professionally prepared in electronic format with full table of contents and tabbed indexing.

7.3. TRAINING

7.3.1. Onsite, hands on training in the maintenance and operations of all equipment and systems installed will be provided to the 149th Fighter Wing personnel prior to final walk through of the project.

7.4. AS-BUILT DRAWINGS

7.4.1. The Contractor shall supply final as-built drawings of the entire completed project in accordance with the current DoD A/E/C CAD Standards. The current standards and Detail Library can be found at <https://www.wbdg.org/ffc/army-coe/cad-bim-technology-center>.

7.4.2. The Contractor will provide electronic copies of all drawings in .PDF and AutoCAD formats to the Contracting Officer.

7.5. REAL PROPERTY

7.5.1. The Contractor has the responsibility to ensure that the appropriate DD Forms 1354 are prepared and furnished to the 149th Real Property Accountable Officer (RPAO) or Contracting Officer.

7.5.2. The Contractor must provide the final DD Form 1354 and other supporting documentation to the RPAO or CES accepting official within 60 days of acceptance/final payment. The Contractor shall include a copy of contractual deficiencies as an enclosure to the DD Form 1354 and reference it in block 26.

8. REQUIRED PERMITS

8.1. AF FORM 103 (WORK CLEARANCE REQUEST)

8.1.1. The Contractor shall obtain excavation permits (AF Form 103, Base Civil Engineering Work Clearance Request) prior to any excavation. Contact CE Production Control at (210) 925-3772 for assistance. Permit request should be made at least two weeks before the start of excavation. Dig Permit meetings are held at Building 7065 (JBSA LAK) at 1300 every

Wednesday. Dig Permits are good for 30 days from final signature. Should any one of the coordination points indicate an additional underground utility or structure over and above those shown on the contract drawing either by sketch on the permit's drawing or by field pointing or by flagging, the Contractor shall be responsible for protection of each of the items indicated. Should damage occur to any of the items indicated by the Contractor, contract drawings or coordinating agency to the permit, the Contractor shall be responsible for prompt repair of the damage to return the item to its original workable condition. It is required that the operator of excavation equipment have the permit (or copy) in possession while excavating. The Contractor is responsible for initiating the permit renewal process if required.

8.2. WELDING PERMIT

- 8.2.1. The Contractor must receive a permit for any welding or other open flame work to be done on base from the base Fire Department before such work is performed.

PART 4: ANTITERRORISM/OPERATIONS SECURITY REQUIREMENTS

8.3. ACCESS AND GENERAL PROTECTION POLICY AND PROCEDURES

- 8.3.1. The contractor shall comply with all applicable installation/facility access and local security policies and procedures, further specified in Attachment 6: Industrial Security SOW- Unclassified.
- 8.3.2. Site specific requirements/forms for access will be provided by the COR, JBSAANTONIO Form 7.
- 8.3.3. See Attachment 6: Industrial Security SOW- Unclassified, for DoD IAA CyberAwareness, Protecting Sensitive Information and Force Protection training requirements, for applicable contractors.
- 8.3.4. See Attachment 6: Industrial Security SOW- Unclassified, for AT Level I training requirements, for applicable contractors.