STATEMENT OF OBJECTIVES – SOO

FOR
PREMISE WIRING
WITHIN B549

AT

Tyndall AFB FL

Prepared By

38ES/ENIU

4064 Hilltop Road

Tinker AFB OK 73145-2713

1.0 INTRODUCTION. This Statement of Objectives (SOO) defines the requirements for the Contractor to engineer, furnish, install and test (EFI&T) premise wiring within building 549 at Tyndall AFB. Newly installed premise wiring will support Unclassified but Sensitive Internet Protocol Router Network (NIPRNet).

2.0 REQUIREMENTS.

2.1 General Requirements. The Contractor shall provide all materials, transportation, labor, management, tools, and other incidentals necessary to meet the requirements as stated in this SOO. All materials provided shall be new and not refurbished.

2.2 Base Support Requirements. The Contractor must identify any base support requirements (for example, laydown and storage areas) necessary to complete this project. The Contractor shall coordinate with 325CS for storage space and staging area requirements.

2.3 Restoration. The Contractor shall restore all disturbed grounds/base property to the "as found" condition or better after installation. Base grounds/property restoration requirements shall be complied with.

2.4 Project Residue. All residues from this project shall be disposed off base and IAW Federal, State, local, and base environmental laws and regulations. The Contractor is wholly responsible for project waste removal. Removed premise wiring shall be transported to DRMO on base; premise wiring will be processed for disposition. Contractor may use base Recycling Center to dispose of other project waste materials. Contractor shall verify which waste materials the Recycling Center will accept. Contractor will not use base, facility, or building waste dumpster(s) to dispose of project waste material(s). If Contractor chooses to lease dumpsters for project waste, Contractor shall coordinate with 325CS for dumpster placement.

3.0 COMMODITY REQUIREMENTS. The Contractor shall engineer, furnish, and install the infrastructure as defined herein.

3.1 Requirements: The Contractor shall complete the following requirements.

3.1.1 In existing Comm Rooms 122 and 133, Contractor shall install

3.1.1.1 New Network Cabinets, UPS, patch panels, Network Switches and FOC panels as required. Any questions will be directed to 325CS/SCOI

3.1.1.2 All Cat 6 cables shall be terminated into new patch panels installed in the Comm Rooms.

3.1.1.3 All Cat 6 cables shall be home run to the locations approved by 325CS.

3.1.1.4 All equipment and Network Cabinets shall be properly grounded and bonded.

3.1.2 The Contractor shall verify all drop locations.

3.1.3 Within user drop room/areas, install faceplates flush mount through drywalls if feasible. If flush mount installation is not feasible, terminate CAT-6 cables with double gang outlet box (as an example); for dry wall installations, route cable in "Panduit" surface mount raceway; for cider block/concrete wall installations, route cables w/in surface mount EMT conduit. Paint ALL new Conduit/Panduit to match wall surfaces.

3.1.4 Areas are composed of various types of workspaces, the Contractor shall verify appropriate hardware required for cable routing, installation, and termination.

3.1.5 New Data Drop installation(s) shall be at a height above the finish floor, matching electrical outlet height to be aesthetically pleasing, for easy access for patch cord connections. Any questions will be directed to 325CS/SCOI.

3.1.6 Install cable support hardware for the entire cable run per Industry and Installation standards. Table of standards located in section 8.1.

3.1.7 All cables shall be routed in a structured and orderly manner. Secure cable(s) within support hardware i.e. J-hooks or Cable tray.

3.1.8 The Contractor shall fire stop all cable entrances cut, drilled, or cored drilled into walls, per Industry and Safety codes. Table of standards located in section 8.1.

3.1.9 All equipment, patch panels, and Network Cabinets shall be installed in New designated Comm Closet, all required hardware shall be provided by the Contractor, and installed by industry and applicable standards.

3.1.10 Install plenum rated cables where required by Industry and applicable standards. Table of standards located in section 8.1

3.1.11 All CAT 6 cables shall be "Home Runs" from user drop (face plate) to patch panel(s). Cable runs shall not exceed 300 feet in length.

3.1.12 Contractor shall install cable drops in according with attached drawing. Any questions will be directed to 325CS/SCOI.

3.1.13 All new CAT 6 cabling shall have a "Blue" colored sheath for identification.

3.1.14 All termination hardware, cable components, and cables shall be CAT 6 compliant. Termination hardware to include but not limited to termination modules, patch panels, FOCs, etc. All cabling and terminations hardware shall be new and not refurbished.

3.1.15 Label all new premise wiring installations with Tyndall AFB specifications provided by 325CS

3.1.16 Test and certify all new cable installations to the Category 6 specifications. Document test results for review and reference.

3.1.17 All working area(s) shall be restored to original condition IAW Tyndall AFB policy.

3.1.18 The Contractor shall provide CAT 6 UTP RJ45 Patch Cords, blue in color. Patch cords shall be of a variety of cable lengths for cable routing from patch panels and network switches. Also, provide patch cords from User(s) drop face plate to User network device i.e. laptop/desktop. The Contractor shall verify patch cord cable length required for User drop connections with 325CS.

4.0 MANAGEMENT.

4.1 Schedule. The Contractor shall provide a complete milestone schedule that denotes major activities to include time-phased start and completion dates for this project and sub-projects associated with the installation of the components and systems.

4.2 Project Manager on Site. The Contractor shall provide a full time, on-site Project Manager

(PM) to oversee all facets of the project.

4.3 Quality Assurance. The Contractor shall provide quality assurance support for the entire +life of the project. This support shall assist the government representative in performing random spot checks and in performing the system acceptance tests. Contractor QA and Government Representative shall be responsible for identifying system and outside plant deficiencies and/or discrepancies throughout the life of the project. A weekly report (soft copy) will be submitted indicating project progress/statuses and listings any deficiencies/discrepancies found and actions to correct them.

4.4 Compliance. The Contractor shall remain in compliance with all Federal, State, county, and base security and safety laws, regulations, policies, and requirements.

4.5 Clean up. At day's end, the Contractor shall remove all debris and surplus materials from the workplace. Equipment and materials required to complete the work effort may remain on site as long as they are organized/stored in a manner that does not cause a safety hazard.

4.6 Environmental Management. The Contractor shall comply with the most stringent environmental federal, state, and local laws and regulations, and Air Force policies, instructions, and plans. The federal Government is not exempt from compliance with environmental regulations. The installer shall maintain an awareness of changing environmental regulatory requirements to avoid environmental deficiencies for activities on Tyndall AFB. The Prime Contractor shall ensure their sub-contractors (if any) comply with these specifications. Asbestos may be present at all buildings within the scope of this project. But the presence of asbestos along, adjacent, or within existing cable runs is not anticipated. If asbestos is discovered during the installation phase of this project, the Contractor shall stop work and contact 325CS for disposition.

4.7 Integrated Product Team (IPT). The Contractor shall chair a weekly IPT meeting consisting of Contractor representatives, the Contracting Officer, Program Manager, Engineer, and representatives of the 325CS. The purpose of this meeting is to discuss project progress, problems being encountered, and other discussions necessary/beneficial to ensure success and timely completion of the SOO.

4.8 Walk-Through. The Contractor shall schedule a final project walk-through of all work completed prior to close out with the government Project Manager. This should be scheduled at least 72 hours prior to the event.

5.0 DELIVERABLES.

5.1 List of Deliverables. All deliveries are subject to Government acceptance and approval. They shall meet professional standards and the requirements set forth in this Task Order. All deliverables shall be produced using recommended software tools/versions as accepted by the Government. The Contractor shall submit the following deliverables:

Data Item Title
As Built
Work Schedule
Status Report
Meeting Minutes
Test Report
Test Plan

5.2 Cutover Plan: Reserved.

5.3 Acceptance Test Plan: The Contractor shall provide a detailed acceptance test plan of the installation covering all aspects of the installation and demonstrate the acceptability of the work on meeting the government requirement. The Contractor shall perform all tests and document results of tests with government witnesses overseeing the Acceptance testing.

5.4 As-Built Drawings: The Contractor shall provide as-built drawings for the installed equipment to include where and how they connect/interface with each other and existing base.

5.5 Training: Reserved.

5.6 Testing Requirements: The Contractor shall perform testing and inspections of all systems solutions to ensure the technical adequacy and accuracy of all work, including reports and other documents required in support of that work. The Contractor shall conduct on-site testing in accordance with the Original Equipment Manufacturer's installation manuals, practices and the appropriate vendor's test procedures. The Contractor shall provide a detailed test plan.

6.0 WARRANTY

The vendor shall provide a one year warranty or manufacturer's standard commercial warranty, whichever is longer. The vendor shall also provide a one year workmanship warranty. The warranty period shall start from the date of system and or project acceptance.

7.0 PERFORMANCE.

7.1 Period of Performance. The period of performance for the project shall not exceed three months after the start of the project.

7.2 Place of Performance. The place of performance is Tyndall AFB.

7.3 Hours of Work. The Contractor shall routinely work during normal operating hours 0600 – 1500. Monday through Friday, excluding federal holidays. Any site work requested by the Contractor to be performed outside of normal duty hours shall be coordinated with the 325CS/SCOI, Contracting, and B549 building users at least two working days in advance.

The Contracting Officer must be notified in advance if there is any cost impact for this work

8.0 GOVERNMENT FURNISHED INFORMATION/ACCESS/STANDARDS.

8.1 The Contractor shall comply with all base installation standards. Installation technicians shall be familiar with appropriate Commercial/Military/Local Installation Standards. Installation tasks shall be performed in accordance with the appropriate installation standards and practices. Installation Contractor shall comply with all commercial codes and standards to include but not limited to the following:

NUMBER	TITLE	WEBSITE OR LOCATION
BICSI	Building Industry Consulting Service International, Inc (BICSI)	http://www.bicsi.org/
NFPA 70 (2020)	National Fire Protection Association (NFPA), National Electric Code (NEC)	http://www.nfpa.org/
ANSI	American National Standards Institute (ANSI) and Internet Standards Resources	http://www.ansi.org/
TIA	Telecommunications Industry Association Engineering: TIA Standards See Commodity Specific Appendices and Individual Task Orders	http://www.tiaonline.org/
ANSI/TIA-568-0.E (2020)	Generic Telecommunications Cabling for Customer Premises	https://www.ansi.org/ http://www.tiaonline.org/
ANSI/TIA-568-1.E (2020)	Commercial Building Telecommunications Cabling Standard	https://www.ansi.org/ http://www.tiaonline.org/
ANSI/TIA-568-2.D (2018)	Balanced Twisted-Pair Telecommunications Cabling and Components Standard	https://www.ansi.org/ http://www.tiaonline.org/
ANSI/TIA-568-3.D (2016)	Optical Fiber Cabling Components	https://www.ansi.org/ http://www.tiaonline.org/
ANSI/TIA-569-E (2019)	Commercial Building Standards for Telecommunications Pathways and Spaces	https://www.ansi.org/ http://www.tiaonline.org/
ANSI/TIA-606-C (2017)	Administration Standard for Commercial Telecommunications Infrastructure	https://www.ansi.org/ http://www.tiaonline.org/
ANSI/TIA-607-D (2019)	Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises	https://www.ansi.org/ http://www.tiaonline.org/
EIA/ECA-310-E (Dec 2005)	Cabinets, Racks, Panels and Associated Equipment	https://www.ansi.org/ http://www.tiaonline.org/
ISO/IEC 111801 (2017)	Generic Cabling for Customer Premises	https://www.iso.org/home.html https://www.iec.ch/

IEEE 802 Standards	-IEEE 802.3af Power over Ethernet (PoE) Standard -IEEE 802.3at Power over Ethernet+ (Plus) Standard -IEEE 802.3an Physical Layer and Management Parameters for 10 Gbps Operation Type 10GBASE-T -IEEE 802.3ba Media Access Control Parameters, Physical Layers and Management Parameters for 40 Gbps and 100 Gbps Operation -IEEE 802.11 Wireless Standard	https://www.ieee.org/
ICEA S-80-576 (2002)	Telecommunications Wire and Cable for Wiring of Premises	Insulated Cable Engineer Association, Inc., P.O. Box P, South Yarmouth MA 02664; Telephone (508) 394-4424
NEMA TC 2 (2013)	Electrical Polyvinyl Chloride (PVC) Tubing and Conduit	http://www.nema.org/index_nema.cfm/1260/
UFC 3-580-01 (2016)	Whole Building Design Guide Telecommunications Interior Infrastructure Planning and Design	https://www.wbdg.org/ffc/dod/unified- facilities-criteria-ufc/ufc-3-580-01
I3A (2016)	Technical Criteria for Installation Information Infrastructure Architecture	https://www.lrl.usace.army.mil/Portals/64/docs/ Engineering/Design_Army_Res/i3a.pdf

The Contractor shall obtain and comply with any other applicable manuals not identified above that would be required to meet industry standards.

9.0 SECURITY

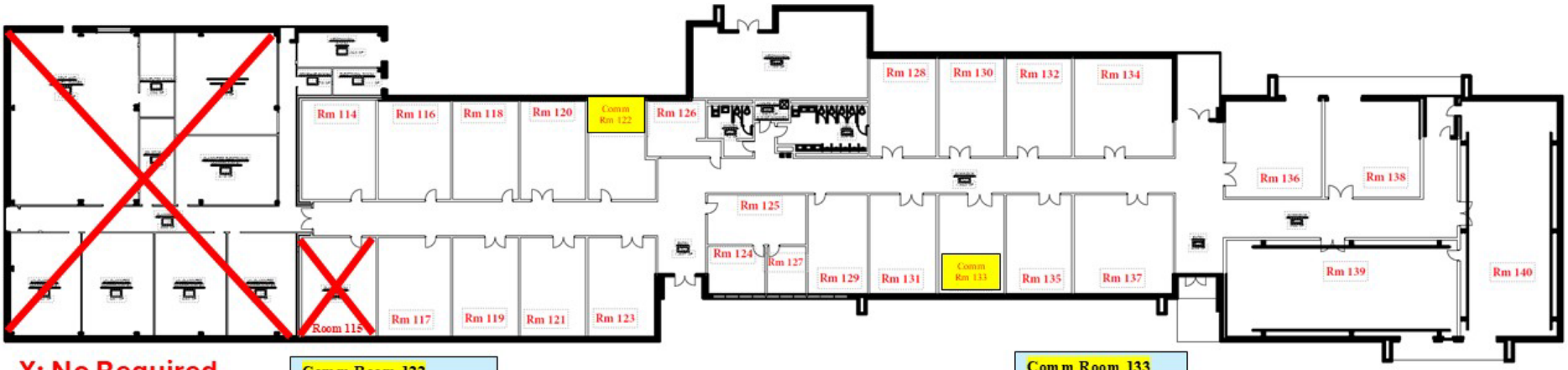
9.1 Stated work and associated products shall be performed at the UNCLASSIFIED level. However, when access to classified areas may be required, selected personnel who install network equipment, test network equipment and cutover network equipment may be required to obtain a minimum of DoD Secret Security Clearance. Escorts may be required, as some work will be performed in secure facilities. It is the Government's responsibility to provide escorts.

9.2 The Contractor shall process a Site Visit Request Letter (Refer below 9.3). This letter shall identify the names, social security numbers, driver's license numbers and state of issue, and birth date of the personnel who will performing on this SOO. This information is required to grant access to the base. If required by the base, the Contractor shall provide identification badges for their employees. All Contractor personnel shall wear these badges while on duty on the Government site. The badges shall identify the individual, company name, and be clearly and distinctly marked as Contractor and be in accordance with base regulations.

9.3 Complete Installation Access Application form (Refer above 9.2). Access requests should be made by 325CS. Access requests shall be submitted at least one (1) week prior to scheduled arrival.

10. Drawing: B549 Proposed Premise Wiring

B549 - Proposed Premise Wiring



X: No Required

Comm Room 122
1 ea full cabinet
1 ea UPS
1 ea C9300-NM-2Y
2 ea 48-port Switch-P
1 ea 24-port Switch-P

Comm Room 133
1 ea full cabinet
1 ea UPS
2 ea C9300-NM-2Y
4 ea 48-port Switch-P
1 ea 24-port Switch-P

Room 114 5 ea Dual Data Outlet 2 ea Quad Data Outlet	**Room 116** 4 ea Dual Data Outlet 2 ea Quad Data Outlet
Room 117 3 ea Dual Data Outlet	**Room 118** 1 ea Dual Data Outlet 5 ea Quad Data Outlet
Room 119 1 ea Dual Data Outlet 2 ea Quad Data Outlet	**Room 120** 4 ea Quad Data Outlet
Room 121 5 ea Quad Data Outlet	**Room 123** 1 ea Dual Data Outlet

Room 124 2 ea Dual Data Outlet	**Room 125** 1 ea Dual Data Outlet 2 ea Quad Data Outlet	**Room 126** 2 ea Quad Data Outlet	**Room 127** 1 ea Dual Data Outlet
Room 128 2 ea Dual Data Outlet 1 ea Quad Data Outlet	**Room 129** 4 ea Quad Data Outlet	**Room 130** 1 ea Dual Data Outlet 1 ea Quad Data Outlet	**Room 131** 2 ea Dual Data Outlet 4 ea Quad Data Outlet
Room 132 1 ea Dual Data Outlet 2 ea Quad Data Outlet	**Room 134** 1 ea Dual Data Outlet 6 ea Quad Data Outlet	**Room 135** 6 ea Quad Data Outlet	**Room 136** 3 ea Quad Data Outlet
Room 137 6 ea Quad Data Outlet	**Room 138** 6 ea Quad Data Outlet	**Room 139** 3 ea Dual Data Outlet 1 ea Quad Data Outlet	**Room 140** 1 ea Dual Data Outlet 1 ea Quad Data Outlet

NOTE: 325 CS/SCOI shall provide the final location of Data Outlets