STATEMENT OF WORK (SOW)

For

New Fiber Optic Cable (FOC) from ITB 7320 to CN 7318

at

Dyess AFB, TX

29 Apr 2026

Prepared by:

7 CS/SCXP

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1. SCOPE

This SOW defines the requirement for the Contractor to Engineer, Furnish, Install and Test (EFI&T) 24 strand, Single Mode Fiber Optic cable from ITB7320 to CN7318. The Contractor

shall provide all equipment, materials, supplies, transportation, supervision, management, and other incidentals necessary to meet the requirements as stated in this SOW. All electronics equipment, supplies, and materials to be installed shall be new and not refurbished.

1.1 Point of Contact Information

Throughout this Statement of Work, references are made to '7CS/SCXP' as points of contact for contractor coordination. These designators refer to personnel within the 7th Communications Squadron (7CS). Specifically, all coordination with 7CS/SCXP shall be directed to SSgt Kyle Coffey via email kyle.coffey.1@us.af.mil or phone 325-696-5205 or MSgt Nolan Fischer via email nolan.fischer@us.af.mil or phone 325-696-2220. The contractor shall ensure that all communication and coordination for tasks requiring their involvement are routed through these designated individuals.

2. GENERAL REQUIREMENTS

2.1 Safety Requirements.

The contractor shall remain in compliance with all applicable OSHA safety regulations.

2.1.2 Confined Spaces

The Contractors and Sub-contractors entering spaces on Dyess AFB TX are responsible for the safety of their personnel and for their own confined space program. The primary Contractor is responsible for all Sub-contractor confined space operations. The Contractor's confined space program shall be provided to 7CS/SCXP no later than 10 calendar days after the contract is awarded. The confined spaces that are required to be entered for this project are non-permit required confined spaces. Should the confined spaces be deemed as permit required during the project, 7CS/SCXP will immediately notify the Contractor site lead and provide instruction on how to receive entry permits as well as any safety precautions that must be taken.

2.1.3 Accident/Incident Reporting and Investigation.

The Contractor shall report all accidents or safety incidents to OSHA. The Contractor shall secure the scene of any accident and wreckage until released by the accident investigative authority. If the Government elects to conduct an investigation of the incident, the Contractor shall cooperate fully and assist the Government personnel until the investigation is completed. If an accident or incident involves any Government personnel, facilities or equipment, the contractor shall immediately notify 7CS/SCXP.

2.1.3.1 Fire Prevention.

The contractor shall take all necessary precautions to prevent fires in the work area and contractor-furnished and government-furnished facilities while performing any work under this contract. In the event fires do occur, the contractor shall immediately notify the Base Fire Department at 911. The contractor shall then notify 7CS/SCXP and the CO.

2.1.4 Work Area(s).

At day's end, the Contractor shall remove all debris and surplus materials from the workplace. All open holes or trenches shall be completely enclosed by flexible orange construction safety fencing, or other safety barriers, at the end of the workday. 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. The contractor shall coordinate with 7CS/SCXP to ensure that any locking manhole covers are put back in place at the end of each workday.

2.2 Security Requirements.

The Contractor shall process and provide a Site Visit Request Letter to 7CS/SCXP within 5 calendar days after contract award. This letter shall identify the names (as shown on the driver's license), driver's license numbers and state of issue, and birth date of the personnel who will be performing work under this SOW. This information is required to grant access to 7CS controlled facilities.

2.2.1 Security Clearances.

Stated work and associated products shall be performed at the UNCLASSIFIED level. However, some of this work may take place in secure areas where Contractor employees must be escorted at all times. The Contractor must coordinate access to secure areas at least five (5) calendar days ahead of time via a Site Visit Request Letter that will be provided to the contractor upon contract award. It is the 7 CS's responsibility to provide escorts.

2.3 Permits.

The Contractor shall be responsible to coordinate, complete and process all permits required to complete the installation prior to any trenching, horizontal directional boring or modifications to a facility, maintenance hole (MH) or hand-hole (HH). For example:

- Digging permit, AF Form 103 shall be submitted through BCE 30 calendar days in advance of digging activities. The Contractor is responsible for maintaining all markings and for ensuring AF Form 103 remains current.

- The Contractor shall trench, excavate, and mark and barricade open trenches IAW OSHA Standards.

All utility markings, flags, etc. shall be maintained by the contractor after the responsible work center/shop identifies/locates them and ensure that the AF Form 103 remains current. The contractor shall take precautions to protect existing infrastructure. If a utility is severed or damaged due to neglect or if attributed to the fault of the contractor, then the contractor shall repair and return the utility back to the same condition it was in prior to the damage.

2.4 Site Point of Contact

The Contractor shall provide a site lead and designate alternate(s) responsible for contract performance and continuity. The Contractor shall identify the site leads and alternate(s) range of authority to act for the Contractor relating to daily contract operation. The designated site lead and alternate(s) shall be responsible for providing weekly updates on the progress made in the project and be the main point of contact that 7CS/SCXP can coordinate with for project requirements. The Site lead and/or alternate(s) shall be on site during duty hours for the duration of the project, up to and until final acceptance by the Government and shall oversee all facets of the installation tasks. The Site lead shall be the interface for all work site communications with the Government, including quality, safety, and discrepancy matters. The Site lead, and respective alternate(s) shall be able to read, write, speak, and understand English and shall be on site to coordinate permits, clearances, and receive shipments/material related to the task order.

3. SPECIFIC REQUIREMENTS

3.1 Installation Requirements

- The Contractor shall EF&I one new Handhole (HH).
- The contractor shall EF&I approximately 600 feet of 1, 4-inch PVC/HDPE conduit and approximately 600 feet of 1-Pck (3-Cell) geotextile fabric innerducts between MH-M0134, New HH and HH-H0172.
- The Contractor shall EFI&T approximately 700 feet of 24-St, SM FOC from ITB7320 to CN7318.
- The contractor shall provide all necessary equipment/materials required to perform these installations.

The Contractor shall provide all equipment, tools, materials, supplies, transportation, labor, supervision, management, and other incidentals necessary to meet the requirements as stated in this SOW. The Contractor shall comply with the current TIA telecommunication installation and testing commercial standard and base installation standards. All equipment, supplies, and materials provided shall be new and not refurbished.

3.1.1 Grounding and Bonding

All new and existing racks/cabinets housing equipment for this project, as well as all ladder rack/and cable tray shall be bonded and grounded to the Equipotential Ground Plane IAW TIA-607-E. All Equipment racks and cabinet rails shall be Telecommunications style rails that are unpainted and have drilled and tapped mounting holes IAW DISN Implementation Standards, Ch. 2.7.20 to 2.7.26. Equipment cabinets shall be capable of containing any standard equipment shelves for communications equipment per the current revision of EIA/ECA-310. The Contractor shall test any new or extended ground at the cabinet/rack and at the new grounding/bonding points. The government reserves the right to test and validate newly installed grounds to ensure they meet compliance.

3.1.2 Bushings

All penetrations into the existing/new rack/cabinet must be reamed, filed and have an installed bushing or grommet material. No exposed metal edges shall come in contact with telecommunication cabling.

3.2 OSP Requirements

3.2.1 Existing Maintenance Holes

The Contractor shall be responsible for pumping out maintenance holes/handholes. Water from maintenance holes/handholes shall be pumped into the storm drain system unless it is not available; then it may be pumped out onto the surrounding ground, as long as there is no impact to roads, driveways, or vehicle traffic.

3.2.2 Measurements

Any distances provided in this SOW are approximations and should NOT be used for ordering materials or determining duct lengths. The Contractor shall be responsible for verifying distances prior to ordering materials.

3.2.3 Underground Utilities Markings

The Contractor shall coordinate with base agencies to ensure markings are placed over existing base infrastructure prior to digging or horizontal directional boring and shall take precautions to protect existing infrastructure. The Contractor is responsible for repair of any damage caused during installation when the infrastructure is clearly marked. The Contractor is responsible for maintaining all markings and for ensuring AF Form 103 (Dig Permit) remains current.

3.2.4 Splice Connectors

All splicing shall be performed in accordance with RUS Bulletin 1735F-401, Standards for Splicing Fiber Cable.

The Core Alignment fusion splice method shall be used for all splicing and terminations of fiber optic cable.

3.2.5 Labeling

The Contractor shall label all equipment and cables they install, and cables identified for re-use in accordance with TIA-606-C and as directed by the 7CS/SCXP.

3.2.5.1 Cable Tags

All tags shall be permanently labeled, easily visible and corrosion resistant. Install cable tags in all maintenance holes/hand-holes, cable vaults, pull boxes and building entrance terminal locations. When cables pass through a maintenance-hole, put a tag on the cable, approximately 2 feet from each duct entrance. Information on the cable tag shall identify cable by size, type, cable number and count. Tagging and labeling of new cables shall be IAW the following:

- **Fiber Optic Tags:**

A36L8.3F

FO B241-B100, 1-12 +

FO B241-B101, 13-24 +

FO B241-B102, 25-36

Line One: A = Armored Sheath (otherwise leave blank) 36 = Fiber Count. L = Loose Tube Buffer or (T) Tight Tube Buffer. 8.3 = Single Mode. F = Filled core (otherwise leave blank).

Lines Two, three and four: 241-100 = From-To Building numbers. 1-12 = Cable/strand Count.

3.2.5.2 Fiber Optic Distribution Panel (FODP) Marking

Each FODP shall be stenciled/marked with black ink or paint or adhesive backed decals in letters and numbers. The cover of all new fiber optic distributions (FODPs) shall be labeled to conform to the system used by local maintenance personnel to identify FODPs that terminate fiber. If the manufacturer has not identified the sequence in which ports on FODPs (pigtail modules) are counted, the Contractor shall provide designation labels/strips to identify the sequence in which they are counted. Each splice tray shall be marked to identify the fiber count contained in the splice tray. The marking shall identify the FODP by number (building number), cable number, and count.

FODP-B3

FO B3-B1038, 1-12

FO B3-B1400, 13-24

3.2.5.3 New Ducts

New ducts shall be permanently labeled on the wall of each building/Maintenance Hole (MH)/Handhole (HH) indicating the connecting building/Maintenance hole/Handhole at the other end of the duct (for example, “To MH-306H”). The same information shall appear on the Contractor’s completed as-built-drawings.

3.2.6 Cable Terminations

3.2.6.1 Fiber Optic Terminations

Newly installed fiber optic cables shall be terminated on new fiber optic distribution panels using fusion spliced pigtails with LC (per UFC 3-580) connectors or LC fusion splice direct connectors. Distribution panels shall be designed for rack mounting in 19-in (48 cm) racks or wall mounted as required. Panels shall be sized according to cable and method of termination.

3.2.6.2 Grounding and Bonding

In the Equipment room/Mechanical room in which the cable is to be terminated, there is either a telecommunications main grounding busbar (TMGB) or a telecommunications grounding busbar (TGB). If a grounding busbar doesn't exist in the equipment room/mechanical room, then the Contractor shall provide it and bond it to the electrical service equipment (power) ground. The grounding conductor shall be tagged with a nonmetallic tag as close as practicable to the point of termination in a readable position. The information on the tag shall contain the following information "If this connector or wire is loose or must be removed, please call the Communications Squadron at 325-696-2220." Although it is not anticipated that any splicing will be required in a Maintenance hole, should there be some practical reason that a splice be made, the cable shield (armor) shall be bonded and continuous throughout the cable length. In addition, the splice case shall be bonded to the Maintenance hole bonding ribbon, if it exists. Grounding hardware such as corrosion resistant wire, bonding ribbon, clamps, ground rod, etc. necessary to properly bond/ground the cable in MHs/HHs shall be provided by the contractor. Reference TIA 607.

3.2.7 FOC Maintenance Loop

The Contractor shall install a minimum of a 50-foot fiber optic cable maintenance loop at the first MH from the building, at each splice point MH location and at every third manhole. The maintenance loop shall be properly labeled and securely supported by two cable hooks. Cable hooks are to be positioned so the highest one supports the underside of the top of the coil, and the bottom hook supports the underside of the bottom of the coil. The maintenance loop shall have a cable tag. The same information shall appear on the Contractor's completed as-built-drawings.

3.2.8 New Maintenance Holes/Hand-holes

Maintenance holes installed under this Task Order shall have an American Association of State Highway and Transportation Officials (AASHTO) rating of H-20U. Unless otherwise stated, MHs shall have minimum interior dimensions of 6'W x 8'L x 7' H (Width, Length, Height); HHs shall have a minimum interior dimension of 3'W x 5'L x 4'H or 4'W x 4'L x 4'H (Width, Length, Height). New hand-holes shall have a self-latching torsion assisted full-opening diamond plate stainless steel 2-piece lid. Maintenance holes/Hand holes shall be furnished with cable rack hardware, pulling irons, a sump, water resistance gaskets, bonding ribbon and a grounding system; predrilled duct entry holes [sealed with knockouts configured for splayed entry in the end walls)] with duct terminators to accept 4-inch I.D. schedule 40 conduit. It is understood that some Maintenance Holes are precast with bonding ribbons or some similar connection, to the manhole rebar and therefore do not require a ground rod. This method of grounding in lieu of a ground rod is satisfactory just as long as the achieved impedance to ground is twenty-five (25) ohms or less. MHs/HHs shall be of concrete construction and meet the requirements of TIA - 758B, paragraphs 5.2.1 and/or 5.2.2. Polymer concrete (i.e., Quazite) construction is NOT authorized.

Prefabricated MHs/HHs are preferred. MH/HH should be installed so that they are reasonably level on a gravel bed of 6 inches to allow drainage of water from the walls. The gravel bed should extend 8 inches to 12 inches beyond the outer edges of the MH/HH. MH/HH covers shall be labeled with 1/8” raised letters stating “COMMUNICATIONS”.

3.2.8.1 Cable Racks and Cable Rack Supports

Cable racks shall be installed in maintenance holes and hand holes as required - this includes new and existing MHs/HHs. Splices shall not be supported by the cables that enter each end of the splice case. The splices shall be supported by cable hooks under the splice case. Telecommunications industry standard cable hooks of the appropriate length shall be provided to support cables and splice cases. The cable hooks shall be secured using cable rack locking clips. All cables shall be supported using racking clips, cable racks, and cable hooks.

3.2.9 Underground Conduit System

The Contractor shall be responsible for any required trenching and/or boring necessary to lay the duct system. Contractor is also responsible for backfilling ditch lines and compaction of fill materials with appropriate compaction tools. Provide a minimum of 12" cover of clean fill above the conduit. Backfill material shall be clean and free from all organic material, clay, marl or unstable materials, debris, lumps, or broken paving. No rocks or stones larger than 3 inches in diameter shall be allowed in backfill. Material for backfill may be material resulting from excavation, if it meets the above requirements. Directional drilling will be used for major road crossings. Otherwise, crossing of paved surfaces may be performed by pavement cuts and resurfacing with appropriate matching road material. This does not prevent the Contractor from using directional drilling if it is more cost effective. Ducts will be appropriately protected when placed under paved surfaces.

3.2.9.1 Composition

The ducts shall be corrosion resistant and 4-inch inside diameter (I.D.) round or metric equivalent. The ducts shall be made of EPC-40 Polyvinyl Chloride (PVC) (Schedule 40) IAW NEMA TC-2. For unique situations the ducts shall be EPC-80-PVC (Schedule 80) IAW NEMA TC-2, high density polyethylene (HDPE) SDR 11.5, Galvanized Iron Pipe (GIP) or “thickwall” stainless steel. Schedule 80 PVC shall be limited to risers. High density polyethylene (HDPE) SDR 11.5 shall be used when directional boring is used. GIP or stainless steel shall be used under taxiways and runways. The ducts shall be appropriately labeled indicating the composition material. Ducts shall have a sleeve or bell end type coupling and shall be watertight when assembled.

3.2.9.2 Installation

Installation of underground conduits/ducts shall be IAW RUS Bulletin 1751F-643 and RUS Bulletin 1753F-151. Ducts installed beneath roads, sidewalks, parking areas, other paved surfaces or areas to be paved, etc. shall be installed a minimum of 36" below grade. Ducts

installed beneath roads and parking areas must be protected. It is understood that in some locations, especially at paved surface crossings, the Contractor may bore and substitute 4-inch I.D. HDPE conduit (Roll pipe, suitable for the application) for 4-inch PVC conduit. This substitution is acceptable. However, do not terminate the HDPE directly in a MH/HH but instead install 4-inch I.D. PVC stub out(s), a minimum of 5-10 feet out of the manhole and couple the HDPE to the PVC. Also, if HDPE is used, it shall be SIDR 11.5 so that the inside diameter of the HDPE will match the inside diameter of the PVC. All ducts not installed at/under a crossroad, sidewalk, parking area, or area to be paved, etc. shall have a minimum of 36 inches ground cover, where possible. The Contractor shall provide other suitable protective measures in those areas where the minimum ground cover cannot be achieved. Grading of ducts and drain slope of ducts shall be accomplished IAW BICSI "Outside Plant Design Reference Manual" (OSPDRM) and RUS Bulletin 1751F-643.

3.2.9.3 Bends and Sealing

Ducts shall be sealed to prevent moisture from entering the Maintenance Holes. All bends between MHs/HHs shall be a minimum of ten times (10X) the diameter of the duct size (i.e, 4-inch duct = 40 inches) with the sum of bends in all directions not exceeding a total of 90 degrees where practical. Coordinate with 7CS/SCXP if runs have bends that total more than 90 degrees is required. Ducts shall have bell ends and enter a MH/HH perpendicular to the surface of the wall through which it is entering. All ducts/inner-ducts entering MH/HH shall be sealed. Universal duct plugs or removable putty sealants may be used. Upon completion of conduit sections, a rigid test mandrel ¼" (6.4mm) smaller than the inside diameter of the conduit shall be pulled through two diagonally opposite ducts to ensure proper alignment. In addition, all ducts shall be cleared of loose materials such as concrete, mud, dirt, stones, etc.

3.2.9.4 Utility Separation

When communications ducts cross either power duct or buried power cable, maintain a minimum separation of 3 inches of concrete or 12 inches of well-tamped earth between the two or 12 inches of well tamped earth when parallel; for pipes (e.g., gas, water, oil) maintain 6 inches when crossing or 12 inches when parallel.

3.2.9.5 Spacers and Tracer Wire

Along the length of the duct run, if the ducts are installed by trenching, spacers shall be placed at five (5) foot intervals. At least one duct or roll pipe shall have tracer wire or be otherwise locatable from the surface. All new tracer wire installed for this project needs to have a wire nut and label installed at all wire ends, and those wire ends secured but not connected to grounds. The tracer wire shall be exposed; free from the conduit and capped (insulated). The tracer shall be secured and routed to the maintenance hole or hand-hole neck to a point where maintenance personnel may access the wire without having to enter the maintenance hole/hand-hole and tagged with a label so indicating it as a "Duct Tracer Wire to xxx – Do Not Remove (where xxx is the other end of the wire)." Tracer wires shall not be connected to any grounding system.

Tracer wire should be pulled back from building entrances until they are underground to prevent lightning damage.

3.2.9.6 Warning Tape

Cable warning tape shall be buried one (1) foot below the surface and shall follow the duct route. The tape shall be a minimum of three inches wide and orange in color with “CAUTION BURIED FIBER OPTIC LINE BELOW”.

3.2.9.7 Entrance Conduits into Existing Maintenance Holes

When new entrance conduits/ducts or sleeves are required, the Contractor shall bore and install the necessary holes and install the ducts or sleeves, if knockout doesn’t exist. Penetration shall not be in such a location through the wall as to block use of existing ducts in the maintenance hole. New ducts will be a minimum of 18 inches from either the floor or ceiling of the maintenance hole if practical. Ducts shall have bell ends and enter the maintenance hole perpendicular to the surface of the wall through which it is entering and shall be installed flush with the interior wall of the maintenance hole.

3.2.9.8 Excavation/Building Penetrations

All wall penetrations, including inside buildings, shall be restored to meet the required base fire ratings.

3.2.9.9 Conduit Protection

The Contactor shall install the appropriate physical protection required [(concrete encasement, steel tube (casing)] for buried PVC conduits or HDPE Roll pipe, consistent with commonly accepted telecommunications industry practices relative to the task and to the environment in which they are installed and the loads (H-5, H-10, H-20, railroads, flight line, etc.) to which they are expected to be exposed.

3.2.9.10 Pull Tape

All newly installed ducts left vacant shall be provided with a pull tape with a waterproof, corrosion resistant, pre-lubricated flat woven polyester pull tape with sequential footage markings, (1250 lb. pulling strength) for future cable installations. The pull tape shall extend into the maintenance holes/handholes and be secured to a cable rack or pulling iron, etc.

3.3 New Outside Plant Installation

This section describes the underground maintenance hole/conduit system, flexible geotextile multiple cell fabric inner-duct and fiber optic cable installation requirements. The Contractor shall design and install Customer-Owned “Outside Plant Telecommunications Infrastructure” in according with TIA-758-B. Each cable installation should be coordinated with the 7CS/SCXP so that the impact on the building users is properly coordinated. The sequence of installation is at the Contractor’s discretion.

See Project Sketches in Appendix D for reference and estimated distances of existing and proposed infrastructure and cables routes. This is only a proposed solution. The Contractor is free to make any recommendations pertaining to the accomplishment of this requirement in their proposal. The Contractor shall install underground outside plant infrastructure as described below.

3.3.1 Infrastructure Installation

The contractor shall provide and install the following new infrastructure. All new locations and distances are approximate.

3.3.1.1 Manholes (MH)/Hand-holes (HH)

The contractor shall install one new HH (4x4x4). The approximate location of the new HH is shown on the project sketch (1 of 3). Coordinate/verify with 7CS/SCXP for final HH size, placement location, and numbering scheme.

3.3.1.2 Duct Bank/Conduit Infrastructure Installation

The contractor shall provide and install one (1), new 4-Inch PVC/HDPE conduit as shown at the following table. Distances (Dist.) are approximate and shown in feet. See project sketch (1 of 3) for suggested location of the new conduit path.

Note: The contractor must verify/confirm the new proposed conduit path/route with 7CS/SCXP 14 calendar days before the actual digging/installation.

Install the following 4″ PVC/HDPE Conduit			
From	**To**	**Dist.**	**Comment**
MH-M0134	New HH	225	N/A
New HH	HH-H0172	200	N/A

3.3.1.3 Geotextile Inner-duct (or Innerduct) Installation

The contractor shall provide and install one pack, 3-inch, 3-Cell Geotextile Fabric Innerducts (AKA Maxcell) inside the new 4-inch conduit as shown at the following table. Each new 3-cell shall have a separate thread color, and one shall be detectable.

Distances (Dist.) are approximate and shown in feet. See project sketch for additional information.

Install the following Geotextile Innerducts			
From	**To**	**Dist.**	**Comment**
MH-M0134	New HH	225	Inside New 4-Inch conduit
New HH	HH-H0172	200	Inside New 4-Inch conduit

3.3.2 Fiber Optic Cable Installation

The Contractor shall install single mode (SM), loose buffer tube, water blocked, outside plant (OSP) cable suitable for underground applications. The intent is to install the cable in one continuous length, to the extent that it is practical. The cable shall meet RUS 7 CFR 1755.900 criteria; shall comply with industry standards with regard to manufacturers' cable marking, jacket, rip cords, water blocking, fiber color coding, jacketing materials, etc. In addition, the fibers shall comply with industry standards with regard to mode field diameter, core cladding concentricity, attenuation, and dispersion characteristics at 1310 nm and 1550nm.

All fiber optic cables shall be installed in new or existing geotextile innerduct/ innerduct. Distances (Dist.) are approximate and shown in feet. See project sketches for suggested/recommended cable route/path.

From	To	Dist.	Path
ITB7320	MH-M0134	70	Inside existing vacant Geotextile Innerduct
MH-M0134	New HH	225	Inside new vacant Geotextile Innerduct
New HH	HH-H0172	200	Inside new vacant Geotextile Innerduct
HH-H0172	CN7318	50	Inside existing vacant Geotextile Innerduct

3.3.3 In Building FODP, Cable Installation and Termination

ITB7320: The contractor shall install 24-Port FODP at the communication room at an existing rack. The new cable will come from the outside PB through building wall to the false floor to the rack.

Verify the final design, including FODP placement location with 7CS/SCX. See Project Sketch (2 of 3) for more information

CN7318: The contractor shall install 24-Port FODP at the Communication/Mechanical Room at an existing Network (NW) rack. The new cable will come through the outside vault to existing rack. See Project Sketch (3 of 3) for more information.

The contractor shall terminate the new 24-St SM FOC at the new FODPs at each building (ITB7320 and CN7318) by providing new LC connectors and all other materials necessary to terminal the new FOC.

The contractor shall test the new FOC and provide the test result to 7CS/SCXP.

3.4 Project Residue

All residue from this project shall be disposed of off base and in accordance with Federal, State, local and base environmental laws and regulations. All residue produced by horizontal directional boring operations (i.e., slurry) shall be disposed of off base on the same day the residue is produced, at an appropriate disposal facility at the contractor's expense, IAW federal and state environmental laws and regulations. Under no circumstances will the contractor stage or store boring residue in slurry ponds or other containment areas on Dyess AFB TX.

3.5 Site Restoration

The Contractor shall restore all disturbed grounds to the “as found” condition or better after installation.

3.6 Service Outages

The Contractor shall be responsible for preventing any unscheduled (i.e. cutting or disabling any in-service cables or equipment.), Contractor-caused, interruptions of communications capabilities that are properly identified. The Contractor shall coordinate planned outages with 7CS/SCXP at least 10 calendar days in advance of the outage if the implementation necessitates disruption of service, (e.g., communications, electrical, or other utilities).

3.7 Identification/Marking

The Contractor shall clearly mark all Contractor-Furnished Property and Equipment (CFP/CFE) with their company's name. The Contractor shall place an easily read, very visible, sign (minimum 8.5" x 11") on large containers, construction equipment, or un-manned rental vehicles while on the Government installation indicating the company name and both the Contractor and Site lead's names and local telephone numbers.

3.8 Installation Schedules

The Contractor shall provide a complete milestone schedule that denotes project activities to include time-phased start and completion dates for the project and sub-projects associated with the installation of the components and system. All submissions shall be delivered electronically in MS Office-compatible format NLT 10 business days after contract award and as significant schedule changes occur.

3.9 Weekly Status Reports

The Contractor shall prepare a Weekly Status Report email addressed to 7CS/SCXP and delivered by 1200 CST each Friday. The purpose of the report is to inform 7CS/SCXP of the project progress, problems being encountered, and other topics necessary/beneficial to ensure success and timely completion of the contract requirements.

3.10 Drawings

All copies of contractor supplied drawings will be handed over to 7CS/SCXP prior to Government acceptance of the project. The contractor will not maintain possession of any as-built drawings after completion of the contract. All digital copies of as-built drawings will be removed from contractor information systems and permanently deleted.

3.10.1 As-Built Drawings

The 7CS/SCXP has supplied existing system drawings in Appendix D; the Contractor shall provide updated drawings in .pdf format for OSP. These drawings shall depict the entire pathway and details of the installation, including but not limited to labeling, cables, innerducts and maintenance holes/handholes, conduits, maintenance loops, distances, bores, trenches, building

entrances. Detailed butterfly drawings of the new handhole and the two existing handholes that are being tied into will also be required in .pdf format. The Contractor shall record/deliver geospatial data of new outside plant distribution system.

3.10.2 Butterfly Drawings

The Contractor shall record and submit butterfly, cable path and building penetration drawing information for all new installations including butterfly drawings for all maintenance holes and pull boxes that contain new or reused FOC. Drawings shall record the path and arrangement of new and reused fiber optic cables, splices, and the arrangement of duct banks, ducts, inner-duct and shall show maintenance hole orientation with respect to geodetic north. Drawings shall be submitted in an easily read electronic format such as pdf.

3.10.3 Geospatial Deliverables

The Contractor shall collect and record geospatial data and provide as-built documentation (shape files) of all new installed maintenance hole/duct system components and new cable components (including metadata) compatible with the Cyberspace Infrastructure Planning System (CIPS) Visualization Component (CVC) drawing system. Data points shall be recorded at the center of each manhole/hand-hole lid and at intervals not to exceed 25 feet along cable routes. Sufficient data points shall be recorded to capture any change in direction along the route. All GPS coordinates shall have +/- 3 feet accuracy for all readings. The government will review the shape files and transcribe the information to the CVC system. Provide geospatial data via CD as Environmental Systems Research Institute (ESRI) Shape files. Shape files shall be delivered within 30 days of project completion.

3.11 Test and Acceptance/Installation Test Plan

The Contractor shall provide a test plan as to how the system shall be pre-tested, in-progress-tested and post-tested. Draft Cut-over Test Plan shall be submitted NLT 10 calendar days after contract award. Government comments will be provided after review of the draft. A final plan will be submitted 30 calendar days before the actual cut-over date. The Contractor shall test the system to demonstrate to the Government quality assurance representative that the system is fully operational and meets or exceeds the specified requirements and that the system is fully ready to be placed into service. These tests shall be accomplished prior to the system being placed into service.

3.11.1 Testing

The Contractor shall on-site testing IAW OEM’s installation manuals, practices and the appropriate vendor’s test procedures. The Contractor shall coordinate with 7CS/SCXP prior to conducting testing so that the Project Manager can be on-site to observe testing. The Contractor shall furnish all test equipment and personnel required to conduct all required testing. During any testing phase, the Government reserves the right to perform any of the contractor performed inspections and tests to assure solutions conform to prescribed requirements. The Contractor

shall provide on-site support during the acceptance testing. When any system, subsystem, component or requirement test fails to meet the requirements of the test, Government acceptance and payment will be withheld until such time as the cause of the failure is corrected. After appropriate corrective action has been taken, all tests including those previously completed, related to the failed test and the corrective action shall be repeated and successfully completed prior to Government acceptance.

3.11.2 Fiber Optic Tests

All strands of all fiber optic cables shall be tested in accordance with TIA 526-7-A, Measurement of Optical Power Loss of Installed Single-mode Fiber Cable Plant, or equivalent. As a minimum, the following tests shall be performed. Both Optical Time Domain Reflectometer (OTDR) and Optical Power Meter tests will be used for all end-to-end circuits. Between FODPs, bi-directional testing at 1310 nm and 1550 nm is required. For incomplete circuits that end in Maintenance Holes, only one-way OTDR testing is required.

3.11.2.1 Optical Attenuation

End to end attenuation tests shall be conducted on all fiber optic cable strands. Tests shall be accomplished to ensure the installed cable is within the specified parameters.

3.11.2.2 Distance

Test to determine the installed cable length between optical patch panels. All strands of all fiber optic cables shall be tested.

3.12 Acceptance/Installation Test Report

The Contractor shall provide an installation test report of the results of the testing accomplished under the installation test plan NLT 10 business days after Government Witness Testing is complete.

3.13 Final Acceptance

The Contractor shall schedule a final project walk-through with the Base POC. This should be scheduled 5 calendar days prior to acceptance.

3.14 Deliverable Summary

All deliverables are subject to Government acceptance and approval. They shall meet professional standards and the requirements set forth in this document. All deliverables shall be produced using recommended software tools/versions as accepted by the Government. The deliverables will include the following: installed equipment listing to include fiber lengths and manufacturer, test results, butterfly and geospatial drawings, warranty contact information, and all necessary accoutrements.

4. GENERAL INFORMATION

4.1 Period of Performance

The period of performance for the project shall be determined based on the proposed schedule and actual contract award date. The Government estimates that this requirement should be completed within 90 days of project start. The estimated Period of Performance is negotiable, but the Contract shall to the best of their ability meet timelines outlined in this SOW.

4.2 Place of Performance

The place of performance is Dyess AFB, TX.

4.3 Hours of Operation

The Contractor shall routinely work during normal duty hours 0800-1600 Monday through Friday. Any site work requested by the Contractor to be performed outside of normal duty hours shall be coordinated with the 7th CS/SCXP and approved by the Contracting Officer. If work outside normal duty hours occurs, this will be at no additional expense to the Government.

4.4 Holidays/Down Days

The Contractor shall not perform under this contract on federal holidays or site-unique down-days unless expressly authorized by the CO and coordinated with 7CS/SCXP.

4.4.1 Recognized Holidays.

New Year's Day	Labor Day
Martin Luther King Jr.'s Birthday	Columbus Day
President's Day	Veteran's Day
Memorial Day	Thanksgiving Day
Juneteenth	Christmas Day
Independence Day	

4.4.2 Dyess AFB Down-Days.

Friday, 22 May 2026	Friday, 3 July 2026
Monday, 6 July 2026	Friday, 11 September 2026
Friday, 27 November 2026	Tuesday, 10 November 2026
Thursday, 24 December 2026	

4.5 Base Support

The Contractor shall identify any base support requirements (for example, laydown and storage areas) necessary to complete this project in their proposal. The contractor shall return all

government furnished lay-down and storage areas to their original condition upon completion of the project.

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APPENDIX A: APPLICABLE STANDARDS

The following list is not all-exclusive. The Contractor shall comply with applicable commercial code and standards

AFI 91-203 – Air Force Consolidated Occupational Safety Instruction OSHA CFR 29 Part 1910-268 – Telecommunications

OSHA CFR 29 Part 1910-268 – Telecommunications

NEMA TC 2- Electrical Polyvinyl Chloride (PVC) Tubing and Conduit

TIA-606-D Administration Standard for Telecommunications Infrastructure

TIA-568.1-E Commercial Building Telecommunications (568C.1, 568C.2, 568C.3) Cabling Standard

TIA-607-E Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications

TIA-526-7-A Measurement of Optical Power Loss of Installed Single-mode Fiber Cable Plant

TIA-569-E - Commercial Building Standard for Telecommunications Pathways and Spaces TIA-570-E –Residential Telecommunications Infrastructure Standard

TIA-758B Customer-owned Outside Plant Telecommunication Infrastructure Standard BICSI TDM Manual - Building Industries Consulting Services International Telecommunications Distribution Methods (TDM) Manual

BICSI OPDRM – Outside Plan Design Reference Manual

RUS Bulletin 345-65 (PE-33) – Specification for Shield Bonding Connectors RUS Bulletin 1735F-401, Standards for Splicing Copper and Fiber Cable

RUS Bulletin 1751F-643 - Underground Plant Design

RUS Bulletin 1751F-644 - Underground Plant Construction Telecommunications Engineering Shield Continuity and Construction Manual (TE&CM) 451.2

RUS Bulletin 1751F-801 – Electrical Protection Fundamentals

RUS Bulletin 1753F-151 (515b) - Specifications and Drawings for Underground Cable Installation

RUS Bulletin 1753F-201 (PC-4) – RUS Standard for Acceptance Tests and Measurements of Telecommunications Plant

RUS Bulletin 1753F-207 (PE-87) – REA Specification for Terminating Cables NFPA 70 - National Electric Code

Unified Facilities Criteria 3-260-01 Unified Facilities Criteria 3-580

FGDC-STD-007.3-1998 - Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy.

APPENDIX B: DELIVERABLES

All deliverables are subject to Government acceptance and approval. They shall meet professional standards and the requirements set forth in this SOW. All deliverables shall be produced using recommended software tools/versions as accepted by the Government.

APPENDIX C: LIST OF ACRONYMS

AASHTO American Association of State Highway and Transportation Officials

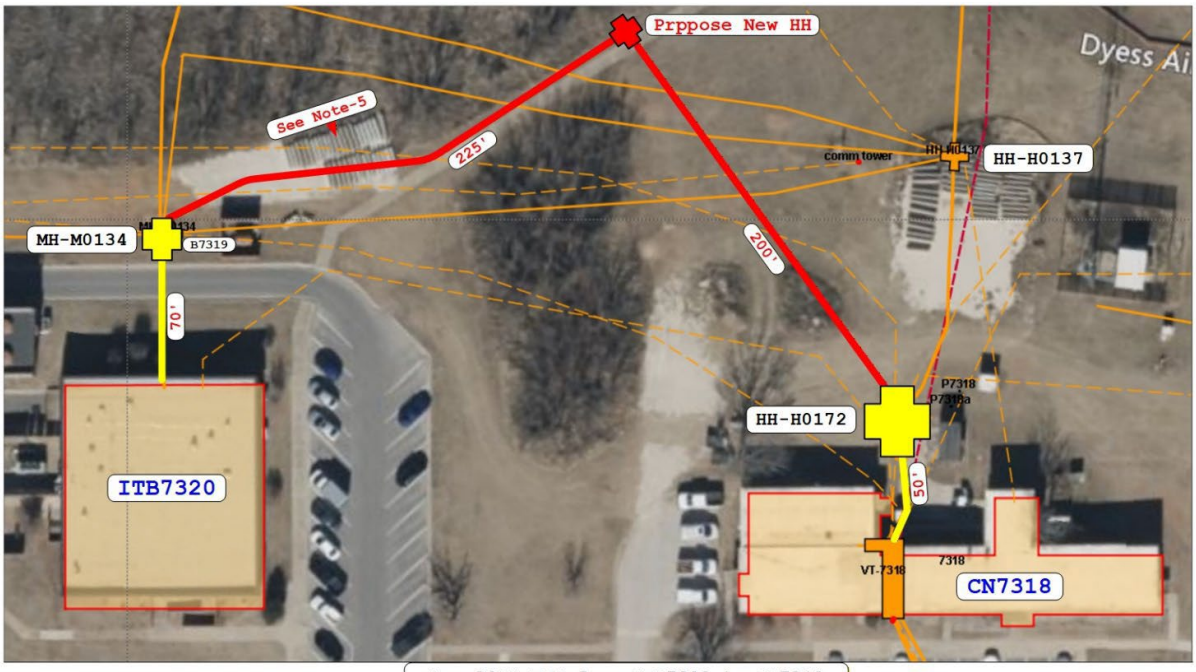
AFM Airfield Management (BaseOPS)

Approx	Approximately
ATC	Air Traffic Control Tower
ATCALS	Air Traffic Control and Landing Systems
BCE	Base Civil Engineering
CDRL	Contract Deliverable
CFE	Contractor-Furnished Equipment
CFP	Contractor-Furnished Property
CIP	Common Installation Picture
CIPS	Cyberspace Infrastructure Planning System
CMA	Controlled Movement Area
CMHDS	Communications Maintenance Hole Duct System
CO	Contracting Officer
Comm	Communications
CS	Communications Squadron
CSI-B	Cyberspace Integrator-Base
CVC	CIPS Visualization Component
ECMRA	Contractor Manpower Reporting Application
EFI&T	Engineer, Furnish, Install and Test
FODP	Fiber Optic Distribution Panels
FOUO	For Official Use Only
FY	Fiscal Year
HDPE	High Density Polyethylene
HH	Hand Hole
IAW	In Accordance With
ID	Inside Diameter
ILS	Instrument Landing System
IPT	Integrated Process Team

LMR	Land Mobile Radio
LC	Lucent Connectors
MH	Maintenance Hole
MHDS	Maintenance Hole Duct System
NLT	No Later Than
NPDES	National Pollution Discharge Elimination System
OEM	Original Equipment Manufacturer
OPSEC	Operational Security
OSHA	Occupational Safety & Health Administration
OSP	Outside Plant
OSS	Operations Support Squadron
OTDR	Optical Time Domain Reflectometer
PDF	Portable Document Format
PM	Project Manager
POC	Point of Contact
Prime	Prime Contractor
PSI	Pounds per Square Inch
PVC	Polyvinyl Chloride
QAE	Quality Assurance Evaluator
QCM	Quality Control Manager
Qty	Quantity
RUS	Rural Utilities Service Bulletin
SCOW	Supply Chain Operations Wing
SCX	Scheduler Planner
SE	System Engineer
SM	Single Mode
SOW	Statement of Work

Sub	Sub-Contractor
SWPPP	Storm Water Pollution Prevention Plan
TIA	Telecommunications Industry Association
TMGB	Telecommunication Main Ground Busbar
TRD	Technical Requirements Document

APPENDIX D: PROJECT SKETCHES



New 24SM FOC from OTB7320 to CN7318

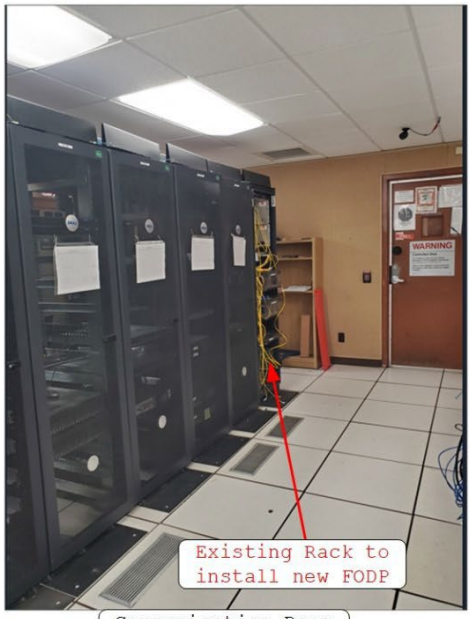
Project Sketch 1 of 3

Notes:

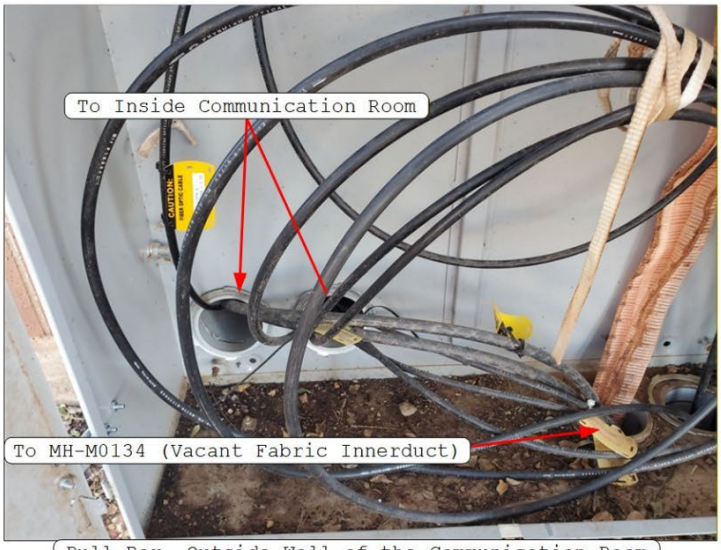
1. Existing MH/HH (Manhole/Handhole).
2. Proposed new HH.
3. Existing Conduit/Innerducts/Geotextile Innerducts.
4. Proposed new 1, 4-Inch Conduit and new 1-Pack, total of 3-Cellgeotextile Innerducts.
5. T-Walls, will be removed by the base.
6. The Conduit route/path and HH placement location shown on this sketch is for recommendation only. The installer is free to make any adjustment upon base approval.

(Drawing NOT to Scale, Distances are approximate)

Sketch-1 of 3 (Cable Route)



Communication Room



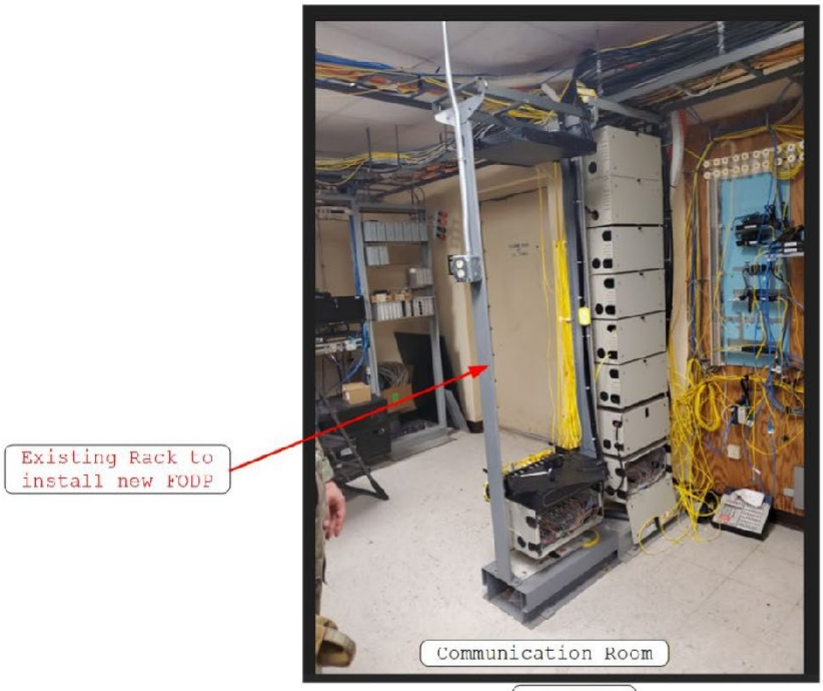
Pull Box, Outside Wall of the Communication Room

ITB7320

Project Sketch 2 of 3

(Drawing NOT to Scale, Distances are approximate)

Sketch-2 of 3 (ITB7320)



CN7318

Project Sketch 3 of 3

(Drawing NOT to Scale, Distances are approximate)

Sketch-3 of 3 (CN7318)