

**STATEMENT OF WORK (SOW)
FOR
ALC Storage Facility Elizabeth City**

1.0 GENERAL

1.1 Background

1.1.1 The U.S. Coast Guard, Command, Control, Communications, Computers, Cyber, and Intelligence Service Center (C5ISC), Infrastructure Services Division (ISD), Physical Infrastructure Services Branch (PSB) performs the following as part of their mission requirements:

- Acts as the project manager for the C5I component of all new construction, relocation, or expansions to shore facilities Coast Guard wide.
- Acts as the C5I single point of contact on all construction projects and coordinates the installations of any relocated C5I equipment.
- Develops Statements of Work (SOW) and Independent Government Cost Estimates (IGCE) covering these C5I installations.
- Performs contractor quality assurance and evaluates contractor performance.
- Provides management and oversight of all inside and outside cable plant upgrades independent of facility construction projects.

1.2 Scope

1.2.1 The Coast Guard requires the installation of Inside Plant (ISP) cabling at Aviation Logistics Center (ALC) new storage facility. New cabling will be installed within the the storage facility located at 1833 W. Ehringhaus Street Elizabeth City, NC 27909. This is a commercially leased space. A total of four (04) duplex work area outlets (WAO) will be installed. All new horizontal cabling must be CAT 6A.

1.3 OBJECTIVE

1.3.1 This task order will establish telecommunication pathways, install a telecommunications rack, and install telecommunications cabling.

1.4 APPLICABLE DOCUMENTS

1.4.1 Compliance Documents (Use the most current version of all Specifications)

- 1.4.1.1** COMDTINST M10550.25 Electronics Manual
- 1.4.1.2** Engineering Drawing Practices, DODSTD 100 (Series)
- 1.4.1.3** ANSI/TIA-568 (series), Commercial Building Telecommunications Cabling Standard
- 1.4.1.4** ANSI/TIA-569 (series), Commercial Building Standard for Telecommunications Pathways and Spaces

- 1.4.1.5 ANSI/TIA-606, Administration Standard for Commercial Telecommunications Infrastructure
- 1.4.1.6 ANSI/TIA-758-A, Customer-Owned Outside Plant Telecommunications Infrastructure Standard
- 1.4.1.7 J-STD-607, Commercial Building Grounding and Bonding Requirements for Telecommunications – Joint Standard
- 1.4.1.8 Building Industries Consulting Services International (BICSI) Telecommunications Distribution Methods Manual (TDMM) – Latest edition
- 1.4.1.9 National Fire Protection Agency (NFPA) – NFPA 70
- 1.4.1.10 National Electric Code (NEC)

1.4.2 Reference Documents

- 1.4.2.1 Naval Facilities Engineering Command Guide Specification (NFGS) 16710 (current version) Structured Telecommunications Cabling and Pathway System.
- 1.4.2.2 NFGS 16712 Fiber Optics Data Transmission for Exterior System (current version).
- 1.4.2.3 NFGS 16721 Telephone Distribution System Outside Plant (current version).

2.0 TASK ORDER MANAGEMENT DESIGNATION

- 2.1 The Contracting Officer's Representative (COR) for this task is Jeremy Wood who can be reached at (206) 820-4324.
- 2.2 Project Officer for this task is ITCS Michael Green who can be reached at (757) 628-4182.
- 2.3 Electronic Support Detachment (ESD) Elizabeth City C5I representative for this task is ITCS Trevor Paternoster who can be reached at (571) 607-6692.

3.0 SPECIFIC REQUIREMENTS/TASKS

3.1 Task A: Provide and Install Horizontal Cabling at ALC Storage Facility Elizabeth City

SCOPE: The contractor must provide all materials and services necessary to accomplish the work described herein except those items identified as Government Furnished Property. The scope of work for this task must consist of that effort required to **install new horizontal cabling at ALC Storage Facility** located at 1833 W. Ehringhaus Street Elizabeth City, NC 27909.

- 3.1.1 Provide and install one (1) 2-post, open frame, relay style, floor-mounted equipment rack with 19-inch mounting capability. The rack must have at least 75-inches of vertical mounting space and must comply with the EIA/ECA-310 standard. The rack must be provisioned with double sided, slim frame, vertical cable management with covers on both sides of rack. Contractor must determine best location and orientation (end-to-wall, centered) of the new floor mount rack. Rack must be located within the designated Telecommunications Room (TR).

- 3.1.1.1 Provide and install new plywood backboard in the TR in accordance with (IAW) the TIA-569 standard. The backboard must be fabricated from

sheets of ¾-inch fire-rated (fire retardant) “AC” plywood to meet applicable codes. The “A” side of the plywood must be exposed. The plywood must be mounted on the wall vertically, 10-inches off the floor and extended up to the ceiling or 106-inches (8’-10”) from the floor, whichever is lower. The plywood must be installed in full 8-foot by 4-foot sheets, where possible. All plywood must be painted with two coats of light colored paint on all exposed surfaces, leaving at least one example of the fire retardant stamp on the plywood exposed.

3.1.1.2 Provide and install one (1) 1U fiber optic closet connector housing (CCH) at the top of the rack. Fiber CCH must be loaded with ceramic LC-style connector panels.

3.1.1.3 Provide and install one (1) vented rack mount shelf below the fiber CCH for the future installation of a network router.

3.1.1.4 Leave 1U of space below the rack mount shelf for the future installation of a network switch. Provide and install 1U horizontal cable manager with cover below 1U of blank space.

3.1.1.5 Provide and install one (1) 24-port CAT 6A patch panel (110 style/RJ-45 with cable management bar) for termination of CAT 6A horizontal cabling below allocated network switch space. Provide and install 1U horizontal cable manager with cover below 24-port patch panel.

3.1.1.6 Provide and install one (1) rack mount Power Distribution Unit below the horizontal cable manager.

3.1.1.7 Provide and install 2U rack-mount APC 1500 Uninterruptible Power Supply (UPS), or equivalent, at the bottom of the newly installed rack.

3.1.2 Remove and dispose of existing horizontal cabling, to include any other cabling not currently in use or designated for future use, cable raceway, face plates, keystone jacks, surface mount boxes, 66/110 blocks, and wall mount boxes.

3.1.3 Provide and install new horizontal cabling, blue keystone jacks, and white faceplates for four (4) new WAOs at ALC Storage Facility. All WAOs will be installed in single office space directly adjacent to TR. The specific locations for these installations will be directed by C5I personnel. All WAOs must be a duplex outlet with two (2) 8P8C (RJ-45) style jacks. For planning purposes, total cable distance for all four (4) WAOs is under 100m. Do not color-code or designate work area jacks as to intended usage. The choice of data or voice to a work area outlet jack will be determined in the floor mount rack by patch cables. All horizontal cabling must be CAT 6A and must be terminated on the horizontal patch field, not on 66 or 110 style termination blocks. All work area outlets and CAT 6A connections in the TR must be terminated to pin/pair assignment T568A in accordance with the TIA-568 standard. CAT 6A runs must not exceed 295 feet where 295 feet represents the total length of cable including horizontal, vertical, and bend distances.

3.1.3.1 All WAO must be fed from the new TR.

- 3.1.3.2** Plenum cabling must be provided as required by National Fire Protection Association (NFPA) 70, or as required by the facility safety officer or local building code.
- 3.1.3.3** Contractor must verify with Authority Having Jurisdiction (AHJ) that cable installation is compliant with applicable local codes or standards.
- 3.1.3.4** Provide and install blank WAO covers for any abandoned outlet boxes. Blank covers must be the same color as new WAO covers.
- 3.1.3.5** All cabling must be labeled within 12-inches of termination points with wrap-style, machine generated labels. Fiber CCHs must also be labeled on the front panel to indicate owner (USCG ALC), fiber type, strand count, and far end termination point.
- 3.1.3.6** Provide and install a J-hook style pathway system for horizontal cabling. Sizing of the J-hook system must provide for 100% expansion of the initial cable fill. J-hooks must not be attached to existing drop ceiling system. CAT 6A cables are not to be run in the same pathways as public address (PA) speakers, coaxial cables, intrusion detection, or other non-category cables. Contractor must use existing conduit and junction where applicable for routing of communications cabling within walls.
- 3.1.3.7** Provide and install ladder rack within the TR for cable management. Provide 4-feet of cable slack for horizontal cabling and store on the newly installed ladder rack.
- 3.1.3.8** Provide and install 4-inch PVC sleeves as needed for horizontal cabling pathways.
- 3.1.3.9** All patch panel ports must be installed in a serial format to reflect the work area outlet numbering scheme and labeled with a unique identifying number IAW TIA/EIA 606-A.
- 3.1.3.10** All cable penetrations must be fire stopped IAW the TIA-569 standard.
- 3.1.3.11** The Contractor must install, terminate, and test CAT 6A cable terminations IAW the ANSI/TIA-568 Standard.
- 3.1.4** Grounding and Bonding
 - 3.1.4.1** Provide and install a Primary Bonding Busbar (PBB) in the TR. PBB must be mounted to the newly installed backboard and installed in accordance with the TIA-607 standard.
 - 3.1.4.2** The PBB must be a ¼-inch by 4-inch (nominal width) by 20-inch (minimum length) flat copper stock. The PBB must be drilled to accept two-hole bolt-on compression lugs. The PBB must be isolated from its mounting hardware and any building structural metal. Provide space for four spare ground lugs on the PBB.
 - 3.1.4.3** Bond all appropriate components (equipment racks, metal conduits, raceways, raceway segments, and raised panel flooring) to the PBB. Provide two-hole bolted type ground lugs for connection of each ground

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connector. Total resistance from the PBB to ground must be 25 ohms or less. Tie the PBB to the universal temporary facility ground or electrical main IAW the NFPA 70 and the TIA-607 standard.

- 3.1.5** Contractor must provide properly sized CAT 6A 28 AWG reduced diameter patch cords (blue for data, white for voice). Note: For estimating purposes, plan on providing eight (8) 3-foot blue, eight (8) 7-foot blue, eight (8) 3-foot white, and eight (8) 7-foot white CAT 6A 28 AWG reduced diameter patch cords. Upon completion of job, leave patch cords inside the new TR.
- 3.1.6** Provide four (4) 3-meter, LC-LC, yellow, OS2 fiber optic patch cords and leave inside the TR.

3.2 Testing

- 3.2.1** The contractor must test and validate the correct performance of telecommunications equipment, cabling, bonding, and grounding installed in this task order in accordance with TIA/EIA standards and manufacturer specifications.
- 3.2.2** Provide a Fluke Networks Linkware or equivalent summary of testing for CAT 6A and fiber optic cables terminated by the contractor upon completion. Report should show at a minimum pass/fail, cable length, and date/time of tests.
- 3.2.3** Test reports must be delivered via email to the C5ISC-ISD-PSB Project Officer.

4.0 CONTRACTOR PERSONNEL

4.1 Project Manager

- 4.1.1** The Contractor must provide a Project Manager who must be responsible for all Contractor work performed under this SOW. The Project Manager must be a single point of contact for the Contracting Officer and the COR. It is anticipated that the Project Manager must be one of the senior level employees provided by the Contractor for this work effort. The name of the Project Manager, and the name(s) of any alternate(s) who must act for the Contractor in the absence of the Project Manager, must be provided to the Government as part of the Contractor's proposal. During any absence of the Project Manager, only one alternate must have full authority to act for the Contractor on all matters relating to work performed under this contract. The Project Manager and all designated alternates must be able to read, write, speak and understand English. Additionally, the Contractor must not replace the Project Manager without prior approval from the Contracting Officer.
- 4.1.2** The Project Manager must be available to the COR via telephone between the hours of 0700 and 1500 EST, Monday through Friday, and must respond to a request for discussion or resolution of technical problems within 8 hours of notification.

4.2 Employee Identification

- 4.2.1** Contractor employees visiting Government facilities must wear an identification badge that, at a minimum, displays the Contractor name, the employee's photo, name, clearance-level and badge expiration date. Visiting Contractor employees must comply with all Government escort rules and requirements. All Contractor employees must identify themselves as Contractors when their status is not readily apparent and display all identification and visitor badges in plain view above the waist at all times.
- 4.2.2** Does not require the issuance of a Common Access Card (CAC).

4.3 Employee Conduct

- 4.3.1** Contractor's employees must comply with all applicable Government regulations, policies and procedures (e.g., fire, safety, sanitation, environmental protection, security, "off limits" areas, wearing of parts of DHS uniforms, and possession of weapons) when visiting or working at Government facilities. The Contractor must ensure Contractor employees present a professional appearance at all times and that their conduct must not reflect discredit on the United States or the Department of Homeland Security. The Project Manager must ensure Contractor employees understand and abide by Department of Homeland Security established rules, regulations and policies concerning safety and security.

4.4 Removing Employees for Misconduct or Security Reasons

- 4.4.1** The Government may, at its sole discretion (via the Contracting Officer), direct the Contractor to remove any Contractor employee from DHS facilities for misconduct or security reasons. Removal does not relieve the Contractor of the responsibility to continue providing the services required under the contract. The Contracting Officer will provide the Contractor with a written explanation to support any request to remove an employee.

5.0 OTHER APPLICABLE CONDITIONS

5.1 SECURITY

- 5.1.1** Contractor's employees will adhere to the background investigation, as the minimum to complete a NCIC-III criminal history inquiry for physical access control on government installation.
- 5.1.2** Contractor employees working on-site at Government facilities must comply with all installation security requirements and all security regulations and directives for this task order (i.e, security, and safety, visit request, badging, escorted/unescorted, day-to-day requirements, etc.).
- 5.1.3** **SUB-CONTRACTING REQUIREMENTS:**
 - 5.1.3.1** Tasks must be overseen by the Contracted Contractor and Contracted Contractor must remain onsite while sub-contractor is performing tasking.
 - 5.1.3.2** Sub-Contractors must be U.S. citizens and meet requirements of Paragraph 5.

5.2 PERIOD OF PERFORMANCE

5.2.1 The period of performance for this contract is a six month base period:

5.2.1.1 Base Period (six months from award)

5.3 PLACE OF PERFORMANCE

5.3.1 Elizabeth City, NC.

5.3.2 Contractor's Facility

5.4 HOURS OF OPERATION

5.4.1 Contractor employees must generally perform all work between the hours of 0800 and 1700 EST, Monday through Friday (except Federal holidays). However, there may be occasions when Contractor employees must be required to work other than normal business hours, including weekends and holidays, to fulfill requirements under this SOW.

5.5 Travel

5.5.1 This is a firm fixed price award, all travel related should be included in your firm fixed price quote/offer.

5.6 GENERAL REPORT REQUIREMENTS

5.6.1 The Contractor must provide all written reports in electronic format with read/write capability using applications that are compatible with DHS workstations (Windows 10 and Microsoft Office Applications).

5.6.1.1 Documents must be provided in Microsoft Word.

5.6.1.2 Spreadsheets must be provided in Microsoft Excel.

5.6.1.3 Provide red-line drawings to onsite COR representative upon completion of site work. Provide as-built drawings in CADD and PDF format within 30 business days of work completion.

5.6.1.4 Cable test results, run sheets, block diagrams, and riser diagrams must be provided to the COR's Representative in either a spreadsheet format, as part of as-built drawings, or as an appendix to other reports.

5.6.1.5 In all cases, the contractor must adjust format as required to meet the current Coast Guard applications package.

5.6.1.6 All timeframes in this section refer to workdays unless otherwise specified.

5.6.1.7 Timeframes for deliverables can be adjusted in writing by the Coast Guard COR/KO.

5.6.1.8 The Coast Guard retains all rights to the deliverables provided under this SOW.

5.6.1.9 The exact quantity of documents will be determined at the time of submission. For planning purposes, upon request, at least two hard copies and one soft copy of all deliverables.

5.7 INTELLECTUAL PROPERTY

- 5.7.1** All contractor developed processes, procedures, documentation, software and other forms of intellectual property developed under this Delivery Order must be considered Government property. All information (records) created by contractor will be filed as per USCG Manual 5212.12 and returned to USCG whenever requested. All records will be surrendered to USCG at end of contract. No records will be deleted or destroyed prior to meeting their legally approved disposition timeframe(s).

5.8 PROTECTION OF INFORMATION

- 5.8.1** Contractor access to proprietary information is required under this SOW. Contractor employees must safeguard this information against unauthorized disclosure or dissemination in accordance with the law and Government policy and regulation.

6.0 GOVERNMENT FURNISHED RESOURCES

- 6.1** N/A

7.0 CONTRACTOR FURNISHED PROPERTY

- 7.1** The contractor must provide all standard tools as needed including, but not limited to, wrenches, hand drills, connector removal/crimp tools, screwdrivers, climbing harnesses and all associated climbing and safety equipment, all earth moving equipment large and small, digital cameras, calculators, and all electronic test equipment.

8.0 GOVERNMENT ACCEPTANCE PERIOD

- 8.1** The COR will review deliverables prior to acceptance and provide the contractor with an e-mail that provides documented reasons for non-acceptance. If the deliverable is acceptable, the COR will send an e-mail to the Contractor notifying it that the deliverable has been accepted.
- 8.2** The COR will have the right to reject or require correction of any deficiencies found in the deliverables that are contrary to the information contained in the Contractor's accepted proposal. In the event of a rejected deliverable, the Contractor will be notified in writing by the COR of the specific reasons for rejection. The Contractor may have an opportunity to correct the rejected deliverable and return it per delivery instructions.
- 8.2.1** All work to be performed and all materials and data to be submitted under this delivery order will be inspected and accepted by a designated COR identified in the individual task order. The COR may designate an onsite representative, to act the Government Representative, in writing.
- 8.3** The COR will have 30 business days to review deliverables and make comments. The Contractor must have 15 business days to make corrections and redeliver.

- 8.4** All other review times and schedules for deliverables must be agreed upon by the parties based on the final approved Delivery Order. The Contractor must be responsible for timely delivery to Government personnel in the agreed upon review chain, at each stage of the review. The Contractor must work with personnel reviewing the deliverables to assure that the established schedule is maintained.

9.0 Section 508 Requirements

- 9.1** Section 508 of the Rehabilitation Act (classified to [29 U.S.C. § 794d](#)) requires that when Federal agencies develop, procure, maintain, or use information and communications technology (ICT), it must be accessible to people with disabilities. Federal employees and members of the public with disabilities must be afforded access to and use of information and data comparable to that of Federal employees and members of the public without disabilities.
- 9.2** All products, platforms and services delivered as part of this work statement that, by definition, are deemed ICT must conform to the revised regulatory implementation of Section 508 Standards, which are located at 36 C.F.R. § 1194.1 & Appendixes A, C & D, and available at <https://www.ecfr.gov/cgi-bin/text-idx?SID=e1c6735e25593339a9db63534259d8ec&mc=true&node=pt36.3.1194&rgn=div5>. In the revised regulation, ICT replaced the term electronic and information technology (EIT) used in the original 508 standards. ICT includes IT and other equipment.
- 9.3** Exceptions for this work statement have been determined by DHS and only the exceptions described herein may be applied. Any request for additional exceptions must be sent to the Contracting Officer and a determination will be made according to DHS Directive 139-05, Office of Accessible Systems and Technology, dated November 12, 2018 and DHS Instruction 139-05-001, Managing the Accessible Systems and Technology Program, dated November 20, 2018, or any successor publication.

10.0 Section 508 Requirements for Technology Products

- 10.1** Section 508 applicability to Information and Communications Technology (ICT): Reports
- 10.2** Applicable Exception: N/A Authorization #: N/A
- 10.3** Applicable Functional Performance Criteria: All functional performance criteria in Chapter 3 apply to when using an alternative design or technology that results substantially equivalent or greater accessibility and usability by individuals with disabilities than would be provided by conformance to one or more of the requirements in Chapters 4 and 5 of the Revised 508 Standards, or when Chapters 4 or 5 do not address one or more functions of ICT.
- 10.4** Applicable 508 requirements for electronic content features and components (including but not limited to electronic documents; Electronic reports): All requirements in E205 apply, including all WCAG 2.0 Level A and AA Success Criteria apply as specified in E205
- 10.5** Applicable 508 requirements for software features and components (including but not limited to electronic content and software authoring tools and platforms): All requirements in Chapter 5 apply, including all WCAG 2.0 Level A and AA Success Criteria, 502 Interoperability with Assistive Technology, 503 Application, 504 Authoring Tools

10.6 Applicable 508 requirements for hardware features and components: Does not apply

10.7 Applicable 508 requirements for support services and documentation: All requirements in Chapter 6 apply

11.0 Section 508 Deliverables

11.1 Section 508 Accessibility Conformance Reports: For each ICT item offered through this contract (including commercially available products, and solutions consisting of ICT that are developed or modified pursuant to this contract), the Offeror must provide an Accessibility Conformance Report (ACR) to document conformance claims against the applicable Section 508 standards. The ACR must be based on the Voluntary Product Accessibility Template Version 2.0 508 (or successor versions). The template can be found at <https://www.itic.org/policy/accessibility/vpat>. Each ACR must be completed by following all of the instructions provided in the template, including an explanation of the validation method used as a basis for the conformance claims in the report.