

Network Infrastructure Install

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STATEMENT OF WORK

The new Delta 9 SCIF (Sensitive Compartmented Information Facilities) will require bulk fiber optic cabling installed from existing communications room in building 300 room 307G to room 351. To accomplish this the contractor will install all Government Furnished materials and purchase any supplemental materials required for any pathways and fully functional connectivity for all four networks.

Rm 351 Zone Box

- The contractor will mount one (1) Government Furnished Corning Zone Box within Rm 351.
 - The contractor shall provide and install one (1) 2'x2'x3/4" plywood sheet with toggle bolts on one wall within Rm 351. The contractor will mount one (1) Government Furnished Corning Zone Box onto the plywood sheet.
 - The contractor shall provide and install three 2 1/2" conduits from the zone box into the drop ceiling above for cable pathway from the existing above ceiling wire basket to the zone box.
 - The contractor will ground bond the conduits and zone box to the pre-existing wire basket tray.
 - Please reference figure 1 for proposed zone box location

Net1 Bulk Fiber

- The contractor will install five (5) 24-strand Multi-Mode OM4 Rose colored fiber optic cables between existing Communications Room 307G and the Fiber Zone Box in Rm 351.
 - The contractor will install one (1) Government Furnished Corning 4U Fiber Enclosure in the Net1 cabinet within Communications Room 307G. The contractor will install five (5) Government Furnished 24-strand duplex LC pigtail cassettes within this 4U enclosure.
 - The contractor shall provide and install three (3) 4" EMT Conduit pathways between the end of the hall in the 307 area and Conf Rm 351D. The contractor will cut three (3) 4" penetrations through the wall and install threaded rod concrete anchors into the concrete ceiling to support the two conduit paths on each side.
 - The contractor shall provide and install firestop caulk around each conduit at each wall penetration as well as firestop plugs cut around the installed cable in the ends of each conduit.
 - The contractor will ground bond each conduit to the nearby pre-existing wire basket tray.
 - The contractor shall abide by all install regulations as per ICD 705.
 - The contractor will install five (5) Government Furnished 24-strand Multi-Mode OM4 Rose colored fiber optic cables from Communications Room 307G to the Corning zone box in 351.
 - The contractor will fusion splice all five (5) 24-strand Rose cables to each of the five (5) Government Furnished 24-strand duplex LC pigtail cassettes within the 4U enclosure in the Net1 cabinet in Communications Rm 307G.
 - The contractor will install five (5) Government Furnished 24-strand duplex LC pigtail cassettes within the Corning zone box in Rm 351.

- The contractor will fusion splice all five (5) 24-strand Rose cables to each of the five (5) 24-strand duplex LC pigtail cassettes within the Corning zone box in Rm 351.

Net2 Bulk Fiber

- The contractor shall install one (1) Government provided 24-strand Multi-Mode OM4 Yellow colored fiber optic cable between existing Communications Room 307G and the Fiber Zone Box in Rm 351.
 - The contractor will install one (1) Government Furnished Corning 2U Fiber Enclosure in the Net2 cabinet within Communications Room 307G. The contractor shall provide and install one (1) 24-strand duplex LC pigtail cassette within this 2U enclosure.
 - The contractor will fusion splice the 24-strand Yellow cable to the one (1) 24-strand duplex LC pigtail cassette within the 2U enclosure in the Net2 cabinet in Communications Rm 307G.
 - The contractor will provide and install one (1) 24-strand duplex LC pigtail cassette within the Corning zone box in Rm 351.
 - The contractor will fusion splice the 24-strand Yellow cable to the one 24-strand duplex LC pigtail cassette within the Corning zone box in Rm 351.

Net3 Bulk Fiber

- The contractor shall install one (1) Government furnished 24-strand Multi-Mode OM4 Red colored fiber optic cable between existing Communications Room 307G and the Fiber Zone Box in Rm 351.
 - The contractor shall provide and install one (1) 2U fiber enclosure within the Net3 cabinet in Rm 307G.
 - The contractor shall provide and install one (1) 24-strand duplex LC pigtail cassette within this 2U enclosure.
 - The contractor will fusion splice the 24-strand Red cable to the one (1) 24-strand duplex LC pigtail cassette within the 2U enclosure in the Net3 cabinet in Communications Rm 307G.
 - The contractor shall provide and install one (1) 24-strand duplex LC pigtail cassette within the Corning zone box in Rm 351.
 - The contractor will fusion splice the 24-strand Red cable to the one (1) duplex LC pigtail cassette within the Corning zone box in Rm 351.

Net4 Bulk Fiber

- The contractor shall install five (5) Government furnished 24-strand Multi-Mode OM4 Aqua colored fiber optic cables between existing Communications Room 307G and the Fiber Zone Box in Rm 351.

- The contractor shall provide and install five (5) 24-strand duplex LC pigtail cassettes within the 4U enclosure in the Net1 cabinet of Communications Rm 307G.
 - The contractor will fusion splice all five (5) 24-strand Aqua cables to each of the five (5) 24-strand duplex LC pigtail cassettes within the 4U enclosure in the Net1 cabinet in Communications Rm 307G.
 - The contractor shall provide and install five (5) 24-strand duplex LC pigtail cassettes within the Corning zone box in Rm 351.
 - The contractor will fusion splice all five (5) 24-strand Aqua cables to each of the five (5) 24-strand duplex LC pigtail cassettes within the Corning zone box in Rm 351.

Net1 Horizontal Work Area Fiber

- The contractor will install fifty (50) Government Furnished 2-strand Multi-Mode OM4 Rose colored zipcord fiber optic cables from the Corning zone box in Rm 351 to each cubicle, office and printer locations needing network 1 connectivity.
 - The contractor will terminate the fifty (50) 2-strand Rose zipcord within the Corning zone box using one hundred (100) Government Furnished Corning Unicam LC connectors.
 - The contractor shall provide and install forty-one (41) 4-port modular furniture faceplates for each modular furniture desk and nine (9) 2-gang 4-port wall faceplates for each office and printer drop location.
 - The contractor shall provide and install fifty (50) Rose duplex LC keystone non-keyed adapters within each faceplate.
 - The contractor will terminate all fifty (50) 2-strand Rose zipcord fibers using one hundred (100) Government Furnished Corning Unicam connectors.

Net2 Horizontal Work Area Fiber

- The contractor will install two (2) Government Furnished 2-strand Multi-Mode OM4 Yellow colored zipcord fiber optic cables from the Corning zone box in Rm 351 to two locations in office 351C.
 - The contractor will terminate the two (2) 2-strand Yellow zipcord within the Corning zone box using four (4) Government Furnished Corning Unicam LC connectors.
 - The contractor shall provide and install two (2) Yellow duplex LC keystone non-keyed adapters within the 2-gang faceplate at each location.
 - The contractor will terminate both of the two (2) 2-strand Yellow zipcord fibers using four (4) contractor provided Corning Unicam connectors.

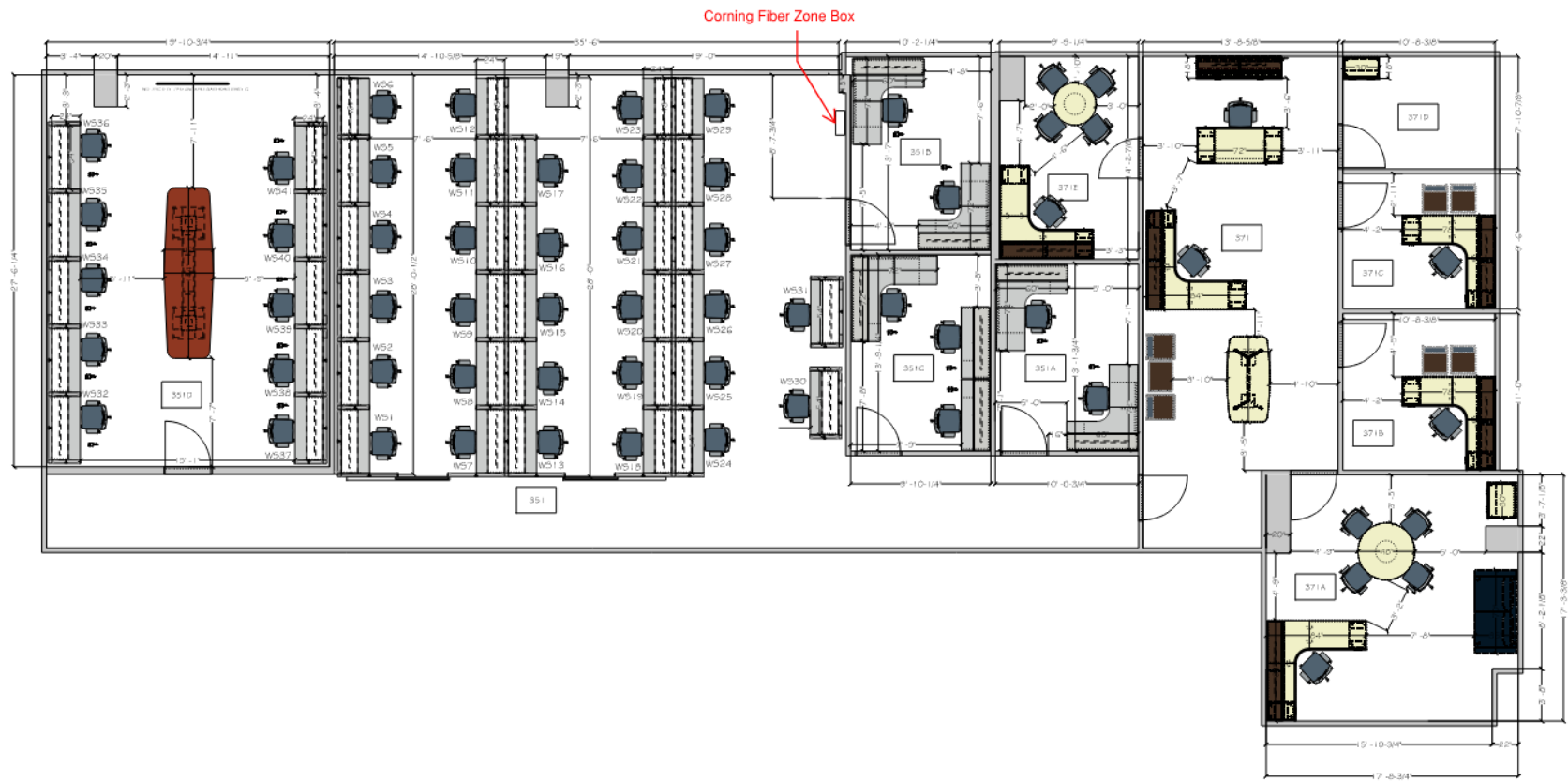
Net4 Horizontal Work Area Fiber

- The contractor shall install fifty (50) Government furnished 2-strand Multi-Mode OM4 Aqua colored zipcord fiber optic cables from the Corning zone box in Rm 351 to each cubicle, office and printer locations needing this network connectivity.
 - The contractor will terminate the fifty (50) 2-strand Aqua zipcord within the Corning zone box using one hundred (100) contractor provided Corning Unicam LC connectors.
 - The contractor shall provide and install fifty (50) Aqua duplex LC keystone non-keyed adapters within each faceplate.
 - The contractor will terminate all fifty (50) 2-strand Aqua zipcord fibers using one hundred (100) contractor provided Corning Unicam connectors.

Testing and Install Standards

- Upon completion of fiber splicing and connector termination, the contractor will certify each strand using a Fiber Certification test set and will provide all results to the customer upon completion of the project.
- The contractor will install and provide labeling on each cable according to Schriever Space Force Base Instruction 17-201 and uphold ICD 705 base security requirements when making any penetrations through SCIF walls.

Figure 1 Floorplan



Government Furnished Bill of Materials

QTY	Manufacturer	Item Description	Item #
1	Corning	Multimode 50um OM4 24F 2000'	024T88-37190-RS
1	Corning	Multimode 50um OM4 24F 2000'	024T88-37190-RD
1	Corning	Multimode 50um OM4 24F 2000'	024T88-37190-YL
1	Corning	Fiber Zone Box 4 RU	FZB-04U
10	Corning	CCH Splice Cassette 24F OM4 LC	CCH-CS24-E4-P00QE
1	Corning	Fiber Distro Panel (COMM Rack User)	CCH-04U
12	Corning	UniCam Connector LC 50 um MM OM3/4 25 pack	95-050-99-X-Z
12	Corning	Corning Optical Zip Rose 1000'	002T58-35190-RS
50	CP Technologies	Fiber Patch Cords 1M Rose	CP TECHNOLOGSLCLC-01-OM4-PK
75	CP Technologies	Fiber Patch Cords 2M Rose	CP TECHNOLOGSLCLC-02-OM4-PK
4	Corning	Fiber Bulkhead LC 12P (User)	CCH-CP24-E4
1	Corning	Fiber Distro Panel (COMM RM Users)	CCH-02U
2	Corning	Corning Optical Zip Yellow 1000'	002T58-35190-YL
5	CP Technologies	Fiber Patch Cords 1M Yellow	CP TECHNOLOGSLCLC-01-OM4-YW
5	CP Technologies	Fiber Patch Cords 2M Yellow	CP TECHNOLOGSLCLC-02-OM4-YW
1	Corning	Multimode 50um OM4 24F 2000'	024T88-33190-29