**Tishomingo C2 Internal Connections Additional Specs**

**(401) Cabling Data Drops** – Minimum CAT 6, Only Data Drops that are ERate Eligible to be funded.

1. Quantities as follows:

a. ES – 125

b. HS - 276

Quantities may be adjusted by the Vendor for their solution

**(5) Cabling Fiber Runs** - Single Mode Fiber

1. Must be Precision Terminated with Fusion Spliced ends

2. Runs are all from MDF to IDF Closets

3. Quantities as follows:

a. ES – 1x (Minimum of 6x Strands)

b. HS – 3x (Minimum of 6x Strands)

c. HS – 1x (Minimum of 24x Strands)

Quantities may be adjusted by the Vendor for their solution

**(15) Switches** **& (60) Related Components** – Description/Minimum Specifications and Requirements

1. Must include all Patch Cords, Stacking Cables, GBICS / SFP and SFP+ Optics, and Labor, etc. to provide a Turn-key Solution

2. 48 Port, Enterprise Class, Layer2 / Layer3, min. of 256 Gbps of Aggregated Switch Bandwidth

3. Must Support Virtual Switch Stacking via 10Gpbs Modules or better and support up to eight nodes in the stack

4. Must have CLI Access and Local Management Port

5. Must support POE+ (802.3AT / 30W Per Port)

6. Licensing is needed to allow for a minimum of 4 SFP/SFP+ Ports with 10Gbps Links to Upstream/Downstream Distribution Closets / Switches

7. Fully compatible with Existing Switch Infrastructure

8. Preferred Vendor: Extreme Networks

9. Quantities as follows:

a. ES – 5

b. HS – 10

Quantities may be adjusted by the Vendor for their solution

**(5) Uninterruptible Power Supplies**, (UPS), Minimum Requirements

1. Minimum 1500VA, Rackmount with Network Management Cards

2. Preferred Vendor – Cyber Power

3. Quantities as follows:

a. ES – 1x (UPS and 1x Mgmt Card)

b. HS – 4x (UPS and 4x Mgmt Card)

Quantities may be adjusted by the Vendor for their solution

**(49) Wireless Access Points** Minimum Requirements

1. Must support POE+

2. Maximum Throughput: 4,800Mbps

3. Fully Compatible with the current wireless environment

4. Preferred Vendor: Ubiquiti

5. Quantities as follows:

a. ES – 13

b. HS – 36

Quantities may be adjusted by the Vendor for their solution

**(5) Racks and Enclosures**– Descriptions and Min. Requirements

1. Must include Horizontal and Vertical Wire Management as needed.

2. Specifications and Quantities

 a. ES – 1x (4 Post, Floor to Ceiling Rack, with 1x Vertical Wire Mgmt and 6x Horizontal Mgmt)

 b. HS – 1x (12 - 15U Enclosure, with 1x Vertical Wire Mgmt and 2x Horizontal Mgmt)

 c. HS – 1x (12 - 15U Enclosure, with 1x Vertical Wire Mgmt and 2x Horizontal Mgmt)

 d. HS - 1x (4 Post, Floor to Ceiling Rack, with 1x Vertical Wire Mgmt and 4x Horizontal Mgmt)

 e. HS - 1x (4 Post, Floor to Ceiling Rack, with 1x Vertical Wire Mgmt and 8x Horizontal Mgmt)

Quantities and Sizes may be adjusted by the Vendor for their solution