

**Wilma P. Mankiller Health Center Addition
 BID PACKAGE #27 – Low Voltage
 10-12-20**

SCOPE SUMMARY:

DIVISION: 0	- Bidding Requirements and Contract Forms,	Complete, as Applicable;
DIVISION: 1	- General Requirements,	Complete
DIVISION: 7	- Thermal and Moisture Protection,	As Applicable;
DIVISION: 8	- Openings,	As Applicable;
DIVISION: 21	- Fire Suppression,	As Applicable;
DIVISION: 26	- Electrical,	As Applicable;
DIVISION: 27	- Communications,	Complete
DIVISION: 28	- Electronic Safety and Security,	Complete, as Applicable;
SECTION:	- Access Control and Alarm Monitoring System,	Complete; as Applicable

In the event of a conflict or ambiguity between the following “clarifications” to the scope of Work and the contract documents, the contract documents shall control. The following “Scope Clarifications” are intended to emphasize, amplify, and clarify the Work of this package, and do not supersede the contract documents or in any way list every item of work required by the contract documents for Work of this package.

Terminology:

- Contractor shall mean work package Bidder.
- Construction Manager (CM) shall mean M. Ross, Inc.

GENERAL SCOPE OF WORK INCLUSIONS:

Includes, but is not limited to, providing all the necessary labor, materials, tools, supplies, supervision, insurance, equipment, scaffolding, hoisting, fees, etc. necessary to provide the **Communications Network, Communications Cabling, and Electronic Safety and Security** work for the **Wilma P. Mankiller Health Center Expansion – located at 471688 Highway 51, Stilwell, OK 74960**, in accordance with the Contract Documents. It is further understood and agreed that this Work Package also includes the furnishing and installation of the below listed items regardless of whether or not they are in the listed specification section(s) or any other specification section(s), or shown on the plans. Drawing and detail references are provided for reference only and are not to be considered as all inclusive of Contract Documents for the particular items referenced. (Please note: The word “provide” when used herein shall mean furnish and install completely, including all costs for labor, materials, equipment, hoisting, layout, scaffolding, ladders, staging, tools, rigging and any other facilities necessary to complete the work”.)

Bid Package Scope Items:

1. Include in pricing any and all mobilizations that may be required.
2. Work hours will need to be flexible as to keep disruption or displacement to employees and patrons to a minimum. After hours and weekend work will be acceptable with prior notice to avoid disruption.
3. Before bidding on this project, make sure that all questions are sent in writing. Thoroughly look through the plans and specifications to make sure that all materials are covered in your bid unless they are shown to be excluded in the “Scope of Work Exclusions” section
4. Attached Cherokee Nation Network Cabling Specifications

Communication:

1. Furnish and install complete Communications Network as specified, shown and required for a complete, functional and operable system.
2. Provide all special back boxes, wire ways, etc. unique to the system.
3. Furnish and install all necessary cabling required for a complete, functional and operable system.
4. Provide all testing and labeling required for a complete, functional and operable system.

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Cabling:

5. Provide all labor, materials, equipment, installation, testing, labeling, engineering, documentation and certification as required by specification for the Twisted Pair Backbone and Horizontal Cabling system as specified and/or required for a complete system.
6. Provide all labor, materials, equipment, installation, testing, labeling, engineering, documentation and certification as required by specification for the Fiber Optic Backbone as specified, shown and required for as complete system.
7. Provide all labor, materials, equipment, installation and labeling as required by specification for the CATV Coaxial Backbone and Horizontal Cabling system as specified and/or required for as complete system. All termination and testing.
8. Power strips on all racks shall be provided by this Bid Package.
9. Furnish and install all racks, cabinets, runways, grounding, labeling, interconnecting jumpers, testing, certification, documentation in Tel/Comm Rooms.
10. Terminations shall include all necessary “keystones”, labels, and plates.
11. Include all “J-Hooks” beyond raceways as necessary to support system cable.
12. Contractor shall be aware that other contractors will be installing cable in cable trays and shall cooperate and coordinate fully.

Electronic Safety and Security:

13. Provide all labor, materials, equipment, installation, testing, labeling, engineering, documentation and certification as required by specification for the **Access Control and Alarm Monitoring** system as specified and/or required for a complete system.
14. Provide all labor, materials, equipment, installation, testing, labeling, engineering, documentation and certification as required by specification for the **Security Video Surveillance** system as specified, shown and required for as complete system.
15. Furnish and install all cabinets and special back boxes as required by systems.
16. Furnish and install all racks, cabinets, power supplies, runways, grounding, labeling, interconnecting jumpers, testing, certification, documentation as required for a complete system.

Communication and Security:

17. Coordinate with other contractors to determine required size for all cables entering all Tel/Comm Rooms.
18. Provide all fire safing and fire caulking of all penetrations in accordance with documents and to meet code as required. Note; all fire caulk to be per Cherokee Nation or other, more stringent requirements (Hilti – red in color) as directed.
19. Fire caulk all sleeves entering Tel/Comm Rooms regardless of content with Hilti re-enterable speed sleeves.
20. Ground all equipment and equipment racks.
21. Ground all shielded cables.
22. All cabling shall be neatly bundled and secured with Velcro straps and not ty raps.
23. All 120-volt AC circuits shall be by others.
24. Plywood back boards are provided by others.
25. Provide system components knocked-down as necessary to accommodate transport through the building, stairs, and upon availability, material hoist.
26. Provide vibration isolation and inertia bases for all equipment furnished by this Contract including any grouting of same.
27. Provide all vibration isolation and seismic restraints as specified and/or required.
28. Provide all field testing of work and systems as specified, including test and startup, commissioning, Owner training, O&M manuals, etc. as specified and/or required by Cherokee Nations IT requirements.
29. Provide a complete set of record drawings (red line documents) for entire scope of work.
30. Unit prices shall include all materials, overhead, profit, tools, labor, cabling, testing, labeling, engineering and documentation for a complete installation of the requested item.
31. Cherokee Nation Network Cabling Specifications is incorporated herein and is a portion of this Bid Package as if fully written out.

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GENERAL ITEMS:

Safety:

1. Comply with Construction Manager's Safety Policies and Insurance Requirements.
2. Submit Daily Project Reports to MRI daily, while on site.
3. Participate in and submit weekly safety audits as required by the Construction Manager.
4. Hard Hats and eye protection required at all times while on site.
5. In addition to other safety requirements required elsewhere in this bid package, this contractor shall replace or restore all safety rails, guards, fences or the like, which are temporarily removed or damaged by and for the Work of this package.

Project Coordination:

6. Provide mandatory on-site Subcontractor supervision while work is being performed.
7. If Work involves demolition of items to be salvaged and turned over to the Owner; Bidder shall remove, load, transfer and unload all salvaged items to and at locations designated by the Owner.
8. Coordinate all work with the Construction Manager to avoid delay and/or interference with other work and to ensure minimum interference with vehicular or pedestrian traffic and to permit unencumbered access to site and adjacent properties.
9. Subcontractor shall conform to Construction Manager's work hours. Normal work hours are 7:30 am to 4:00 pm or as otherwise required per schedule or by Cherokee Nation regulations and procedures. Additionally, all weather delays, coordination conflicts and work congestion delays are considered normal delays; as such, all normal delays will be made up on Saturday and Sunday.
10. Provide manpower and equipment mobilizations/remobilizations as required for the work in accordance with project schedule including all phasing and interim milestone dates.
11. Subcontractor in performance of this work agrees to cooperate and work harmoniously with other trades to achieve all interim and final completion dates and to coordinate the work to avoid compression (to the extent possible) for the benefit of all trades.
12. Provide as applicable to the work, all identification requirements including charting, tagging, labeling, marking tape and trace wires, stenciling and painting as specified, indicated, and/or required by jurisdictional authorities.
13. Subcontractor shall include daily cleanup of all waste and debris generated by their work, their employees, sub-tier subcontractors and suppliers. All waste shall be accumulated, removed, broken down, compacted, bundled and deposited in project dumpsters as provided by others. Subcontractor shall employ (as necessary) adequate personnel whose sole responsibility is the performance of clean-up described herein.
14. Additionally, each subcontractor will also be responsible for contributing personnel to a composite clean-up crew. This will not supersede daily clean-up as stipulated above. Crew of 5-10 : 1, Crew of 11-20 : 2, Crew of 21-40 : 3, Crew of 41 and above : 4.
15. Provide, schedule and coordinate with CM all required testing requirements including providing assistance, access, obtaining samples and data gathering, as required. All field testing and cost thereof for geotechnical, concrete, asphalt, masonry and structural steel is provided by others. Costs for all retesting due to failed tests and Subcontractor unpreparedness for tests, will be paid by this Work Package Subcontractor.
16. Provide as applicable to the scope of this Work package, all required factory or field testing, and systems including cleaning, disinfection, sterilization, and certifications as specified, indicated and/or as required and necessary by jurisdictional authorities for the Work.
17. Furnish, install and remove upon completion, all temporary protection for protecting existing or new improvements (whether public or private), work of other trades, stored materials, floors, and/or building finishes from damage from Work activities. Restore areas to new condition per documents and/or as required by the CM or jurisdictional authorities to new condition immediately following completion of the Work.
18. Provide and mark as applicable to the Work, all existing underground utility locations. Damage and repair to existing utilities resulting from the Work will be the responsibility of the Subcontractor.
19. Provide all field engineering and layout from benchmarks and base building control. Benchmarks and baseline control is furnished by others. This contractor is responsible for replacement of any damaged benchmarks,

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base line control, or layout work of other trades/packages damaged or destroyed by the work of this subcontractor.

20. Provide all temporary shoring and bracing that may be required for work of this package including all engineering, design and calculations stamped by a registered engineer in the State of Oklahoma. All costs and fees therefore as required are to be included as a portion of the bid.
21. Provide all hoisting as necessary, material transportation, dunnage, rigging, loading and unloading, etc. as required for the work of this bid package.
22. Provide, arrange, obtain and pay for all licenses, taps, connections, meters and appurtenances including all cutting and patching, testing, inspections, approvals and certifications.
23. Provide and comply with all Division 0 and 1 specifications.
24. All deliveries are to be coordinated through MRI to avoid traffic or Cherokee Nation disruptions. All deliveries shall be prescheduled with MRI to ensure that construction access is available when needed (Subcontractor is to cooperate, and work harmoniously with other trades to avoid delivery delays). Additionally, Subcontractor must have adequate flagmen where required to position truck(s) for unloading and to control traffic during truck positioning. All deliveries and components must be sized to fit within the designated construction entrances.
25. Provide all safety requirements including traffic and pedestrian control (i.e. signage, barricades, flashers, etc.), traffic covers, flagmen and flagging, etc. in conjunction with Work whether on public or private property for the prosecution and completion of this work scope.
26. Attend weekly on-site Supervisors, foreman, safety meetings, etc. as required by the Construction Manager.
27. If applicable, provide all fuel for fuel storage tanks (fuel oil, diesel, etc.) as required for all start-up, testing and commissioning for all permanent power generating equipment indicated. Upon turnover to Owner, provide full (completely filled) fuel storage containers with appropriate fuels.
28. As applicable to the Work, provide all attic stock, extra materials, chemicals, special tools, filters, testing equipment, etc. as indicated, specified, as required.
29. Provide coordination, assistance, and necessary access for the Owner's furnished Testing Laboratory, including notification, obtaining samples and data gathering as required for scope of work. Costs for retesting due to failed tests and/or for Contractor's unpreparedness, will be paid by this Contractor.
30. Provide manpower and equipment mobilizations and remobilizations as required for the work of this agreement in accordance with project schedule including phasing and interim milestone dates.
31. Any shutdown of services to Cherokee Nation requires a 30 day notice.
32. Costs for bonds shall be provided (separately stated) with your proposal. Additionally, provide cost of bonds for any applicable alternates or unit prices. All bidders with contracts greater than \$100,000 must be bondable.

Administrative:

33. All cables to be labeled on both ends as well as wall plates / biscuits.
34. All cables to be tested and certified before turned over to owner.
35. Camera / access control / networking records drawings will be delivered to owner as each section installed is complete.
36. Provide complete drop count by AV, networking, camera, and access control – as applicable.
37. Subcontractor to provide all quantities as required for scope of work.
38. Subcontractor will be responsible for timely submission of all submittals including but not limited to: daily reports, shop drawings, licenses, certificates, permits, manifests, samples, product data sheets, MSDS information, LEED requirements and all other submittals required by Contract Documents. Note: furnish the required number of copies including electronic copies of all submittals in quantities as determined by the CM.
39. Subcontractor agrees to diligently process submittals, expedite material deliveries and to supply required manpower and resources to complete work in accordance with M. Ross, Inc. master schedule including all individual milestone dates, Owner equipment installation dates, and Owner's completion date. If progress by Subcontractor is inadequate, MRI may direct Subcontractor to immediately remedy scheduling inadequacies at no additional cost to MRI or the Owner. Failure to meet milestone or completion dates will also subject Subcontractor to a \$1,000 per calendar day damages as listed in the Instructions to Bidders.
40. Provide all mock-ups as indicated and required in specifications.

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41. Provide all licenses, permits, fees, and certifications and arrange for inspections and tests as required for the work. (Coordinate all inspections and tests through Construction Manager).
42. General building permit and payment for the required fee is provided by others, however, Subcontractor except as otherwise indicated, shall provide, arrange, obtain and pay for all other required permits including trade, Infrastructure Development Process, and/or similar specialty permits required by jurisdictional authorities.
43. Provide, arrange, obtain and pay for all licenses, taps, connections, meters and appurtenances, all cutting and patching, testing, inspections, approvals and certifications, safety requirements, traffic and pedestrian control (i.e. signage, barricades, flashers, etc.), traffic covers, flagmen and flagging, etc. in conjunction with Work whether on public or private property for the prosecution and completion of this work scope
44. Submit to the Construction Manager a self-performed, typewritten pre-punch listing of items of work including for any embedded, concealed, in-wall, and/or above ceilings as part of this contractor's quality control procedures.
45. Provide all warranties and specialty as specified.
46. Schedule of Values and Applications for Payment shall be broken down as required by the Owner and/or the Construction Manager.
47. Contractors, subcontractors and lower tier subcontractors and suppliers lien releases must be received monthly prior to processing of the following months application for payment. Additionally, provide all required reports, certifications, etc. as indicated above. Upon 80% of total billing, Subcontract shall submit all close-out documents. If close-out documents are not submitted at 80%, Subcontractor shall not be paid until close-out documents are submitted in form and format (hardcopies and electronic media) as required.
48. Provide all test and (if required) balance, start-up, commissioning reports, Owner training information, record drawings (PDF), O&M manuals, etc. as required and specified. All close-out information is to be submitted as one package.
49. The terms and conditions contained in the following documents, including General Provisions – Article 2.5, Indemnification as included with the contract documents; are incorporated herein by reference as if fully written out;
 - MRI General Provisions for Subcontracts;
 - Exhibit "B" Subcontract Performance and Payment Bonds;
 - Exhibit "C" Subcontractors Minimum Insurance Requirements;
 - Exhibit "D" of Subcontract;
 - Exhibit "E" Indemnification; and
 - Exhibit "F" Preliminary Schedule.

SCOPE OF WORK EXCLUSIONS:

1. General Building Permit Fees.
2. Soils Testing.
3. Removal of hazardous waste unless generated by scope of work.
4. Finish Painting unless otherwise included.
5. Fire Alarm System
6. All conduit, raceways, baskets, ladder racks, ladder trays, wire ways, and standard back boxes as specified and/or required.
7. Installation of access doors and frames in drywall partitions.
8. Temperature control and interlock wiring per Division 23 documents.