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### **SCOPE SUMMARY:**

| DIVISION: | 00      | - PROCUREMENT AND CONTRACTING REQUIREMENTS | Complete;      |
|-----------|---------|--|----------------|
| DIVISION: | 01      | - GENERAL REQUIREMENTS                     | As Applicable; |
| SECTION:  | 07 8400 | - PENETRATION FIRESTOPPIING                | As Applicable; |
| SECTION:  | 07 9005 | - JOINT SEALANTS                           | As Applicable; |
| SECTION:  | 08 0000 | - OPENINGS                                 | As Applicable; |
| DIVISION: | 22      | - PLUMBING                                 | Complete;      |
| DIVISION: | 23      | - HEATING, VENTILATION, AIR CONDITIONING   | As Applicable; |
| DIVISION: | 26      | - ELECTRICAL                               | As Applicable; |
| DIVISION: | 27      | - COMMUNICATIONS                           | 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 contract documents or in any way list every item of work required by contract documents for this work 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 Plumbing for the Cherokee Nation - W.W. Keeler Second Story Addition and Remodel - located at 17675 South Muskogee Avenue, Tahlequah, OK 74464 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 drawings. Drawing and detail references are provided for reference only and are not to be considered as all inclusive of Contract Documents for 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:**

#### Mechanical - (Plumbing Specific) Work

Anticipate work of this package to be performed in several phases and could be controlled by performance
of other site and building work. For example, masonry on the canopy will be installed later in the project.
Contractor shall be responsible for all mobilizations as required.

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- 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. No disruption to Council meeting (which should be three days a month and we will provide a calendar for these events) or meetings that Administration may have.
- 3. Provide all plumbing work as specified in division 22 for new construction.
- 4. All copper domestic water piping, cast iron vents, and cast iron roof drains piping.
- 5. Provide all plumbing work as applicable to complete the Domestic Water system as specified in section 22 including all piping, equipment, insulation, fixtures, and appurtenances. (Owner provided equipment connections to be included in this bid package).
- 6. Provide all Plumbing work as applicable to complete the Sanitary Waste and Vent systems as specified in section 22 13 16 including all piping, equipment, insulation, fixtures, and appurtenances.
- 7. Provide all natural gas service line for the Natural Gas Piping system. The Natural Gas Piping work associated with this item is to include:
  - a. All pipe, fittings, valves, and associated accessories for the Natural Gas Piping system.
  - b. All connection(s) to existing lines. All remaining natural gas piping work will be complete by this package.
  - c. Fee to utility service for natural gas tap by owner.
  - d. Owner provided equipment connections to be included in this bid package.
- 8. Provide and install the water softener and water heaters.
- 9. Provide all caulking and sealing around plumbing fixtures.
- 10. The plumbing work will include verifying that existing utility lines are clean and accept prior to making final connection to building systems
- 11. Provide rough in and final hook up for bathroom fixtures, & kitchen equipment.
- 12. Provide all exterior plumbing fixtures including hose bibs.
- 13. Provide and install floor drains, floor sinks, roof drains, electrical unit heaters, water heaters, and hose bibs.
- 14. This package will be responsible for providing the hook up of the water piping.
- 15. Furnish and install all plumbing fixtures and equipment.
- 16. All required fiberglass insulation, and heat trace for domestic water, roof drains, and grease waste as directed in plans and specification. This does not include any insulation that is specifically excluded in the exclusions.
- 17. All required coordination and tie into owner provided equipment.
- 18. Provide all required accessories as needed for the installation of plumbing fixtures.

### General Items to be included in Plumbing and HVAC Scope

- 1. Provide complete shop drawings and submittal information for the work as required by the contract documents Two (2) weeks after Letter of Intent.
- 2. The delivery and installation of all plumbing equipment will be coordinated with the Construction Manager.
- 3. The provision and installation of all equipment will be compatible and integrate fully with the building automation requirements as outlined in the construction documents.
- 4. Protect all trees indicated to remain (no parking or material storage or temporary staging of equipment or materials within the drip lines of trees) as required by the contract documents.
- 5. Provide all trenching and plumbing work in accordance with and as required by the Geotechnical Engineering Report as prepared by Building and Earth, dated May 25, 2011. Provide all materials including their submission, importing, placement and required compaction of approved materials to sub grade elevations as required. Refer to specification for proper fill material and compaction.
- 6. Provide temporary bracing, shoring and hanging of existing utilities necessary to perform the work and

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properly protect existing facilities.

- 7. Provide all granular/aggregate backfill required at trenches under asphalt and concrete paving, curb & gutter and sidewalks as indicated on the contract documents and/or required by jurisdictional authorities.
- 8. Provide all demolition, haul off, and replacement of existing asphalt paving and roads required for the completion of the work including saw cuts, soil treatment, compaction, and aggregate sub base as required by the Contract Documents and jurisdictional authorities.
- 9. Provide all demolition, haul off, and replacement of existing concrete pavement, sidewalk, curb and gutter required for the completion of the work including saw cuts, soil treatment, compaction, and aggregate sub base as required by the Contract Documents and jurisdictional authorities.
- 10. Locate, mark and protect all existing utilities line indicated to remain. Pothole exploration will be utilized as necessary. (This will require hiring a private locator service. "CALL OKIE" is not sufficient.)
- 11. Load haul and legally dispose of all excess excavated, unsuitable and spoil materials.
- 12. Maintain, repair and replace all erosion control devices required including all silt fence, straw bale dikes and sedimentation traps, in conformance with best practice and as specified. Provide all requirements for Storm Water Pollution control as most specifically indicated and as required per EPA guidelines. The Erosion control measure will be originally installed by the demolition contractor. It will be the responsibility of this contractor to keep posted information on the SWPPP plan in the Construction Managers office. This shall be performed while this contractor is onsite.
- 13. Provide and coordinate all plumbing services and final connect all Equipment and all items Owner Provided and furnished under other trade sections.
- 14. Provide all steel hangers, framing including misc. items for attachment to structure, all supports, Unistrut etc. required for work for Division 22 Plumbing work. All hangers and supports to be prime painted or galvanized as required.
- 15. Provide all vibration isolation and seismic fittings/restraints as specified.
- 16. Provide all roof penetrations and openings including cutting and removal of metal decking. Make all openings weather and water tight, free of leaks as required for all plumbing roof work.
- 17. Provide weather and water tight closures for all exterior building and roof penetrations including required curbs, frames, flashing and counter flashings, trim, sleeves, pitch pans, boots, gaskets, pipe collars, pipe supports, sealants, clamps, etc. for all plumbing work.
- 18. Provide roofing protection for all roof related plumbing work.
- 19. Perform preliminary air testing prior to hydrostatic testing of all piping to avoid leakage and damage to other work or floors below during actual water testing if required.
- 20. Perform all system drain downs as required with no liquid discharge onto floors, adjacent spaces, floors below, or into any occupied spaces for testing. Provide bucket brigade if required or if drain down cannot be hosed to a floor drain.
- 21. Reclaim any contaminants and dispose of in accordance with all jurisdictional requirements.
- 22. Coordinate and cooperate with the mechanical, electrical and other trade work at tight and congested above ceiling areas. Provide all necessary bends, fittings, etc. as required for properly installed systems to minimize elevation and space conflicts.
- 23. Furnish and install all sleeves, coring, and drilling of walls and floors required for contractor's work.
- 24. Provide sheet metal protective covers for all exterior pipe penetrations thru slab and wall areas.
- 25. Provide all pipe, and equipment identification, stencils, tags, banding, etc. as specified, indicated by documents or as required by code.
- 26. Provide all templates, layout, drilling, and epoxy grouting required for all anchorage.
- 27. Provide all penetration seals, escutcheons, plate covers, and sealing required for work of this package.
- 28. Provide all caulking, joint sealant, and acoustical sealants for all penetrations including sealing of all Plumbing appurtenances to finished walls, countertops, and/or floor surfaces in accordance with specification 07 92 00. Subcontractor is also required to seal (including fire or acoustical) all thru wall penetrations which occur. Additionally, acoustical seal all plumbing penetrations at any STC rated walls.

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- 29. Provide all fire safe and fire caulk penetrations in as specified in section 07 84 13 Penetration Firestopping and section 07 84 46 Fire-Resistive Joint Systems and as indicated per documents and required by code.
- 30. Provide "Water Resistant" pipe insulation in risers within chases that will be closed up prior to building dryin.
- 31. Coordinate with Structural Steel supplier for all openings and framing required for penetrations which may be required in roofs, structural steel columns, beams and metal decking.
- 32. Furnish for installation by others, all secure access panels for all required Division 22 Plumbing work. In addition, Access panels are required at all locations for plumbing components requiring testing, replacement parts, maintenance, etc. behind or concealed by hard surfaces (i.e. drywall, concrete, masonry, etc.) and further defined by documents. (It is the ultimate responsibility of the Plumbing contractors to insure proper size, placement and elevation of all access panels provided for their Plumbing work.)
- 33. Furnish all templates and back boxes to the Masonry Subcontractor to coordinate blockout/openings in mechanical room walls, if required. (It is the ultimate responsibility of the Plumbing contractors to insure proper size, placement and elevation of all blockouts provided for their Plumbing work).
- 34. Provide all grouting required for equipment bases.
- 35. Protect all concrete and finish surfaces. Clean, if stained, all concrete and finish surfaces to the satisfaction of M. Ross, Inc. and the Owner.
- 36. Provide all field testing of work for specified systems

### **General Items:**

#### Safety:

- 1. Comply with Construction Manager's Safety Policies and Insurance Requirements.
- 2. Submit Daily Project Reports to M. Ross, Inc. daily, while on site.
- 3. Participate in and submit weekly safety audits as required by the Construction Manager.
- 4. Hard Hats and eye protection is required at all times while on site.
- 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 Health Center 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.

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- 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, subtier subcontractors and suppliers. All waste shall be accumulated, removed, broken down, compacted, bundled and deposited at subcontractors expense. 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 5-10 1, Crew 11-20 2, Crew 21-40 3, Crew 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, base line control, or layout work of other trades/packages damaged or destroyed by the work of this subcontractor.
- 20. Provide all required dewatering, pumping, bailing, squeeging, mopping, fans, etc. necessary to keep all work areas free of water during performance of Work. All discharge shall be in accordance with EPA guidelines or other more stringent jurisdictional and/or Owner requirements. Protect all existing and new finished surfaces from rutting, dirt, debris, stain, mold and repair all damage resulting from standing or discharged water.
- 21. 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.
- 22. Provide all hoisting as necessary, material transportation, dunnage, rigging, loading and unloading, etc. as required for the work of this bid package.
- 23. Provide, arrange, obtain and pay for all licenses, taps, connections, meters and appurtenances including all cutting and patching, testing, inspections, approvals and certifications.
- 24. Provide and comply with all Division 0 and 1 specifications.
- 25. All deliveries are to be coordinated through M. Ross, Inc. and may be restricted to nights or weekends to avoid traffic or Health Center disruptions. All deliveries shall be prescheduled with M. Ross, Inc. 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.
- 26. Provide all safety requirements including traffic and pedestrian control (i.e. signage, barricades, flashers, etc.),

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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.

- 27. Attend weekly on-site Supervisors, foreman, safety meetings, etc. as required by the Construction Manager.
- 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. 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.
- 34. 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, M. Ross, Inc. may direct Subcontractor to immediately remedy scheduling inadequacies at no additional cost to M. Ross, Inc. 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.
- 35. Provide all mock-ups as indicated and required in specifications.
- 36. 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).
- 37. 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.
- 38. 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
- 39. 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.
- 40. Provide all warranties and specialty as specified.
- 41. Schedule of Values and Applications for Payment shall be broken down as required by the Owner and/or the Construction Manager.
- 42. 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.

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- 43. Provide all test and balance, start-up, and 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.
- 44. 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:

M. Ross, Inc. General Provisions for Subcontracts

Exhibit "B" Subcontract Performance and Payment Bonds

Exhibit "C" Subcontractors Minimum Insurance Requirements

Exhibit "D" of Subcontract;

Exhibit "E" Indemnification;

Exhibit "F" Preliminary Schedule

### **SCOPE OF WORK EXCLUSIONS:**

- 1. Soil and Concrete Testing. (Compaction testing of your excavations is included as with Plumbing work)
- 2. All Fire Suppression System as specified.
- 3. Irrigation water service meter, sleeves, and connection.
- 4. Electrical Service Line.