Cherokee Nation W.W. Keeler Second Story Addition and Remodel Tahlequah, Oklahoma

WORK PACKAGE # 8C – Glass, Glazing, & Storefront

SCOPE SUMMARY:

DIVISION: 0	- LEGAL DOCUMENTS	As Applicable;
DIVISION: 1	- GENERAL REQUIREMENTS	As Applicable;
SECTION: 079000	- JOINT SEALERS	As Applicable;
SECTION: 084230	- AUTOMATIC SLIDING DOORS	Complete;
SECTION: 084313	- ALUMINUM-FRAMED STOREFRONTS	Complete;
SECTION: 085654	- SECURITY AND DETENTION WINDOWS	Complete;
SECTION: 087100	- DOOR HARDWARE	As Applicable;
SECTION: 088100	- GLASS GLAZING	Complete;
SECTION: 088300	- MIRRORS	Complete;

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 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 <u>Bid Package 8C – Glass</u> <u>& Glazing, & Storefronts</u> 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 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".)

- 1. Include in pricing any and all mobilizations that may be required due to the canopy or any other tasks that may be required to be completed at a later date
- 2. See attached drawing for phasing of the existing facility. The installation shall be broken into 5 phases. The first phase shall be the completion of the 2nd floor addition. Contractor shall included mobilization as required for these phases. There will be a break between each phase as the owner will move each department to the new 2nd floor area.
- 3. 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 meetings (which should be three days a month and we will provide a calendar for these events) or meetings that Administration may have.

- 4. 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
- 5. Provide all Glazed Aluminum Windows complete.
- 6. Provide all required Glass and Glazing complete.
- 7. Provide all etched glass complete.
- 8. Provide all mirrors (unframed) complete.
- 9. Provide all metal sizes, profiles, components and finishes, complete.
- 10. Provide all insulated metal infill panels, as required.
- 11. Provide all horizontal break-metal mullions, sills, stools, headers, accents, fillers, closures, jambs, and angle, etc. for all components.
- 12. Provide all required custom extrusions.
- 13. Provide all hardware being installed in aluminum doors.
- 14. Provide all attachment plates, clips or angles for attachments including as required, all embeds cast into structure for attachment to building frame, along with dimensioned placing plans for structure contractor(s) installation of these anchors, if applicable.
- 15. This subcontractor shall include all wood shims between the frames and building wall materials.
- 16. All caulking and sealants at perimeter of all aluminum glazed and framed systems, both sides exterior side and interior side. Includes any glass to glass, glass to aluminum joints, and glass to dissimilar materials.
- 17. All miscellaneous glass and glazing per the contract documents.
- 18. All wood and hollow metal door light, vision kit, vision lite, sidelight and borrowed light glazing. Note all pre-finished wood doors come pre-glazed by others.
- 19. All fire rated glass and specialty glass and glazing as indicated.
- 20. All wire glass as indicated.
- 21. All glass protection "X" markings as specified, when directed by the CM. This contractor to clean and polish glass and aluminum at completion of the work of this contract.
- 22. All glass and glazing as specified and scheduled.
- 23. All Spandrel glass if required.
- 24. Provide any miscellaneous exterior window sills and required sill and head flashings for weather tight installations or if required by the manufacturer.
- 25. Provide samples and mockups as specified. Remove mockups at completion
- 26. All field testing as specified.
- 27. Provide all temporary enclosures as required if windows or glass are not installed in accordance with schedule.
- 28. All aluminum entrances, glass entrances, and storefronts.
- 29. Provide manufacturers previous testing data and engineering data that complies with specified performance requirements (this is in lieu of a new large scale mockup and test).
- 30. All metal sizes and profiles to be as detailed.
- 31. All automatic sliding entry doors complete with operators, controls and safety devices. Includes all power and control wiring concealed in the door header.
- 32. All glass entry doors, including hardware as specified.
- 33. All horizontal break metal sills, headers and accents required and/or specified.
- 34. All miscellaneous break metal closures and fillers at corners, jambs and angles.
- 35. Custom extrusions as detailed and required.
- 36. All touchup painting of anchors.
- 37. All interior storefront, aluminum doors, sidelights and borrowed lights.
- 38. All sliding glass track and glazing at the areas as indicated by the documents.
- 39. All flashings, receivers, break metal etc as required to interface with the metal siding system or

the composite panel systems.

- 40. All caulking and sealants at perimeter of aluminum glazing systems, both at the exterior side and the interior side. Includes any glass to glass or glass to aluminum joints. Also, included caulking where work of this contract interfaces with metal siding or composite panel systems.
- 41. All interior glass walls, vision assemblies, aluminum doors and glass doors, including patterned glass as specified
- 42. Special glass and finish warranty as specified.
- 43. Install any door hardware furnished under section 087100 to be installed in your work. Provide any additional hardware required by the storefront specifications or notes or details. Provide weather stripping and threshold at door. Thresholds are to be set in a full bed of caulking (front, middle and back with architect approved caulking material).
- 44. Provide any miscellaneous sill base flashings or head flashings required for a weathertight installation or if required by the manufacturer.
- 45. All field testing and water testing as specified.
- 46. All aluminum entrances, glass entrances, storefronts, curtain walls, and structural silicone glazed curtain walls.
- 47. Provide manufacturers previous testing data and engineering data that complies with specified performance requirements.
- 48. All metal sizes and profiles to be as detailed.
- 49. All glass entry doors, including hardware as specified.
- 50. All metal studs and ½" exterior sheathing required for aluminum cladding by others. Provide shop drawings of aluminum cladding with dimensions necessary for a complete installation by others.
- 51. This subcontractor shall include the $+/- \frac{1}{4}$ " & 3/8" wood shim between the aluminum frame and the building wall materials.
- 52. All miscellaneous glass and glazing per the contract documents.
- 53. All fire rated glass as indicated
- 54. All field testing and water testing as specified
- 55. Provide shop drawings and all required calculations and, if applicable, reviewed and stamped by a Registered Engineer licensed to practice in Oklahoma.
- 56. All applicable Sealants and Caulking as specified in the contract documents, per Specification Section 079000.
- 57. Provide systems by specified manufacturers as identified in each relevant specification. Approved substitutions must be made in accordance with specification section 016000, prior to bid.
- 58. Provide all framing, fasteners, wood blocking, clips, wind load clips, finishes, panels and appurtenance for a complete system as required by the contract documents.
- 59. All aluminum break metal and trim required for a complete and finished installation of the work of this package (Aluminum Tube). Scope of work will also include all sheathing, insulation, etc.
- 60. Provide all and/or coordination of low voltage and controls including rough-in, raceways, wire circuitry and connection for all electronic operated or automatic doors. Electrical Power supply will be provided by the electric contractor.
- 61. All hardware (except cylinders) for aluminum doors as required by the contract documents. Install cylinder as supplied by the hardware package.
- 62. All interior glass and glazing systems for glass partitions and interior windows as drawn, scheduled, or otherwise indicated by the contract documents.
- 63. All interior aluminum door frames and glass as indicated by the door and door frame schedules. Includes all glass in hollow metal frames and wood doors.
- 64. All pattern glass or other special glazing as indicated in the glazing schedule.

- 65. All interior and exterior caulking, sealants, backer rods, and flashings of exterior and interior window and doors systems as required and specified for complete finish and watertight systems.
- 66. Caulking and sealants of all portions of this package to any other adjacent material as indicated by the contract documents shall be provided by this contractor.
- 67. All required shims, felts, sheathings, or other devices necessary to separate dissimilar materials.
- 68. Provide all Mock-ups, mock-up test assemblies, testing, test reports, lodging, travel for all parties, etc. for the curtain wall assembly per specification section 088150.
- 69. Replace any and all chipped or broken glass, and other transparent finished surfaces provided under this package as required for Owner occupancy and acceptance. Subcontractor shall include allowance for <u>3% replacement of broken</u>, cracked, scratched glazing systems from damage outside the scope of this subcontract.
- 70. Construction cleaning of glass and framing to remove stickers, packaging materials, residues, etc. as the job progresses. A completion final, wash and polish all glass and aluminum, inside and out just prior to Owner acceptance.
- 71. All temporary dry-in for all openings after glazing structure is in place. The intent is to provide temporary measures at the edges of each exterior window system or as necessary to provide a weatherproof enclosure by the dry-in date in the master schedule.
- 72. All bull nosed profile covers as indicated in the drawings.
- 73. Furnish and install flashing pertaining to the work of this bid package.
- 74. Tempered glass at all areas required by codes of prevailing jurisdictions and by climatic conditions.
- 75. Application of bitumastic or other materials as required to prevent corrosive interaction of aluminum with dissimilar metals.
- 76. Thresholds, weatherstripping, silencers, and miscellaneous appurtenances as normally employed in facilities of this nature for the applications involved.
- 77. Sheet metal work associated with this bid package including, but not limited to aluminum closures, pan flashing, and through wall/drip flashing.
- 78. All steel tube column structure for curtain wall.
- 79. All interior glazing including tempered, rated, and leaded glass as required by authorities having jurisdiction.
- 80. All operable windows where indicated on the drawings.
- 81. Aluminum sub sill with a drip edge and end dams set in sealant.
- 82. All aluminum covers to match the curtain wall system as shown on the contract documents.
- 83. Determination as to the appropriateness of the anchoring with regard to height and wind loads. If wood blocking is a part of the engineered system, the wood blocking will be included in the total engineered system. (Engineered shop drawings with registered Oklahoma engineer stamp will be required.)
- 84. Field welding as required (to be performed by certified welders).
- 85. Perform all layout and surveying required for proper placement of all work installed under this bid package, including field measurements of openings prior to fabrications (as necessary).
- 86. Properly clean and prepare surfaces to receive paint.
- 87. Maintain and protect aluminum to prohibit contact with dissimilar metals.
- 88. Stool extensions to accommodate drywall at all locations other than where window stools of another material are indicated or where the sash abuts the floors surface.
- 89. Furnishing of any embedded anchoring devices for installation by others in concrete.
- 90. Fire safing insulation at slab edge and curtain wall, including the perimeter fire containment system.
- 91. All finishes, coatings, patterns, colors, flashings, trim, shims, closures, etc. as required.

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, eye protection, & high visibility vests are 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. 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 Cherokee Nation and 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 at Subcontractors expense. Subcontractor shall employ (as necessary) adequate personnel whose sole responsibility is the performance of clean-up described herein.
- 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 Cherokee Nation, 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. 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. All deliveries are to be coordinated through M. Ross Inc. and may be restricted to nights or weekends to avoid traffic or hospital 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.
- 24. All work in existing building and work outside of construction zones where work is to be performed areas must be pre-scheduled though M. Ross Inc. as specified, including a minimum 14 working days advanced scheduling (or longer if so specified). All areas outside of construction zones will remain operational and hard temporary partitions (drywall) are to be avoided and will not be installed.
- 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.

Administrative:

29. 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.

- 30. 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.
- 31. Provide all mock-ups as indicated and required,
- 32. 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).
- 33. 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.
- 34. 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
- 35. 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.
- 36. Subcontractor is responsible for all applicable federal, state, municipal and local sales and use taxes.
- 37. Provide all warranties and specialty as specified.
- 38. Schedule of Values and Applications for Payment shall be broken down as required by the Owner and/or the Construction Manager.
- 39. 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.
- 40. 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.
- 41. Costs for performance and payment bonds shall be stated separately as an add to your base bid and any applicable alternates or unit prices. All base bids, or combination Base Bid and any Alternate, of \$100,000 or above will require Performance and Payment Bonds.
- 42. 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" Schedule

SCOPE OF WORK EXCLUSIONS: