BID PACKAGE: 03 Electrical and Low Voltage

SCOPE OF WORK SUMMARY:

The scope of work includes, but is not necessarily limited to, furnishing all labor, materials, accessories, appliances, tools, equipment, facilities, transportation, applicable taxes and services necessary for, and incidental to, performing all operations in connection with the specification sections listed below, complete as indicated on the drawings and specifications or incidental to the requirements of this Bid Package Contractor and/or specified herein, unless specifically excluded.

The Following are the Project Contract Documents and are primary to this Bid Package:

Bid Packages

Bid Package #1 – General Construction Bid Package #2 – Demolition and Grading Bid Package #3 – Electrical and Low Voltage Bid Package #4 – Plumbing and Site Utilities

- Plans Maybrook Elementary School (Temporary) Interim Housing October 28, 2022
- **Project Bid Documents** Multi-Prime Bidding Documents for the Lowell Joint School District for Bid No. 2223-01 Maybrook Elementary School Interim Housing Project January 25, 2023

Notice Inviting Bids Instructions to Bidders **Checklist of Mandatory Bid Forms** Designation of Subcontractors **Designation of Subcontractors Form** Bid Form Trade Contractor's Certificate Regarding Workers' Compensation Form Non-Collusion Declaration Bid Guarantee Form **Bid Bond Form** Request for Substitution at Time of Bid Acknowledgement of Bidding Practices Regarding Indemnity Form Disabled Veteran Business Enterprise (DVBE) Participation Statement Trade Contractor's Certificate Regarding Drug-Free Workplace Trade Contractor's Certificate Regarding Alcoholic Beverage and Tobacco-Free Campus Policv Form Agreement Payment Pond Performance Bond Guarantee Escrow Agreement for Security Deposits in Lieu of Retention **Insurance Documents & Endorsements** Disabled Veteran Business Enterprise (DVBE) Trade Contractor Close-Out Statement Trade Contractor Certification Regarding Background Checks **General Conditions** Article 1 Definitions Article 2 District Article 3 The Trade Contractor Article 4 Administration of the Contract and Claims Article 5 Subcontractors Article 6 Construction by District or By Separate Contractors

Article 7 Changes in the Work Article 8 Time and Schedule Article 9 Payments and Completion Article 10 Protection of Persons and Property Article 11 Insurance and Bonds Article 12 Uncovering and Correction of Work Article 13 Miscellaneous Provisions Article 14 Termination or Suspension of the Contract Article 15 Debarment

- Site Logistics and Fencing Map January 25, 2023
- Preliminary Milestone Schedule January 25, 2023
- DSA TI 103 Testing and Inspection Requirements
- Construction Manager Special Conditions

00 73 00 Special Conditions (for All Bid Packages) 00 74 00 Allowances (for All Bid Packages)

• Technical Specifications – Maybrook Elementary School Interim Housing – July 28, 2022

Division 0 – Procurement and Contracting Requirements

- 00 01 01 Project Title Page
- 00 01 07 Seals Page
- 00 01 10 Table of Contents

Division 1 – General Requirements

- 01 10 00 Construction Documents
- 01 20 00 Project Meetings
- 01 30 00 Submittals
- 01 40 50 Testing and Inspection
- 01 50 00 Construction Facilities and Temporary Controls
- 01 57 23 Temporary Storm Water Pollution Control
- 01 63 00 Substitutions
- 01 70 00 Contract Closeout
- 01 71 23 Field Engineering
- 01 74 00 Warranties and Guarantees
- 01 74 50 Cleaning
- 01 75 00 Starting of Systems
- 01 78 00 Operating and Maintenance Manuals
- 01 78 50 Project Records Documents

Division 7 – Thermal and Moisture Protection

07 92 00 Joint Sealants

Division 26 – Electrical

- 26 01 00 Electrical General Provisions
- 26 05 00 Basic Electrical Materials and Methods
- 26 05 30 Conduit and Wire

Division 27 – Communications

27 10 00 Structured Cabling
27 41 19 Portable Assistive Listening System
27 60 20 Audio Video Cabling System
Division 28 – Electronic Safety and Security
28 46 20 Fire Alarm

1.0 INCLUSIONS:

SPECIFIC INCLUSIONS FOR THE SCOPE OF WORK (including, but not limited to)

- 1 The Bid Package Contractor will be responsible for completing all work included in the contract documents including, but not limited to, the following:
- 2 The work included is, but is not necessarily limited to, furnishing all labor, materials, appliances, tools, equipment, facilities, transportation, applicable taxes, permits and services necessary for, and incidental to, performing all operations in connection with this Bid Package, complete as shown on the drawings and/or specified herein. Contractor to complete all work as detailed herein as well as indicated in plans and specifications in accordance with approved project documents. Multiple mobilizations may be required to perform this work.
- 3 Weekly Foreman Coordination meetings will be held every week (date and time to be determined by Construction Manager) and it is mandatory that this Bid Package Contractor provide representation by someone with authority to make schedule and manpower decisions when this Bid Package Contractor's work is being performed on site or when specifically requested by the Construction Manager. Whereas attendance at these meetings directly affects coordination of the project schedule, if this Bid Package Contractor fails to attend when required, the cost of labor will be assessed against its contract for each occurrence.
- 4 The Bid Package Contractor acknowledges that the Pull Planning (a.k.a. Last Planner) supplemental means of activity scheduling is required to meet the project schedule. Therefore, Bid Package Contractor agrees to provide a supervisory and management level of representation at all Pull Planning quarterly or sometimes monthly pull planning sessions. This Bid Package Contractor also agrees to provide a foreman level of representation at all Pull Planning weekly updates in conjunction with the weekly foreman's meetings. Whereas attendance at these meetings directly affects coordination of the project schedule (RE: Liquidated Damages).
- 5 Responsibility for storage and security of own materials and equipment located on jobsite. Own work shed, yard and security fence if required for storage. Note: on-site storage, laydown areas, parking and access is limited and controlled by the Construction Manager. Subcontractor responsible for own employee parking.
- 6 Daily clean-up of own debris and removal of same from project site.
- 7 Utilities for own work from provided power sources.
- 8 Responsibility for environmental conditions affecting own work.
- 9 Attend and participate in pre-installation conference at project site.
- 10 Task lighting for own work.
- 11 Provide scaffold for own work.
- 12 Dust, noise, and traffic control for own work.

- 13 Responsible for all trucking operations associated with own work, including street clean up, flag-people, and routing requirements.
- 14 Provide field samples and mock-ups as specified
- 15 Export of spoils from job site from own work.
- 16 Provide dumpsters for disposal and removal of own work.
- 17 Contractor to submit survey requests to Prime Contractor of Bid Package #2, 72 hours prior to being needed onsite.

Division 1 – General Requirements

- 18 The Bid Package Contractor is responsible for all requirements in the Division 1 Technical Specifications.
- 19 The Bid Package Contractor is responsible for all items included in the CM Supplemental Specifications including, and all other requirements as specified in Section 00 10 00 General Requirements.

Division 7 – Thermal and Moisture Protection

20 Provide all labor, materials, and equipment to apply all fire stops, smoke seals, and sealants for own work as specified.

Division 26 – Electrical

- 21 Provide all labor, materials and equipment necessary to install all electrical systems per Plans, Specifications and Addenda, including but not limited to; all high voltage systems, lighting control devices, underground cable, underground ducts, cabling boxes, infrastructure conduits, end vaults, precast boxes, pull boxes, switchboards, panel boards, transformers, disconnects, circuit breakers, electrical grounding, electrical bonding, motor starters, switches, raceways, boxes, conduit, wire, conductors, cables, cable trays, tamper switches at post indicator valves, engine generators, transfer switches, barrier posts, conduit and back boxes for card readers, connections to existing systems, fixtures, flashings, hanger rods, supports, brackets, seismic restraints, wiring devices, vaults, pads, dry utilities, fire sealants, electrical identification, hardware, trim and accessories for a complete operational system and installation.
- 22 Provide all labor, materials, and equipment necessary to install equipment per Plans, Specifications, and Addenda, including but not limited to, concrete pull boxes, disconnection switches and accessories for a complete operational system and installation.
- 23 Provide all labor, materials, and equipment necessary to install power and signal cables and poles per Plans, Specifications, and Addenda.
- 24 Provide conduit, power, and data to HVAC system as required. Coordinate with Portable Contractor for final location.
- 25 Provide power for all new equipment and devices per Plans, Specifications, and Addenda. Coordinate with all other Division Contractors for locations of power required for all new devices requiring hardwired connections our power outlets.
- 26 Coordinate mounting heights with Construction Manager Superintendent.

- 27 Core drill for own work as required.
- 28 Coordination with utility companies as required to complete all work. Electrical Division Contractor to pay all permits and/or fees required for to complete own work.
- 29 Submit all closeout documents, O&M manuals, spare parts and tools, warranties, and other specified items per Plans and Specifications. Update as-built drawings as required.
- 30 Owner training, demonstrations, videos or instructional sessions for maintenance and operations staff as specified or required. Schedule and coordinate with Owner through Construction Manager.
- 31 Coordination of all rough and finish opening requirements with affected trades to ensure proper installation of all fixtures, openings and other equipment for own work.
- 32 Coordinate required blocking and backing with affected trades. Provide blocking and backing for own work if required due to lack of coordination by this Bid Package Contractor.
- 33 Provide final hook up of high and low voltage systems installed. Circuitry and hook up of all electrical equipment and components supplied by others.
- 34 Start-up, testing, adjustments and commissioning as specified for own work.
- 35 Provide extra stock, turnover and replacement materials as specified.
- 36 Seismic requirements for own work.
- 37 Labeling and identification as specified or required for own work.
- 38 Contractor to coordinate with Demolition Contractor and Construction Manager for locations of all saw cutting and demolition required. This Division Contractor will be responsible for any and all additional saw cutting, demolition, removal, disposal and patching if not properly coordinated with Demolition Contractor.
- 39 Provide, install, maintain and remove (as the work progresses) all temporary electrical power and lighting for the project including the required metering of this service per Owner's requirements.
- 40 Relocation of existing electrical utilities. All abandoned conduit and wires to be "made safe" by this Bid Package Contractor.
- 41 Provide "safe off" of all existing electrical work, as applies to demolition (demolition by others).

Division 27 & 28 – Communication & Electronic Safety and Security

- 42 Provide all labor, materials and equipment necessary to install all low voltage and fire alarm systems per Plans, Specifications and Addenda, including but not limited to; low voltage systems, voice and data systems, data racks, computer networking systems, communication systems, communication cabling, sound systems, fire alarm systems, security systems, video systems, telephone systems, clock systems, telephone backboards, connections to existing systems, fixtures, flashings, rods, supports, brackets, seismic restraints, wiring devices, fire sealants, identification, hardware, trim and accessories for a complete operational system and installation
- 43 Submit all closeout documents, O&M manuals, spare parts and tools, warranties, and other specified items per Plans and Specifications. Update as-built drawings as required.
- 44 Owner training, demonstrations, videos or instructional sessions for maintenance and operations staff as specified or required. Schedule and coordinate with Owner through Construction Manager.

- 45 Coordination of all rough and finish opening requirements with affected trades to ensure proper installation of all fixtures, openings and other equipment for own work. Provide openings for own work if required due to lack of coordination by this Bid Package Contractor.
- 46 Start-up, testing, adjustments and commissioning as specified for own work.
- 47 Provide extra stock, turnover and replacement materials as specified.
- 48 Verify all panel power requirements prior to commencement of work.
- 49 Furnish and install all assistive listening systems as specified.
- 50 Furnish and install all new TV mounts as specified.

ALSO INCLUDES:

- 51 Comply with structural details for locations of underground piping near footings.
- 52 This Bid Package Contractor is to review Bid Documents for potential conflicts between intended routing of own work (indicated diagrammatically only on the bid documents, such as gas, water, waste and vent, fire sprinkler, etc.) and that of all other building and site components. Failure to do so will result in this Bid Package Contractor re-routing of own work and all incidental costs resulting from such.
- 53 All access doors required by Plumbing and Electrical Bid Package Contractors shall be located, supplied, and installed by those Bid Package Contractors. Access doors shown on Architectural Drawings will be provided by Bid Package 01.
- 54 All distribution, either underground or overhead to be coordinated with Construction Manager to not impact other trades.
- 55 Provide a sufficient quantity of power and "spider" boxes so that "spider" boxes can be spaced at a maximum of 100 feet 0 inches cord length at any location in the building and exterior site work. Confirm locations with Construction Manager as needed.
- 56 Install and maintain temporary construction lighting in accordance with the latest edition of the CAL or FED-OSHA Safety Order.
- 57 Temporary power boxes and cords are to be in place ready for use, from 6:30 am to 5:00 pm daily. IF power boxes are intended to remain in place 24 hours a day, have them secured to deter theft. In the event of theft, this Bid Package Contractor shall replace equipment immediately to mitigate loss of production. Cost for replacement of cords/ boxes shall be borne by this Bid Package Contractor.
- 58 Maintenance of all temporary electrical and lighting for duration of the project and removal of the same at project completion.
- 59 Include all costs for set up, monthly usage, maintenance and removals.
- 60 This Bid Package Contractor shall provide power hook up to IOR/Construction Manager Trailer. The Electrical Bid Package Contractor will include temporary power poles, wire, panels, transform, and other plant, materials, equipment or labor and utility cost necessary to service and provide adequate power to the construction trailers.
- 61 This Bid Package Contractor shall provide internet service for the IOR/Construction Manager Trailer. This includes all labor and equipment necessary to provide adequate internet service of at least 100Mps for the duration of the project. This Bid Package Contractor will cover the necessary service cost as required.

- 62 This Bid Package will also include the removal of temporary electrical service to both the site and construction trailers. This will also include removal of temporary poles, wire, panels, and patching of existing asphalt and/or concrete as required.
- 63 Temporary Power is to be checked and certified per OHSA requirements but no less than every month at beginning of month. Provide CM with documentation of certification.

2.0 SPECIAL NOTES FOR THIS BID PACKAGE

2.1 Contractor shall include in the bid price, an allowance, with a value equal to One Hundred Thousand Dollars (\$100,000.00). The allowance shall be shown separately on the contractor's schedule of values. The allowance can only be used with prior approval by the District. The unused balance will be credited back to the District at the Time of Project Completion. See Construction Manager Supplemental Specification Section 00 73 00.

NOTE:

All of the work in the above sections **MUST** be included in the **ELECTRICAL & LOW VOLTAGE PACKAGE NUMBER 03** unless specifically excluded herein. <u>CONTRACTOR MUST EXAMINE</u> <u>ALL OTHER SPECIFICATION SECTIONS, DRAWINGS, AND CONTRACT DOCUMENTS</u> for related work that may be specified or shown on drawings and required to be included as work under this Bid Package.

This Bid Package summary supplements and complements the Plans, Specifications, and the balance of the project documents, hereafter referred to as Contract Documents and in no way supersedes any information contained in the Contract Documents unless specifically stated.

It is the responsibility of each bidder to fully familiarize themselves with the entire Summary of Work for all Bid Packages, as the individual Specifications' Sections interface throughout the project and thus impact all Bid Package Contractors.

END OF THIS SECTION