

# MICHIGAN STATE UNIVERSITY

## INFRASTRUCTURE PLANNING AND FACILITIES PLANNING, DESIGN AND CONSTRUCTION

January 6, 2025

TITLE OF PROJECT: Electrical Distribution – Farm Ln Duct Bank Extension – Red Cedar to Farm Ln/Wilson Rd – Phase 1

PROJECT ISSUE DATE: December 2, 2024

PROJECT NUMBER: CP23036

ADDENDUM NO: 3

### GENERAL

This Addendum is issued prior to receipt of Proposals to amend the Contract Documents identified as Electrical Distribution – Farm Ln Duct Bank Extension – Red Cedar to Farm Ln/Wilson Rd – Phase 1. Except as otherwise specifically mentioned, the general character of the work required by this Addendum shall be the same as originally specified, and all incidentals required in connection with the work hereinafter described shall be included even though not specifically mentioned. When an item is mentioned with additional specifications given, reference shall be made to the original specifications.

Drawing(s) accompanying this Addendum include: N/A

No drawings accompany this Addendum

TRADES – N/A

### ITEM NO.      DESCRIPTION

1. Clarification Response to RFI
  - a. (Specifications 2.2 6 PG. 128) Will the contractor be responsible for supplying the grounding & tracing wire, if so, what specs are required?
    - i. Response: The Contractor is responsible for supplying and installing the grounding and tracer wire. The ground wire shall be provided as outlined on PG. 127 (Items D.1 through D.5) Additionally, The tracing wire shall be as outlined on PG.128 (Section 2.2 , Item A.6). The material shall be #4/0 THW.
  - b. Please provide the list of materials to be picked up from Beaumont Supply.
    - i. Response: Per Spec 011000 , Section 1.1 , Item B.2 , The contractor is responsible for picking up the erosion eels.
  - c. (MSU Design Plans – G-003) What type of insulated material will be required when crossing over future steam tunnels?
    - i. Response: Per Spec 337119 , Section 3.3 , Item B.7 , The insulated material shall be high density extruded polystyrene insulation.
  - d. Owner is explained to cover the cost of obtaining the SESC permit? Will any other

permits/bonds required for this work be the responsibility of the contractor (Specifications 8.1.1 PG. 18)?

- i. Response: The Contractor will be responsible for obtaining the necessary electrical permits, as indicated on technical specification 260500 (issued as part of this addendum).
- e. (Specifications 1.1 B PG. 21) Will the owner provide all SESC materials required?
  - i. Response: Except for the erosion eels that have to be picked up by the contractor at Beaumont Supply, the contractor must supply any additional SESC materials.
- f. (Specifications 3.19 PG. 90) Will the contractor be required to seed stockpiled soil if stored for over 24 hours?
  - i. Response: MSU Landscaping will do the stockpile seeding. The contractor to do the coordination with MSU landscaping to get the stockpile seeded as soon as possible.
- g. (MSU Design Plans – G-003) & (Specifications 1.1 B PG 44) Can equipment be stored in the spoil storage location off Trowbridge Rd? If not, will a laydown yard be provided?
  - i. Response: The Contractor can store equipment on-site or one will be available in the nearby parking lot behind the Natural Resources Building (Lot 48).
- h. Will a grade plan be required for areas requiring an altered grade? Will the owner cover the cost of these plans in addition to completing the restoration?
  - i. Response: See Plan sheet C-103 for grading plan. The contractor is responsible for the grading work as part of this project.
- i. (Specifications 1.2 B PG. 45) Who will be responsible for staking the run line?
  - i. Response: The Contractor is responsible for the construction staking.
- j. (Specifications 1.1 B PG. 20) Does this include the tree clearing for Trowbridge Rd?
  - i. Response: MSU Landscaping is responsible for the tree clearing as part of this project.
- k. (Specifications Soil Borings PG. 157) Will the contractor be required to limit the size and amount of equipment on site as indicated by Driesenga & Associates Inc? If so, what are the limitations?
  - i. Response: There are not any limitations on the size and amount of equipment that can be on site.
- l. (Specifications Soil Borings PG. 157) Driesenga & Associates Inc. call out the need for possible dewatering. Will the owner cover all dewatering costs as a pass-through if required?
  - i. Response: It is our understanding that groundwater encountered is primarily perched water. Some Vault/Duct bank locations may require excavation below the water table. If that occurs, the contractor will be responsible for temporary dewatering in those areas.
- m. Please confirm that the pipe will be SCHED 40 and not EB20.
  - i. Response: The contractor will provide a Base Bid that includes the SCHED 40 as the material and an alternative bid that includes the EB20 as the material, as outlined in the bid documents.
- n. Who will be responsible for the cable pulling?
  - i. Response: Cable pulling is not part of this project.

<u>ITEM NO.</u>	<u>DESCRIPTION</u>
2.	Issued Technical Spec “Section 260500 – Common Work Results For Electrical”
3.	Add “260500 for Electrical Permits and Inspection” to Section 13000 , 1.3.B.3

## SECTION 260500 – COMMON WORK RESULTS FOR ELECTRICAL

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. This section shall apply to all Division 26 sections.

#### 1.2 SUMMARY

- A. Work Included
  - 1. The work shall be executed in conformity with the drawings, the approved shop drawings, and these specifications.
  - 2. In general, this work shall consist of, but not necessarily be limited to the following:
    - a. Demolition
    - b. New Work
- B. Work Not Included
- C. The Contractor shall refer to Alternates listed in Division 01 and Proposals and shall submit price quotations for the alternates that apply to the electrical work.

#### 1.3 SUBMITTALS

- A. Shop Drawings and Samples
  - 1. The Contractor shall submit shop drawings for all major equipment including, but not limited to the following items and/or the items listed in Division 26 sections.
  - 2. Quantity of shop drawings and information to be included shall be as specified in Division 01 - General Requirements.
- B. As-Built Drawings
  - 1. Quantity of shop drawings and information to be included shall be as specified in Division 01 - General Requirements.
  - 2. The Contractor shall submit as-built drawings indicating the location of all outlets, junction boxes, and conduit runs; including conduit size, circuit numbers, and number of wires in each run.

- C. Certificate of Electrical Inspection: Provide certificate as described in this section.

#### 1.4 QUALITY ASSURANCE

##### A. Codes and Regulations

1. See Division 01 General Requirements for Codes and Regulations that apply.
2. The latest National Electrical Code shall be observed and shall govern the character of work, style, quantity and the size of all material used.
3. All materials shall conform with the standards set forth by the State of Michigan in every case where such standards have been established for the particular type of material in question.
4. All material and equipment shall be listed by a "State of Michigan" approved testing agency or lab such as U.L. or ETL. and bear the appropriate label where such listing and labeling exists. Contractors shall refer to the State of Michigan LARA website for a full listing of all state approved testing labs or agencies.
5. The complete electrical installation shall comply with all the requirements of the M.I.O.S.H.A.
6. Codes shall be used as minimum requirements, and where the Specifications or Plans call for an installation that exceeds and does not violate the Code requirements, the Specifications and Plans shall be followed.

##### B. Character of Work

1. The installation shall be executed in a workmanlike manner and shall present a neat mechanical appearance when completed.
2. Contractors working in the T.B. Simon Power Plant shall have a minimum of five years of experience working on like systems in power plants that involved in this project.
3. Where work is performed in existing spaces or buildings and abandoned wiring or conductors are encountered, they shall be removed in accordance with the requirements of the National Electric Code.

##### C. Permits and Inspections

1. The Electrical Contractor shall obtain and pay for all permits required by the State of Michigan Labor Department, Electrical Division.
2. The Electrical Contractor shall submit, to precede request for final payment, a copy of the Certificate of Electrical Inspection as required by the State of Michigan.

1.5 GUARANTEE

- A. Refer to Division 01 - General Requirements.
- B. Refer to individual Division 26 sections for any additional guarantee requirements.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Refer to individual Division 26 sections for product specifications.
- B. Material to be Returned to the Owner
  - 1. Refer to Division 01 - General Requirements.

PART 3 - EXECUTION

3.1 GENERAL

- A. Refer to Division 01 - General Requirements for items such as examination of premises, coordination with other trades, cutting and patching, connection to present equipment, etc.
- B. Laying Out Work
  - 1. All exterior light locations shall be staked out by the Contractor and approved by the Engineer prior to installation.
  - 2. A/E or consulting firm shall generate "Point-by-Point" photometric calculations for submission and approval prior to finalizing pole & luminaire layouts; "pole height-to-spacing" ratio for all installations shall not be greater than 4:1
- C. Equipment Supports
  - 1. Enclosures for panelboards, motor starters, motor control centers, and other similar equipment shall be mounted on ½" spacers when mounted in a room on a below grade exterior wall.
- D. Feeders and/or branch circuit wiring shall not pass through electrical equipment such as switchboards, panelboards, disconnect switches, and motor starter enclosures where the power source for that wiring originates in another location.

END OF SECTION 260500