Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

September 10, 2020

SUBJECT: FAP Route 346 (US 41)
Section (21&21S)-I
Lake County
Contract No. 62B65
Item No.38 September, 18 2020 Letting
Addendum D

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Revised pages 138,145-147, 149, 164, 590 and 601 of the Special Provisions

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

Jack A. Elston, P.E.
Bureau Chief, Design and Environment

MTS

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH

Description. This work shall consist of removing the existing HMA surface in the areas shown on the plans. The work shall be completed in accordance with Section 440 of the Standard Specifications except as modified herein.

Removal Depth. The asphalt surface shall be removed to a depth of **3-3/4** inches below the edge of gutter in the area between the edge of gutters. Specific areas, identified below, have asphalt pavement of one to three inches in depth between the edge of gutter and the face of curb (over the existing gutter). Asphalt in these areas shall be removed to the surface of the gutter, leaving the existing curb and gutter intact. Any existing gutter damaged by the contractor shall be repaired or replaced as needed and approved by the engineer.

Areas of Asphalt Over Gutter. The following areas are known to have asphalt pavement over the existing gutter. Any areas not listed below having asphalt pavement over the existing gutter where the curb and gutter is not scheduled for removal, shall have the asphalt removed.

45+73 to 47+53 LT
51+78 to 53+10 LT
51+10 to 51+54 RT
53+29 to 54+70 LT
54+21 to 54+69 RT
54+78 to 55+16 LT
54+82 to 55+08 RT
55+43 to 55+69 LT

Contractor shall maintain positive drainage during and after asphalt surface removal.

Method of Measurement. This work will be measured for payment in square yards.

Basis of Payment. This work will be paid for at the contract unit price per square yards for HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH.

CLASS D PATCHES, TYPE IV, 12 INCH (SPECIAL)

Description. This work shall consist of placing Class D Patches for storm sewer installation, utility relocation, and roadway maintenance at the locations shown in the plans and as directed by the Engineer. The work shall be performed in accordance with Section 442 of the Standard Specifications, except as modified herein.

Delete Table of Types from Article 442.01 of the Standard Specification.

Revise Note 2 from Article 442.02 of the Standard Specification to read:

> "Note 2. The mixture composition of the HMA used shall be binder course and surface course as specified in the Hot-Mix Asphalt Mixture Requirements Table."

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SPECIAL PROVISIONS FOR PUMP STATION
DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01 01 00 – SUMMARY OF WORK

PART 1 GENERAL:

1.1 GENERAL WORK

A. The requirement of Division 1, General Requirements, shall apply to all Pump Station Work **including the Generator Building.**

1.2 PUMP STATION GENERAL WORK

A. The Pump Station General Work shall include, but not be limited to, the following and shall be paid for under the pay item PUMP STATION GENERAL WORK:

1. All cast-in-place concrete as indicated in the drawings and as specified in Section 03 30 33, Cast-In-Place Concrete.
2. All prestressed hollowcore plank as indicated on the drawings and as specified in Section 03 41 13, Prestressed Hollowcore Plank.
3. All grout as indicated on the Drawings and as specified in Section 03 60 00, Grout.
4. All unit masonry work consisting of glass block work and faced brickwork as indicated on the Drawings and as specified in Section 04 10 00, Unit Masonry.
5. All cast stone masonry work as indicated on the drawings and as specified in Section 04 72 00, Cast Stone Masonry.
6. All miscellaneous metal work as indicated on the Drawings and as specified in Division 5, Metals.
7. All carpentry work as indicated on the Drawings and as specified in Section 06 10 00, Rough Carpentry.
8. All fiberglass reinforced plastic products and fabrications as indicated on the Drawings and specified in Section 06 60 00, Fiberglass Reinforced Plastic Products And Fabrications.
9. All board insulation as indicated on the Drawings and specified in Section 07 20 00, Board Insulation
10. All mineral wool insulation as indicated on the drawings and specified in Section 07 21 10, Mineral Wool Insulation.
11. All asphalt shingle as indicated on the drawings and specified in Section 07 31 13, Asphalt Shingles
12. All sheet metal work as indicated on the Drawings and as specified in Section 07 62 00, Sheet Metal Flashing and Trim.
13. All sealant work as indicated on the Drawings and as specified in Section 07 92 00, Joint Sealers.
14. All doors, hardware, glass, and glazing as indicated on the Drawings and as specified in Division 8, Doors and Windows.

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15. All louvers and vents as indicated on the drawings and specified in Section 08 90 00, Louvers and Vents.
16. All painting as indicated on the Drawings and as specified in Section 09 91 00, Painting.
17. The station identification plate, shop desk, bulletin board, staff gauges, first aid kit, fire extinguishers, electric clock and trash can as indicated on the Drawings and as specified in Section 10 00 00, Specialties.
18. The Bridge Crane as indicated on the Drawings and as specified in Section 41 22 13, Bridge Crane.

1.3 STRUCTURAL WORK

A. The requirements of the Special Provisions and Division 1, General Requirements, shall apply to the work described herein.

1. All sheet waterproofing membrane systems as indicated on the drawings and as specified in Section 07 13 26.
2. All dewatering as indicated on the drawings and as specified under the "DEWATERING" specification.

1.4 MECHANICAL WORK

A. The requirements of the Special Provisions and Division 1, General Requirements, shall apply to all Pump Station **and Generator Building** Mechanical Work described herein.

B. The Pump Station Mechanical Work shall include, but not be limited to, the following and shall be paid for under the pay item PUMP STATION MECHANICAL WORK:

1. The Pump Station Mechanical Work shall include, but not be limited to, furnishing and installing the following items as indicated on the Project Drawings and in the Special Provisions:
2. New pump discharge and suction piping, fittings, wall castings, and appurtenances.
3. New valves and appurtenances as indicated; including but not limited to, knife gates valves installed on the pump suction piping, and any valves required for installation on ancillary piping. Manual or electric motor actuators for valves shall also be included.
4. All required pipe and equipment support systems, hangers, and appurtenances; required for the installation of all piping, pumps, valves, and other mechanical items.
5. New metal bar rack, including appurtenant items.
6. Any miscellaneous mechanical items that are ancillary to the Work described above.

1.5 HEATING AND VENTILATION

A. The requirement of Division 1, General Requirements, shall apply to all Heating and Ventilation Work.

B. The Pump Station **and Generator Building** Mechanical Work shall include, but not be limited to, the following and shall be paid for under the pay item HEATING AND VENTILATION WORK:

1. New ventilation system including, but not limited to, exhaust fans, supply fans, duct work, unit heaters, louvers, dampers, actuators, controls, control wiring and all associated appurtenances.

1.6 ELECTRICAL

A. The requirements of Division 1, General Requirements, shall apply to all Pump Station **and Generator Building** Electrical Work.

B. The Pump Station **and Generator Building** Electrical Work shall include, but not be limited to, the following and shall be paid for under the pay item PUMP STATION ELECTRICAL WORK:

1. Disconnection and removal of existing electric service, including all metering.
2. Installation and connection of a new electric service including all metering in accordance with ComEd Electric Requirements.
3. Installation of new disconnect switches and motor starters.
4. Removal of existing disconnect switches and motor starters.
5. New lighting fixtures, lighting panel board, lighting transformer and wiring devices.
6. New power, lighting, control and signal wires and cables.
7. New conduit and raceway system.
8. New electric heaters, complete.
9. New float type level sensing control system.
10. New combustible gas detectors, fire detection system and intrusion alarm system.
11. Branch wiring and conduit for main pumps, low flow pumps, unit heaters, ventilation system, and other electrical equipment as shown on the Drawings.
12. Pavement flood float sensing system.
13. Testing of electrical equipment.

1.7 INSTRUMENT AND CONTROL

A. The requirement of Division 1, General Requirements, shall apply to all Pump Station SCADA Equipment work.

B. The Pump Station **and Generator Building** Electrical Work shall include, but not be limited to, the following and shall be paid for under the pay item PUMP STATION SCADA EQUIPMENT:

A. The requirements of the Special Provisions and Division 1, General Requirements, shall apply to the work described herein.

1. All motor control centers as indicated on the drawings and as specified in Section 26 24 19.

1.11 BACKUP GENERATOR

A. The requirements of the Special Provisions and Division 1, General Requirements, shall apply to the work described herein.

1. All backup generators as indicated on the drawings and as specified in Section 26 32 13.16.

1.12 PUMPS

A. The requirements of the Special Provisions and Division 1, General Requirements, shall apply to the work described herein.

1. All main pumps as indicated on the drawings and as specified in Section 43 21 39.
2. Low flow pump as indicated on the drawings and as specified in Section 43 21 39.

PART 2 EXECUTION:

2.1 SUBMITTALS

A. Except as specified elsewhere herein, materials and equipment shall be in conformance with the requirements of Section 106 of the Standard Specifications.

B. Except as specified elsewhere herein, all submittal requirements in this section shall apply for all Special Provisions for Pump Station **and Generator Building** items.

C. OWNER shall refer to both the Illinois Department of Transportation and the City of Lake Forest.

D. ENGINEER, CONTRACTOR, and Subcontractor, are defined in Section 101.01 of the Standard Specifications.

E. Materials and equipment shall be the products of established and reputable manufacturers and shall be suitable for the service required. Unless otherwise specifically indicated, all materials and equipment shall be new. The CONTRACTOR is obligated to conduct his own search into the timely availability of the specified equipment and materials to ensure that they are in strict conformance with the contract documents and that delivery schedules are compatible with project time constraints. Materials or equipment items which are similar or identical shall be the product of the same manufacturer. The cost of submittals, certifications, any required samples, and

l. MAINTENANCE OF EXISTING PUMP STATION DURING CONSTRUCTION shall be measured and paid for at the contract unit price per lump sum as specified in the Special Provisions for Civil Items.

m. LOW FLOW PUMP shall be paid for at the contract unit price per each as specified in the applicable requirements Division 1, General Requirements and Division **43**, Liquid Handling Equipment.

n. MAIN PUMPS shall be paid for at the contract unit price per each as specified in the applicable requirements Division 1, General Requirements and Division **43**, Liquid Handling Equipment.

o. SHEET WATERPROOFING MEMBRANE SYSTEM shall include all work which is not listed as a specific pay item but which is required for compliance with the specifications and for a complete operational facility and will be paid for at the contract lump sum price as specified in the Special Provisions; Division 1, General Requirements; and the applicable requirements under Division 7, Thermal and Moisture Protection.

p. TELEVISION INSPECTION OF SEWER shall be measured and paid for at the contract unit price per foot as specified in the Special Provisions for Civil Items.

q. ADDRESSABLE FIRE ALARM SYSTEM shall be paid for at the contract lump sum price as specified in the applicable requirements of the Special Provisions and Division 1, General Requirements and all requirements under Division 40, SCADA System.

r. ELASTOMERIC CHECK VALVE of the specified diameter shall be measured and paid for at the contract unit price per each as specified in the Special Provisions for Civil Items.

s. HEATING AND VENTILATION WORK shall be paid for at the contract lump sum as specified in Division 23, Heating and Ventilation and Air Conditioning.

t. GAS UTILITY SERVICE CONNECTION shall be measured and paid for at the contract unit price per square yard as specified in the Special Provisions for Civil Items.

u. DRIVEWAY REMOVAL AND REPLACEMENT shall be measured and paid for at the contract unit price per square yard as specified in the Special Provisions for Civil Items.

v. PUMP STATION GENERAL WORK shall include all work which is not listed as a specific pay item but which is required for compliance with the specifications and for a complete operational facility and will be paid for at the contract lump sum price as specified in the Special Provisions; Division 1, General Requirements; and the applicable requirements under the following: Division 2, Site Work; Division 3 Concrete; Division 4, Masonry System; Division 5, Metals, Division 6, Carpentry; Division 7, Thermal and Moisture Protection; Division 8, Doors and Windows; Division 9, Painting; Division 10, Specialties; and Division 41 Material Processing & Handling Equipment.

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2. Fuses: Three of each kind and size.
3. Tool Kit: Provide six sets of tools for use with security fasteners, each packaged in a compartmented kit configured for easy handling and storage.
4. Security Fasteners: Furnish no fewer than 1 box for every 50 boxes or fraction thereof, of each type and size of security fastener installed.

1.8 QUALITY ASSURANCE

A. Installer Qualifications:
1. An employer of workers, at least one of whom is a Certified Alarm Technician, Level 1.
2. Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
3. Layout Responsibility: Preparation of Shop Drawings, cabling administration Drawings, and field testing program development by an RCDD.
4. Installation Supervision: Installation shall be under the direct supervision of Level 2 Commercial Installer, who shall be present at all times when Work of this Section is performed at Project site.
5. Testing Supervisor: Currently certified by BICSI as an RCDD to supervise on-site testing.

B. Intrusion Detection Systems Integrator Qualifications: An experienced intrusion detection equipment supplier and Installer who has completed systems integration work for installations similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
1. At least one of whom is a Certified Systems Integrator.

C. Testing Agency Qualifications: Certified by BICSI.
1. Testing Agency's Field Supervisor: Currently certified by BICSI as an RCDD to supervise on-site testing.

1.9 PROJECT CONDITIONS

A. Environmental Conditions: Capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
1. Altitude: Sea level to 4000 feet.
2. Master Control Unit: Rated for continuous operation in an ambient of 50 to 132 deg F and a relative humidity of 20 to 80 percent, noncondensing.
3. Interior, Controlled Environment: System components, except master control unit, installed in temperature-controlled interior environments shall be rated for continuous operation in ambients of 50 to 132 deg F dry bulb and 20 to 90 percent relative humidity, noncondensing.
4. Hazardous Environment: System components located in areas where fire or explosion hazards may exist because of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers or flyings shall be rated, listed, and installed according to NFPA 70.

1.10 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer and Installer agree to repair or replace components of intrusion detection devices and equipment that fail in materials or workmanship within specified warranty period.
1. Warranty Period: Two years from date of Substantial Completion.

1.11 BASIS OF PAYMENT

A. The work shall be paid at the contract lump sum price for **PUMP STATION SCADA EQUIPMENT** which shall be payment in full for the work described herein.

2. Warranty Period: Five years from date of Substantial Completion.

1.12 BASIS OF PAYMENT

A. The work shall be paid at the contract lump sum price for **ADDRESSABLE FIRE ALARM SYSTEM** which shall be payment in full for the work described herein.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

A. Source Limitations for Fire-Alarm System and Components: Components shall be compatible with, and operate as an extension of, existing system. Provide system manufacturer's certification that all components provided have been tested as, and will operate as, a system.

B. Noncoded, UL-certified addressable system, with multiplexed signal transmission and horn/strobe evacuation.

C. Automatic sensitivity control of certain smoke detectors.

D. All components provided shall be listed for use with the selected system.

E. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.2 SYSTEMS OPERATIONAL DESCRIPTION

A. Fire-alarm signal initiation shall be by one or more of the following devices and systems:
1. Manual stations.
2. Heat detectors.
3. Flame detectors.
4. Smoke detectors.
5. Combustible gas detectors.

B. Fire-alarm signal shall initiate the following actions:
1. Continuously operate alarm notification appliances.
2. Identify alarm and specific initiating device at fire-alarm control unit.
3. Transmit an alarm signal to the remote alarm receiving station.
4. Unlock electric door locks in designated egress paths.
5. Release fire and smoke doors held open by magnetic door holders.
6. Activate voice/alarm communication system.
7. Switch heating, ventilating, and air-conditioning equipment controls to fire-alarm mode.
8. Activate smoke-control system (smoke management) at firefighters' smoke-control system panel.
9. Close smoke dampers in air ducts of designated air-conditioning duct systems.
10. Activate preaction system.
11. Activate emergency shutoffs for gas and fuel supplies.
12. Indicate device in alarm on the graphic annunciator.

C. Supervisory signal initiation shall be by one or more of the following devices and actions:
1. Alert and Action signals of air-sampling detector system.
2. Independent fire-detection and -suppression systems.
3. User disabling of zones or individual devices.

D. System trouble signal initiation shall be by one or more of the following devices and actions:
1. Open circuits, shorts, and grounds in designated circuits.
2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.