



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

February 27, 2019

SUBJECT: Route Kings Road
Section 15-00059-00-PV (Bolingbrook)
Will County
Contract No. 61F40
Item 166
March 8, 2019 Letting
Addendum B

NOTICE TO PROSPECTIVE BIDDERS:

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

- 1. Revised pages 26, 51 and 52 of the Special Provisions**
- 2. Revised sheets 2, 3, 24, 85, 90, 91 and 105 of the Plans**
- 3. Revised the Index of the Special Provisions**
- 4. Revised the Schedule of Prices**

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
Engineer of Design and Environment

A handwritten signature in black ink, reading "Ted B. Walschleger P.E.".

By: Ted B. Walschleger, P.E.
Engineer of Project Management

BIKE PATH REMOVAL	17
HANDHOLE (SPECIAL)	17
LIGHTING CONTROL CABINET	17
TYPE 1, 2, 3 OR 4 LIGHTING UNIT	19
WEED CONTROL, PRE-EMERGENT GRANULAR HERBICID	20
CONCRETE FOUNDATIONS	21
FULL-ACTUATED CONTROLLER AND CABINET	21
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	23
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	26
TRAFFIC SIGNAL GENERAL REQUIREMENTS (D1 LR)	27
TRAFFIC SIGNAL POST	37
MAST ARM ASSEMBLY AND POLE	37
HANDHOLES	37
SERVICE INSTALLATION (TRAFFIC SIGNALS)	39
ELECTRIC CABLE	41
GROUNDING OF TRAFFIC SIGNAL SYSTEMS	41
PEDESTRIAN PUSH-BUTTON POST	43
PEDESTRIAN PUSH-BUTTON	43
LIGHT EMITTING DIODE (LED) SIGNAL HEAD & OPTICALLY PROGRAMMED LED SIGNAL HEAD	44
LIGHT EMITTING DIODE (LED) PEDESTRIAN SIGNAL HEAD	47
LED INTERNALLY ILLUMINATED STREET NAME SIGN	49
PARAPET RAILING	51
EMERGENCY VEHICLE PRIORITY SYSTEM	52
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO.20, 3/C	53
PLUG EXISTING SANITARY SEWER	53
ABANDON FILL EXISTING SANITARY MANHOLE	53
TRAFFIC CONTROL PLAN	54

Revise Article 1074.04(d)(4) of the Standard Specifications to read:

Batteries shall be certified by the manufacturer to operate over a temperature range of -13 to 160 °F (-25 to + 71 °C) for gel cell batteries and -40 to 140 °F (-40 to + 60 °C) for AGM type batteries.

Add the following to Article 1074.04(d) of the Standard Specifications:

(9) The UPS shall consist of an even number of batteries that are capable of maintaining normal operation of the signalized intersection for a minimum of 6 (six) hours. Calculations shall be provided showing the number of batteries of the type supplied that are needed to satisfy this requirement. A minimum of four batteries shall be provided.

(10) Battery Heater mats shall be provided, when gel cell type batteries are supplied.

Add the following to the Article 1074.04 of the Standard Specifications:

(e) Warranty. The warranty for an uninterruptable power supply (UPS) and batteries (full replacement) shall cover a minimum of 5 years from date the equipment is placed in operation.

(f) Installation. Bypass switch shall completely disconnect the traffic signal cabinet from the utility provider.

(g) The UPS shall be set-up to run the traffic signal continuously, **without** going to a red flashing condition, when switched to battery power unless otherwise directed by the Engineer. The Contractor shall confirm set-up with the Engineer. The continuous operation mode when switched to battery may require modification to unit connections and these modifications are included in the unit price for this item.

Revise Article 862.05 of the Standard Specifications to read:

Basis of Payment.

This work will be paid for at the contract unit price per each for UNINTERRUPTABLE POWER SUPPLY, SPECIAL or UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL. Replacement of Emergency Vehicle Priority System confirmation beacons and any required modifications to the traffic signal controller shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY, SPECIAL or UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL item. The concrete apron and earth excavation required shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL item.

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

Traffic Control shall be in accordance with the applicable sections of the Standard Specifications, Supplemental Specifications, the "Illinois Supplement to the National Manual on Uniform Traffic Control Devices", any special details and Highway Standards contained in the plans, the Traffic Specifications, Traffic Control Plan, and Special Provisions contained herein.

The Contractor shall coordinate all traffic control work on this project with any adjoining projects. The coordination will include any barricade placements necessary to provide a uniform traffic pattern. In addition as requested by the Engineer, signage indicating road conditions will also be required at no additional expense. Special attention is called to Article 107.14 and Section 701 of the Standard Specifications and the Highway Standard, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required as indicated in the plans and as directed by the Engineer.

Method of measurement: All traffic control (except temporary pavement markings) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment on a Lump Sum basis.

Basis of Payment: All traffic control and protection will be paid for at the contract lump sum price for Traffic Control and Protection (Special).

energized when traffic signals are powered by an alternate energy source such as a generator or uninterruptable power supply (UPS).

(f) Photometric Requirements.

1. The entire surface of the sign panel shall be evenly illuminated. The average maintained luminous intensity measured across the letters, operating under the conditions defined in Environmental Requirements and Wattage Sections shall be of a minimum value of 100 cd/m².
2. The manufacturer shall make available independent laboratory test results to verify compliance to Voltage Range and Luminous Intensity Distribution Sections.
3. LED shall have a color temperature of 5200k nominal, CRI of 80 with a life expectancy of 75,000 hrs.

(g) Quality Assurance.

The LED Light Engine shall be manufactured in accordance with a vendor quality assurance (QA) program. The production QA shall include statistically controlled routine tests to ensure minimum performance levels of the LED Light Engine build to meet this specification. QA process and test result documentations shall be kept on file for a minimum period of seven (7) years. The LED Light Engine that does not satisfy the production QA testing performance requirements shall not be labeled, advertised, or sold as conforming to these specifications. Each LED Light Engine shall be identified by a manufacturer's serial number for warranty purposes. LED Light Engines shall be replaced or repaired if they fail to function as intended due to workmanship or material defects within the first sixty (60) months from the date of acceptance. LED Light Engines that exhibit luminous intensities less than the minimum value specified in Photometric Section within the first thirty-six (36) months from the date of acceptance shall be replaced or repaired.

Installation.

The sign shall be located on a steel traffic signal mast arm no further than 8-feet from the center of the pole to the center of the sign at a height of between 16 to 18-feet above traveled pavement. Mounting hardware shall be from an approved vendor, utilizing stainless steel components.

Basis of Payment.

This work will be paid for at the contract unit price each for LED INTERNALLY ILLUMINATED STREET NAME SIGN, of the length as specified in the contract plans which shall be payment in full for furnishing and installing the LED internally illuminated street name sign, complete with circuitry and mounting hardware including photo cell, circuit breaker, fusing, relay, connections and cabling as shown on the plans for proper operation and installation.

PARAPET RAILING

This work shall consist of furnishing and installing the steel rail, including anchorage system. All work shall be performed in accordance with applicable articles of section 509 of the Standard Specifications. The steel rail shall be installed in accordance with the details indicated in the Plans and as directed by the Engineer.

Materials shall be in accordance with Article 509.02 of the Standard Specifications. The railing and posts shall be finished according to the details as described in the plans. All steel parapet railing elements, including bolts, nuts, anchors shall be galvanized. All posts, railing, anchor devices, plates shall be painted. The color of the rail shall be selected and approved by the Village of Bolingbrook.

Shop drawings of the railing including anchorage system should be submitted for approval according to Section 509.04 of the Standard Specifications. Shim plates shall be provided in accordance with Article 509.05 (a).

PARAPET RAILING shall be measured for payment in feet of such rail in place. The length measured will be the overall length along the top longitudinal railing member through all posts and gaps.

This work shall be paid for at the contract unit price per foot for PARAPET RAILING, which price shall be payment in full for all labor, materials, anchor devices, bolts, nuts, plates, tools, equipment and appurtenances to complete the work specified herein, as indicated in the Plans, and as directed by the Engineer.

EMERGENCY VEHICLE PRIORITY SYSTEM

Effective: May 22, 2002
Revised: July 1, 2015
887.01TS

Revise Section 887 of the Standard Specifications to read:

It shall be the Contractor's responsibility to contact the municipality or fire district to verify the brand of emergency vehicle pre-emption equipment to be installed prior to the contract bidding. The equipment must be completely compatible with all components of the equipment currently in use by the Agency.

All new installations shall be equipped with Confirmation Beacons as shown on the "District One Standard Traffic Signal Design Details." The Confirmation Beacon shall consist of a 6 watt Par 38 LED flood lamp with a 30 degree light spread, or a 7 watt Par 30 LED flood lamp with a 15 degree or greater spread, maximum 7 watt energy consumption at 120V, and a 2,000 hour warranty for each direction of pre-emption. The lamp shall have an adjustable mount with a weatherproof enclosure for cable splicing. All hardware shall be cast aluminum or stainless steel. Holes drilled into signal poles, mast arms, or posts shall require rubber grommets. In order to maintain uniformity between communities, the confirmation beacons shall indicate when the control equipment receives the pre-emption signal. The pre-emption movement shall be signaled by a flashing indication at the rate specified by Section 4L.01 of the "Manual on Uniform Traffic Control Devices," and other applicable sections of future editions. The stopped pre-empted movements shall be signaled by a continuous indication.

All light operated systems shall include security and transit preemption software and operate at a uniform rate of 14.035 Hz \pm 0.002, or as otherwise required by the Engineer, and provide compatible operation with other light systems currently being operated in the District.

This item shall include any required modifications to an existing traffic signal controller as a result of the addition of the EMERGENCY VEHICLE PRIORITY SYSTEM.

Basis of Payment.

The work shall be paid for at the contract unit price each for furnishing and installing LIGHT DETECTOR and LIGHT DETECTOR AMPLIFIER. Furnishing and installing the confirmation beacon shall be included in the cost of the Light Detector. Any required modifications to the traffic signal controller shall be included in the cost of the LIGHT DETECTOR AMPLIFIER. The preemption detector amplifier shall be paid for on a basis of (1) one each per intersection controller and shall provide operation for all movements required in the pre-emption phase sequence.