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

April 10, 2025

SUBJECT: Various Routes
Section 17-00064-00-BT (Carol Stream)
DuPage County
Contract No. 61K79
Item 167
April 25, 2025 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

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

1. **Revised Sheet 6 of the Plans.**
2. **Revised the Schedule of Prices.**
3. **Revised the Table of Contents to the Special Provisions.**
4. **Revised Pages 5, 6 & 7 of the Special Provisions.**
5. **Added Pages 6a & 6b to 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

TABLE OF CONTENTS

Place and compact backfill materials in 6-inch layers around the fire hydrant and auxiliary gate valve.

Rotate hydrants to the proper position prior to testing.

Cover new fire hydrant with plastic bag until new system is in service.

Basis of Payment
The work will be paid for at the contract unit price EACH for FIRE HYDRANTS.

FIRE HYDRANTS TO BE REMOVED

Description: This item shall include full compensation for cost of removal and disposal of the complete fire hydrant and auxiliary valve assembly and connecting water main, excavation, plugging of abandoned main at the hydrant tee, hauling, disposal of excess material, backfill, temporary restoration of disturbed area but not including permanent restoration, cleanup and work incidental to fire hydrant removal but not specifically included in other unit prices.

Method of Measurement: This work will be measured for payment in place as EACH for FIRE HYDRANTS TO BE REMOVED.

Basis of Payment: This work will be paid at the contract unit price for FIRE HYDRANTS TO BE REMOVED.

RECTANGULAR RAPID FLASHING BEACON ASSEMBLY (COMPLETE)

Description
This work shall consist of furnishing and installing the solar-powered flashing beacon assembly. Each assembly shall consist of a rectangular rapid flashing beacons (RRFBs), accessible pedestrian signal (APS), solar panel, battery pack with charger, LED driver and wireless communications equipment, traffic signal post, warning signs and plaques attached to a breakaway post or other approved mounting system as shown in the plans and as specified by the Engineer.

Materials
All materials furnished, assembled, fabricated, or installed shall be corrosion resistant. All mounting hardware shall be Type 304 stainless steel.

All components shall be manufactured and assembled as a complete system rated for at least 300 cycles per day. The solar-powered system shall be an easy to install, fully self-contained, weather, corrosion, and vandal-resistant unit with a premium grade UV-resistant head. The system shall be power-autonomous without the need for an external power supply. The system shall have an operating temperature range of -20 degrees to 122 degrees Fahrenheit (-15 degrees to 50 degrees Celsius).

The Contractor shall furnish and install two direction RRFB units mounted to the post as indicated on the plans. All equipment and hardware required to mount the beacons and solar engine to the

assembly are included in the cost of this item. The RRFB housing shall be minimum 1/8" thick aluminum.

Each RRFB unit shall satisfy the FHWA Interim Approval for Optional Use of Pedestrian Actuated Rectangular Rapid Flashing Beacons (IA-21), dated March 20, 2018, and the 2009 edition of the MUTCD, including the unit size, mounting location, flash rate, and operational parameters. The RRFB units must be programmable to allow the Engineer to set the duration of the flashing beacon display based on the crossing time requirements established in the MUTCD.

Accessible Pedestrian Signals (APS)

Solar-powered flashing beacons shall be push-activated with ADA compliant buttons. The APS must meet the requirements of the MUTCD and Sections 801 and 888 of the Standard Specifications, except as modified herein.

Add the following to Article 888.03 of the Standard Specifications:

> "A mounting bracket and/or extension must be used to assure proper orientation and accessibility where needed. The bracket and/or extension is included in the cost of the pedestrian push-button. The Contractor is not allowed to install a push-button assembly with the sign below the push-button to meet mounting requirements."

Add the following to Article 1074.02 of the Standard Specifications:

> "Stations must be designed to be mounted to a post, mast arm pole or wood pole. The station must be aluminum and must accept a 3 in. round push-button assembly and a regulatory pedestrian instruction sign according to MUTCD sign series R10-3e 9 in. x 15 in. sign with arrow(s) for a countdown pedestrian signal. Stations must be powder coated yellow with a black push-button and a stainless steel tactile arrow on the push-button."

Electrical Requirements. The APS must operate with systems providing 95 to 130 VAC, 60 Hz and throughout an ambient air temperature range of -29 to +160 °F (-34 to +70 °C).

The APS must contain a power protection circuit consisting of both fuse and transient protection.

Audible Indications. A push-button locator tone must sound at each push-button. Push-button locator tones must have a duration of 0.15 seconds or less and must repeat at 1 second intervals. Each actuation of the push-button must be accompanied by the speech message "Wait". Locator tones must be audible 6 to 12 ft from the push-buttons.

In addition, a speech push-button information message must be provided by actuating the APS push-button during the Don't Walk interval. This verbal message must be modeled after: "Wait". The extended press option verbal message must be: "Wait to cross Gundersen Drive".

If a speech pushbutton information message is used in conjunction with an RRFB, a locator tone shall be provided, the audible information device shall not use vibrotactile indications or percussive indications, and the message should say, "Yellow lights are flashing." The message should be spoken twice.

Automatic volume adjustments in response to ambient traffic sound level must be provided up to a maximum volume of 100 dB. Locator tones and speech messages must be no more than 5 dB louder than ambient sound. Locator tones and speech messages must be programmed at the same volume; one must not be significantly louder than the other and must be adjusted as directed by the Engineer.

Pedestrian Push-button.

Pedestrian push-buttons must be at least 2 in. (50 mm) in diameter or width. The force required to activate the push-button must be no greater than 3.5 lb (15.5 N).

A red LED must be located on or near the push-button which, when activated, acknowledges the pedestrian's request to cross the street.

APS push-buttons must be compatible with one another and easily replaceable on future replacements or maintenance repairs. Multiple model variations will not be allowed.

All APS push-buttons must come with speech messages pre-programmed for each particular intersection regardless of their location or distance of separation. Final field adjustments, including the use of percussive tones or speech messages, must be completed once push-buttons are installed in the final location. All push-buttons must be programmed with the appropriate parameters and settings as directed by the Engineer. These settings must be standard for all push-buttons and will vary based on the manufacturer. Access to push-button settings must be provided via an application either through wired, wireless or Bluetooth connection. Push-button information, settings and access instructions must all be provided in a weatherproof pouch and safely stored inside each traffic signal cabinet.

The batteries shall be sealed, maintenance free and field replaceable. The battery pack shall have a minimum rated lifespan of 3 years.

The solar engine shall be the high-efficiency type and rated for at least 20 watts. The system shall have the capacity to operate the beacons continuously for 30 days without solar charging and have automatic light control to provide useful light during extreme conditions that prevent charging over an extended period of time.

All wiring for connecting the pedestrian push buttons, flasher unit, solar power unit, and other installed components shall be included in the cost of RECTANGULAR RAPID FLASHING BEACON ASSEMBLY (COMPLETE).

All installed solar powered flashing beacon assemblies must communicate wirelessly using an unlicensed radio band so as to simultaneously commence operation of their alternating flashing indications and cease operation simultaneously. The communication equipment shall comply with FCC requirements and the vendor representative shall field test the equipment prior to placing the units in operation. The wireless communications of one beacon installation shall not interfere with, or cause unintended operation of, beacons at nearby intersections.

The flashing beacon assembly shall be installed and mounted as indicated in the plans, using a Concrete Foundation Type A. A galvanized steel traffic signal post meeting the requirements of Section 875 of the Standard Specifications, of the diameter and length recommended by the

beacon manufacturer, up to a maximum length of 18 feet, shall be used to support the flashing beacon assembly hardware. All posts shall be steel and hot dipped galvanized.

Each beacon assembly shall include signage as shown on the plans. The signs shall be in accordance with Section 720 of the Standard Specifications.

The entire system shall have a minimum 3-year warranty.

Installation

The solar powered flashing beacon assembly and system shall be installed in strict accordance with the manufacturer's recommendations, applicable portions of Article 880.03 of the Standard Specifications, as shown on the Plans, and as directed by the Engineer.

Mounting of the hardware to the foundation shall be in accordance with the Standard Specifications modified herein and shall follow all manufacturer recommendations. The traffic signal post and shroud shall be installed on the foundation in accordance with the manufacturer recommendations.

The beacons and solar engine shall be attached to the structure using rigid galvanized steel conduit, stainless steel straps, manufacturer recommended mounting brackets, and U-bolts.

The beacons shall be installed as shown on the Plans. The final elevation and location of the beacons must be approved by the Engineer prior to beginning work.

The solar panel shall be installed at the highest point on the assembly structure, or as directed by the Engineer, and away from the travelled way. The solar engine shall be at a 45-degree angle facing the equator (due south) with full unobstructed solar exposure for optimum performance of the system, or as recommended by the manufacturer and directed by the Engineer.

Basis of Payment

This item will be paid at the contract unit price each for RECTANGULAR RAPID FLASHING BEACON ASSEMBLY (COMPLETE), which shall be payment in full for furnishing and installing the support structure finished according to the plans, RRFB's, accessible pedestrian signal (APS), solar power equipment, wiring, mounting hardware, control or circuit board hardware, housings, communications equipment, post, shroud, warning signs and plaques and all other materials, labor, hardware, and connections required to achieve proper operations of the flashing beacon assembly to the satisfaction of the Engineer. Foundations shall be paid for separately.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

Description. This work shall consist of the removal and disposal of regulated substances according to Section 669 of the Standard Specifications as revised below.

Contract Specific Sites. The excavated soil and groundwater within the areas listed below shall be managed as either "uncontaminated soil", hazardous waste, special waste or non-special waste. For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

Soil Disposal Analysis. When the waste material requires sampling for landfill disposal acceptance, the Contractor shall secure a written list of the specific analytical parameters and analytical methods required by the landfill. The Contractor shall collect and analyze the required number of samples for the parameters required by the landfill using the appropriate analytical procedures. A copy of the required parameters and analytical methods (from landfill email or on landfill letterhead) shall be provided as Attachment 4A of the BDE 2733 (Regulated Substances Final Construction Report). The price shall include all sampling materials and effort necessary for collection and management of the samples, including transportation of samples from the job site