

SOLAR-POWERED SCHOOL ZONE FLASHING BEACON

**\*\*From Fair Haven-Castleton/Fair Haven paving (4 projects)**

- xx. DESCRIPTION. This work shall consist of installing a solar-powered school zone flashing beacon at the location indicated in the Plans and as directed by the Engineer.

The work under this Section shall be performed in accordance with these provisions, the Plans, and Section 678 of the Standard Specifications.

- xx. MATERIALS. Materials shall meet the requirements as shown on the Plans. Materials shall be approved by the Engineer prior to use.

- xx. SUBMITTALS.

(a) Fabrication Drawings. The Contractor shall submit Fabrication Drawings in accordance with Sections 105 and 678.

(b) Documentation Requirements. Three (3) advance copies of equipment manuals furnished by the manufacturer shall be submitted to the Engineer for review a minimum of ten days prior to the scheduled start of the first Operational Stand-alone Test. The Engineer will verify the manufacturer's equipment manual as part of the test and integration process. The equipment manual incorporating the Engineer's corrections and comments shall be integrated by the Contractor into the operations and maintenance manual. The manual shall, as a minimum, include the following:

- (1) Complete and accurate schematic diagrams.
- (2) Complete installation and operation procedures.
- (3) Complete performance specifications (functions, electrical, mechanical, and environmental) of the unit.
- (4) Complete accurate troubleshooting, diagnostic, and maintenance procedures.

- xx. CONSTRUCTION REQUIREMENTS. Installation of the solar-powered flashing beacon, support assembly, power supply, and testing shall be performed in accordance with the Contract Documents, manufacturers' recommendations, and as directed by the Engineer.

- xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Solar-Powered School Zone Flashing Beacon) to be measured for payment will be for each beacon installed in the complete and accepted work.

- xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Solar-Powered School Zone Flashing Beacon) will be paid for at the Contract unit price per each at each designated location.

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Payment will be full compensation for installing the reinforced concrete base, grounding electrode with conduit, pedestal post and base, solar panel, flashing beacon, flasher cabinet, and any required attachment hardware; testing the beacon; and for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work.

Payment for sign post(s) and panel(s) installed on the pedestal post will be made under the appropriate Contract items.

Payment for Special Provision (Solar-Powered School Zone Flashing Beacon) will be made as follows:

- (a) When applicable, 10 percent of the Contract unit price will be paid for installation of the pedestal pole.
- (b) Upon installation of a functioning system as indicated by a successful continuous 24-hour operation test period, an additional 10 percent of the Contract unit price will be paid.
- (c) Thirty percent of the Contract unit price will be paid upon receipt by the Engineer of notice from all responsible Agency parties that all paperwork related to the beacon installation has been completed to the satisfaction of the Agency.
- (d) The remainder, less 20 percent of the Contract unit price, will be paid after successful completion of the 30-day test control period.
- (e) The final 20 percent of the Contract unit price will be paid upon acceptance of the project.
- (f) The Contractor will not be paid more than 50 percent of the Contract unit price for flashing beacon installation, whether directly or through stockpile or any other means until the Engineer has been notified that all related paperwork has been completed to the satisfaction of the Agency.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.620 Special Provision (Solar-Powered School Zone Flashing Beacon)	Each