

Special Provisions for: Statewide STP SRIN(42)(Re-Advertised)

1. LABOR SUPPLY. Available workers for this Contract may be obtained from Manager, Employment & Training, Barre, Burlington, Rutland, and St. Johnsbury, VT. The latest edition of the DBE Registry can be obtained from the Office of Civil Rights and Labor's Webpage at the following address: <http://vtranscivilrights.vermont.gov/>. Contractors that do not have access to the internet may obtain a copy from the Office of Contract Administration upon request.
2. CONTRACT COMPLETION DATE. This Contract shall be completed on or before **September 2, 2016**.
3. NOTICE TO BIDDERS - SUBSTANTIAL COMPLETION. The Contractor is hereby notified that Substantial Completion will not be granted under this Contract until a walk through inspection has been completed by the Engineer and the Contractor's project supervisor to ensure that work has been completed according to the Contract Documents and subsequent change orders, and all resulting "Punch List" items have been completed to the satisfaction of the Engineer.
4. NOTICE TO BIDDERS. U.S. Department of Labor Davis-Bacon wage rates are applicable to this Contract. Copies of the applicable rates are included in this proposal.

*In the included wage rates, the requirements of Executive Order 13658 do not apply to this Contract.*

5. CONTACT WITH THE AGENCY. From the time of advertising until the actual bid opening for this Contract, all prospective Contractors, subcontractors, and suppliers shall direct all inquiries related to this project solely to the Agency's Office of Contract Administration at (802) 828-2641. This number may also be accessed via the Agency's TTY/TDD Telecommunications Relay Service at 1-800-253-0191.

*The deadline for submitting inquiries related to this project to the Office of Contract Administration is 4:30 p.m. Eastern Standard Time on October 23, 2015. No exceptions will be made to this requirement.*

6. NOTICE TO BIDDERS. The Contractor is hereby notified that in the absence of the Engineer, the Agency's Safety Officer and the Agency's Hazardous Materials and Waste Coordinator shall each have the authority to suspend work when they determine that a serious safety or environmental violation exists on the job site. The period of time work is suspended due to a serious safety or environmental violation will not be justification for an extension of time.
7. NOTICE TO BIDDERS. Prior to ordering any signs, the Contractor shall perform an inventory of the signs on the project in the presence of the Engineer.

Upon completion of the inventory, the Engineer will issue to the Contractor a written order detailing all signing changes, including decisions made by the Engineer in conformance with Agency policy, the Manual on Uniform Traffic Control Devices (MUTCD), and the Standard Highway Signs and Markings (SHSM) book. Upon receiving the written order, the Contractor shall then order signs.

8. STANDARD SPECIFICATIONS. The provisions of the 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, as modified herein, shall apply to this Contract.

9. SUPPLEMENTAL SPECIFICATIONS AND CONTRACT REQUIREMENTS. The Contractor's attention is directed to the following specifications and contract requirements included in the Proposal form and effective for this Contract:

Required Contract Provisions for Federal-Aid Construction

Standard Federal EEO Specifications

VT Agency of Transportation Contractor Workforce Reporting Requirements

Workers' Compensation; State Contracts Compliance Requirement

General Special Provisions dated April 7, 2015

Bulletin 3.5 Attachment C: Standard State Provisions for Contracts and Grants

Vermont Minimum Labor & Truck Rates

Disadvantaged Business Enterprise (DBE) Policy Contract Requirements

U.S. Department of Labor Davis-Bacon Wage Rates

Asphalt Price Adjustment Provisions dated April 6, 2010

Certification for Federal-Aid Contracts

Contractor's EEO Certification Form

Debarment & Non-Collusion Affidavit

10. NOTICE TO BIDDERS - CONTRACT INSURANCE REQUIREMENTS. The Contractor is hereby notified that in the event of a discrepancy between the stated insurance requirements of Bulletin 3.5 Attachment C: Standard State Provisions for Contracts and Grants and those of Subsection 103.04 of the Standard Specifications for Construction, the requirements of Subsection 103.04 of the Standard Specifications for Construction shall govern.

11. NOTICE TO BIDDERS - ADDITIONAL CONTRACT REQUIREMENT. For construction and transportation projects over \$250,000.00, a payroll process by which during every pay period the Contractor collects from the subcontractors or independent contractors a list of all workers who were on the jobsite during the pay period, the work performed by those workers on the jobsite, and a daily census of the jobsite. This information, including confirmation that Contractors, subcontractors, and independent contractors have the appropriate workers' compensation coverage for all workers at the jobsite, and similar information for the subcontractors regarding their subcontractors shall also be provided to the Department of Labor and to the Department of Banking, Insurance, Securities, and Health Care Administration, upon request, and shall be available to the public.

12. NOTICE TO BIDDERS - RE-DESIGNATION OF VTRANS OFFICIALS. The Contractor is hereby notified of the following re-designation of VTrans officials as referenced in the Contract Documents:

Where in the Contract Documents it reads:	It shall be read as and shall mean:
Director of Program Development	Chief Engineer
Assistant Director of Program Development	Deputy Chief Engineer
Roadway, Traffic, and Safety Engineer; Roadway Program Manager; Highway Safety & Design Engineer; Structures Engineer; Structures Program Manager	Director of Project Delivery Bureau
Chief of Local Transportation Facilities	Director of Municipal Assistance Bureau
Construction Engineer; Materials and Research Engineer	Director of Construction and Materials Bureau
Director of Operations	Director of Maintenance and Operations Bureau

13. NOTICE TO BIDDERS - STANDARD DRAWING MODIFICATION. The Contractor is hereby notified of the following Standard Drawing modification:

- (a) STANDARD E-163: TUBULAR STEEL SIGN POST. GENERAL NOTES, Note No. 1, is hereby modified by being deleted in its entirety and replaced as follows:

MATERIAL AND FABRICATION FOR STEEL PIPE SHALL CONFORM TO THE REQUIREMENTS OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, AS MODIFIED.

14. NOTICE TO BIDDERS. All temporary construction signs shall meet the following requirements:

- A. Where sign installations are not protected by guardrail or other approved traffic barriers, all sign stands and post installations shall meet National Cooperative Highway Research Program (NCHRP) Report 350 or the AASHTO Manual for Assessing Safety Hardware (MASH). The appropriate resource shall be determined as described in the MASH publication. No sign posts shall extend over the top of the sign installed on said post(s). When anchors are installed, stub shall not be greater than 100 mm (4 inches) above existing ground.
- B. As a minimum, roll up sign material shall have ASTM D 4956 Type VI fluorescent orange retroreflective sheeting.
- C. All post-mounted signs and solid substrate portable signs shall have ASTM D 4956 Type VII, Type VIII, or Type IX fluorescent orange retroreflective sheeting.

- D. All retroreflective sheeting on traffic cones, barricades, and drums shall be at minimum ASTM D 4956 Type III sheeting.
- E. All stationary signs shall be mounted on two 4.5 kg/m (3 lb/ft) flanged channel posts or 51 mm (2 inch) square steel inserted in 57 mm (2 ¼") galvanized square steel anchors. No sign posts shall extend over the top edge of sign installed on said posts.
- F. Prior to placing temporary work zone signs on the project, the Contractor must furnish for the Engineer's approval a detail for temporary work zone signs on steel posts showing stubs projecting a maximum of 100 mm (4 inches) above ground level and bolts for sign post.
- G. Construction signs shall be installed so as to not interfere with nor obstruct the view of existing traffic control devices, stopping sight distance, and corner sight distance from drives and town highways.
- H. Speed zones, if used, should be a maximum of 16 kph (10 mph) below existing posted speeds. Temporary speed limit certificates must be approved by the Chief Engineer.
15. NOTICE TO BIDDERS. All retroreflective sheeting on permanent signs (signs to remain after the project is completed) shall be at minimum ASTM D 4956 Type III sheeting, unless otherwise shown on the Plans.
16. NOTICE TO BIDDERS. The Contractor may place all construction approach and work zone signs on temporary sign stands to move them from work area to work area as required by the Contractor's operations. Each area in which the Contractor is working shall have all necessary approach and work zone signs erected and properly viewable by the traveling public before the work begins.

All signs will be continuously maintained in viewable condition while work is being performed in the signed area.

The Contractor shall remove signs and temporary sign stands from the project as soon as they are no longer required.

While any work is being performed on ramps either night or day, a uniformed traffic officer with a blue light shall be on station.

**17. ENVIRONMENTAL. TO BE DEVELOPED - NLEB**

18. UTILITIES. It is anticipated that no utilities will be affected by the construction of this project.

Employees or agents of the owners of the utility facilities are to be allowed free and full access within the project limits with the tools, materials, and equipment necessary to install, operate, maintain, place, replace, relocate, and remove their facilities.

There will be no extra compensation paid to the Contractor for any inconvenience caused by working around and with the utility facilities owners or their facilities.

The Contractor is advised that exploratory excavation to locate existing underground facilities may be necessary to protect these facilities from damage. Where approved by the Engineer, these utilities shall be located and/or exposed by methods such as air/vacuum excavation and/or hand digging to determine their exact location. This exploratory work shall be classified as Trench Excavation of Earth, Exploratory and payment will be made under Contract item 204.22.

Vermont Statutes Annotated, Title 30, Chapter 86 ("Dig Safe") requires notice to Dig Safe before starting excavation activities. The Contractor must telephone Dig Safe at 811 at least 48 hours (excluding Saturdays, Sundays and legal holidays) before, but not more than 30 days before, starting excavation activities at any location. In addition, before excavation and/or pavement grinding in or on the state highway right-of-way, the Contractor must contact the Agency's District Transportation Administrator to obtain/verify the location of Agency's underground utility facilities or to confirm the absence of such facilities.

Should the Contractor desire additional adjustments of the utility facilities for his/her convenience, proper arrangements shall be made in conformance with Subsection 105.07 of the Standard Specifications for Construction.

19. NOTICE TO BIDDERS - SALVAGED MATERIALS. The Contractor is hereby notified that all existing sidewalk detectable warning surfaces, re-usable signs meeting ASTM D 4956-01 Type III or greater retroreflective sheeting requirements, re-usable sign posts, and other materials designated in the Plans to be salvaged, as determined by the Agency, and where applicable the municipality, shall remain the property of the municipality or the State as specified herein.

All salvageable materials removed under this project in the towns of Burke, Fayston, Isle Lamotte, Jericho, and West Rutland shall remain the property of the municipality. All salvageable materials located in the Town of Concord shall remain the property of the State.

The Contractor shall remove these materials in such a manner that salvageable components are not damaged.

The Contractor shall load these materials onto suitable transport and deliver them to the designated municipal or VTrans Maintenance Facility. The Contractor shall perform delivery of these materials between normal working hours of 7:30 a.m. to 3:30 p.m. The State or municipality will provide equipment and personnel to unload and stockpile these materials. Component materials not designated to be retained by the municipality or the State shall be disposed of by the Contractor to the satisfaction of the Engineer.

The Contractor shall contact the appropriate municipal representative or VTrans District Transportation Administrator Dale Perron [Tel.: (802)748-6670], as applicable, a minimum of two (2) weeks prior to beginning delivery to the designated location.

All costs for loading and delivering these salvaged materials will be considered incidental to the Contract item(s) under which they are removed.

20. HIGHWAY PARKING RESTRICTIONS. Only such trucks and equipment as are necessary for the construction of this project will be permitted to stop or park on the shoulders or right-of-way of the highway or intersecting highways. All trucks or equipment so stopped or parked shall be at least 1.2 m (4 feet) from the edge of the thru traffic lanes. Parking or stopping on the traveled portion of the roadway will not be permitted unless authorized by the Engineer to meet field conditions.

Private automobiles of workers will not be permitted to stop or park on the shoulders or right-of-way of the highway or intersecting highways.

Each of the Contractor's trucks or equipment used for the construction of this project and permitted to park or stop as provided above shall be equipped with flashing light signals on the front and rear and the signals shall be operating at all times when parked or stopped on the highway unless otherwise authorized by the Engineer.

The flashing light signals shall be visibly distinct from and physically separate from the hazard warning system required by Federal and State motor vehicle laws and regulations. At least one of these flashing light signals shall be visible to traffic approaching from any angle at all times.

Qualified traffic control personnel shall be employed whenever the Contractor's vehicles or equipment (including that which belongs to the individual workers) enter or leave the traffic flow. All movement, in or out of the traffic flow, shall be with the flow of traffic.

21. SPECIAL CONSTRUCTION REQUIREMENTS.

- A. Unless otherwise permitted in writing by the Engineer, the Contractor shall not work during the holiday period for July Fourth. The Engineer shall give a written order designating the time of observance of this holiday and of any additional holidays required by the season, anticipated traffic, and local custom. As specified in Subsection 105.14, construction operations shall not be performed on any Sunday without the specific authorization of the Engineer.

Designated holiday periods shall begin at 12:00 noon on the day before the weekend or holiday, whichever applies, and shall end at 7:00 a.m. on the day after the holiday or the weekend, as appropriate.

- B. Except during holiday periods, the Contractor shall maintain a minimum of one-way traffic through the project at all times. During holiday periods, the Contractor shall maintain two-way traffic through the project at all times. Wherever one-way traffic is maintained by the Contractor, the traveling public shall not be delayed more than 10 minutes unless otherwise directed by the Engineer.
- C. The Contractor shall maintain a safe access to all drives, intersecting side roads, ramps, and U-turns at all times during the construction of this project.
- D. Portions of this project are within urban limits, requiring that pedestrian and bicycle traffic be accommodated for in the project Traffic Control Plan.

- E. Consideration shall be given in order that construction does not interfere with peak traffic flow during the week or weekends.
- F. Consideration shall be given to businesses located along the project route. The Contractor shall maintain a safe access to for customers and employees to all businesses at all times during the construction of this project.
- G. No construction signs shall be installed so as to interfere or obstruct the view of existing traffic control devices or stopping and corner sight distances from drives and town highways.
- H. The Contractor may place all construction approach and work zone signs on NCHRP 350 compliant stands to move from work area to work area as required by the Contractor's operations. Each work area in which the Contractor is working shall have all necessary approach and work zone signs erected and properly viewable by the traveling public.

The Contractor shall not allow a Flagger or Uniformed Traffic Officer to be located more than 300 meters (1000 feet) from the "Flagger Ahead" sign.

It is recommended that the Contractor review the work to be performed in advance and locate sufficient signage and stands unerected along the route of work so that necessary signage may be erected as needed. The Contractor's designated Safety Officer shall ensure that traffic control devices that are no longer needed are removed from the project as soon as possible.

- I. Before any sign is removed, its replacement shall be installed where required.
- J. Direct communication between each of the Contractor's crews, including all of the Contractor's vehicles during moving operations, traffic control personnel, Uniformed Traffic Officers, and the Engineer and/or Inspector(s) will be maintained by two-way radios. Widely separated crews may communicate with each other by cell phone if out of radio range.

The Contractor shall provide at each work location one hand-held radio compatible with the two-way radios used in the Contractor's vehicles for use by the Engineer and/or Inspector(s) to contact traffic control personnel.

All radios will be checked daily for proper operations. If they are not working properly, the Contractor will not start the day's operations.

The radios provided herein will remain the property of the Contractor. All costs for furnishing and using radios will not be paid for directly, but will be considered incidental to Contract item 641.10.

- K. The Contractor shall only stage equipment, materials, supplies, or park equipment overnight at locations determined by the Engineer to meet project and safety conditions.

- L. The Contractor shall have available on the project the current editions of the Manual on Uniform Traffic Control Devices (MUTCD) and the Standard Highway Signs and Markings (SHSM) Book. Information for obtaining these publications may be found at: <http://mutcd.fhwa.dot.gov/index.htm>.

#### ASPHALT PRICE ADJUSTMENT

22. SUPPLEMENTAL SPECIFICATION - ASPHALT PRICE ADJUSTMENT, dated April 6, 2010, is hereby made a new Subsection of the Specifications, superseding all previous editions and their modifications.
23. SUPPLEMENTAL SPECIFICATION - ASPHALT PRICE ADJUSTMENT, dated April 6, 2010, GENERAL REQUIREMENTS AND CONDITIONS, part (b) text, is hereby modified by being deleted in its entirety and replaced with text "NOT USED".

The index price for asphalt cement is \$XXX.00 per ton.

In addition to materials produced under Contract pay item(s) as allowed in GENERAL REQUIREMENTS AND CONDITIONS, part (a) of the Supplemental Specification, asphalt cement produced under Contract item 900.675 Special Provision (Hand-Placed Bituminous Concrete Material, Drives) will be included for adjustment.

The tonnage of Special Provision (Hand-Placed Bituminous Concrete Material, Drives) placed will be utilized in the adjustment calculation.

If an emulsified asphaltic liquid is used in the Contract work under any Contract item subject to the Asphalt Price Adjustment provisions and that liquid is not included in the table under subpart (5) of PRICE ADJUSTMENT PROCEDURES of the Supplemental Specification, the ACEA as defined in subpart (5) for that liquid will be that as determined by averaging Contractor certified test results for the project.

#### SECTION 108 - PROSECUTION AND PROGRESS

24. 108.01 SUBLETTING OR ASSIGNMENT OF CONTRACT, part (b) Performance of the Contract Work, is hereby modified by deleting the phrase "50 percent" in the first and fourth sentences, and in subpart (1), and replacing it with the phrase "30 percent".
25. 108.11 DETERMINATION OF EXTENSION OF CONTRACT TIME FOR COMPLETION, part (b) Determination of Contract Completion Date Extension, is hereby modified by adding new subpart (11) as follows:

- (11) The days from April 15<sup>th</sup> to December 1<sup>st</sup>, inclusive, on which the weather or condition of the ground caused suspension of the work.

#### SECTION 900 - SPECIAL PROVISION ITEMS

##### RADAR SPEED FEEDBACK SIGN ASSEMBLY

26. DESCRIPTION. This work shall consist of installing radar speed feedback sign assembly(ies) at the location(s) 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.

27. GENERAL REQUIREMENTS. Radar speed feedback signs shall meet the requirements and be configured as specified in the Plans.

The Contractor shall install solar-powered feedback signs where feasible, as determined by the sign manufacturer and the Engineer.

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

29. SUBMITTALS.

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

(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.

30. CONSTRUCTION REQUIREMENTS. Installation of the radar speed feedback signs, support assembly, power supply, and testing shall be performed in accordance with the Contract Documents, manufacturers' recommendations, and as directed by the Engineer.

Radar speed feedback signs shall not be made operational until all new speed limit signs are installed and all existing speed limit signs required to be removed are removed.

31. METHOD OF MEASUREMENT. The quantity of Special Provision (Radar Speed Feedback Sign Assembly) of the type specified to be measured for payment will be for each sign assembly installed in the complete and accepted work.

32. BASIS OF PAYMENT. The accepted quantity of Special Provision (Radar Speed Feedback Sign Assembly) of the type specified will be paid for at the Contract unit price per each at each designated location. Payment will be full compensation for preparing and submitting Fabrication Drawings, foundation design, installing the reinforced concrete base, grounding electrode with conduit, pedestal post and base, breakaway base where required, solar panel, backup battery, speed feedback screen, "YOUR SPEED" sign, R2-1 or S5-1 sign as specified on the Plans, and any required attachment hardware; testing the feedback mechanism; training of all municipality representatives in sign operation; display of identification and contact information for the municipality; and for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work.

Payment for Special Provision (Radar Speed Feedback Sign Assembly) of the type specified 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 sign 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 proper training of municipal representatives and acceptance of the project.
- (f) The Contractor will not be paid more than 50 percent of the Contract unit price for Radar Speed Feedback Sign 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 (Radar Speed Feedback Sign Assembly, Solar-Powered)	Each

SCHOOL ZONE FLASHING BEACON

33. DESCRIPTION. This work shall consist of installing a solar-powered school zone flashing beacon at the location(s) 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.

34. GENERAL REQUIREMENTS. Flashing beacons shall meet the requirements and be configured as specified in the Plans.

The Contractor shall install solar-powered beacons where feasible, as determined by the sign manufacturer and the Engineer.

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

36. 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.

37. CONSTRUCTION REQUIREMENTS. Installation of the 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.

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

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

Payment will be full compensation for preparing and submitting Fabrication Drawings, foundation design, 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; training of all municipality representatives in beacon operation; display of identification and contact information for the municipality; and for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work.

Payment for Special Provision (School Zone Flashing Beacon) of the type specified 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 proper training of municipal representatives and 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 (School Zone Flashing Beacon, Solar-Powered)	Each

HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES

40. DESCRIPTION. This work shall consist of the placement of one or more courses of bituminous concrete material by hand (non-mechanical) methods on a prepared foundation in conformance with the Plans or as directed by the Engineer.

The work under this Section shall be performed in accordance with these provisions, the Plans and Section 406 or Section 490 of the Standard Specifications, as appropriate.

41. GENERAL. This work will include only that bituminous concrete material placed by hand methods as required at public and/or private drives and permitted drives (such as field drives for agriculture) measured from the outside edge of shoulder to outside limit of drive, within the project limits as identified on the Plans or as directed by the Engineer. Bituminous concrete material placed by mechanical methods at these locations is excluded.

All other bituminous materials placed within the project limits, whether by hand or mechanical methods, shall be paid under the appropriate Contract pay item for bituminous mix or as otherwise specified in the Contract Documents.

42. MATERIALS. Materials shall meet the requirements of the following Subsections:

Subbase, RAP.....	301.02
Aggregate Shoulders, RAP.....	402.02
Performance-Graded Asphalt Binder.....	702.02
Emulsified Asphalt.....	702.04
Crushed Gravel for Subbase.....	704.05
Aggregate for Surface Course and Shoulders.....	704.12

Bituminous concrete material of the type specified in the Contract or as specified by the Engineer shall meet the requirements of Section 406 or Section 490, as applicable. For the purpose of this Section, bituminous concrete material to be used shall be of the type specified in the Contract or, by default, of a matching material to that adjacent material placed by mechanical methods.

43. CONSTRUCTION REQUIREMENTS. The existing surface and/or bed (subbase) upon which the bituminous concrete material is to be placed shall be compacted to the line, grade, and shape shown on the Plans or as directed by the Engineer. All vegetation and soft, yielding, or unsuitable material shall be excavated and replaced with properly compacted material meeting the requirements of Section 301 for Subbase of Crushed Gravel, Fine Graded. Crushed RAP generated from the project may be substituted for Subbase of Crushed Gravel, Fine Graded.

The existing edge of pavement shall be saw cut to provide a vertical edge for placing the hand-placed bituminous concrete material.

Emulsified asphalt shall be applied uniformly and completely to all vertical and horizontal surfaces to be paved. All surfaces shall be free of moisture, dust, and debris prior to applying emulsified asphalt.

If cross slope allows, as determined by the Engineer, existing paved drives shall be cold planed the entire drive width to the depth of the wearing course, not to exceed 50 mm (2 inches). Unless the drive is to be paved that day, all cold planed vertical edges shall have temporary fillets placed the same day cold planning takes place.

All existing paved drives shall have all temporary fillets removed; any existing joints, cracks, and holes cleaned; all vertical and horizontal surfaces to be paved coated with emulsified asphalt; all holes filled with bituminous concrete material compacted to the level of the existing surface; and be thoroughly cleaned and dried prior to any hand-placed bituminous concrete material being placed.

Hand-Placed bituminous concrete material shall be rolled with a 1 metric ton (1 ton) mechanical roller with steel drums, or approved equal, until compacted to the satisfaction of the Engineer.

44. METHOD OF MEASUREMENT. The quantity of Special Provision (Hand-Placed Bituminous Concrete Material, Drives) to be measured for payment will be the number of square meters (square yards) complete in place in the accepted work.

Hand-placed bituminous concrete material placed less than 12.5 mm (½ inch) thick will not be measured for payment.

When any portion or all of Special Provision (Hand-Placed Bituminous Concrete Material, Drives) is removed from the project under any provisions of the Contract or as directed by the Engineer, no payment will be made for the removal, disposal, or replacement of said material.

45. BASIS OF PAYMENT. The measured quantity of Special Provision (Hand-Placed Bituminous Concrete Material, Drives) will be paid for at the Contract unit price per square meter (square yard). Payment shall be full compensation for furnishing, mixing, hauling, placing, compacting, and finishing the material specified and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

Emulsified asphalt used as specified and backfill material meeting the requirements specified in the Plans will be considered incidental to Special Provision (Hand-Placed Bituminous Concrete Material, Drives).

When not specified for payment under separate Contract item(s), the costs of placing subbase material, cleaning existing paved surfaces, including power equipment, and for filling joints, cracks, and holes will not be paid for directly, but will be considered incidental to Special Provision (Hand-Placed Bituminous Concrete Material, Drives).

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.675 Special Provision (Hand-Placed Bituminous Concrete Material, Drives)	Square Yard