Outagamie County Request for Proposal
2025 Asphaltic Materials

Attachment A – Special Provisions

1. General

Perform the work under this proposal for furnishing of Asphaltic Materials for Outagamie County, Wisconsin. Execute the work as specified in the Standard Specifications for Highway and Structure Construction of the Wisconsin Department of Transportation (WisDOT Standard Specifications), current edition, Additional Special Provision 6 (ASP-6), WisDOT Construction and Materials Manual (CMM), WisDOT Manual of Test Procedures (WTP), current edition, and these Special Provisions. References to the Department or State in the Standard Specifications shall, in most instances, mean Outagamie County. The term "Engineer" shall mean an authorized representative of the Outagamie County Highway Department. The special provisions in this proposal shall supplement and take precedence over the above-mentioned specifications.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

2. Scope of Work

The work under this proposal consists of furnishing, delivering, and/or placement of asphaltic materials and all incidental items necessary to complete the work as included in this proposal.

3. Prosecution and Progress

The Department will order materials for construction and maintenance projects on an "as needed" basis in the current construction season, generally May 1 to October 15. The Department reserves the right to receive material outside of these dates, dependent upon weather conditions, availability, budgetary restrictions, and other factors.

4. Delivery Location

All "Delivered" and "Applied" pricing reflected on the proposal form shall be based on materials delivered to any County highway or County highway facility within Outagamie County. A current map of County highways is available from the Highway website or available upon request.

5. Inclement Weather

In the event of inclement weather, unless the Department has available storage, the full tanker load or portion of the scheduled delivery shall be returned to the terminal at no additional cost to the Department.

6. General Requirements for Emulsified Asphalts

A General

This special provision describes furnishing Emulsified Asphalts furnished by the supplier, picked up from the supplier's terminal (FOB), delivered by the supplier to trucks operated or hired by the Department, and/or furnished and field applied by the supplier on Department projects.

Perform work in accordance to section 455 of the standard specifications and as provided below.

B Materials

B.1 General

Furnish Emulsified Asphalt materials according to the pertinent requirements of section 455 of the Standard Specifications, CMM and ASP-6.

B.2 Quality Control

Replace section 455.2.2 and 455.2.4.3 of the Standard Specifications with the following:

Provide certification that the supplied material is in accordance with the Standard Specifications.

Supplier is encouraged to perform sampling and testing of materials at a frequency determined by the supplier as needed to maintain quality. Any testing completed shall be documented and the documentation submitted to the Department within 15 days upon completion of each project.

C Construction

If furnished material is to be applied to the roadway surface, apply material per the pertinent requirements of sections 455 or 475 of the Standard Specifications.

D Measurement

The Department will measure the asphaltic material items acceptably completed by the gallon, without correcting volumes for temperature. The Department may also measure volume by the square yard of applied surface, if the total applied volume in gallons cannot be easily determined.

E Payment

The Department will pay for measured quantities at the proposed unit price under the following items:

DESCRIPTION	UNIT
Emulsified Asphalt HFRS-2, FOB Refinery or Terminal	GAL
Emulsified Asphalt HFRS-2P, FOB Refinery or Terminal	GAL
Emulsified Asphalt CSS1-H 70/30, FOB Refinery or Terminal	GAL
Emulsified Asphalt HFRS-2, Delivered	GAL
Emulsified Asphalt HFRS-2P, Delivered	GAL
Emulsified Asphalt CSS1-H 70/30, Delivered	GAL
Emulsified Asphalt HFRS-2, Applied	GAL
Emulsified Asphalt HFRS-2P, Applied	GAL
Emulsified Asphalt CSS1-H 70/30, Applied	GAL

Payment for Emulsified Asphalt items is full compensation for furnishing Emulsified Asphalt materials to the Department for pick up by the Department or Department-hired firm at the supplier terminal (FOB), for furnishing Emulsified Asphalt materials and delivering to the Department for storage and/or transfer to Department vehicles (Delivered), or for furnishing, transporting, and field applying Emulsified Asphalt materials (Applied) to roadway surfaces for or under the control of the Department; for furnishing Quality Control testing and documentation; and for all incidental items necessary to complete the work included in this proposal.

The Department will consider adjustments to unit pricing for any proposed unit price that increases or decreases in cost by more than 25%, as long as the cost increase/decrease is shown to be industry wide. Requests for price adjustments may be initiated by the contractor or the Department

with applicable supporting documentation, and shall use the requirements of subsection 104.2.2.4.3 of the standard specification as a basis for considering an adjustment to the contract price.

Proposed unit prices shall remain in effect until March 31, 2026, unless otherwise indicated on the proposal form.

7. General Requirements for Asphalt-based Mastic Seals

A General

A.1 Overview

This special provision describes furnishing asphalt-based mastic surface seals or similar products for use on Department-owned or Department-controlled highway maintenance projects.

This specification outlines the production, application and acceptance of mastic surface seals or similar product; a surface preservation treatment consisting of a plant-produced mixture of asphalt emulsion, fine aggregates, clay, polymers, and other additives and that cures by evaporation.

A.2 Referenced Standards

A.2.A AASHTO Standards

- R 9 Acceptance Sampling Plans for Highway Construction T11 Materials Finer than # 200 Sieve
- T 27 Sieve Analysis of Fine & Coarse Aggregates
- T 59 Standard Method of Test for Emulsified Asphalt
- T 84 Specific Gravity and Absorption of Fine Aggregate
- T 308 Determining the Asphalt Binder Content of Hot-Mix Asphalt (HMA) by the Ignition Method
- T 327 Standard Method of Test for Resistance of Coarse Aggregate to Degradation by Abrasion in the Micro-Deval Apparatus

A.2.B ASTM Standards

- C 117 Materials Finer Than 0.075mm (No. 22) Sieve in Mineral Aggregates by Washing C 136 Sieve Analysis of Fine and Coarse Aggregates
- D 5 Standard Test Method for Penetration of Bituminous Materials D 244 Standard Test Methods and Practices for Emulsified Asphalts
- D 6937 Standard Test Method for Determining Density of Emulsified Asphalt
- D 2196 Rheological Properties of Non-Newtonian Materials By Rotational (Brookfield Type) Viscometer
- D 3910 Standard Practices for Design, Testing and Construction of Slurry Seal
- E 1911 Standard Test Method for Measuring Paved Surface Frictional Properties Using the Dynamic Friction Tester

A.2.C International Slurry Seal Association (ISSA) Standards

- TB 100 Wet Track Abrasion of Slurry Surfaces*
  ** Modified test procedure available upon request*

A.3 Submittals

If requested by the engineer, provide a report containing the following:

- Date of production
- Type and grade of emulsified asphalt source; Table 1 – Emulsified Asphalt
- Application rates
- Testing Report: submit a report of source and/or field quality control data

A.4 Weather Limitations

A.4.A Temperature

Unless otherwise directed by the Engineer, apply surface treatment when pavement and air temperature in the shade is 60 °F and rising. Do not apply surface treatment when temperature is projected to be below 32 °F within 72 hours prior or following application.

A.4.B Moisture

Do not apply surface treatment during rain, when free surface moisture is present, or during other adverse weather conditions.

A.5 Acceptance of Finished Product

Based on owner/agency preferred method of quality control and/or quality assurance. Field inspection includes verification of coverage and mat appearance with no or minimal runoff; streaking; light spots; and de-bonding due to road contaminants. Total coverage of the pavement surface should have a homogenous appearance.

B Materials

B.1 Emulsified Asphalt

Use emulsified asphalt grades CSS-1 or CSS-1h in accordance with Table 1.

Table 1. Emulsified Asphalt Specification

Criterion	Standard	Min.	Max.
Saybolt Furol Viscosity, 77 °F, seconds	T59/D244	15	100
Particle Charge If inconclusive, material with a maximum pH of 6.0 will be acceptable	T59/D244	Positive	
Sieve, %	T59	0	0.1
Residue by Distillation, %	T59	57	--
Penetration, 77 °F, 100 g, 5 seconds, dmm	T49/D5	15	150

B.2 Aggregates

Use aggregate that is substantially free of organic matter and other deleterious materials. Ensure the aggregate meets the quality standards in Table 2.

Table 2. Aggregate Requirements

Gradation - C136			
Sieve	**Master Band Limits Min.**		**Tolerance**
No. 8	100		--
No. 16	80	100	--
No. 30	75	100	+/- 5
No. 60	50	85	+/- 5
No. 100	40	65	+/- 5
No. 200	25	65	+/- 5

[1] Performed on R60 material

B.3 Central Plant Additives

a) General

Polymers, clays, and other additives may be used at the central plant, as necessary, to achieve mix design performance

b) Required Minimums Latex

Required minimum latex content by weight shall be 4%

c) Water
The central plant shall use water that is clean and free from salts and contaminant

d) Dilution
Contractor shall not dilute the sealer mixture in the field with water or any other additive

B.4 Mix Design

The mastic sealer shall be designed to satisfy the requirements in Table 3.

Table 3. Mix Design Criteria

Criterion	Standard	Min.	Max.
Wet Track Abrasion Loss, 3-day soak, g/m^2	TB100, modified[1]	--	80
Asphalt Content by Ignition, %	T308	30	--
Dynamic Friction Test No. @ 20 kph	E1911[2]	0.9	--

[1] Modified to account for sealer application depth; procedure available upon request

[2] Establish base friction value using prepared laboratory compacted slab of approved mix as surface to be tested. The Dynamic Friction Test (DFT) number ratio should indicate that after application of the mastic seal, the surface retains required minimum percentage DFT number of the original pavement surface.

The mastic sealer shall be tested daily for conformance to the requirements in Table 4.

Table 4. Daily Quality Control and Field Sample Test Criteria

Criterion	Standard	Min.	Max.
Solids Content by Evaporation, %	T59[1]	48	--
Asphalt Content by Ignition, %	T308	30	--
Rotational Viscosity, 20 RPM, 25 °C, cPs	D2196	800	4000
Sieve, %	T59[2]	--	0.5

[1] Dried in oven until subsequent measurements taken 20 minutes apart are substantially constant.

[2] Run test on finished mastic sealer product; use No 20 ASTM sieve; use 250 or 500 g of finished product diluted 1:1 with tap water to run test.

C Construction

C.1 Equipment

a) Mixing Equipment:
All materials shall be thoroughly mixed as to produce a homogenous mixture as close to or during use as is feasible.

b) Distributor:
The Distributor shall be equipped a pumping system designed to handle fine aggregate mixes, and sufficient power to operate the full spray system and the agitation system at the same time. The Distribution equipment shall be capable of applying an even distribution of material at the design application rate.

c) Storage Tanks:
Ensure that all storage tanks being used to store product prior to use have a mixing capability of providing a homogenous mix that represents the mix design at any given location within the tank.

C.2 Surface Preparation

Substantially remove any loose material, mud spots, sand, dust, oil, vegetation and other contamination material prior to application. When using water to clean pavement, allow cracks and surface to dry thoroughly before application.

C.3 Application

a) General

Application by distributor truck shall occur in two separate coats or as determined by the Engineer and by considering individual project circumstances; the first application must be thoroughly set and substantially dry before the second application begins. When hand application is encountered, one or two uniform coats may be used to ensure a uniform distribution of product. If two coats are used, the first application must be thoroughly set and substantially dry before the second application begins

b) Application Rate & Placement

Application shall be performed by either a calibrated distributor truck or by hand by trained personnel. The nominal total application rate shall be 0.27 gallons/SY MINIMUM, adjusted based on the existing surface conditions as reviewed and approved by the Engineer. If two coats are used, the first coat shall be 0.10 to 0.15 gallons/SY.

c) After Application

Protect the treatment from traffic until it is no longer tacky and can withstand rolling tracking without tracking. Pavement marking may be applied after material is no longer tacky.

D Measurement

The Department will measure mastic seals items acceptably completed by the gallon, without correcting volumes for temperature. The Department may also measure volume by the square yard of applied surface, if the total applied volume in gallons cannot be easily determined.

E Payment

The Department will pay for measured quantities at the proposed unit price under the following items:

DESCRIPTION	UNIT
Mastic Surface Seal	GAL
Mastic Surface Seal	SY

Payment is full compensation for furnishing, transporting, and field applying asphalt-based mastic surface seal to roadways for or under the control of the Department; for furnishing Quality Control testing and documentation; and for all incidental items necessary to complete the work included in this proposal.

The Department will consider adjustments to unit pricing for any proposed unit price that increases or decreases in cost by more than 25%, as long as the cost increase/decrease is shown to be industry wide. Requests for price adjustments may be initiated by the contractor or the Department with applicable supporting documentation, and shall use the requirements of subsection 104.2.2.4.3 of the standard specification as a basis for considering an adjustment to the contract price.

Proposed unit prices shall remain in effect until March 31, 2026, unless otherwise indicated on the proposal form.