

University of Houston Master Specification

<Insert Project Name>

<Insert U of H Proj #>

<Insert Issue Name>

<Insert Issue Date>

SECTION 32 1236 – ASPHALT SLURRY SEAL COAT

Maintain Section format, including the UH master spec designation and version date in bold in the center columns of the header and footer. Complete the header and footer with Project information

Edit and finalize this Section, where prompted by Editor's notes, to suit Project specific requirements. Make selections for the Project at text identified in bold.

This Section uses the term "Engineer." Change this term to match that used to identify the design professional as defined in the General and Supplementary Conditions.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

Delete hidden text after this Section has been edited for the Project.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. The Contractor's attention is specifically directed, but not limited, to the following documents for additional requirements:
 - 1. The current version of the *Uniform General Conditions for Construction Contracts*, State of Texas, available on the web site of the Texas Facilities Commission.
 - 2. The University of Houston's *Supplemental General Conditions and Special Conditions for Construction*.

1.2 SUMMARY

- A. This Section specifies the requirements for placing an asphalt slurry seal coat upon an existing asphalt pavement surface for maintenance purposes as determined from the Drawings and in accordance with these Specifications.

1.3 APPLICABLE PUBLICATIONS

- A. Current editions of the following publications form a part of this Specification to the extent indicated by references thereto.
- B. Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (TxDOT).
 - 1. Item 300 – Asphalts, Oils and Emulsions
 - 2. Item 302 – Aggregates for Surface Treatments

<Insert A/E Name>

AE Project #: <Insert Project Number>

Asphalt Slurry Seal Coat
UH Master: 11.2020

32 1236 - 1

University of Houston Master Specification

<Insert Project Name>

<Insert U of H Proj #>

<Insert Issue Name>

<Insert Issue Date>

3. Item 316 – Surface Treatments
4. Item 320 – Equipment for Asphalt Concrete Pavement

C. American Society for Testing and Materials Standards (ASTM)

1. ASTM D 8-02 – Standard Terminology Relating to Materials for Road Pavements
2. ASTM D 698 – Moisture Density Relations of Soil Using 5.5 Pound Rammer and 12 Inch Drop.

D. Texas Department of Transportation Test Procedures

1. TEX 207-F – Determining Density of Compacted Bituminous Mixtures
2. TEX 227-F – Theoretical Maximum Specific Gravity of Bituminous Mixtures

1.4 DEFINITIONS

- A. Hot-Mix Asphalt Paving Terminology: Refer to ASTM D 8 for definitions of terms.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include technical data and tested physical and performance properties.

1.6 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For each paving material, signed by manufacturers.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications:

1. A paving-mix manufacturer registered with and approved by authorities having jurisdiction or, if none exists, a manufacturer registered with the Texas Department of Transportation.

1.8 PROJECT CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp or if the following conditions are not met:

1. Prime and Tack Coats: Minimum surface temperature of 60 degrees F.
2. Slurry Seal Coat: Comply with weather limitations of ASTM D 3910.

<Insert A/E Name>

AE Project #: <Insert Project
Number>

Asphalt Slurry Seal Coat
UH Master: 11.2020

32 1236 - 2

University of Houston Master Specification

<Insert Project Name>
<Insert U of H Proj #>

<Insert Issue Name>
<Insert Issue Date>

PART 2 - PRODUCTS

2.1 ASPHALTIC MATERIALS

- A. Asphaltic material shall conform to the applicable requirements of Item 300, TxDOT. Asphalt Emulsion shall be AC-5.

2.2 MINERAL AGGREGATE

- A. The aggregate and mineral filler shall be a graded sand mixture conforming to the following:

U.S. Standard Sieve Size	Total Percent Passing
No. 8	100
No. 16	65-90
No. 30	40-60
No. 50	25-42
No. 100	15-30
No. 200	10-20

2.3 SEAL COAT MIXTURE

- A. The seal coat mixture shall be mixed in the following proportions based upon a 220 pound aggregate mixture. A larger mix may be made using the proper proportions.

Material	Weight (lbs)
Aggregate including mineral filler	220
Asphalt emulsion	33-66
Water, including water present in the emulsion and aggregate	22-33 (as required for proper consistency)

2.4 EQUIPMENT

- A. All equipment necessary to perform the Work of this Section shall conform to requirements of TxDOT Item 316, Article 316.3.

2.5 WATER

- A. Water used for mixing or curing shall be clean and free of oil, salt, acid, alkali, sugar, vegetable matter or other substances injurious to the finished product.
- B. Source: The local municipal domestic water supply.
 - 1. If onsite reclaimed water sources are used, tanks and appurtenances must be clearly marked with the words "non-potable water."

<Insert A/E Name>
AE Project #: <Insert Project Number>

**Asphalt Slurry Seal Coat
UH Master: 11.2020**

32 1236 - 3

University of Houston Master Specification

<Insert Project Name>
<Insert U of H Proj #>

<Insert Issue Name>
<Insert Issue Date>

PART 3 - EXECUTION

3.1 GENERAL

- A. Asphalt Surface Course shall be applied to existing asphaltic surface in accordance with TxDOT Item 316 Article 316.4.
- B. Test samples in accordance with TEX 207-F and TEX 227-F and report test results to the Engineer the same day the tests are made.

3.2 SURFACE PREPARATION

- A. Repair potholes and other structural failure of the surface prior to placing the seal coat.
- B. Sweep the surface clean of all debris, dirt, loose gravel and other loose articles. If necessary, the surface may be washed, but the surface must be dry before the seal coat is applied.

3.3 SLURRY SEAL COAT APPLICATION

- A. Mix asphalt emulsion, water, mineral filler and aggregate in a mixer.
- B. Apply mixture in an average thickness of 1/16 inch to 1/8 inch. The mixture should form a creamy-textured mixture that, when spread, will flow in a wave approximately two feet ahead of the strike-off squeegee.
- C. Allow mixture to cure for 48 hours.
- D. Apply a second seal coat in the same manner as the first coat and allow the second coat to cure for 48 hours.
- E. Test surface at end of the second curing process to insure surface is dry and not tacky. Apply pavement markings in accordance with Section 32 1723.33 "Thermoplastic Pavement Markings" or Section 32 1723.13 "Painted Pavement Markings" depending on location and open for traffic after seal coat has dried.

END OF SECTION 32 1236