

LC400202 SEAL COAT (LCDOT) For use on LCDOT let projects only - do not include in IDOT let projects. This special provision is used for bike paths and HMA shoulders behind curb and gutter. For seal coats on parking lots, road pavements etc., the Designer should look at the standard specifications, the MN seal coating design guide and other reference material. Delete this note from the Contract Specifications.

Effective: October 3, 2014

Revised: May 15, 2017

Description: This work shall consist of seal coating an existing HMA pavement.

Reference: American Society for Testing and Materials Standards:

- ASTM D 977-03, "Standard Specification for Emulsion Asphalt."
- ASTM D 2397-02, "Standard Specification for Cationic Emulsified Asphalt."

Materials: The sealer shall be limited to an Asphalt Emulsion. Coal Tar based sealants or other high PAH sealants (greater than 0.1% PAH by weight) **shall not** be used on LCDOT projects. The materials shall meet the requirements of Section 1032 of the "Standard Specifications" and the following:

- A. Sealer:
 - a. Grade SS-1h according to ASTM D 977
 - b. Grade CSS-1h according to ASTM
- B. Aggregate: The aggregate shall be clean sand free of silt, clay salts and organic matter, meeting the following grading requirements

Sieve Size	% Passing
#16	100
#30	40-60
#50	0-5

General:

- A. Protection: Protect signs, posts, street lamp posts, trees, shrubs, and tops of curb and gutters from being discolored by splashing asphaltic material.
- B. Surface Preparation:
 - a. Plane or grid off existing painted lines, grease or oil patches, and spillage of any material that has adhered to pavement.
 - b. Remove debris, sand, dirt, and dust from pavement using power brush, power vacuum sweeper, and 15 hp minimum blower as necessary.

- c. Seal areas damaged by oil or grease according to the Manufacturer's recommendations.

Construction:

- A. Weather Limitations - Construct seal coat operations (including traffic restrictions on the freshly constructed seal coat) and fog sealing according to the following:
 - a. Work only during daylight hours.
 - b. Start when the pavement and air temperature are 60 °F and rising.
 - c. The pavement surface may be damp. There shall be no standing water.
 - d. No construction is allowed in foggy weather.
- B. Road Surface Preparation
 - a. Clean all pavements to be seal coated. Sweep the pavement with a motorized broom to remove loose material. Clean depressions not reached by the power broom, using hand brooming.
 - b. Cover iron (manholes, gate valve covers, catch basins, sensors, etc.) to prevent adherence of the bituminous material. Suitable covering includes plywood disks, sand, Kraft paper, roofing felt or other approved methods. Remove the protective coverings before opening the road to traffic.
- C. The Contractor shall construct a test strip to the satisfaction of the Engineer prior to commencing the sealcoating operation. The test strip shall determine that the application rate of sealer and aggregate is adequate for the existing surface being sealed.
- D. The seal coat shall be applied in one coat. The Contractor shall apply the sealer using power driven machine that continually mixes sealer, water, and sand. The application rate shall be 0.2 gallons per square yard. If in the opinion of the Engineer the Contractor's single application did not adequately cover the existing pavement the Contractor shall apply a second coat to the designated areas. The second coat shall be applied at a reduced rate of 0.15 gallons per square yard.
- E. The Contractor shall follow sealer Manufacturer's recommendations regarding fogging the substrate, priming the substrate, and the dilution of sealer.
- F. Keep traffic off freshly applied sealer for 24 hours minimum.

Method of Measurement: Seal Coat will be measured in place for the area seal coated and the total area calculated in square yards. No additional area will be calculated for any additional applications required by the Engineer due to the inadequate first application of seal coat by the Contractor.

Basis of Payment: This work will be paid for at the contract unit price per square yard for SEAL COAT. No additional compensation will be allowed for additional applications required by the Engineer due to the inadequate first application of seal coat by the Contractor. *The unit price shall include all equipment, materials, and labor required to perform the operations contained in this special provision.*