



Illinois Department of Transportation

Memorandum

To: Regional Engineers
From: Jack A. Elston 
Subject: Special Provision for Cape Seal
Date: September 25, 2020

This special provision was developed by the Bureau of Research and Central Bureau of Materials to update the cape seal specification. It has been revised to reflect changes made to the BDE special provision "Micro-Surfacing and Slurry Sealing" which adds mix design and quality assurance requirements.

This special provision, as well as the BDE special provision "Micro-Surfacing and Slurry Sealing", should be inserted into contracts involving cape seal.

Designer Note: The aggregate gradation for the A-1 bituminous surface treatment must be specified in the plans as CA 15, CA 16, CA 20, FA 1 (Special), FA 4 (Special), or FA 22. Districts are encouraged to use CA 20.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the January 15, 2021 and subsequent lettings. The Project Coordination and Implementation Section will include a copy in the contract.

This special provision will be available on the transfer directory September 25, 2020.

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CAPE SEAL (BDE)

Effective: January 1, 2020

Revised: January 1, 2021

Revise Article 405.02(b) of the Supplemental Specifications to read:

“(b) Micro-Surfacing. Materials for micro-surfacing shall be according to Article 404.02 as modified by the special provision, “Micro-Surfacing and Slurry Sealing (BDE)”..”

Revise the second and third paragraphs of Article 405.09(b)(1) of the Supplemental Specifications to read:

“The paving mixture shall be spread to fill minor cracks and shallow potholes and leave a uniform surface. A sufficient amount of material shall always be carried in all parts of the spreader box to ensure complete coverage. Overloading of the spreader shall be avoided. No lumps or uncoated aggregate will be permitted in the finished surface.

Adjustments to the mix design may be required during construction, based on field conditions. The percent of cement in the mix design may be increased or decreased by less than 0.5 percent when the micro-surfacing is being placed if it is found to be necessary for better consistency or set times. The Engineer will give final approval for all adjustments.”

Add the following to Article 405.11 of the Supplemental Specifications.

“The Contractor shall provide a copy of the paver calibration to the Engineer for verification and approval. The calibration shall be performed a minimum of once per job mix formula (JMF), per contract.

The Contractor shall collect a minimum of one sample per JMF in the presence of the Engineer. More samples may be collected at the discretion of the Engineer to address any issues on the job. Material for the sample shall be collected from the loading shoot of the pug mill prior to being deposited into the drag box. The sample shall be placed in a 1 gal (3.8 L) sealed plastic bag. Enough material shall be collected, evenly distributed in the plastic bag and laid flat to form approximately 1/2 in. (13 mm) of material. The bag shall be squeezed to remove excess air, sealed, and placed on a hard, flat surface. After allowing the bag to sit flat for 15 minutes, pick up the bag and evaluate the sample. The material should have turned black and should show positive signs of setting up (stiffening). The results at 15 minutes should be noted and the sealed bag placed into a 1 gal (3.8 L) friction top container and sent to the Department for AB content testing.”

Revise the fourth paragraph of Article 405.15 of the Supplemental Specifications to read:

“Cape seal will be paid for at the contract unit price per square yard (square meter) for CAPE SEAL.”

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