Iowa Department of Transportation

SPECIAL PROVISIONS
FOR
THIN LIFT OVERLAY

Fayette County
MP-93-2(701)16--76-33

Effective Date
May 21, 2013

THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS AND APPLICABLE DEVELOPMENTAL SPECIFICATIONS.

120058.01 DESCRIPTION.
The work consists of scarifying 1/2 inch and placing a 3/4 inch thin lift overlay over a 1 inch interlayer.

120058.02 MATERIALS.

A. Asphalt Binder.
   - Surface: PG+ 76-34, minimum 95% elastic recovery
   - Interlayer (Base): PG+ 64-34

B. Thin Lift Surface Mix Design.
   - Ndesign = 50, N_{init} and N_{max} will not apply
   - Design Target Air Voids = 0.5% minimum to 2.0% maximum
   - Minimum VMA = 16%
   - VFA = 70-95%
   - Gradation
     | Sieve  | % Passing |
     |--------|----------|
     | 3/8 inch | 91-100   |
     | No. 4    | ≤ 90     |
     | No. 8    | 32-67    |
     | No. 200  | 2 - 10   |
   - Do not use Recycled Asphalt Materials
   - No maximum film thickness
   - No minimum filler/bitumen ratio
   - 50% of the total aggregate shall be friction Type 4.
C. **Interlayer Mix Design.**
   Use a 3/8 inch HMA Special per Materials I.M. 510 Appendix A. Do not use Recycled Asphalt Materials.

D. **Performance Requirements (Surface and Interlayer).**
   AASHTO T-324 Hamburg Wheel Tracking Device.
   - Test temperature = 50°C
   - Minimum number of passes to 4 mm rut depth > 8,000
   - Traffic shall not be allowed for more than 3 total days on the base mix. If more than 3 mm of rutting is observed, remove traffic until intermediate lift can be placed.

120058.03 **CONSTRUCTION.**

A. Tack the milled, cleaned surface prior to placement of the interlayer. Apply a second tack coat prior to placement of the surface layer.

B. Compact with static steel wheeled roller unless otherwise approved by the Engineer

120058.04 **QUALITY ASSURANCE/QUALITY CONTROL.**

A. Acceptance for laboratory voids will be based on a moving absolute average deviation (AAD) from target as defined in Materials I.M. 501. Use the production tolerance in Table 2303.03-5 of the Standard Specifications.

B. Acceptance for field voids will be Class II. The Engineer may verify compaction with coring or other methods.

120058.05 **RESEARCH SAMPLING.**
Provide advanced notification of mixture placement to the Engineer such that research sampling can be coordinated. Provide safe access to research personnel at the plant and on the grade to collect samples.

120058.05 **METHOD OF MEASUREMENT.**
Apply Article 2303.04 of the Standard Specifications

120058.05 **BASIS OF PAYMENT.**
Apply Article 2303.05 of the Standard Specifications.