

January 24, 2005
March 4, 2005
April 17, 2016
March 31, 2021

**Tennessee Department of Transportation
Division of Materials and Tests**

**Acceptance and Verification of
Maintenance “In-Place” Hot Mix Asphalt (SOP 3-3)**

Purpose: The purpose of this document is to establish a material acceptance procedure for in-place maintenance hot mix asphalt.

Discussion: Hot mix asphalt that is placed using in-place maintenance funds and procedures must be formally accepted by TDOT in accordance with the procedure herein. In-place is considered to be hot mix asphalt that is Contractor produced and placed and compacted by either the Contractor or TDOT Maintenance forces.

Procedure: All mixtures shall have an approved job mix formula (JMF) in accordance with TDOT Specifications, which may have been previously approved on other state projects during the calendar year, before any work is done.

All plant produced mixtures shall be produced and placed in accordance with Sections 307, 403, 407, 411, and 903 of the TDOT Specifications.

I. PLANT PRODUCED HOT MIX ASPHALT: LAB TEST REQUIREMENTS:

All plant testing shall be completed by TDOT certified plant personnel only and in a TDOT qualified laboratory.

All producer samples shall be split with one half retained for TDOT random verification testing as needed.

- A) All work orders/jobs greater than 1000 tons or interstate jobs greater than 500 tons shall be tested in accordance with Section 407.20 and meet the following requirements:
- 1) The producer shall have an approved JMF for the specified mixture(s)
 - 2) The producer shall conduct Asphalt Cement (AC) content & gradation in accordance with TDOT Specifications/ Supplemental Specifications.
- B) Small Quantities- for work orders/ jobs equal to or less than 1,000 tons per mixture type for Non-Interstate routes, or less than 500 tons for Interstate routes.
- 1) The producer shall have an approved JMF for the specified mixture(s)

January 24, 2005

March 4, 2005

April 17, 2016

March 31, 2021

- 2) Certification of compliance from the Producer stating all mixtures were produced and placed (if applicable) in full accordance with the TDOT specifications and this procedure.

For all mixtures produced, the Producer shall submit Daily reports in accordance with current TDOT procedures to the TDOT Maintenance Supervisor or TDOT project representative for each day's production. A Performance-Graded Asphalt Material Certification (DT-0293PG) shall be submitted to represent the asphalt material in the mixture.

The mixtures shall be produced within the allowable tolerances specified in 407.20 of the TDOT specifications. Any mixture placed that is out of compliance as documented by the Contractors test results is not acceptable.

II. ROADWAY REQUIREMENTS

Unevenness of texture, segregation (including end-of-load segregation), tearing or shoving of the bituminous mixture that occurs during the paving operation shall be reason to stop the paving until the condition is corrected. Skim patches and dragging of the aggregate shall be avoided.

Mix Placed By TDOT Maintenance Forces-

The Floating Maintenance Supervisor should coordinate with the Regional Materials & Test Supervisor or the Operations District Supervisor to establish roller patterns to achieve desired densities.

Mix Placed By Contractor –

- A) All work orders/ jobs greater than 1000 tons or interstate jobs greater than 500 tons shall be tested in accordance with Section 407.15 and meet the following requirements:

- 1) Density Requirements – The Contractor shall provide a sufficient number of rollers and a roller pattern to achieve the densities specified below. If desired, the contractor may request assistance from TDOT to aid in the development of establishing roller patterns; however, the Contractor retains all responsibility to achieve the density requirements specified in Tables 407.15-1 of the TDOT standard specifications.
- 2) Testing Density for Acceptance- Density testing will be achieved by obtaining & averaging the test results of 5 randomly selected cores.

Cores shall be taken by the contractor at locations directed by the TDOT Maintenance Supervisor or Project Representative and delivered to TDOT for

January 24, 2005

March 4, 2005

April 17, 2016

March 31, 2021

testing. Cores shall be taken to represent an accumulated total of 1,000 tons (1 core for approximately 200 tons). Cores shall only be taken in sections where densities requirements are needed as stated above.

Sections represented by densities not meeting the specification noted above will not be acceptable.

- 3) Surface Requirements- Straight Edge (parallel to centerline)
 - a) Surface courses – with a 12' straightedge. The surface shall not deviate more than $\frac{1}{4}$ ".
 - b) Base Courses – Shall not deviate more than $\frac{3}{8}$ ".

The Contractor shall be required to repair all straightedge deviations as approved by the Maintenance Supervisor.

B) Small Quantities- for work orders/ jobs equal to or less than 1,000 tons for Non-Interstate routes, or less than 500 tons for Interstate routes.

- 1) Density Requirements- the Contractor shall provide a sufficient number of rollers and a roller pattern to achieve the necessary compaction needed for adequate performance. The TDOT may use density measuring devices in determination of adequate compaction. The TDOT Maintenance Supervisor or Project Representative must approve or direct the compaction processes before work begins.
- 2) Surface Requirements- Straight Edge (parallel to centerline)
 - a) Surface courses – with a 12' straightedge. The surface shall not deviate more than $\frac{1}{4}$ ".
 - b) Base Courses – Shall not deviate more than $\frac{3}{8}$ ".

The Contractor shall be required to repair all straightedge deviations as approved by the TDOT Maintenance Supervisor or Project Representative.

January 24, 2005

March 4, 2005

April 17, 2016

March 31, 2021

January 24, 2005

March 4, 2005

April 17, 2016

March 31, 2021

