

SPECIFICATION FOR ASPHALT SURFACE OF
(THIN OVERLAY)
Section XXXX

Hot Mix Asphalt (HMA)

PART 1 - GENERAL

- 1.01 Construction of one or more pavement courses of hot plant mixed asphalt (HMA) on a prepared subgrade, aggregate base or surface.
- 1.02 Related Sections
- A. General Conditions
 - B. General Earthwork
 - C. General Patching
 - D. General Removal of Inplace Mat/Driveway
- 1.03 References
- MnDOT Standard Specifications for Construction, Current Edition (see the following web site for the Bituminous Office most current bituminous special provisions at <http://www.mrr.dot.state.mn.us/pavement/bituminous/bituminous.asp>) and MnDOT Standard Specifications for Construction, 2005 Edition, for the following:
- A. 2105 Excavation and Embankment
 - B. 2232 Mill Pavement Surface (reclamation equipment option)
 - C. 2360 Plant Mixed Bituminous Pavement – February 1, 2010
 - D. 3151 Bituminous Material
- 1.04 Submittals
- A. Test result and certificate of compliance for mineral aggregate showing compliance with MnDOT 3139, class 5, 6, or 7.
 - B. Certificate of compliance for bituminous materials showing conformance with MnDOT 3151.
 - C. Certification of compliance for proposed tack coat.
 - D. Gradation, percent crushing, aggregate quality and approved MnDOT mix design (or consultant laboratory) test results.
 - E. Record data on trial mix (material design report) of job mix formula indicating percentage of materials (aggregate and asphalt binder) for specific mixture type.

PART 2 – MATERIALS

- 2.01 Mineral aggregate shall meet aggregate size D (3/8" maximum size – Traffic Level 3) gradation of MnDOT 2360 for the type and thickness of mixture specified. Traffic Level 4 shall may be used for intersection work.
- 2.02 An approved Material Design Report (MDR) shall meet one of the following:
- 1. A minimum voids in Mineral Aggregate (VMA) of 16.0, or
 - 2. A minimum adjusted Asphalt Film Thickness (AFT) of 8.5 at the time of mixture design.

- 2.03 Bituminous material shall be PG (Performance Grade) 58-28 (non-wear virgin and recycle non-wear or wear) or 64-22 for all virgin mix wearing. Design asphalt content by weight shall be in accordance to MnDOT 2360 (Table 2360.2-E, Table 2360.3-B2a and Table 2360.3-B2b).
- 2.04 Bituminous tack coat material shall be as per MnDOT 2357 subject to approval by the buyer.

PART 3 – CONSTRUCTION

- 3.01 Construction shall be in accordance with current MnDOT 2360.
[\[www.mrr.dot.state.mn.us/pavement/bituminous/bituminous.asp\]](http://www.mrr.dot.state.mn.us/pavement/bituminous/bituminous.asp)
- 3.02 No paving will be allowed without a MnDOT or consultant recommendation or approval of a job mix formula designed using Gyrotory mix design.

The contractor shall provide all data necessary to obtain an approved paving recommendation as described in 2360 and pay all costs.
- 3.03 All compaction shall be by the Ordinary Compaction Method.
- 3.04 The thickness of each course shall be as shown on the detail sections as shown on the plans for the various sections. The thickness tolerance for the compacted courses shall be within plus ½ inch or minus ¼ inch of the total nominal thickness shown on the plans. Pavement smoothness shall be by 10-foot straight edge.
- 3.05 Construction joints shall conform to 2360.5F. All existing pavements shall be sawcut or milled prior to constructing adjacent pavement. All edges shall be tacked. Abutting surfaces of curb, gutter or concrete structures shall be tacked prior to placing bituminous pavement.

PART 4 – FIELD QUALITY CONTROL

- 4.01 The owner will arrange and pay for field quality control testing.
- 4.02 The contractor may be required to supply mixture quality control data to the owner supporting quality of materials incorporated upon request of the owner.

PART 5 – MEASUREMENT AND PAYMENT

- 5.01 All work and costs of this section shall be incidental to the project and included in the total bid on a ton basis for wear and non-wearing mixture(s).

END OF SECTION