

M-NCPPC SPECIAL PROVISIONS
504—HOT MIX ASPHALT PAVEMENT

SECTION 504.03.10 (C) —ACCEPTANCE TESTING

(1) Core Method

DELETE: The Administration will immediately take possession of the QA mixture sample and deliver the sample to the Laboratory for testing.

INSERT: The Contractor shall have the core samples tested by an independent Laboratory. The Laboratory will note any density waivers on the daily field density forms with reasons for waivers.

DELETE: SECTION 504.04 — MEASUREMENT AND PAYMENT in its entirety.

INSERT: The following.

504.04 MEASUREMENT AND PAYMENT. Hot Mix Asphalt Pavement will be measured and paid for at the Contract unit price. The payment will be full compensation for furnishing, hauling, placing all materials including antistripping additive, tack coat, control strip, pot hole and spall repairs, setting of lines and grades where specified, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

Temporary Tie-Ins. Placement and removal of the temporary tie-in where hot mix asphalt is being applied to the traveled way carrying traffic will not be measured but the cost will be incidental to the pertinent Hot Mix Asphalt item.

Removal of the existing pavement or structure for the final tie-in will not be measured but the cost will be incidental to the pertinent Hot Mix Asphalt item.

Adjustments. Adjustment of existing visible manholes, valve boxes, inlets, or other structures will not be measured but the cost will be incidental to the Hot Mix Asphalt item.

Adjustment of existing manholes, valve boxes, inlets, or other structures that are encountered below the existing grade will be considered for payment in conformance with SHA GP-4.07.

Removal of Existing Raised/Recessed Pavement Markers. Removal of existing raised/recessed pavement markers will not be measured but the cost will be incidental to the Hot Mix Asphalt item.

Removal of existing raised/recessed pavement markers that are encountered below the existing pavement will be considered for payment in conformance with GP-4.07.

DELETE: SECTION 504.04.01—PRICE ADJUSTMENT FOR HOT MIX ASPHALT AND PAVEMENT DENSITY in its entirety.

INSERT: The following.

504.04.02 PRICE ADJUSTMENT FOR HOT MIX ASPHALT MIXTURE AND PAVEMENT DENSITY. A price adjustment will be made as specified in SHA GP-5.02 when the hot mix asphalt properties or pavement density does not conform to Specifications. The Contract unit price will be adjusted for noncompliance with HMA properties and pavement density in conformance with these procedures. A pay reduction for pavement density will be based on individual core test data for a given lot and the lot average density as specified in this section.

Pay adjustment due to noncompliance with the density requirements will be made against the adjusted Contract unit price for Hot Mix Asphalt in conformance with Table 504. Price adjustment will be waived for that portion of the pavement where the Engineer determines that inadequate density is due to a poor foundation.

TABLE 504

DENSE GRADED HOT MIX ASPHALT MIXES PERCENT OF MAXIMUM DENSITY		
LOT AVERAGE	NO INDIVIDUAL BELOW	PAY FACTOR %
92.0 — 97.0	91.0	100
91.0 — 97.0	90.0	95
90.0 — 97.0	90.0	90
89.0 — 97.0	89.0	85
Less than 89.0	—	75.0 or rejected as determined by the Engineer

Note 1: When any test data is above 97.0, the Engineer may determine to make additional pay reduction or reject.

Contractor's quality control test data will be used in all analysis of compaction compliance in conformance with 504.03.10.

Acceptance of a mixture lot will be in conformance with Sections 904, 915, and MSMT 735. A composite pay factor (CPF) for asphalt content, gradation, and mixture will be based on the total estimated percent of the lot that is within Specification limits as computed using the quality level analysis in conformance with MSMT 735.

Contractor's quality control test data will be used in all analysis of mixture compliance in conformance with 504.03.10.

The Lot payment for in-place density will be computed using the following formula:

$$LP_{ipd} = (CP) \times (DF) \times (TL)$$

where:

LP_{ipd} = Lot payment in-place density
 CP = Contract unit price

- DF = Density pay factor from Table 504.04
TL = Tonnage per lot.

The Lot payment for asphalt content and gradation will be computed using the following formula:

$$LP_{md} = (CP) \times (MF) \times (TL)$$

where:

- LP_{md} = Lot payment for mix design
CP = Contract unit price
TL = Tonnage per lot
MF = Mixture pay factor (refer to MSMT 735 for CMPWSL):
 when CMPWSL is less than 90 %, MF = 55 + 0.5 CMPWSL
 when CMPWSL is greater than or equal to 90 %, MF = 100

An in-place density lot containing material with a pay factor of less than 1.0 may be accepted at the reduced pay factor, provided the pay factor for density is at least 0.85 and there are no isolated defects identified by the Engineer.

A mixture lot containing material with a pay factor of less than 1.0 may be accepted at the reduced pay factor, provided the composite pay factor for asphalt content and grading is at least 0.75 and there are no isolated defects identified by the Engineer.

An in-place density lot containing nonconforming material that fails to obtain at least a 0.85 pay factor and a mixture lot containing nonconforming material that fails to obtain at least 0.75 pay factor for asphalt content and gradation, will be evaluated by the Engineer to determine its acceptance. When the Engineer determines to reject a lot, the lot shall be replaced at no additional cost to the Administration.

When less than three mix samples have been obtained at the time of the acceptance sampling or at the time a lot is terminated, the Engineer will determine if the material in a shortened lot will be considered a part of a the previous lot, or will be accepted based on the individual test data.

M-NCPPC Materials Chart

A.

<i>SUPERPAVE</i>	<i>BINDER</i>	<i>LIFT THICKNESS</i>	<i>TYPE OF LAYER</i>
4.75 mm	PG 64-22	1/2" MIN. 1/2" MAX	Very Fine Surface
9.5 mm	PG 64-22	3/4" MIN. 1 1/2" MAX	Fine Surface
12.5 mm	PG 64-22	1 1/2" MIN. 2" MAX	Medium Surface *1
19.0 mm	PG 64-22	2" MIN. 3" MAX	Fine Base
25.0 mm	PG 64-22	3" MIN. 4" MAX.	Course Base

*1) To be used for Hiker/Biker Trails (3" Lift Thickness Max.)

B. Protective Non-woven Membrane for Paving: AMOCO Petromat 4597 or approved equal. Installation shall be in accordance with manufactures specifications.