

SECTION 02330

ASPHALT PAVEMENT

PART 1 - GENERAL

1.01 SCOPE

This specification covers hot-mixed, hot-laid asphaltic concrete for surface courses of pavement. The asphaltic concrete surface shall be paid to a uniform compacted depth as shown on plan or as directed by the Engineer.

1.02 REFERENCES

The requirements stated in the NYSDOT Standard Specifications Section 400 "Hot Mix Asphalt", Section 633 "Conditioning Existing Pavement Prior to Hot Mix Asphalt (HMA) Overlay" and Section 702 "Bituminous Materials" shall be part of these specifications and incorporated below. Where a conflict occurs between the NYSDOT Specifications and the City's Specifications, the City's Specifications shall govern.

PART 2 - MATERIALS

2.01 BINDER COURSE

The course aggregate, fine aggregate, asphaltic cement and the grading of same shall meet every detail of NYSDOT Standard Specifications for Bituminous Concrete, Item 403.138902 "Hot Mix Asphalt, Type 3 Binder Course".

2.02 SHIM COURSE

The mixture of aggregate, filler and bituminous material shall conform to the NYSDOT Standard Specifications, Item 403.138902 "Hot Mix Asphalt, Type 5 Shim Course".

2.03 TOP COURSE

The Bituminous wearing surface shall be of hot-mix, hot-laid, asphaltic concrete, NYSDOT Standard Specifications for Bituminous Concrete, Item 403.198902 "Hot Mix Asphalt, Type 7 Top Course".

PART 3 - EXECUTION

3.01 WEATHER AND SEASONAL LIMITATIONS

- A. No mixture shall be spread when the subbase is wet or when other conditions prevent proper spreading, finishing or compaction.
- B. Bituminous plant mix shall not be placed when the surface temperature falls below 40 degrees Fahrenheit, unless approved by the Engineer.
- C. As a general rule, paving shall be discontinued during the period of November 15 through May 1 of the following year. The Contractor shall consult with the Engineer before paving during this restricted time period.
- D. Any binder course, placed by the Contractor, which shall be permanently incorporated into the final repair and left open to traffic over the winter, shall be cleaned in accordance with Article 3.02 - CONDITIONING OF EXISTING SURFACE and tack coated in accordance with Section 01200, Article 2.03.D - Tack Coat. Cleaning and tack coating shall be done immediately prior to overlaying.
- E. Discontinue paving as soon as the surface temperature falls below the requirements which are show in the NYSDOT Standard Specifications Table 402-2 "Temperature and Seasonal Requirements".

3.02 CONDITIONING OF EXISTING SURFACE

- A. Existing surfaces to be overlaid or sealed shall be cleaned by the use of mechanical sweepers, hand brooms, or other effective means until the surfaces are free of all material which might interfere with the bond between the overlay material and the existing surface. The surface shall be left clean until the overlay operations are completed.
- B. All unsealed and inadequately sealed joints and cracks, as determined by the Engineer, shall be subjected to a compressed air stream for cleaning. All dirt and loose material shall be cleaned using an approved method and shall be left clean until sealing, filling or paving operations are completed.

3.03 HAULING ASPHALT MATERIAL

Mixtures shall be transported to the work site in trucks having tight, clean, smooth metal beds. No load shall leave the mixing plant that is not thoroughly protected by a waterproof canvas cover. Truck covers shall be so fastened as to exclude all wind. Any trucks causing undue delays shall not be used on the job.

3.04 SPREADING AND FINISHING

- A. The placing of the mixture shall be accomplished by mechanical spreading and finishing equipment. The equipment shall consist of self-powered pavers, capable of spreading and finishing the mixture true to line and grade. The mixture shall be spread and finished by hand methods acceptable to the Engineer in areas such as intersections where it is impractical to follow the spreading and finishing procedure specified above.
- B. If the areas to be paved are small and scattered, a paver may be dispensed with and the

course spread by hand methods as directed by the Engineer. For such areas, the mixture shall be dumped, spread and screeded to give the required section and compacted thickness.

- C. All types of asphalt course shall be placed in maximum lifts of three (3) inch compacted thickness.

3.05 COMPACTION

- A. After the mixture is spread, it shall be thoroughly and uniformly compacted by a self-propelled roller weighing not less than ten (10) tons. The required rolling shall be completed while the materials are at a temperature at which proper compaction can be secured. Rolling shall precede as per NYSDOT Standard Specification Article 401-3.12. Rollers shall be kept moist the full width of the rolls to prevent adhesion of bituminous material.
- B. Along forms, curbs headers, walls, and other areas not accessible to the rollers, or for small patch areas, the mixture shall be thoroughly compacted with mechanical tampers as directed by the Engineer.
- C. Suitable means shall be provided to keep compaction equipment and other tools free from bituminous accumulations. The surface of the pavement shall be protected from drippings of oil, kerosene, or other materials used in paving and cleaning operations.
- D. Any mixture that becomes loose or broken, mixed with dirt, or is in any defective shall be removed and replaced with fresh hot mixture which shall be compacted to conform with the surrounding area. Any areas showing an excess or deficiency of bituminous material shall be corrected to the satisfaction of the Engineer.

3.06 JOINTS

- A. In the formation of all joints, the exposed edge of the existing layer that will become part of the joint shall be the full thickness of the layer and straight. If the existing edge is unacceptable as determined by the Engineer, the edge shall be corrected by using a power saw or other approved tools to cut a neat, straight line.
- B. The pavement of successive courses shall be such that all joints are offset at least six (6) inches from the joint of the lower pavement course.

END OF SECTION