TO:

Director,
Preliminary Plan Review Bureau

SUPERSEDED BY EB 98-060
EFFECTIVE 11/17/1998

ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

SUBJECT: BITUMINOUS PAVING - CONSTRUCTION PROCEDURES

Subject Code:

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Supersedes:

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For thru mainline expressway pavement 24 feet wide, where traffic does not have to be maintained, full width bituminous concrete pavement will be required for both binder and top.

For thru mainline expressway pavement greater than 24 feet wide, where traffic does not have to be maintained, full width (24 feet minimum) plus a satisfactory combination of tandem pavers will be required for both binder and top.

For other projects using large quantities of bituminous concrete paving, top and binder, an analysis is to be made during the design stage to determine if full width paving would be practicable. The objective is to eliminate as many longitudinal seams as is economically practicable.

Where such a paving requirement is feasible, a note will be inserted into proposals by this office stating that either full width, tandem, or a satisfactory combination thereof will be required for both top and binder courses for these pavements, except where noted otherwise on the plans or ordered in writing by the Regional Director.

You are to advise this office of the feasibility for this pavement requirement for all bituminous concrete pavement projects in your P.S.&E. submissions and for proposed contracts being held in this office waiting for letting day. If such paving operation is not feasible, a simple statement to that effect will be sufficient.

SPECIAL NOTE

BITUMINOUS CONCRETE PAVING

The Contractor's attention is directed to the requirement for this contract that for the thru main line pavement, full width (24 feet minimum) paving will be required for the binder and top course.

All bituminous pavers shall be equipped with approved automatic transverse slope and longitudinal grade screed controls. The controls shall automatically adjust the screed and increase or decrease the mat thickness to compensate for irregularities in the surface being paved. The controls shall be capable of maintaining the proper transverse slope and be readily adjustable so transitions and super-elevated curves can be satisfactorily paved. The controls shall operate from approved fixed or moving references, as hereinafter stated. The transverse slope and longitudinal grade screed controls of the bituminous paver may be manually adjusted, where permitted by the Engineer as hereinafter stated.

Base and binder course material may be delivered from more than one plant providing that no placing or compaction difficulties are evident to the Engineer. The delivery of top course material from two or more plants, in alternate deliveries to the same spreader, will not be permitted unless both the same aggregate source and job-mix formula are used by all plants.

The mixture shall be laid upon an approved clean, dry surface, spread and struck off to the established grade and elevation. Approved bituminous pavers shall be used to distribute the mixture. Bituminous pavers shall be in the charge of an experienced operator. Upon arrival at the site, the mixture shall be dumped into the paver and immediately spread and struck off to the width required and to such appropriate loose depth that when the work is completed, the required compacted thickness of mixture will be obtained. The depth of any one course of plant mixed material shall not be greater than necessary to produce a compacted thickness of four inches.

For the initial pavement course laid with automatic bituminous pavers, the paver shall be guided by a taut reference line positioned at or near the pavement centerline or edge. The reference line shall be supported at approximately 25 foot intervals on tangent sections and at closer intervals on curves. The line shall be tensioned sufficiently to remove any sags. The Contractor shall erect and maintain the reference line to the satisfaction of the Engineer. A moving reference of at least 30 feet in length, unless otherwise permitted by the Engineer, such as floating beam, ski, or other suitable type may be substituted for the reference line if the surface to be paved is sufficiently even and satisfactory results can be achieved. A short ski or shoe may also be used for the initial course if a satisfactory fixed reference such as a curb, gutter or other fixed reference is adjacent to the pavement.

Subsequent pavement courses placed over the initial course can be placed using a suitable fixed reference such as an erected line, curb or gutter, or by a moving reference having a minimum length of 30 feet, unless otherwise approved by the Engineer, such as a floating beam, ski or other similar devices. The automatic screed controls will not be required where existing grades at roadway intersections or drainage structures must be met, for shoulders, temporary detours, behind curbs, or in other areas where its use is impractical as determined by the Engineer.

Before any rolling is started, the loose mat shall be checked, any irregularities adjusted, and all unsatisfactory material shall be removed and replaced.

8/29/72