New Jersey Turnpike Authority

P.O. Box 5042, Woodbridge, NJ 07095



July 18, 2025

Document Change Announcement

2007 Design Manual Resurfacing Detail Update DCA2025DM-05

Subject: Revisions to

Section 6 Geotechnical Engineering, Subsection 6.7 Geotechnical Engineering Analysis and Design General Design Topics and Topics Not Explicitly Addressed in AASHTO-LRFD-BDS or FHWA Guidance

Description of Change:

This DCA specifies a minimum pavement thickness for milling and resurfacing projects matching the current pavement detail exhibits in the manual.

Notice to New Jersey Turnpike Authority Staff and Design Consultants

Effective immediately, all contracts currently in the design phase shall incorporate the revisions herein. For advertised contracts awaiting the opening of bids this revision shall be incorporated via addendum. Contact your New Jersey Turnpike Authority Project Manager for instruction.

The revisions may be accessed on the Authority's webpage: https://www.njta.com/doingbusiness/professional-services

Recommended By:

(signature on original)

Lamis T. Malak, P.E. Deputy Chief Engineer - Design

(signature on original)

Robert Higham, P.E. Acting Deputy Chief Engineer - Construction Approved By:

(signature on original)

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Distribution: Senior Staff Engineering, Law, Maintenance & Operations Depts., All Prequalified Consultant Firms, File

NOTE: All text herein are REVISIONS, as indicated by the tracked changes, to the latest version of the Design Manual.

SECTION 6 – GEOTECHNICAL ENGINEERING

6.7. GEOTECHNICAL ENGINEERING ANALYSIS AND DESIGN...

GENERAL DESIGN TOPICS AND TOPICS NOT EXPLICITLY ADDRESSED IN AASHTO-LRFD-BDS OR FHWA GUIDANCE

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6.7.4. Pavement Design

The GE shall verify subgrade suitability and provide adequate subgrade stabilization methods to improve the subgrade for soils exhibiting inadequate strength as specified in Section 6.4.5.

6.7.4.1. General Guidelines

The following general guidelines shall be applicable to Turnpike and Parkway pavements:

A. The Authority shall participate in any decision to diverge from published pavement standards.

When computing quantities for asphaltic concrete items, the following conversion factors are to be used for preliminary estimates and are to be verified for each project prior to completion of the final quantities:

Surface Course $156.0 \pm pcf$ Intermediate Course $157.5 \pm pcf$ Base Course $159.0 \pm pcf$

Conversion factors are to be verified for each project prior to completion of final quantities.

B. Tack coat shall be applied to all existing (milled) pavement surfaces just prior to asphalt resurfacing. Tack coat shall also be applied to all exposed cut surfaces of an existing asphalt pavement section which is stepped to interface with a proposed pavement section. Tack coat will not be required between subsequent asphalt layers of proposed pavement unless:

- 1. The underlying layer has been contaminated.
- 2. The underlying layer has been exposed to prolonged traffic use.
- 3. It is otherwise required on the drawings or in special provisions.
- C. All milling and resurfacing pavement sections on Turnpike and Parkway roadways shall be a minimum of 2.5 inches thick.
- D. In locations where existing pavement is widened, Grade A material is to be deeper, if necessary, to match template grade of existing pavement. Template grade (top of subgrade below Grade A embankment) shall slope transversely a minimum of 2% or match cross slope of roadway. Template grade shall be constructed transversely under the full section, without breaks in cross slope, on each individual roadway and in such a manner as to provide positive drainage (daylight section or underdrains).