



Florida Department of Transportation

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KEVIN J. THIBAUT, P.E.
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MEMORANDUM

DATE: January 28, 2022

FROM: Mo Hassan, P.E., Turnpike Design Engineer *Mo Hassan*

SUBJECT: 2022 Turnpike Design Criteria Documents

This memorandum announces the 2022 release of three (3) Florida's Turnpike Enterprise (Turnpike) design criteria documents:

- ***Turnpike Design Handbook (TDH) and associated Guide Drawings***
Available on the Turnpike Design website:
floridasturnpike.com/business-opportunities/design/turnpike-design-handbook/
- ***Turnpike Supplement to the FDOT Drainage Manual***
Available on the Turnpike Design website:
floridasturnpike.com/business-opportunities/design/design-criteria-and-standards/
- ***Turnpike Supplement to the FDOT Structures Manual***
Available on the Turnpike Design website:
floridasturnpike.com/business-opportunities/design/design-criteria-and-standards/

IMPLEMENTATION

These documents and associated criteria are effective on projects beginning design on or after February 1, 2022 and on projects currently in the design phase where implementation will not adversely impact production schedules as determined by the Turnpike Project Manager and Turnpike Design Engineer.

REQUIREMENTS

The major changes in Turnpike design requirements are listed below. Other changes consist of formatting, minor editing, updated references, and changes for consistency with FDOT Design Manual (FDM) 2022 updates.

Turnpike Design Handbook (TDH) – Parts 1, 2, 3, and 9**113.1 Right of Way Requirements - General**

Deleted this section and language defining non-monetary benefit.

113.2.3 Right of Way Requirements - Access Management

Deleted this section and language regarding access management criteria coordination.

113.4 Right of Way Requirements - Property Owner Contacts

Deleted this section and language regarding property owner contact procedures.

113.5 Right of Way Requirements - Construction Issues

Deleted this section and language regarding issues that may occur during construction.

113.5 Right of Way Requirements - Construction Issues

Deleted this section and language regarding issues that may occur during construction.

120.2.3.3 Design Submittals - Typical Section Sheet

Deleted required additional roadway typical section elements under bullet item (4) and additional bridge typical sections elements under bullet item (5).

120.2.7.1 Design Submittals - Turnpike Pavement Design Submittals

Deleted language regarding the required timing of submittals.

Deleted required draft pavement design submittal elements (1) – (4).

120.2.7.2 Design Submittals - Cross Slope Analysis During Design

Deleted language regarding the required verification of newly constructed corrected cross slope.

152.6 Shop Drawing Submittals - Disposition of Submittals

In “Blue Box” for Non-Conventional Projects, added additional Department disposition of “Release for Construction as Noted-Submit Specific Item.”

210.10.3 Arterials and Collectors - Vertical Clearances

Deleted this section and language regarding vertical clearance for overhead sign structures and DMS.

211.20 Limited Access Facilities - Flexible Pavement Design

Deleted flexible pavement design minimum standard elements (1) - (6), (8), and (10).

230.2.1 Signing and Pavement Marking - Sign Placement

Deleted language related to sign placement guidance, sign support placement, sign panel visibility, and need for clearing and grubbing.

Deleted language related to destination guide signs and post-interchange distance signs letter height.

230.2.2 Signing and Pavement Marking - Overhead Signs on Limited Access Facilities

Deleted bullet item (4) related to overhead signs when number of travel lanes in one direction is three or more.

230.2.5 Signing and Pavement Marking - Signs on Barriers and Traffic Railings

Deleted this sub-section.

230.3 Signing and Pavement Marking - Pavement Markings

Deleted this sub-section.

231.6 Lighting - Lighting Design Coordination

Modified language related to FAA evaluation and coordination.

233.3.6 ITS - Voltage Drop

Deleted language related to total voltage drop.

233.3.7 ITS - Installation of Power Cable

Deleted language related to sizing of power conduits.

233.4.2 ITS - Pull, Splice, and Junction Boxes

Deleted language related to spacing of consecutive fiber boxes.

233.5.1.1 ITS - Splices, Terminations, and Connection Hardware

Deleted language related to use of multimode fiber or copper in underground backbone or lateral locations.

233.6.1 ITS - Camera Lowering Device

Deleted language related to requirements for use of a camera lowering device.

233.7.4 ITS - Maintenance Service Pads

Deleted language related to requirements for a concrete pad at DMS locations with separate generators.

233.9.5 ITS - Automatic Vehicle Identification (AVI) Systems

Deleted language related to coordination on VDS-AVI penetration.

233.10 ITS - Closed-Circuit Television Systems

Deleted language related to camera specifications.

233.10.1 ITS - Video Display Systems

Deleted this sub-section and language related to video wall requirements coordination.

233.11.1 ITS - Dynamic Message Sign (DMS)

Deleted language related to requirement for travel time sensor installation.

Deleted language related to Toll Facility Approach DMS (TDMS) requirements.

233.11.2 ITS - Highway Advisory Radio (HAR)

Deleted language related to requirements for a frequency study.

240.2.2.23 Transportation Management Plan - Standard MOT General Notes

Deleted this sub-section and language related to requirement that milled surfaces are paved prior to opening to traffic.

260.6 Bridge Structures - Vertical Clearance

Deleted this sub-section and language in Table 260.6.1 related to existing bridge vertical clearance.

261.2 Structural Supports for Signs, Signals, Lighting, and ITS - Sign Support Structures

Deleted this sub-section and language related to coordination of structural ID numbers.

261.7.2 Structural Supports for Signs, Signals, Lighting, and ITS - Cat. 2 Analytical Evaluation

Deleted this sub-section and language related to Design Exception approvals.

325.5 Signing and Pavement Marking Plans - General Notes Sheet

Deleted this section and language related to required typical general notes.

Turnpike Guide Drawings**Traffic Guide Drawings**

Sheet 101-1 – Note #6 - Modified website reference

Sheet 101-1 – Note #7 - Deleted and all subsequent notes renumbered

Sheet 101-1 – Note #19 - Renumbered to #18 and modified language regarding coordination and disposition of Service Plaza Logo signs

Sheet 101-1 – Note #20 - Renumbered to #19 and modified language regarding contact information for coordinating disposition of logo signs

CONTACT

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Turnpike Supplement to the FDOT Drainage Manual**2.4.4 Hydraulics Analysis - Channel Bottom**

Deleted this sub-section and language indicating V-bottom ditches are not allowed.

4.8.1.1 Hydraulics Analysis - Bridges

Deleted this sub-section and language indicating ICPR Version 4 is only acceptable version for analysis.

5.4.4.2 Detention and Retention Ponds

Deleted this sub-section and language related to pond buffer area requirements and details and requirements for skimmers/baffles.

CONTACT

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Turnpike Supplement to the FDOT Structures Manual**Volume 1, Sections 1.4.5 and 7.3.1.C**

Updated Table 1 and the surface treatment requirements for various structures and project types to generally require Class 5 coating for concrete surfaces.

Volume 1, Section 7.3.4.B

Deleted language related to Design Variations for overstress.

Volume 2, Section 22.5

Deleted language related to bridge deck inlets required to avoid an approach slab inlet. There are now no changes to this entire Volume.

Volume 3, Section 2.4.2.2

Deleted language related to overhead sign structure requirement to accommodate 25% extra sign area and all associated language.

Volume 3, Section 2.4.2.4

Deleted language related to overhead sign structure requirement to accommodate 25% extra sign area and associated walk-DMS size requirements.

Volume 3, Section 18.1

Deleted language indicating that the use of exposure B is not permitted.

CONTACT

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