



Florida Department of Transportation

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DATE: October 14, 2002

TO: Registered Plans Preparation Manual Holders

FROM: Brian Blanchard, P.E.
State Roadway Design Engineer

CC: Bob Greer, William Nickas, Jim Mills

SUBJECT: IMPLEMENTATION - PLANS PREPARATION MANUAL
JANUARY 2003 UPDATES

The January 2003 Updates include:

1. Plans Preparation Manual, Volume I, January 2003 – Complete Reprint.
2. Plans Preparation Manual, Volume II, January 2003 – Complete Reprint.

The major changes in design requirements are to be implemented as follows:

Volume I, Chapter 1, Section 1.9 Design Speed

SUMMARY OF CHANGE:

The phrase “necessary for safe operation” in the second paragraph is deleted to be consistent with the definition of design speed in the 2001 AASHTO Green Book.

IMPLEMENTATION:

This change is for clarification and effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.1.5 Cross Slopes and Figure 2.1.1 Standard Pavement Cross Slopes

SUMMARY OF CHANGE:

Section 2.1.5 and Figure 2.1.1 have been revised to allow the maximum number of lanes with

cross slope in one direction for curb and gutter roadways to be four lanes.

IMPLEMENTATION:

This change is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.5 Borders and Table 2.5.1 Borders Highways with Flush Shoulders

SUMMARY OF CHANGE:

A provision has been added to reduce border width requirements for ramps in areas of crossroad terminal as long as design meets requirements for clear zone, horizontal clearance, drainage, maintenance access, etc.

IMPLEMENTATION:

This change is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.6 Grades and Table 2.6.3 Criteria for Grade Datum

SUMMARY OF CHANGE:

“Base Clearance Water Elevation” replaces the term “design high water for roadway base courses”.

IMPLEMENTATION:

This change in terms is made to avoid confusion with other design water elevations and is effective on all projects beginning design as of January 1, 2003.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.7 Sight Distance, Table 2.7.1 Minimum Stopping Sight Distance and Table 27.2 Minimum Passign Sight Distance

SUMMARY OF CHANGE:

Sight Distances have been revised for consistency with the 2001 AASHTO Green Book.

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 2003.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.8 Curves, Table 2.8.4 Horizontal Curves

SUMMARY OF CHANGE:

Maximum curvature for $e_{max} = 0.05$ has been added to Table 2.8.4

IMPLEMENTATION:

This change involves an expansion of an existing table to include information previously available in Table 2.9.2, Superelevation.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.8 Curves, Table 2.8.5 Minimum Lengths of Crest Vertical Curves and Table 2.8.6 Minimum Lengths of Sag Vertical Curves

SUMMARY OF CHANGE:

New vertical curve K values are provided. The new K values for crest vertical curves are based on the 2001 AASHTO Green Book Stopping Sight Distances but using a drivers eye height = 3.5' and object height = 6".

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 2003.

This change applies to English Projects.

Volume I Chapter 2, Section 2.10.1 Vertical Clearance, Table 2.10.4

SUMMARY OF CHANGE:

The minimum vertical clearance for Overhead Dynamic Message Signs (DMS) has been added.

IMPLEMENTATION:

This change was previously implemented by memorandum dated February 8, 1995 from the State Structures Design Engineer.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.10.2 Airspace Obstructions and Table 2.10.5 FAA Notification Requirements

SUMMARY OF CHANGE:

Criteria for addressing airspace obstructions and FAA notification requirements have been added.

IMPLEMENTATION:

This change is a user enhancement to address requirements previously in effect.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.11

SUMMARY OF CHANGE:

The requirement for adjusting clear zone widths on the outside of horizontal curves in accordance with Table 2.11.10 for new construction and reconstruction projects has been deleted.

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 2003 and, at the District's discretion, may be applied to design projects previously underway.

These changes apply to both Metric and English Projects.

Volume I Chapter 2, Section 2.13. Table 2.14.1 Ramp Widths – Turning Roadways

SUMMARY OF CHANGE:

Traveled way widths for selected radii have been revised for consistency with changes in the 2001 AASHTO Green Book.

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 2003 and, at the District's discretion, may be applied to design projects previously underway.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.14.1 Limited Access Right of Way Limits at Interchanges

SUMMARY OF CHANGE:

A provision has been added to reduce or omit limited access limits along crossroads overpassing limited access facilities with no interchange where driveway sight distance is adequate.

IMPLEMENTATION:

This change is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.16 Four Lane High Speed Suburban Sections

SUMMARY OF CHANGE:

A new section has been added providing special design criteria for four lane high-speed suburban sections.

IMPLEMENTATION:

This change is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 4, Section 4.1 Clear Zone

SUMMARY OF CHANGE:

Section 4.1 Clear Zone has been changed to include edits intended to clarify clear zone concepts and to provide consistency with the Utility Accommodation Manual.

IMPLEMENTATION:

This change is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 7, Section 7.2.7 Signing for Bridges with Steel Decks

SUMMARY OF CHANGE:

Section 7.2.7 is a new section to address the requirement for Slippery When Wet Signs (W8-5) in

advance of all movable and non-movable bridges with steel decks.

IMPLEMENTATION:

The requirement for Slippery When Wet Signs in advance of bridges with steel decks was implemented September 27, 1999.

This change applies to both Metric and English Projects.

Volume I Chapter 7, Section 7.4.12.1 Mast Arm Supports

SUMMARY OF CHANGE:

Section 7.4.12.1 Mast Arm Supports has been changed to reflect revised Design Standards for Mast Arms recently issued.

IMPLEMENTATION:

Implementation instructions were provided in the April 1, 2002 Basis of Estimates update. The new mast arm design standards may be used on projects beginning with the January 2003 letting. These new designs are mandated for use on projects beginning with the July 2003 letting.

This change applies to both Metric and English Projects.

Volume I Chapter 8 Pedestrian and Bicycle Facilities

SUMMARY OF CHANGE:

Chapter 8 changes includes edits to address transit considerations, a reference to an example typical design for shared use paths, and a new section (8.6.13) on Signing, Pavement Marking, and Signalization of shared use paths.

IMPLEMENTATION:

These changes are effective immediately.

These changes apply to both Metric and English Projects.

Volume I Chapter 9 Landscaping

SUMMARY OF CHANGE:

Chapter 9 has been completely revised. Changes include improved guidance for developing landscape plans, appropriate references to Rule 14-40, FAC regarding permitted outdoor advertising signs, and a new section (9.2) on the requirement that a comprehensive maintenance plan must accompany landscape plans.

IMPLEMENTATION:

These changes are effective on all projects beginning design as of January 2003.

These changes apply to both Metric and English Projects.

Volume I Chapter 10, Section 10.13 Barrier Walls (Temporary)

SUMMARY OF CHANGE:

Section 10.3 was changed to include edits to clarify requirements for portable concrete barriers on bridges. Also, a reference to water filled barriers has been added.

IMPLEMENTATION:

These changes involve clarification of previously implemented requirements.

These changes apply to both Metric and English Projects.

Volume I Chapter 10, Section 10.13.6 Temporary Curb

SUMMARY OF CHANGE:

Section 10.3.6 Temporary Curb is deleted.

IMPLEMENTATION:

Temporary Curb as detailed in Index 600 cannot be used on projects let to contract after September 30, 2002.

This change applies to both Metric and English Projects.

Volume I Chapter 10, Section 10.16 Law Enforcement Services

SUMMARY OF CHANGE:

Section 10.16 has been changed to reflect the requirements of Section 102 of the Specifications and corresponding pay item changes for the use of Speed and Law Enforcement Officers, and Traffic Control Officers.

IMPLEMENTATION:

Implementation instructions were provided in the April 1, 2002 Basis of Estimates update that stated these changes are effective beginning with the January 2003 letting.

These changes apply to both Metric and English Projects.

Volume I Chapter 11 Stormwater Pollution Prevention Plan

SUMMARY OF CHANGE:

Chapter 11 changes include new discussion and clarification on SWPPP requirements and documentation and moves SWPPP plan sheet requirements to a new Chapter in Volume II (Chapter 28).

IMPLEMENTATION:

These changes are user enhancements to address requirements previously in effect.

This change applies to both Metric and English Projects.

Volume I Chapter 13, Section 13.5.1 Aviation Office Coordination

SUMMARY OF CHANGE:

Section 13.5.1 changes include new discussion and clarification on responsibility for notification of airspace obstructions and Aviation Office Coordination. Table 13.5.1 is added to address notification requirements.

IMPLEMENTATION:

These changes are user enhancements to address requirements previously in effect.

These changes apply to both Metric and English Projects.

Volume I Chapters 14 Final Engineering Design Process, 15 Update Engineering Design Process, and 17 Engineering Design Estimates Process

SUMMARY OF CHANGE:

Changes to Chapters 14, 15 and 17 include edits associated with the implementation of TRNS*PORT.

IMPLEMENTATION:

The use of TRNS*PORT was implemented on all projects let in Central Office beginning with the October 2002 Letting.

These changes apply to both Metric and English Projects.

Volume I Chapter 19 Sealing Design Documents, Section 19.1 General

SUMMARY OF CHANGE:

Section 19.1 includes a new statement that all landscape plans, specifications, and reports for the Department shall be sealed by a registered landscape architect.

IMPLEMENTATION:

This change was previously implemented by the State Highway Engineer and was effective on all projects involving landscaping beginning design as of July 2002.

This change applies to both Metric and English Projects.

Volume I Chapter 19 Sealing Design Documents, Section 19.2 Sealing of Contract Plans/Record Set

SUMMARY OF CHANGE:

Section 19.2 is changed to comply with Florida Board of Professional Engineers Rules for sealing engineering documents.

IMPLEMENTATION:

This change was previously implemented by the Florida Board of Professional Engineers.

This change applies to both Metric and English Projects.

Volume I Chapter 19 Sealing Design Documents, Section 19.2.2 Electronic Sealing

SUMMARY OF CHANGE:

Section 19.2.2 was changed to provide a standard note to be used on electronically signed and sealed documents stating the official record is an electronic file.

IMPLEMENTATION:

This change is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 20 Plans Processing and Revisions

SUMMARY OF CHANGE:

Chapter 20 changes include edits to address plans processing changes associated with the implementation of TRNS*PORT and Electronic Specification Packages.

IMPLEMENTATION:

The use of TRNS*PORT was implemented on all projects let in Central Office beginning with the October 2002 Letting. The implementation of Electronic Specification Packages is effective beginning with the January 2003 letting.

These changes apply to both Metric and English Projects.

Volume I Chapter 23 Design Exceptions and Variations, Section 23.1 General

SUMMARY OF CHANGE:

Section 23.1 General is changed to provide clarification on the responsible party for design variations or exceptions where the Department enters into an agreement with a Utility for joint use utility poles.

IMPLEMENTATION:

This change is a clarification of existing requirements and is effective immediately.

These changes apply to both Metric and English Projects.

Volume I Chapter 23 Design Exceptions and Design Variations, Section 23.4 AASHTO Criteria for Critical Design Elements

SUMMARY OF CHANGE:

Section 23.4 is completely revised to address the implementation of the 2001 AASHTO Green Book.

IMPLEMENTATION:

Use of the 2001 AASHTO Green Book as the minimum threshold for Design Exceptions is effective on all projects beginning design as of January 2003.

These changes apply to both Metric and English Projects.

Volume I Chapter 25 Florida's Design Criteria for Resurfacing, Restoration and Rehabilitation, Section 25.4.10 Vertical Alignment

SUMMARY OF CHANGE:

Section 25.4 changes include revised stopping sight distance requirements and vertical curve K-values for consistency with the 2001 AASHTO Green Book

IMPLEMENTATION:

These changes are effective on all RRR projects beginning design as of January 2003.

These changes apply to both Metric and English Projects.

Volume I Chapter 25 Florida's Design Criteria for Resurfacing, Restoration and Rehabilitation, Section 25.4.11.1 Horizontal Curves

SUMMARY OF CHANGE:

Section 25.4.11.1 is changed to include a definition for significant crash history (3 or more crashes within the most recent 5 year).

IMPLEMENTATION:

This change is effective on all RRR projects beginning design as of January 2003.

This change applies to both Metric and English Projects.

Volume I Chapter 25 Florida's Design Criteria for Resurfacing, Restoration and Rehabilitation, Section 25.4.12 Stopping Sight Distance

SUMMARY OF CHANGE:

Table 24.4.11.2 was deleted and replaced by Table 24.4.12 Stopping Sight Distance. New stopping sight distances based on the 2001 AASHTO Green Book are provided.

IMPLEMENTATION:

This change is effective on all RRR projects beginning design as of January 2003.

This change applies to both Metric and English Projects.

Volume I Chapter 25 Florida's Design Criteria for Resurfacing, Restoration and Rehabilitation, Section 25.4.17 Intersections

SUMMARY OF CHANGE:

Section 25.4.17 was changed to include a requirement for corrective measures at T-intersections with significant crash histories.

IMPLEMENTATION:

This change is effective on all RRR projects beginning design as of January 2003.

This change applies to both Metric and English Projects.

Volume I Chapter 25 Florida's Design Criteria for Resurfacing, Restoration and Rehabilitation, Section 25.4.25.3 Bridge Railing

SUMMARY OF CHANGE:

Section 25.4.25.3 Bridge Railing was changed to clarify requirements and address the use of Thrie Beam Guardrail retrofits and Vertical Face retrofit Structures Standards.

IMPLEMENTATION:

This change is primarily a clarification of previously implemented requirements. New Structures Design Standards and Design Standards will be published soon. Until these are published, the State Roadway Design Office and the State Structures Design Office will provide project specific details on request.

This change applies to both Metric and English Projects.

Volume I Chapter 28 Shop and Erection Drawings

SUMMARY OF CHANGE:

Chapter 28 changes include updates to clarify the roles and responsibilities of the Department, the Department's consultant, and Specialty Engineers and revisions to copy and distribution requirements. There are now allowances for the Districts to delegate shop drawing responsibilities to the EOR. These changes are consistent with recent changes to Specifications regarding shop drawings.

IMPLEMENTATION:

These changes are effective beginning with the January 2003 letting.

These changes apply to both Metric and English Projects.

Volume I Chapter 29 Miscellaneous Structures, Section 29.3 Design of Mast Arm Assemblies and Foundations

SUMMARY OF CHANGE:

Section 29.3 has been changed to reflect revised Design Standards for Mast Arms recently issued.

IMPLEMENTATION:

Implementation instructions were provided in the April 1, 2002 Basis of Estimates update. The new mast arm design standards may be used on projects beginning with the January 2003 letting. These new designs are mandated for use on projects beginning with the July 2003 letting.

This change applies to both Metric and English Projects.

Volume I Chapter 29 Miscellaneous Structures, Section 29.3.5 Anchor Bolt Installation on Existing Foundations

SUMMARY OF CHANGE:

Section 29.3.5 is a new section added to address requirements for anchor bolt installation on existing foundations.

IMPLEMENTATION:

This change is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 29 Miscellaneous Structures, Section 29.6 Design of Sound Barrier Walls

SUMMARY OF CHANGE:

Section 29.6 has been changed to include maximum deflection requirements and horizontal clearance requirements.

IMPLEMENTATION:

These changes are effective immediately.

This change applies to both Metric and English Projects.

Volume II Chapter 6 Typical Sections

SUMMARY OF CHANGE:

Chapter 6 changes include 3 new Typical Section plan sheet exhibits: 2 Suburban Typicals and 1 Shared Use Path.

IMPLEMENTATION:

These changes are user enhancements to address requirements previously in effect.

These changes apply to English Projects.

Volume II Chapter 26 Landscape Plans

SUMMARY OF CHANGE:

Chapter 26 changes include expanded requirements for planting plan sheets, and a statement requiring that maintenance requirements for the plant establishment period must be included in the construction contract documents.

IMPLEMENTATION:

These changes are effective on projects beginning design as of January 2003.

These changes apply to both Metric and English Projects.

Volume II Chapter 28 Stormwater Pollution Prevention Plan

SUMMARY OF CHANGE:

Chapter 28 is a new chapter based on information previously provided in Volume I, Chapter 11. Three new exhibits containing examples of SWPPP narrative requirements are added.

IMPLEMENTATION:

These changes are user enhancements to address requirements previously in effect.

This change applies to both Metric and English Projects.

Volume II Sample Plan Exhibits

SUMMARY OF CHANGE:

A new set of Sample Plan exhibits is provided, which includes edits to existing exhibits and several new exhibits.

IMPLEMENTATION:

These changes are user enhancements to address requirements previously in effect.

These changes apply to English Projects.

All other changes in the July, 2003 Plans Preparation Manual updates package primarily consist of edits for clarification and/or error corrections.

If you have any questions please contact this office, 850-414-4318, Suncom 994-4318.