



## **Florida Department of Transportation**

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**MS-32**

**DATE:** December 17, 1999

**TO:** Registered Plans Preparation Manual Holders

**FROM:** Billy Hattaway, PE  
State Roadway Design Engineer

**CC:** Freddie Simmons, William Nickas, Jim Mills

**SUBJECT:** IMPLEMENTATION - PLANS PREPARATION MANUAL  
JANUARY 2000 UPDATES

The January, 2000 Updates include:

1. Revisions to Plans Preparation Manual, Volume 1 Metric, January, 1998.
2. Revisions to Plans Preparation Manual Volume II Metric, January, 1999.
3. New edition Plans Preparation Manual Volume 1 English, January, 2000.
4. New edition Plans Preparation Manual Volume II English, January, 2000.

The new English version is nearly identical to the Metric version except for units of measure. The major changes in design requirements included in both the Metric revisions and the new English edition are to be implemented as follows:

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### **Volume I, Chapter 1, Section 1.7 .1 Transportation Design for Livable Communities**

#### **SUMMARY OF CHANGE:**

New section added to reference the Department's Policy Statement regarding Transportation Design for Livable Communities (Topic Number 000-625-060). All designs are to consider TDLC features when such features are desired, appropriate and feasible.

#### **IMPLEMENTATION:**

This Policy Statement was implemented December 22, 1998.

This change applies to both Metric and English Projects.

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**Volume I Chapter 2, Section 2.1.4 Pedestrian and Bicycle Facilities**

**SUMMARY OF CHANGE:**

Section 2.1.4.1 was added to address sidewalk requirements.

Section 2.1.4.2 addresses bicycle requirements and includes a new requirement for an undesignated bicycle lane between a right turn lane and the through lane at intersections.

**IMPLEMENTATION:**

Requirements for pedestrian and bicycle facilities have been previously implemented. The new requirement for undesignated bicycle lanes at intersections is effective on all projects beginning design as of January 1, 2000.

This change applies to both Metric and English Projects.

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**Volume I Chapter 3, Earthwork**

**SUMMARY OF CHANGE:**

Chapter 3 has been rewritten to address several major changes to the selection of earthwork pay items and information to be included in plans. Changes include: 1. Pay for all Cut Operations as Regular Excavation or Regular Excavation (Lump Sum); Do not differentiate between suitable and unsuitable. 2. Pay for all Fill Operations as Embankment or Borrow Excavation (Truck Measure). 3. Pay for all material excavated below the finished grading template as Subsoil Excavation; do not differentiate between suitable and unsuitable. 4. When quantities are large, pay for Lateral Ditch and/or Channel Excavation separately. See the Basis of Estimates Handbook for additional information.

**IMPLEMENTATION:**

These changes are to be implemented on all projects beginning with the July, 2000 letting.

These changes apply to both Metric and English Projects.

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**Volume I Chapter 4, Section 4.3.1 Roadside Barriers - Warrants**

**SUMMARY OF CHANGE:**

**Implementation of January, 2000 Updates to the Plans Preparation Manual  
December 17, 1999**

Added bullet on roadside barrier requirements for vertical dropoffs created by retaining walls. Provides new design criteria values for curbed sections with drop offs.

**IMPLEMENTATION:**

The general requirement that roadside vertical dropoffs be addressed is a clarification and is not new. New design criteria values for curbed sections are to be implemented on all projects beginning design as of January 1, 2000.

This change applies to both Metric and English Projects.

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**Volume I Chapter 7, Section 7.4.4 Controller Assemblies**

**SUMMARY OF CHANGE:**

Added guidance that future intersection expansion should be considered in the design of controller assemblies. Also added guidance on expansion versus replacement when existing controller assemblies are to be upgraded.

**IMPLEMENTATION:**

This change is effective on all projects beginning design as of January 1, 2000.

This change applies to both Metric and English Projects.

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**Volume I Chapter 8, Section 8.3.3 Pedestrian Railings, Section 8.4.4 Bicycle Railings, and 8.7 Shared Use Paths**

**SUMMARY OF CHANGE:**

Sections were changed to address pedestrian and bicycle railing requirements. The pipe handrail shown in Index 520 is suitable for dropoffs up to 30". For vertical dropoffs greater than 30", a handrail design conforming to ADA requirements and AASHTO rail requirements shall be provided.

**IMPLEMENTATION:**

This change is to be implemented on all projects beginning with the July, 2000 letting.

This change applies to both Metric and English Projects.

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**Volume I Chapter 10, Section 10.14.4 Work Zone Traffic Control - Pedestrians and Bicyclists**

**SUMMARY OF CHANGE:**

Section 10.14.4 has been changed to provide improved direction on accommodating pedestrians and bicyclist in work zones.

**IMPLEMENTATION:**

This change is a clarification to existing requirements.

This change applies to both Metric and English Projects.

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**Volume I Chapter 13, Section 13.5.2 Projects Involving Bridges with Lead Based Paint**

**SUMMARY OF CHANGE:**

Section 13.5.2 has been changed to clarify project manager responsibilities and contract document requirements for projects with lead based paint.

**IMPLEMENTATION:**

This change is a clarification to existing requirements.

This change applies to both Metric and English Projects.

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**Volume I Chapter 19, Section 19.1 Sealing Design Documents - General**

**SUMMARY OF CHANGE:**

Section 19.1 has been changed to address Landscape Architect sealing requirements (Chapter 481, Part II, Florida Statutes, and Rule Chapter 61G10-11.010(2)).

**IMPLEMENTATION:**

This change addresses existing requirements.

This change applies to both Metric and English Projects.

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**Volume I Chapter 19, Section 19.2.2 Electronic Sealing**

SUMMARY OF CHANGE:

Section 19.2.2 has been added to address electronic sealing.

IMPLEMENTATION:

Electronic sealing is applicable when required as a project deliverable.

This change applies to both Metric and English Projects.

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**Volume I Chapter 19, Section 19.4.1 Sealing Design Documents - Plans**

SUMMARY OF CHANGE:

Section 19.4.1 has been changed to address the disposition of revised plan sheets.

IMPLEMENTATION:

This change is effective immediately and has been implemented by the Central Office Plans Processing section.

This change applies to both Metric and English Projects.

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**Volume I Chapter 20, Section 20.3.1 Plans Processing - District Activities**

SUMMARY OF CHANGE:

Section 20.3.1 has been added to provide general information on District Plans Processing prior to submitting contract plans to Tallahassee.

IMPLEMENTATION:

This change provides general information on typical plans processing activities. Each District should be contacted for specific requirements regarding plans processing.

This change applies to both Metric and English Projects.

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**Volume I Chapter 20, Section 20.4 Revisions to the Contract Plans Package**

**SUMMARY OF CHANGE:**

Section 20.4 has been changed to clarify the recording, processing and dating of revisions. Corresponding changes have been made to the Revision Memo (Exhibit 20-C).

**IMPLEMENTATION:**

This change should be implemented as soon as practical on all projects. Full implementation is required on all projects beginning with the July, 2000 letting.

This change applies to both Metric and English Projects.

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**Volume I Chapter 24, Federal Aid Project Certification**

**SUMMARY OF CHANGE:**

Chapter 24 has been re-written to reflect FDOT's current Exemption Agreement with FHWA as provided for by Federal law. All federal aid projects developed in accordance with the exemption process are exempt from FHWA oversight, except for new or reconstruction projects on the Interstate System with cost estimates greater than \$1 million.

**IMPLEMENTATION:**

The current Exemption Agreement was adopted April 26, 1999.

This change applies to both Metric and English Projects.

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**Volume I Chapter 25, Section 25.4.11.1 c) P.I.'s without Curves**

**SUMMARY OF CHANGE:**

Section 25.4.11.1 c) was added to address maximum deflection without curves. The same maximum deflection without curves that applies to new construction, also applies to RRR projects.

**IMPLEMENTATION:**

This change is effective on all projects beginning design as of January 1, 2000.

This change applies to both Metric and English Projects.

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**Volume I Chapter 25, Section 25.4.14 Horizontal Clearance**

**SUMMARY OF CHANGE:**

Section 25.4.14 on Horizontal Clearance was changed for clarification. The discussion on Clear Zone formerly in Section 25.4.15 is deleted and revised discussion on Clear Zone is included with 25.4.14. Horizontal Clearance tables are provided similar to Chapter 2.

**IMPLEMENTATION:**

This change is effective on all projects beginning design as of January 1, 2000.

This change applies to both Metric and English Projects.

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**Volume I Chapter 25, Section 25.4.15 Control Zones**

**SUMMARY OF CHANGE:**

The discussion on Clear Zone was deleted from 25.4.15 and new discussion provided in 25.4.14. Section 25.4.15 is now entitled “Control Zones” and provides discussion and descriptions of Control Zones. Requirements are compatible with the new Utility Accommodation Manual.

**IMPLEMENTATION:**

This change is effective on all projects beginning design as of January 1, 2000. For utility installations, the application of control zones was implemented with adoption of the January, 1999 Utility Accommodation Manual.

This change applies to both Metric and English Projects.

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**Volume I Chapter 25, Section 25.4.26 Roadside Safety Hardware**

**SUMMARY OF CHANGE:**

Section 25.4.26, Roadside Safety Hardware has been added to address roadside safety hardware

requirements on RRR projects.

**IMPLEMENTATION:**

This change provides clarification to previously implemented requirements and is effective immediately on all RRR projects.

This change applies to both Metric and English Projects.

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**Volume I Chapter 30 Section 30.1 Retaining Walls**

**SUMMARY OF CHANGE:**

Section 30.1, Purpose, has been changed to include reference to the requirement for roadside barriers to shield drop offs created by retaining walls. Also added is a reference to the requirement for handrails or fences for bicyclists and pedestrians when retaining walls are located within the right of way.

**IMPLEMENTATION:**

This change is effective on all projects beginning design as of January 1, 2000.

This change applies to both Metric and English Projects.

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**Volume I Chapter 31 Geosynthetic Design**

**SUMMARY OF CHANGE:**

Chapter 31, Geosynthetic Design is a new chapter addressing design procedures to be followed for designing and preparing plans for geosynthetic reinforced soil slopes, and geosynthetic reinforced foundations over soft soils. The process to be followed involves providing a generic design in the plans rather than contacting individual suppliers to obtain designs for inclusion in the plans. New pay items have been established.

**IMPLEMENTATION:**

This change is effective on all projects beginning with the July, 2000 letting. See the 1999 Basis of Estimates Handbook, July 1999 update for additional information.

This change applies to both Metric and English Projects.

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**Volume II Chapter 1, Section 1.3, Displaying Information and Data**

**SUMMARY OF CHANGE:**

In the English version, the title (Application of the Metric System) was changed and the content of this section was edited for English.

**IMPLEMENTATION:**

This change is a clarification for use with the new English PPM..

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**Volume II Chapter 1, Section 1.4, Base Sheet Format**

**SUMMARY OF CHANGE:**

A new base sheet format with 3/4" margins on each side. Grids can be plotted with minor grids turned on or off. If minor grids are plotted, they are to be half toned.

**IMPLEMENTATION:**

This change is effective on all projects beginning design when the new CADD software release is available.

This change applies to both Metric and English Projects.

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**Volume II Chapter 10, Section 10.2.1 Centerline**

**SUMMARY OF CHANGE:**

Recommendations for scales and the format for showing centerline stationing and tick marks have been added.

**IMPLEMENTATION:**

This change involves recommendations that may be used on projects beginning immediately.

This change applies to English Projects. Similar recommendations are not provided in the Metric edition of Volume II.

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**Volume II Chapter 10, Exhibit 10-1, General Notes for Roadway Plan and Roadway Plan-Profile Sheets**

**SUMMARY OF CHANGE:**

The benchmark datum information required in General Note 1 has been changed to include NAVD 88 when applicable.

**IMPLEMENTATION:**

This change is effective immediately.

This change applies to both Metric and English Projects.

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**Volume II Chapter 11, Section 11.7 At-Grade Railroad Crossings**

**SUMMARY OF CHANGE:**

Section 11.7 has been added to provide guidance on providing supplemental profiles for at grade railroad crossings.

**IMPLEMENTATION:**

This change involves recommendations that may be used on projects beginning immediately.

This change applies to both Metric and English Projects.

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**Volume II Chapter 18, Roadway Cross Sections, Section 18.2 Required Information**

**SUMMARY OF CHANGE:**

Chapter 18 has been changed to be consistent with new procedures for earthwork described in Volume I, Chapter 3.

**IMPLEMENTATION:**

This change is effective on all projects beginning with the July, 2000 letting.

This change applies to both Metric and English Projects.

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**Volume II Chapter 23, Section 23.7.2 Overhead Signs and Support Structure**

**SUMMARY OF CHANGE:**

Section 23.7.2 has been changed to clarify required information to be included in plans for overhead signs and support structures.

**IMPLEMENTATION:**

This change involves a clarification to existing requirements and is effective immediately.

This change applies to both Metric and English Projects.

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**Volume II Chapter 26 Landscape Plans, Section 26.1, General**

**SUMMARY OF CHANGE:**

Section 26.1 has been changed to reference signing and sealing requirements for Landscape Architects.

**IMPLEMENTATION:**

This change involves a clarification to existing requirements and is effective immediately.

This change applies to both Metric and English Projects.

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All other changes in the January, 2000 Plans Preparation Manual updates package primarily consist of minor editing for clarification and/or error corrections.

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