



Florida Department of Transportation

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MEMORANDUM

DATE: November 2, 2016
TO: Holders of the FDOT Drainage Manual
FROM: Carlton Spirio, P.E. (State Drainage Engineer)
SUBJECT: FDOT Drainage Manual – January 2017

The Drainage Manual has been revised for the January 2017 scheduled release date. Implement the revised 2017 Drainage Manual policies on all design projects, when possible, without impacting production schedules. Significant revisions and pertinent details are listed below.

Global Change

The Drainage Manual language was modified to active voice.

Changed handbook references to the Drainage Design Guide.

Changed Design Standard Index reference to simply “Index”.

Table of Contents

Updated as necessary to reflect the revisions shown below.

Chapter 2 – Open Channel

Section 2.2 – Modified language to Acquire flood rights where offsite stages increase and impact land use values.

Section 2.4 – Added guidance on ditch computations for all changes in ditch slope, cross section, lining type, or quantity of flow. The flow shown as contributing to the point of interest includes all contributions upstream of that point of interest.

Section 2.4.3.1.1 – Language changed to non-cohesive sandy soils.

Section 2.4.3.1.3 – Language changed to asphalt linings will not be used for design.

Table 2.2 – Removed values for asphalt concrete, since prohibited for use in design.

Chapter 3 – Storm Drain Hydrology and Hydraulics

Section 3.6 – Modified language to use a physical slope that will produce a velocity of at least 2.5 feet per second (fps) and no greater than 15 fps when the storm drain is flowing full.

Section 3.7 – Removed hydraulic determinations, such as depth and velocity, shall be based on a 25-year rainfall event.

Section 3.7 – Added language to design protective treatments to prevent entry of certain wildlife, such as manatees.

Section 3.9.3 – Added language to capture accumulated runoff from side streets and ramps prior to discharging into the mainline travel lanes or other areas where the additional sheet flow may cause hydroplaning.

Section 3.12.4 – Added language on Floatation.

Chapter 4 – Cross Drain Hydraulics

Section 4.8.1.1 – Added ICPR.

Section 4.9.3.1 – Added if a Standard Specification does not exist.

Section 4.9.3.3 – Removed site specific designs and technical specifications are required when using articulated concrete block, gabions, or when using rubble and the design velocities that exceed the above velocities. All items are now covered under Section 530.

Chapter 5 – Stormwater Management

Section 5.5 – Added (ix) aesthetic effects, (x) construction costs including earthwork, (15) description of how pond aesthetics are addressed and (16) additional information as requested by the District Drainage Engineer.

Chapter 6 – Optional Culvert Materials

Section 6.3 – Added information on Appendix C.

Section 6.5 – Added Pipes within Wall Embankment Section.

Section 6.8 – Design/Build: Removed as-built plan view.

Appendix C – Cover Height Tables

Added: Allowable cover heights in Appendix D do not account for loadings from structural walls in proximity to pipes.