

SECTION IX. - GENERAL DESIGN CRITERIA

This Section is a general guideline and is subject to revisions depending on specific project requirements.

A. Roadway

1. Type C Stabilization shall not be utilized for any Roadway.
2. Thickened base in lieu of Type B Stabilization is preferred due to constructability.
3. Asphalt shall be placed in minimum of one (1") inch lifts.
4. Roadways shall be designed in a two (2) lift system.
5. Refer to Section III. G. g. except as otherwise noted above
6. Refer to Section III.G.h.

B. Utilities

1. All pressure pipes shall be designed using restrained joints (i.e. meg-a-lug) with no use of thrustblock.
2. Conflicts and crossings shall be clearly identified on the design drawings.
3. Design criteria shall meet all applicable utility standards.

C. Lakes and Canals

1. Canal slopes must be no steeper than 3 to 1 unless supported by Geotechnical recommendations.
2. Minimum overhead clearance shall be three feet (3') above 25-year/3 day storm elevation for bridge construction (lowest structural member) and aerial crossings.
3. Bottom of outfall piping shall be a minimum of one foot (1') above the lake bottom and a minimum of two feet (2') below control elevation. The pipe depth shall be maximized to the greatest extent possible. Where this criterion cannot be met a headwall will be required. (See Detail)
4. All pipe collars are to be prefabricated. Formed in-place collars are not acceptable.

5. All Surface Water Management Systems shall be designed such that head loss of lake interconnect pipe is a maximum of 0.2 ft.
6. Storm Routing Calculations shall be performed with adICPR or other South Florida Water Management District (SFWMD) approved software.

D. Control Structures

1. Chain link fence installation for Control Structures and RTU to be six feet (6') high per FDOT Index 452, Type 2 fence enclosure and a three feet (3') wide gate with lock. All fencing materials shall be black PVC coated with a minimum chain link Fabric No. 9 gauge. (See Typical Detail of site layout for a control structure).
2. A 6" reinforced concrete slab is to be constructed within the fenced in area around the control structure.
3. Control Structures should have a width of not more than twice the length of the box and the distance from the weir to the edge of the box shall be greater than the diameter of the outlet pipe.
4. Control structures shall be concrete box with concrete or aluminum weir plates.
5. Control Structures shall be designed with an operable control gate where permitted, or with a "Knock Out" to accommodate installation of a future gate. Engineer shall coordinate with District Engineer on the design of the gate.
6. Major control structures may require telemetry system as determined by Northern.

E. Erosion Control/Turbidity Control

1. Filter fabric form grouted matting for slope stabilization shall not be used.
2. Designs shall incorporate appropriate temporary and permanent erosion control designs and material to prevent erosion during and after construction and must meet NPDES permit requirements.