NOTES

SPECIFICATIONS:

1. General Specifications:
   The Florida Department of Transportation "Standard Specifications for Road and Bridge Construction", Current Edition and Supplements as Amended.
2. Design Specifications:
   a. Florida Department of Transportation (FDOT) "Structures Design Guidelines", Current Edition.
   b. American Association of State Highway and Transportation Officials (AASHTO) "LRFD Bridge Design Specifications", Current Edition.
   c. AASHTO-AGC-ARTBA Task Force 27 (Ground Modification Techniques), "Insitu Soil Improvement Techniques", January 1990.

DESIGN CRITERIA:

1. Design is based on the assumption that the material contained within the reinforced soil volume, methods of construction and quality of prefabricated materials are in accordance with Specification Section 548 and Chapter 3 of the FDOT's Structures Design Guidelines.
2. It is the responsibility of the Engineer of Record to determine that the maximum factored bearing pressure shown for the wall does not exceed the factored bearing resistance of the foundation for that specific wall location.
3. The Wall Company is responsible for internal stability of the wall. External stability design, including foundation and slope stability, is the responsibility of the Engineer of Record.
4. If there are manholes and/ or drop inlets present, design and analysis for both internal and external stability shall be considered.

SOIL PARAMETERS:

1. See Wall Control Drawings for soil characteristics of foundation material to be used in the design of the wall system.
2. The Contractor will provide soil design parameters for backfill material based on the actual soil characteristics utilized at the site.

MATERIALS:

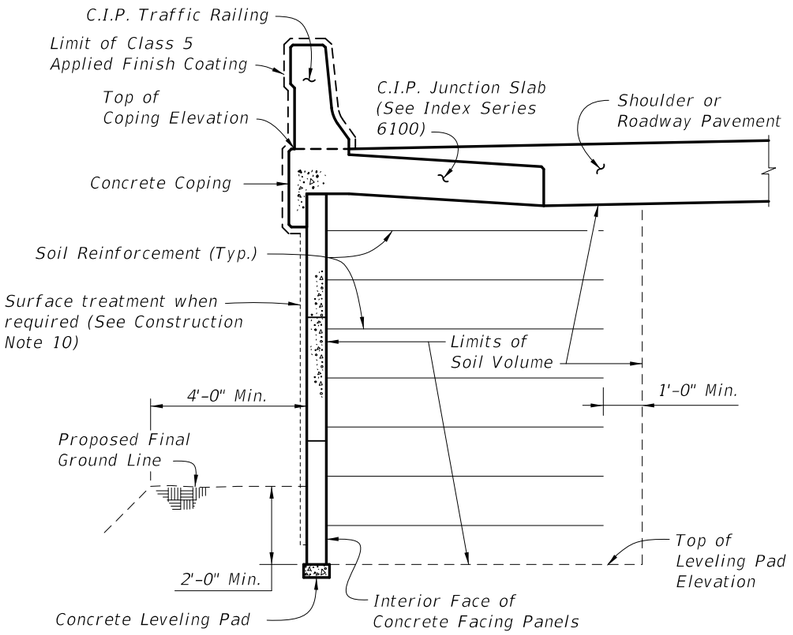
1. Concrete Class: See Wall Control Drawings.
2. See Specification Section 548 for material requirements.
3. For additional material requirements see the Wall Company's General Notes.

CONSTRUCTION:

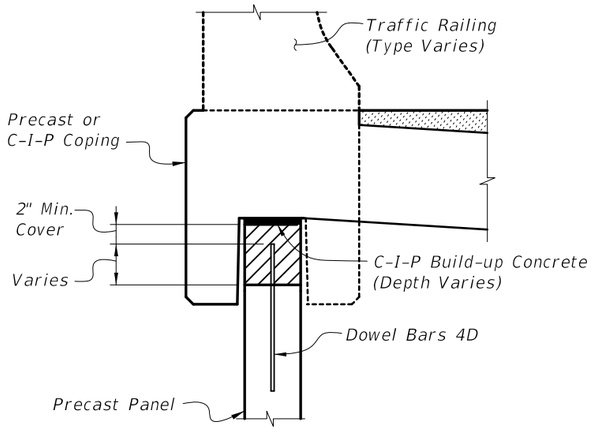
1. Walls will be constructed in accordance with Specification Section 548 and the Wall Company's instructions.
2. For location and alignment of retaining walls, see Wall Control Drawings.
3. If present, consider in design and analysis and locate manholes and drop inlets as shown on wall elevations.
4. Refer to Wall Control Drawings of individual walls for minimum reinforcement strip/mesh length, factored bearing resistance's, minimum wall embedment and anticipated long term and differential settlements.
5. The Contractor is responsible for controlling water during storm events as needed during construction.
6. It is the Contractor's responsibility to determine the location of any guardrail posts behind retaining wall panels. Prior to placement of the top layer of soil reinforcement, individual reinforcing strips/mesh may be skewed (15° maximum) to avoid the post locations if authorized by the Engineer. No cutting of soil reinforcement is allowed unless shown on Shop Drawings and approved by the Engineer. Any damage done to the soil reinforcement due to installation of the guardrail will be repaired by the Contractor at the Contractor's expense. Repair method will be approved by the Engineer.
7. If existing or future structures, pipes, foundations or guardrail posts within the reinforced soil volume interfere with the normal placement of soil reinforcement and specific directions have not been provided on the plans, the Contractor will notify the Engineer to determine what course of action shall be taken.
8. The Contractor is responsible for gradually displacing upper layer(s) of soil reinforcement downward (15° maximum from horizontal) to avoid cutting soil reinforcement and conflicts with paving and subgrade preparation. The Contractor's attention is directed especially to situations where roadway superelevation and/or soil mixing are anticipated.
9. All exposed concrete surfaces will receive a Class 5 Applied Finish Coating in accordance with Specification Section 400. Refer to Typical Section on this sheet and the following notes for limits of applied finish:
   a. The inside, backside and top of Traffic Railings and Pedestrian/Bicycle Railings.
   b. Exposed surfaces of coping on top of retaining wall. Other coatings, colors or textures will be applied as required in the Wall Control Drawings.
10. For concrete facing panel surface treatment, see Wall Control Drawings. Extend surface treatment a minimum of 6" below final ground line.
11. Drive piles located within the soil volume prior to construction of the retaining wall, unless a method to protect the structure, acceptable to both the Engineer and Wall Company, is proposed and approved in writing. The portion of piles or drilled shafts extensions within the soil volume will be wrapped with polyethylene sheeting in accordance with Specification Section 459.
12. A structural extension of the connection of the retaining wall panel to soil reinforcement will be used whenever necessary to avoid cutting or excessive skewing (greater than 15°) of the soil reinforcement around obstructions (i.e., piles, pipes, manholes, drop inlets, etc.).
13. Steps in leveling pads will occur at MSE Wall panel interfaces. Panels will not cantilever more than 2" past the end of the upper tier leveling pad.
14. The top of the leveling pad or footing will be 2'-0" minimum below final ground line.
15. Top of leveling pad elevations shown in the Wall Control Drawings are maximum elevations. The constructed leveling pad elevations may be deeper based on the panel layout shown in the shop drawings.
16. The height of panels in the bottom course of MSE Walls must not be less than half the height of a standard panel.
17. Work this Index with Index 6100 & 6200 Series.

SHOP DRAWING REQUIREMENTS:

See Specification Section 548 for shop drawing requirements.



TYPICAL MSE RETAINING WALL SECTION
WITH A TRAFFIC RAILING
(Showing Limits of the Reinforced Soil Volume)



TYPICAL BUILD-UP DETAIL FOR
COPING/JUNCTION SLAB

FDOT MSE RETAINING WALL CLASSIFICATION TABLE

Durability Requirements					Other Allowable FDOT Wall Types					
Applicable FDOT Wall Type *	Concrete Cover (in.)	Concrete Class for Panels	Pozzolan Additions? **	Soil Reinforcement Type	2A	2B	2C	2D	2E	2F
Type 2A	2	II	No	Metal		✔	✔	✔	✔	✔
Type 2B	2	IV	No	Metal			✔	✔	✔	✔
Type 2C	3	IV	No	Metal				✔	✔	✔
Type 2D	3	IV	Yes	Metal					✔	✔
Type 2E	3	IV	No	Plastic						✔
Type 2F	3	IV	Yes	Plastic						

* See Data Table in Contract Plans.

** Silica fume, metakaolin or ultrafine fly ash.

GENERAL NOTES AND DETAILS

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/11	GJM	New Index No. & Title (Previously Index 5300, Sheet 1 of 19); Changed Materials Notes, Construction Notes 11 & 14 and Shop Drawing note; Deleted Construction Note 9 and QPL Notes.			

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

2010 Interim Design Standard

PERMANENT MSE RETAINING WALL SYSTEMS

Interim Date 01/01/11

Sheet No. 1 of 1

Index No. 6020