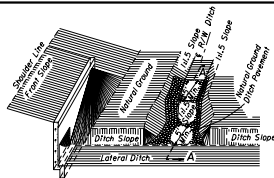
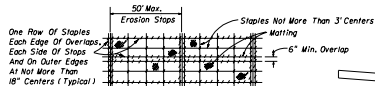


JUNCTION OF ROADWAY DITCH AND LATERAL DITCH

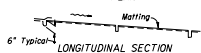
Soil cement or misc. asphalt will not be permitted for this type of construction



JUNCTION OF R/W DITCH AND LATERAL DITCH



PLAN

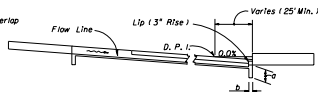


LONGITUDINAL SECTION

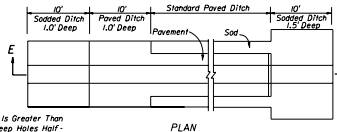


SECTION

MATTING FOR DITCH



SECTION EE



PLAN

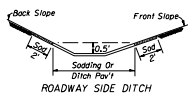
PAVED DITCH END TREATMENT

GENERAL NOTES

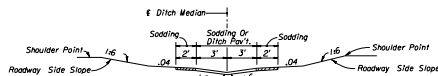
1. Type of ditch pavement shall be as shown on plans.
2. In concrete ditch pavement, contraction joints are to be spaced at 25' maximum intervals, or as directed by the Engineer. Contraction joints may be either formed (construction joint) or tooled. No open joints will be permitted.
3. Expansion joints with $\frac{1}{2}$ " preformed joint filler shall be constructed at all inlets, endwalls, and at intervals of not more than 200'.
4. Lip at end of ditch pavement shall normally be located downstream of D.P.I., or on flatter grades where there is a decrease in ditch velocity.
5. Toe walls are to be used with all ditch paving. A foewall is not required adjacent to drainage structures.
6. For Junction of R/W ditch spillway and lateral ditch, sides of paving to be 1' high minimum.
7. For ditch pavements requiring filter fabric the fabric shall be placed directly beneath the pavement for the entire length and width of the pavement. When weep holes with aggregate are used the filter fabric shall be placed below the aggregate to form a mat continuous with or overlapping the pavement fabric. (See index 199 for fabric type and application).
8. Ditch pavement requiring reinforcement shall be detailed in the plan.
9. Cost of plastic filter fabric to be included in the contract unit price for ditch pavement.

Notes: All weep holes to be 3" x 4" rectangle or 4" or 5" dia. circular hole, $\frac{1}{2}$ cu. ft. (112" x 12" x 6") of No. 6 aggregate to be placed under each hole. 1 sq. ft. of galvanized wire mesh (2 openings) shall be placed between the aggregate and the concrete. Cost of holes, aggregate and wire mesh to be included in the cost of ditch pavement.

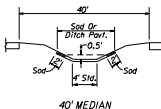
WEEP HOLE ARRANGEMENT



ROADWAY SIDE DITCH

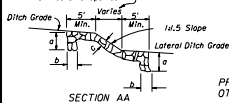


SWALED MEDIAN (No Weep Holes)



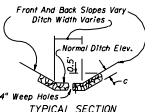
40' MEDIAN

Do Not Construct Weep Holes In This Area Or 5' Upstream



SECTION AA

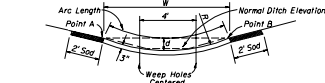
PROFILE OF DITCH PAVT. AT LOCATIONS OTHER THAN JUNCTION WITH LATERAL DITCH 3" x 4" Weep Holes



TYPICAL SECTION

DITCH PAVEMENT

| Pavement Type | Dimensions | | | Payment Unit | Basis Of Estimate | Filter Fabric Type | Velocity Range | References & Remarks |
|-----------------------|------------|-----|----|--------------|-------------------|--------------------|----------------|---|
| | a | b | c | | | | | |
| Concrete | 24" | 6" | 3" | SY | SY | D-6 | Low-High | Section 584 of the Standard Specifications. |
| Miscellaneous Asphalt | 24" | 12" | 4" | TN | 0.2 TAV/SY | None | Low-Moderate | Section 538 |
| Soil-Cement | 24" | 12" | 4" | SY | None | None | Low | Section 170. |
| Riprap (Sand-Cement) | 24" | 12" | 4" | CY | 0.11 CY/SY | D-4 | Low-Moderate | Section 530. Grouting of Joints required. |
| Riprap (Ditch Lining) | | | | TN | TN | D-2 | Moderate-High | Section 530 |



TO REPLACE:

| | W | a | B | No. Of Rows Of Weep Holes | Arc Length |
|----------------------------------|-----|------|-----|---------------------------|------------|
| 6' Median Swale | 6' | .24' | 19' | 0 | 6.0 |
| 1:6 Front Slopes; 1:4 Back Slope | 10' | .67' | 19' | 2 | 10.1 |
| 5' B.W. Ditch | 9' | .54' | 19' | 2 | 9.1 |
| 1:4 Front Slopes & Back Slope | 9' | .74' | 14' | 2 | 9.2 |
| 5' B.W. Ditch | 8' | .58' | 14' | 1 (in center) | 8.1 |

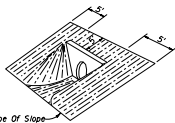
ALTERNATE DITCH PAVEMENT

For use only where side slopes are 1:4 or flatter. Point "A" and "B" are to be the same elevation and should be used to locate the paved section.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

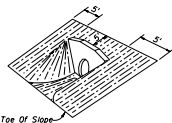
DITCH PAVEMENT & SODDING

| Name | Date | Approved By |
|-------------|------|----------------|
| Designed By | | STATE ENGINEER |
| Drawn By | | 1 of 2 |
| Checked By | | 281 |



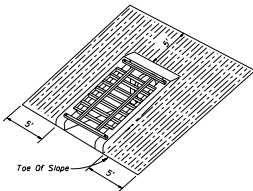
Toe Of Slope
Note: Sodding quantities for each endwall to be determined by the designer from this detail.

(EXCEPT INDEX 250)
STRAIGHT ENDWALL



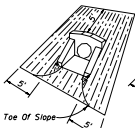
Toe Of Slope

STRAIGHT ENDWALL
INDEX 250



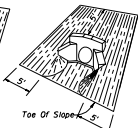
Toe Of Slope

U - TYPE ENDWALL
INDEX 261



Toe Of Slope

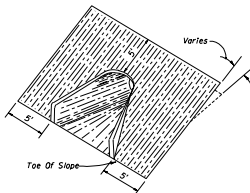
U - TYPE WINGS



Toe Of Slope

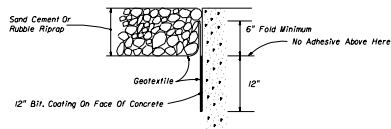
45° WINGS

WINGED ENDWALLS
INDEX 266

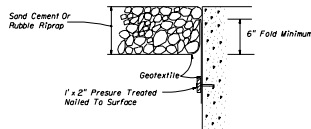


Toe Of Slope

FLARED END SECTION
INDEX 270



BONDED OPTION



NAILED OPTION

Note: Either option maybe used unless otherwise called for in the plans.

GEOTEXTILE PLACEMENT AT CONCRETE STRUCTURE

SODDING QUANTITIES (S. Y.)

| PIPE SIZE | INDEX 250 | | | | | | | | | | | | INDEX 261 | | | | | | INDEX 266 | | | | | | INDEX 270 |
|-----------|-----------|----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----------|----|-----|----|-----|----|-----------|----|----|--|----|--|------------|
| | SLOPE | | | | | | | | | | | | SLOPE | | | | | | SLOPE | | | | | | ALL SLOPES |
| | 1:2 | | | 1:3 | | | 1:4 | | | 1:6 | | | 1:2 | | 1:3 | | 1:4 | | 1:6 | | 1 | | | | |
| | PIPES | | | | | | | | | | | | PIPES | | | | | | PIPES | | | | | | |
| 12" | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15" | 19 | 21 | 24 | 22 | 26 | 29 | 26 | 30 | 33 | 34 | 38 | 43 | 13 (15) | 16 | 17 | 23 | 15 | 17 | 20 | 25 | 11 | | 10 | | |
| 18" | 21 | 24 | 27 | 25 | 29 | 33 | 30 | 34 | 38 | 39 | 44 | 50 | 14 (16) | 17 | 19 | 25 | 16 | 18 | 22 | 28 | 11 | | 11 | | |
| 21" | | | | | | | | | | | | | | | | | | | | | | | 12 | | |
| 24" | 26 | 30 | 34 | 32 | 37 | 42 | 38 | 44 | 50 | 50 | 58 | 66 | 15 (17) | 19 | 21 | 28 | 19 | 22 | 26 | 34 | | | 14 | | |
| 27" | | | | | | | | | | | | | | | | | | | | | | | 15 | | |
| 30" | 31 | 37 | 42 | 39 | 46 | 53 | 46 | 55 | 63 | 62 | 74 | 85 | 17 (18) | 21 | 24 | 32 | 21 | 25 | 30 | 40 | | | 16 | | |
| 36" | 37 | 44 | 52 | 46 | 56 | 65 | 56 | 67 | 79 | 76 | 91 | 107 | | | | | 24 | 29 | 35 | 47 | | | 18 | | |
| 42" | 43 | 53 | 62 | 55 | 67 | 79 | 67 | 82 | 96 | 91 | 111 | 132 | | | | | 27 | 32 | 39 | 54 | | | 19 | | |
| 48" | 50 | 62 | 73 | 64 | 79 | 93 | 78 | 97 | 115 | 108 | 133 | 158 | | | | | 30 | 36 | 44 | 61 | | | 21 | | |
| 54" | 57 | 71 | 85 | 74 | 92 | 110 | 91 | 113 | 136 | 126 | 157 | 188 | | | | | | | | | | | 21 | | |
| 60" | | | | | | | | | | | | | | | | | | | | | | | 22 | | |
| 66" | | | | | | | | | | | | | | | | | | | | | | | 25 | | |
| 72" | | | | | | | | | | | | | | | | | | | | | | | 26 | | |

() Endwall With Baffles

SODDING

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

DITCH PAVEMENT & SODDING

| | | | | | | | |
|------------|-----|-------|------------|-----|--------|-------------|----------------------|
| Drawn By | MSD | 28-85 | Checked By | MSD | 28-85 | Approved By | <i>L. A. McNamee</i> |
| Checked By | MSD | 28-85 | Date | 02 | 2 of 2 | Sheet No. | 281 |