

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

Varies

Arc Length

Point A

Min.

AND LATERAL DITCH

I:I.5 Slope

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

Ditch Slope Lateral Ditch

> JUNCTION OF R/W DITCH* AND LATERAL DITCH

Front And Back Slopes Vary

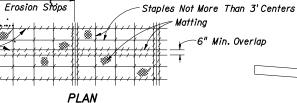
Normal Ditch Elev.

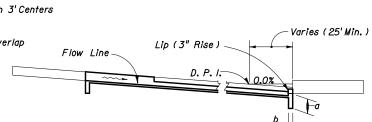
Front Slope

(No Weep Holes)

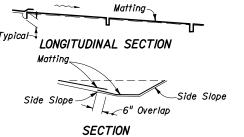
Ditch Width Varies

One Row Of Staples Each Edge Of Overlaps, Each Side Of Stops < And On Outer Edges At Not More Than 18" Centers (Typical)





SECTION EE



50' Max.

MATTING FOR DITCH

10' C To C

Varies

Standard Paved Ditch Sodded Ditch Paved Ditch Sodded Ditch 1.0' Deep I.O' Deep Sod.

When Width Is Greater Than 4', Const. Weep Holes Half-Way Up The Side In Line With Bottom Weep Holes

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I' Except For

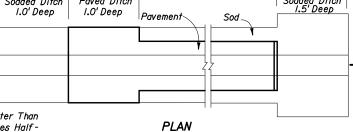
One Row

When "X" = I' To 4' Const. I Row (Centered)

"X" = 5' To 7' Const. 2 Rows

"X" = 8' To 12' Const. 3 Rows "X" = 13' To 17' Const. 4 Rows

"X" = 18' To 22' Const. 5 Rows



PAVED DITCH END TREATMENT

GENERAL NOTES

- I. 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

Expansion joints with $\frac{1}{2}$ preformed joint filler shall be constructed at all inlets, endwalls, and at intervals of not more than 200'.

- 3. 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.
- 4. Toewalls are to be used with all ditch paving. A toewall is not required adjacent to drainage structures.
- 5. When directed by the Engineer, weep hole spacing may be reduced to 5'
- 6. For junction of R/W ditch spillway and lateral ditch, sides of paving to be I 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 underlapping 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.



DITCH PAVEMENT & SODDING

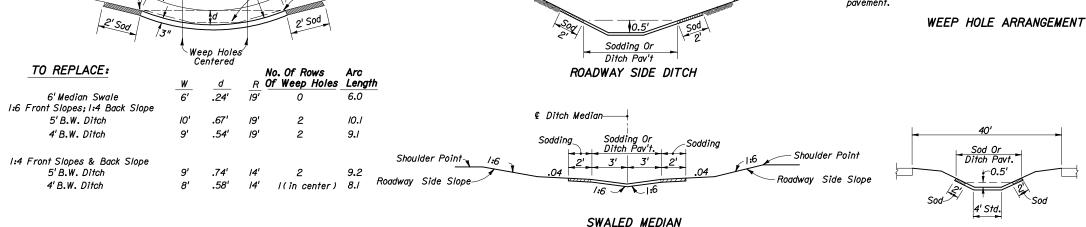
| | Names | Dates | Approve | d By | 1 | M | <i>'</i> |
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| Drawn By | | | Revision | She | et No |). [| Index No. |
| Checked By | | | 00 | l of | 2 | | 281 |

Lateral Ditch Grade 0.5 ROOM, MANUEL STATES PROFILE OF DITCH PAV'T AT LOCATIONS OTHER THAN JUNCTION WITH LATERAL DITCH 3" x 4" Weep Holes SECTION AA TYPICAL SECTION DITCH PAVEMENT Filter Fabric Dimensions Payment Basis Of Velocity Pavement Type

Normal Ditch Elevation

References & Remarks Ŭnit Estimate Type Range Section 524 of the Standard Specifications. Concrete SY TN D-6 Low-High 24" | 12" | 4" 24" | 12" | 4" Section 339. Miscellaneous Asphalt 0.2 TN/SY None Low-Moderate SY CY Soil-Cement SY None Low Section 170. 24" | 12" | 4" Section 530. Grouting of joints required. Riprap (Sand-Cement) O.II CY/SY Low-Moderate D-4 Riprap (Ditch Lining) ΤN ΤN Moderate-High Section 530 D-2

> Notes: All weep holes to be 3" x 4" rectangle or 4" or 5" dia. circular hole. $\frac{1}{2}$ cu. ft. (12" x 12" x 6") of No. 6 aggregate to be placed under each hole. Isq. ft. of galvanized wire mesh $(\frac{1}{4}^{"}$ 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.

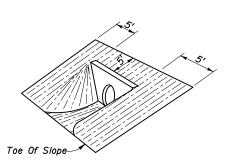


Back Slope

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.

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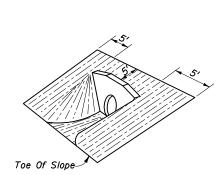


Note: Sodding quantities for each endwall to be determined by the designer from this detail.

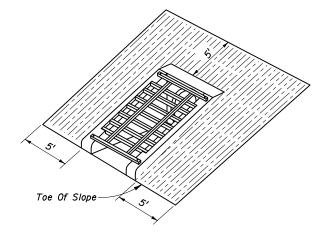
(EXCEPT INDEX 250)

STRAIGHT ENDWALL

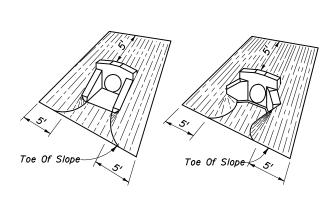
U - TYPE WINGS



STRAIGHT ENDWALL
INDEX 250

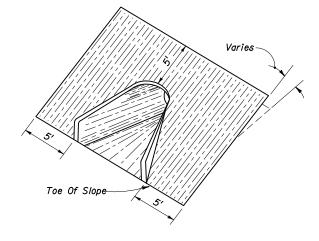


U - TYPE ENDWALL INDEX 261



WINGED ENDWALLS
INDEX 266

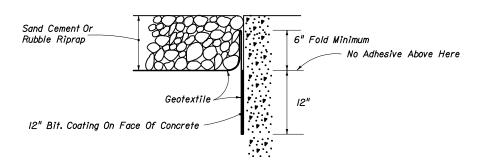
45° WINGS



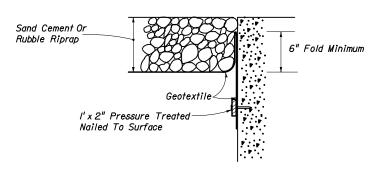
FLARED END SECTION INDEX 270

| SODDING QUANTITIES (S. Y.) | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-------|-----------|----|-----------|----|-----|----|-----|-----|-----|---------------------|-------------|-----------|---------------------|----|-----------|--------------|------------|-----------|------------|------------|
| | | INDEX 250 | | | | | | | | | | | INDEX 261 | | | INDEX 266 | | | INDEX 270 | | |
| DIDE | SLOPE | | | | | | | | | | | SLOPE SLOPE | | | | SLOPE | | | | ALL SLOPES | |
| PIPE | 1: 2 | | | 1: 3 1: 4 | | | | 1:6 | | | 1: 2 1: 3 1: 4 1: 6 | | | 1: 2 1: 3 1: 4 1: 6 | | | 7122 0207 20 | | | | |
| SIZE | | | | | | PIF | ES | | | | | | , | PIP | ES | | | PII | PIPES | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12" | | | | | | | | | | | | | | | | | 14 | <i>l</i> 5 | 18 | 22 | 10 |
| 15" | 19 | 21 | 24 | 22 | 26 | 29 | 26 | 30 | 33 | 34 | 38 | 43 | 13 (15) | 16 | 17 | 23 | 15 | 17 | 20 | 25 | 11 |
| 18" | 21 | 24 | 27 | 25 | 29 | 33 | 30 | 34 | 38 | 39 | 44 | 50 | 14 (16) | 17 | 19 | 25 | 16 | 18 | 22 | 28 | 11 |
| 2/" | | | | | | | | | | | | | | | | | | | | | 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" | | | | | | | | | | | | | | | | | | | | | <i>1</i> 5 |
| 30" | 3/ | 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 | /// | 132 | | | | | 27 | 32 | 39 | 54 | 19 |
| 48" | 50 | 62 | 73 | 64 | 79 | 93 | 78 | 97 | 115 | 108 | /33 | 158 | | | | | 30 | 36 | 44 | 6/ | 21 |
| 54" | 57 | 71 | 85 | 74 | 92 | 110 | 91 | 113 | /36 | 126 | 157 | 188 | | | | | | | | | 21 |
| 60" | | | | | | | | | | | | | | | | | | | | | 22 |
| 66" | | | | | | | | | | | | | | | | | | | | | 25 |
| 72" | | | | | | | | | | | | | | | | | | | | | 26 |
| () Endwall With Baffles | | | | | | | | | | | | | | | | | | | | | |

SODDING



BONDED OPTION



NAILED OPTION

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

GEOTEXTILE PLACEMENT AT CONCRETE STRUCTURE

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

DITCH PAVEMENT & SODDING

| | Names | Dates | Approve | · // // · // | 11 |
|-------------|---------|-------|----------|------------------|------------------|
| Designed By | | | | State Drainage I | Chemose Engineer |
| Drawn By | HSD | 08/85 | Revision | Sheet No. | Index No. |
| Checked By | JBW/JVG | 09/85 | 00 | 2 of 2 | <i>281</i> |