
ORIGINATION FORM

Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: June 5, 2023

Originator: Dino Jameson

Phone: (352) 955-2933

Email: dino.jameson@dot.state.fl.us

Standard Plans:

Index Number: 430-012

Sheet Number (s): 1 and 2 of 3

Index Title: U-Type Concrete Endwall

Energy Dissipator 30" to 72" Pipe



Summary of the changes:

Sheet 1: Added GENERAL NOTE 5 "Install Type D-2 geotextile in accordance with Specifications 514."

Sheet 2: Changed all references of "Filter Fabric" to "Geotextile".

Areas of the Standard Plans where 985 is referenced for drainage details needs to now reference Specs 514 (Division II specs). The Contractor is not responsible for the producer requirements division III specs, but ensure that the product used is on the APL and used for appropriate intended use. Specs 514 essentially does reference 985 to meet the materials requirement.

Commentary / Background:

In the July 2022 SSRBC workbook, construction requirements for the Contractor for geosynthetic materials from Section 985 was removed. The reason for it was that the construction requirements doesn't belong in Division III of the specifications, as this is for producer requirements. Instead of applying specific requirements to each individual specs that references 985 in Division II, the Department is going to modify specification 514 to cover geosynthetics used for drainage applications. Specs 145 covers the reinforcement (structural) applications and construction requirements and erosion control has specific requirements in various areas of Division II, therefore, both erosion and reinforcement are covered. The only missing link in Division II is the drainage applications. Proposed changes to 514 cover construction requirements and material acceptance. In addition, specs 514 ensures that the Contractor obtains geosynthetic product from a manufacturer that meets 985 spec requirements.

Other Affected Offices / Documents: (Provide name of person contacted)

Yes No

- | | | |
|-------------------------------------|-------------------------------------|---|
| ☐ | ☒ | Other Standard Plans – |
| ☐ | ☒ | FDOT Design Manual – |
| ☐ | ☒ | Basis of Estimates Manual – |
| ☒ | ☐ | Standard Specifications – Various sections where 985 is referenced. |
| ☐ | ☒ | Approved Product List – |
| ☐ | ☒ | Construction – |
| ☐ | ☒ | Maintenance – |

Origination Package Includes: (Submit package to Rick Jenkins)

Yes N/A

- | | | |
|-------------------------------------|-------------------------------------|---|
| ☒ | ☐ | Redline Mark-ups |
| ☐ | ☒ | Revised or Proposed Standard Plan Instruction (SPI) |
| ☒ | ☐ | Other Support Documents |

Implementation:

- | | |
|-------------------------------------|----------------------------------|
| ☐ | Design Bulletin (Interim) |
| ☐ | DCE Memo |
| ☐ | Program Mgmt. Bulletin |
| ☒ | FY-Standard Plans (Next Release) |

Contact the Roadway Design Office for assistance in completing this form

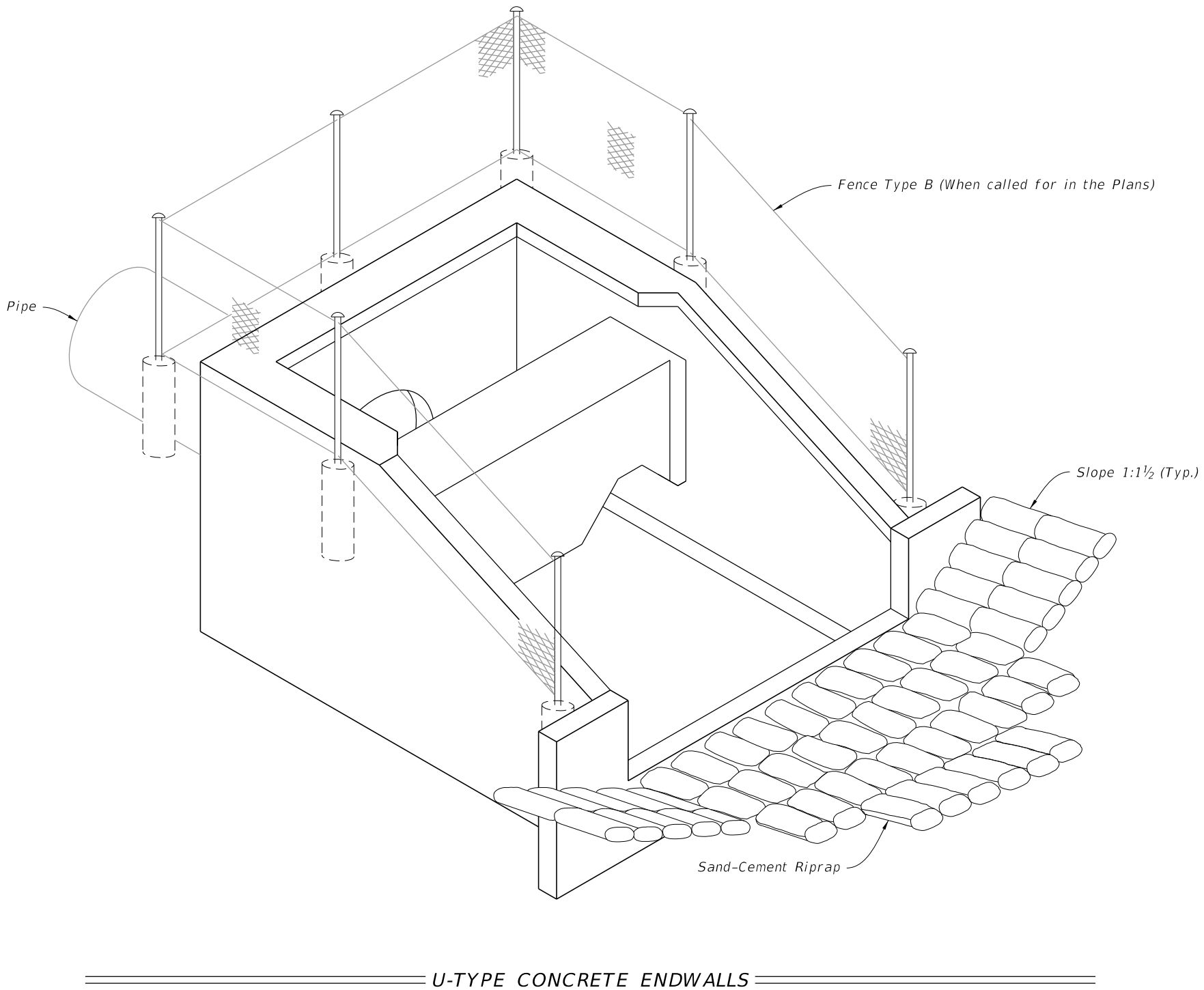
Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us

GENERAL NOTES:

- 1. Use Class II concrete.
- 2. Chamfer all exposed edges $\frac{3}{4}$ ".
- 3. See Index 550-002 for details of Type B fencing.
- 4. Quantities shown are for estimating purposes only.

Note 5 - Install Type D-2 geotextile in accordance with Specification 514.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Dimensional Details
3	Reinforcing Details and Bending Diagram



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LAST REVISION	11/01/23
11/01/21	

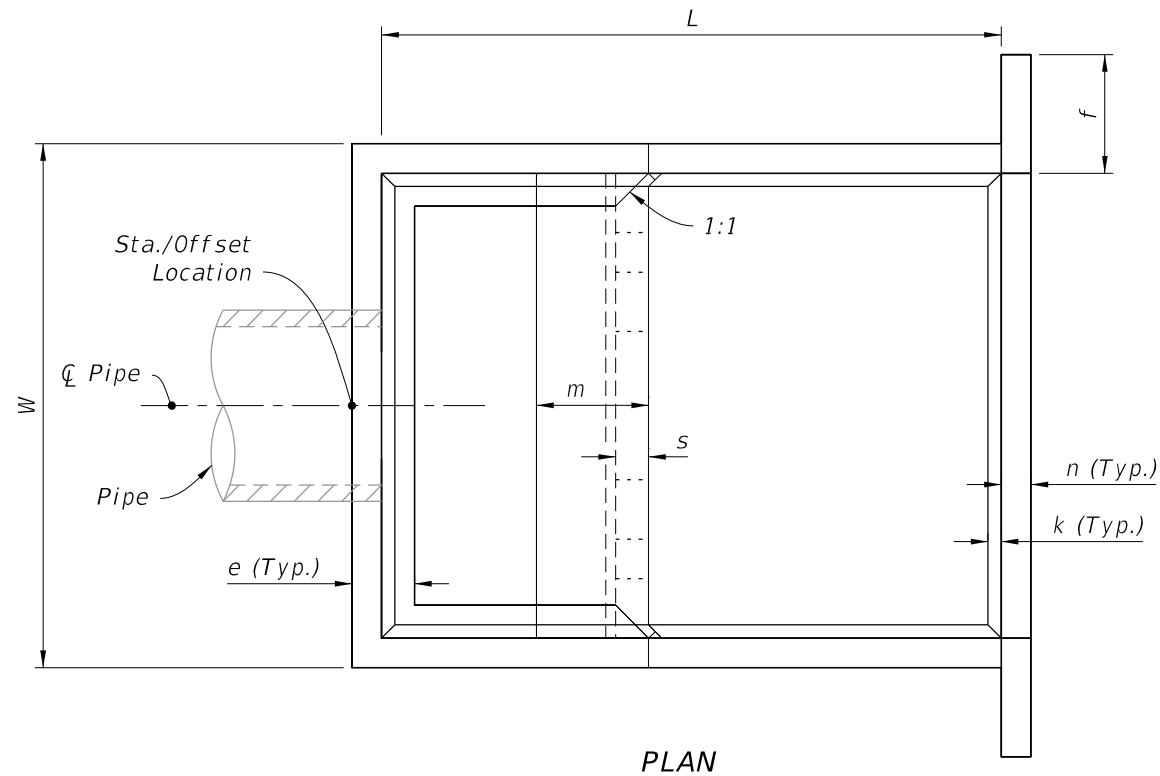


FY 2023-24
STANDARD PLANS

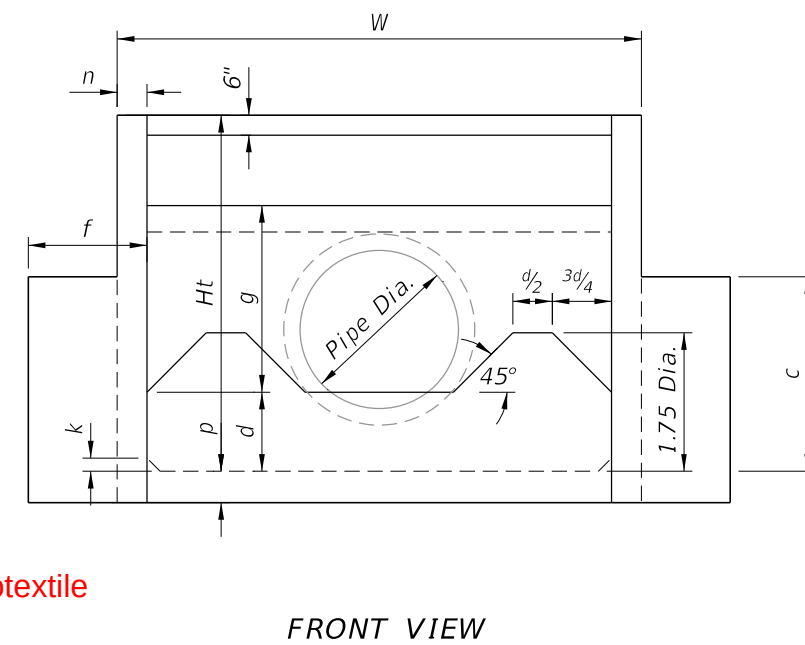
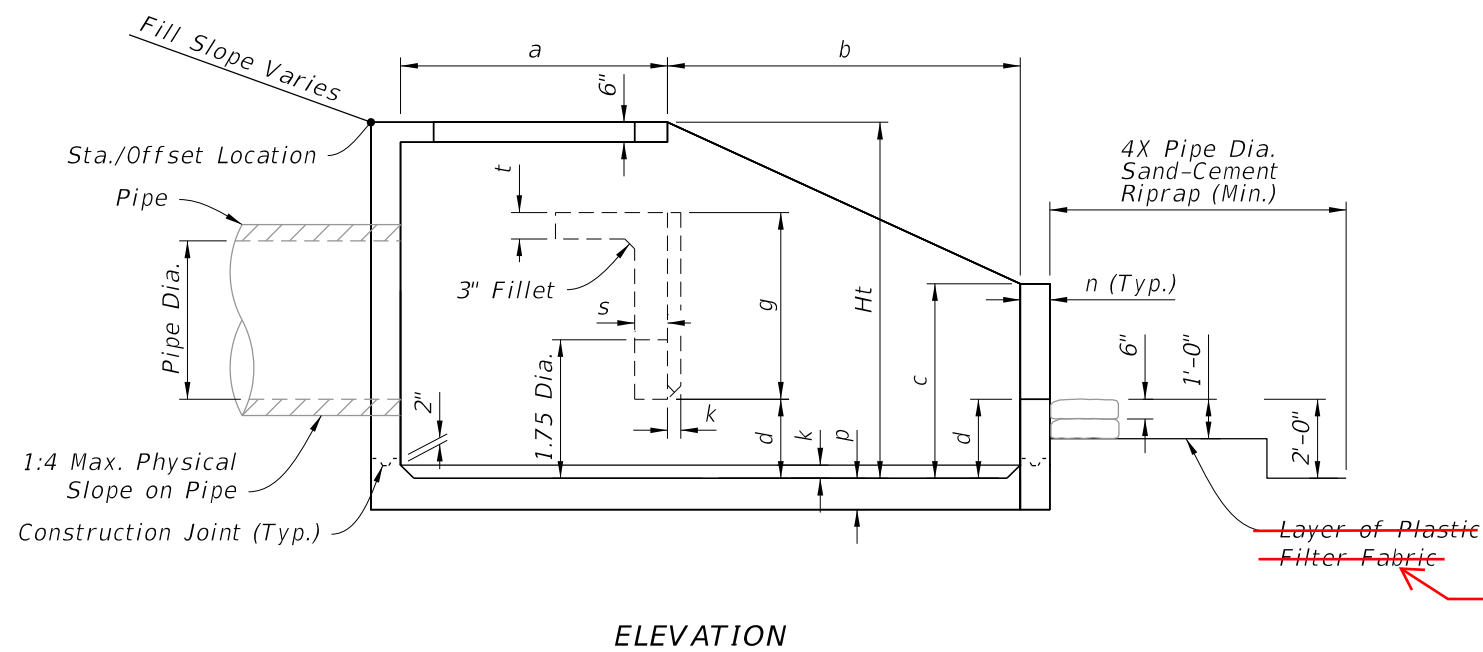
U-TYPE CONCRETE ENDWALLS
ENERGY DISSIPATOR 30" TO 72" PIPE

INDEX
430-012

SHEET
1 of 3



Pipe		DIMENSION TABLE																Concrete (CY)	Reinf. Steel (lb)	Sand-Cement Riprap (Nom.) (CY)
Dia.	Area (SF)	Feet - Inches											Inches							
		W	Ht	L	a	b	c	d	e	f	g	m	n	p	s	t	k			
30"	4.91	9-0	6-3	10-8	4-7	6-1	3-4	1-4	1-2	2-6	3-0	1-11	6	6½	7	7	3	6.72	736	10.6
36"	7.07	10-5	7-3	12-4	5-3	7-1	3-10	1-7	1-3	3-0	3-6	2-3	7	7½	8	8	3	10.34	1,072	13.6
42"	9.62	11-10	8-0	14-0	6-0	8-0	4-5	1-9	1-6	3-0	3-11	2-6	8	8½	9	8	4	14.82	1,429	17.5
48"	12.57	13-3	9-0	15-8	6-9	8-11	4-11	2-0	1-7	3-0	4-5	2-10	9	9½	10	8	4	20.36	2,000	22.1
54"	15.90	14-8	9-9	17-4	7-4	10-0	5-5	2-2	1-10	3-0	4-11	3-0	10	10½	10	8	4	27.19	2,659	27.2
60"	13.63	16-1	10-9	19-0	8-0	11-0	5-11	2-5	1-11	3-0	5-4	3-4	11	11½	11	8	6	34.49	3,552	32.5
66"	23.76	17-3	11-6	20-6	8-8	11-10	6-5	2-7	2-1	3-0	5-9	3-7	12	12½	12	8	6	42.82	4,472	38.3
72"	28.27	18-6	12-3	22-0	9-3	12-9	6-11	2-9	2-3	3-0	6-2	3-9	12	12½	12	8	6	50.68	5,426	44.5



DIMENSIONAL DETAILS

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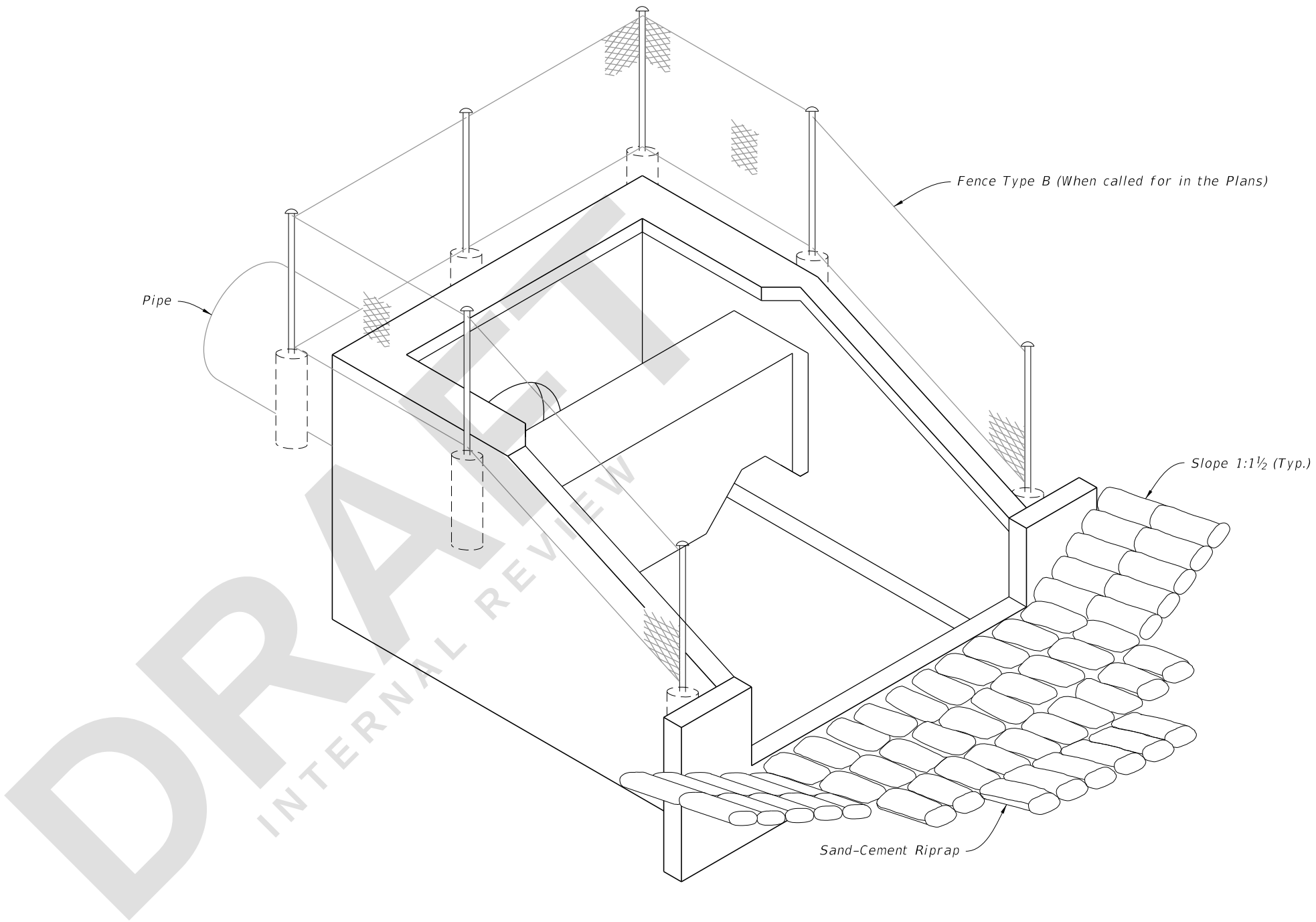
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LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS ENERGY DISSIPATOR 30" TO 72" PIPE	INDEX 430-012	SHEET 2 of 3
11/01/19	11/01/23					

GENERAL NOTES:

- 1. Use Class II concrete.
- 2. Chamfer all exposed edges $\frac{3}{4}$ ".
- 3. See Index 550-002 for details of Type B fencing.
- 4. Quantities shown are for estimating purposes only.
- 5. Install Type D-2 geotextile in accordance with Specification 514.

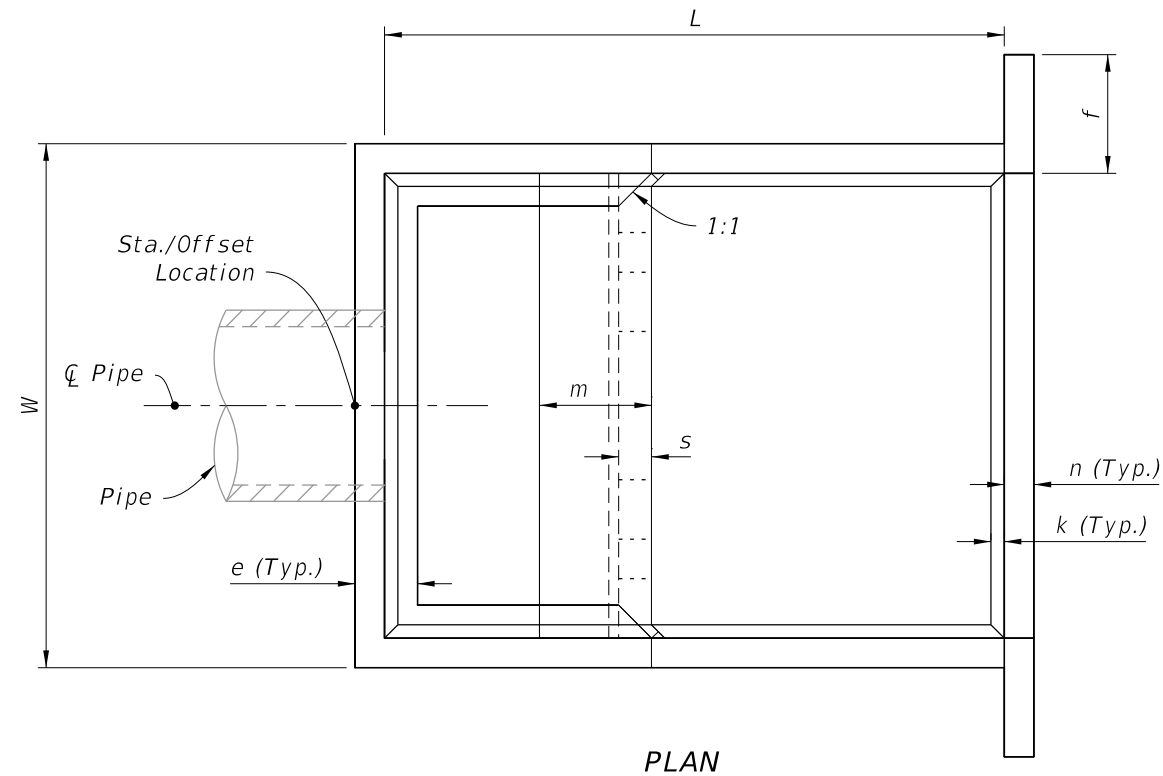
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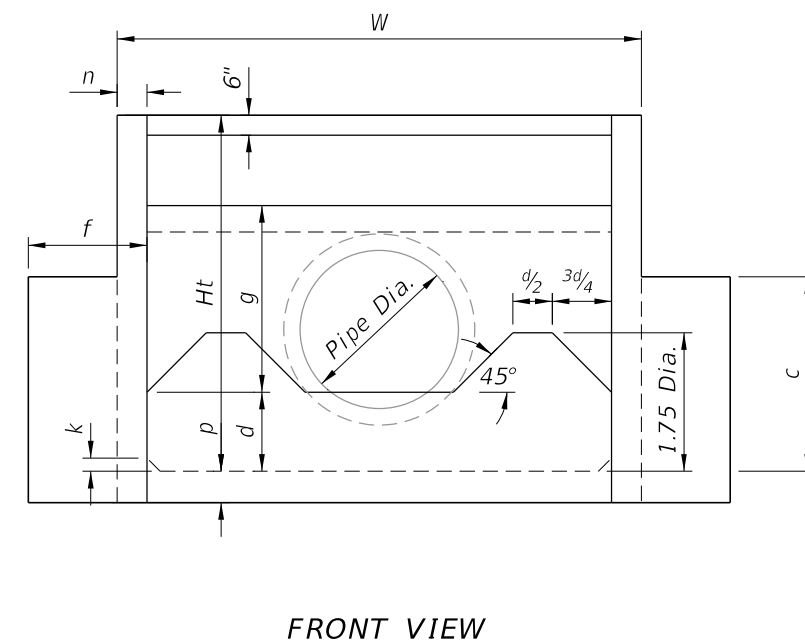
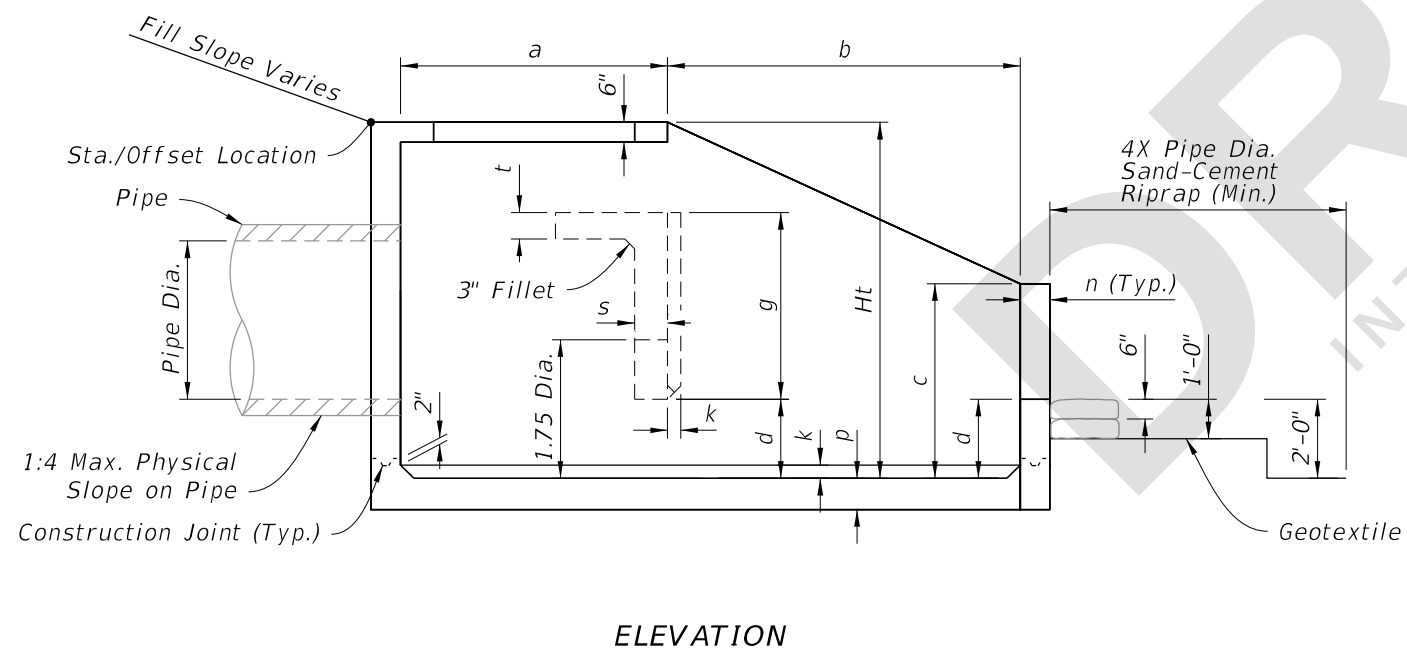
U-TYPE CONCRETE ENDWALLS

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LAST REVISION	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS ENERGY DISSIPATOR 30" TO 72" PIPE	INDEX	SHEET
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Pipe		DIMENSION TABLE																Concrete (CY)	Reinf. Steel (lb)	Sand-Cement Riprap (Nom.) (CY)	
Dia.	Area (SF)	Feet - Inches											Inches								
		W	Ht	L	a	b	c	d	e	f	g	m	n	p	s	t	k				
30"	4.91	9-0	6-3	10-8	4-7	6-1	3-4	1-4	1-2	2-6	3-0	1-11	6	6½	7	7	3	6.72	736	10.6	
36"	7.07	10-5	7-3	12-4	5-3	7-1	3-10	1-7	1-3	3-0	3-6	2-3	7	7½	8	8	3	10.34	1,072	13.6	
42"	9.62	11-10	8-0	14-0	6-0	8-0	4-5	1-9	1-6	3-0	3-11	2-6	8	8½	9	8	4	14.82	1,429	17.5	
48"	12.57	13-3	9-0	15-8	6-9	8-11	4-11	2-0	1-7	3-0	4-5	2-10	9	9½	10	8	4	20.36	2,000	22.1	
54"	15.90	14-8	9-9	17-4	7-4	10-0	5-5	2-2	1-10	3-0	4-11	3-0	10	10½	10	8	4	27.19	2,659	27.2	
60"	13.63	16-1	10-9	19-0	8-0	11-0	5-11	2-5	1-11	3-0	5-4	3-4	11	11½	11	8	6	34.49	3,552	32.5	
66"	23.76	17-3	11-6	20-6	8-8	11-10	6-5	2-7	2-1	3-0	5-9	3-7	12	12½	12	8	6	42.82	4,472	38.3	
72"	28.27	18-6	12-3	22-0	9-3	12-9	6-11	2-9	2-3	3-0	6-2	3-9	12	12½	12	8	6	50.68	5,426	44.5	



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LAST REVISION 11/01/23	REVISION	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS ENERGY DISSIPATOR 30" TO 72" PIPE	INDEX 430-012	SHEET 2 of 3
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