TIP PROJECT: U-4401

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4401	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

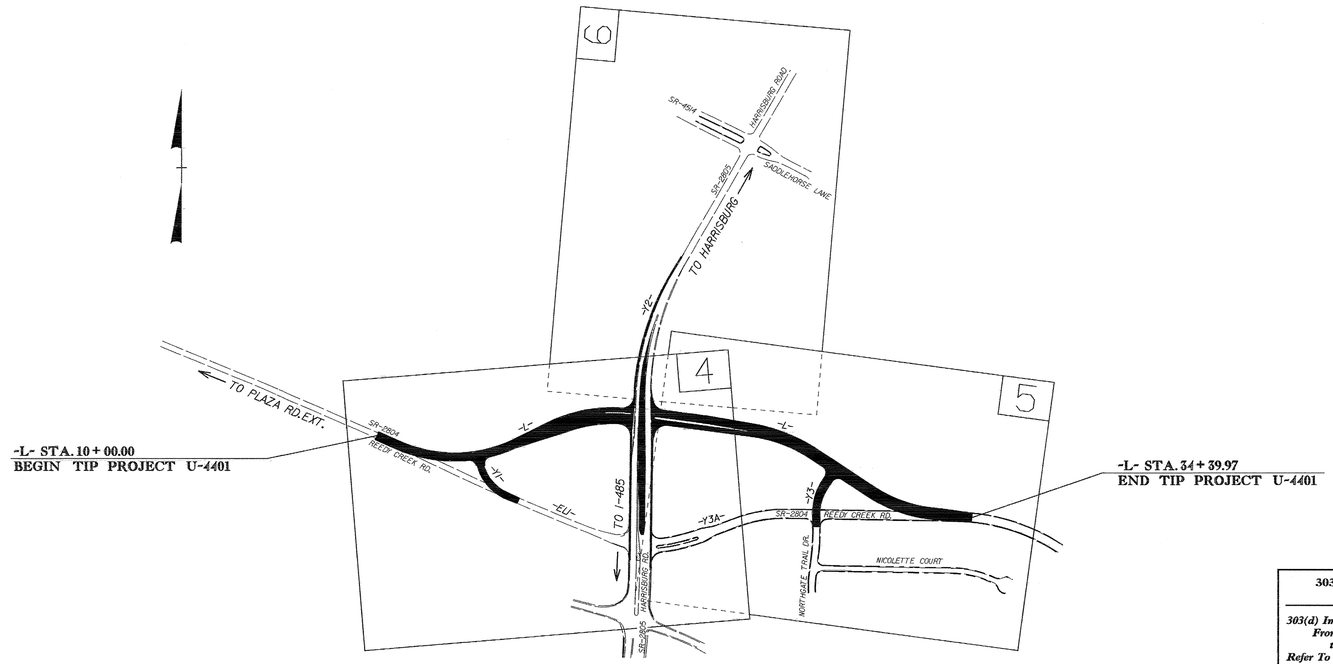
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

MECKLENBURG COUNTY

LOCATION: SR 2804 (REEDY CREEK RD.) AND SR 2805 (HARRISBURG RD.); INTERSECTION REALIGNMENT

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND SIGNAL



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

303(d) IMPAIRED WATER(S) EXIST ON THIS PROJECT

303(d) Impaired Water Zone(s) Exist
From Sta. 21+00 -L-
to Sta. 32+00 -L-
Refer To E. C. Special Provisions for Special Considerations.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

Refer To E. C. Special Provisions for Special Considerations.

GRAPHIC SCALE

0
PLANS
0
PROFILE (HORIZONTAL)
0
PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Prepared In the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated July 18, 2006 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01	Temporary Silt Fence	1632.01	Rock Inlet Sediment Trap Type A
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion		

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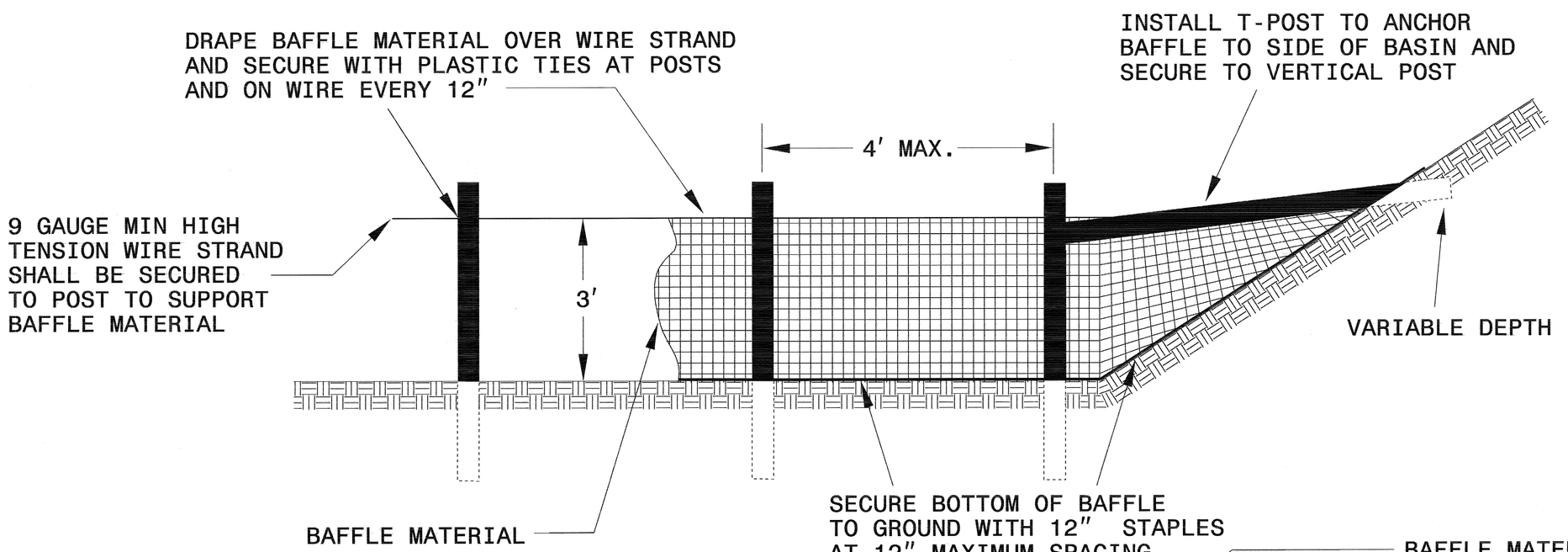
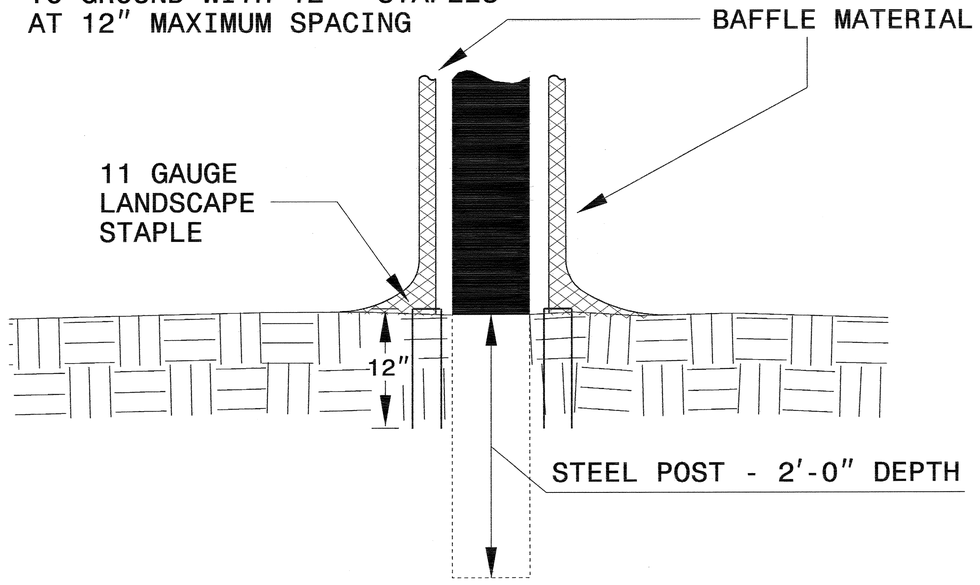
PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL





BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12″ LANDSCAPE STAPLES

NOTES:

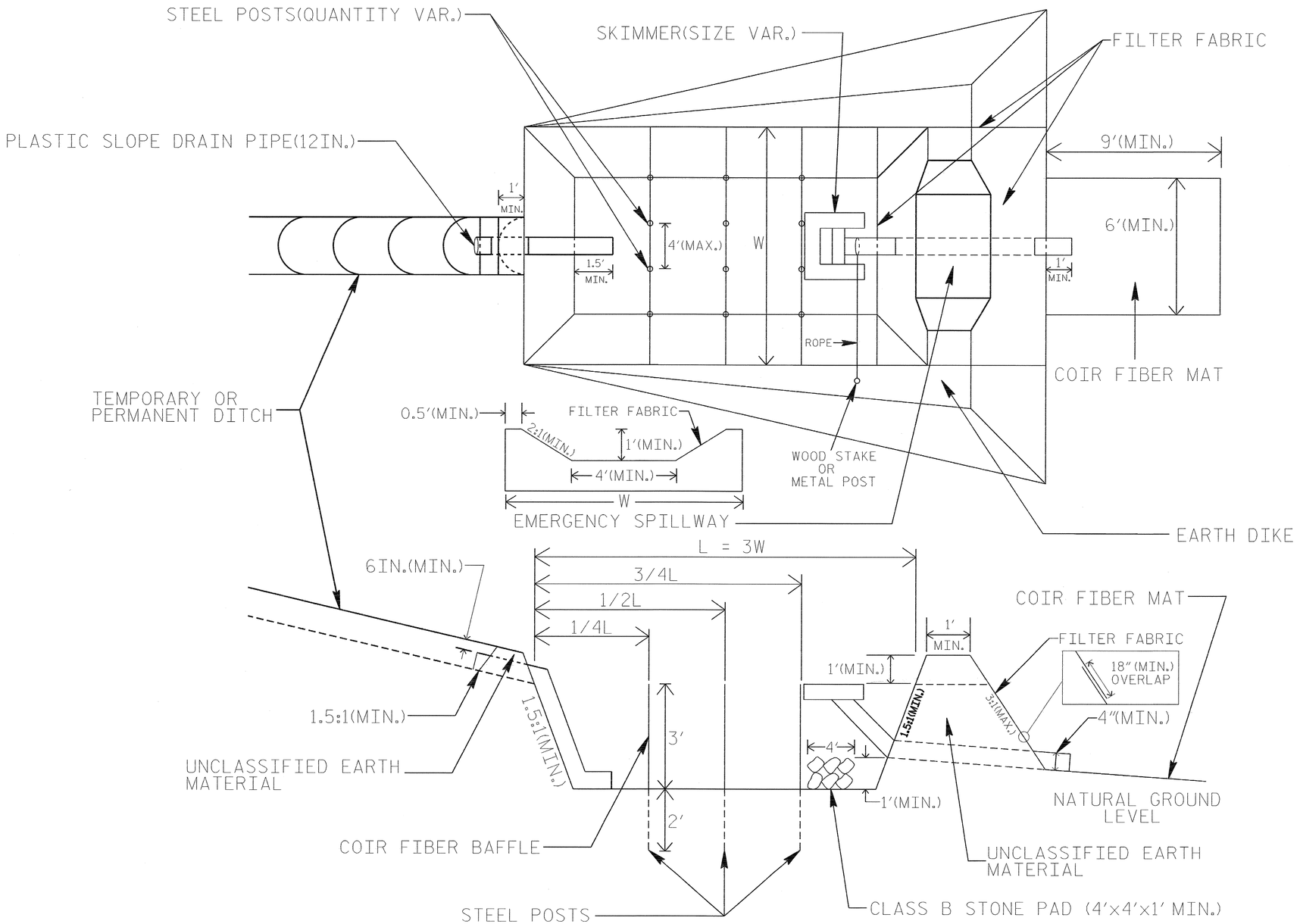
1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH.

2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

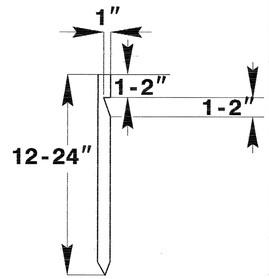
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

SKIMMER BASIN WITH BAFFLES DETAIL

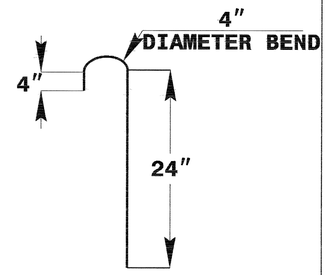
PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



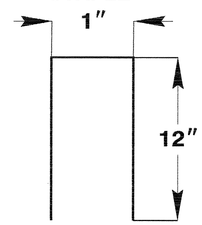
2" x 2" (nominal)
WOODEN STAKE



#10 STEEL
REINFORCEMENT BAR



1" (nominal)
STAPLE



COIR FIBER MAT ANCHOR OPTIONS

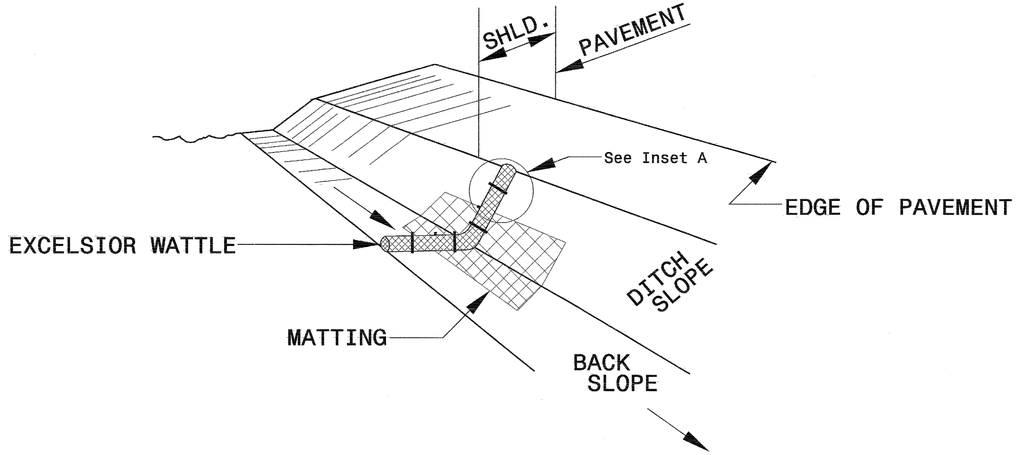
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING Q/0.8, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTER FABRIC AS DIRECTED.
6. FILTER FABRIC FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18" (MIN.) AS SHOWN.

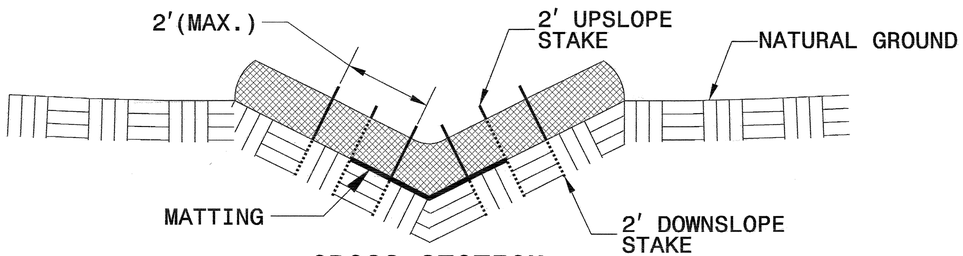
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

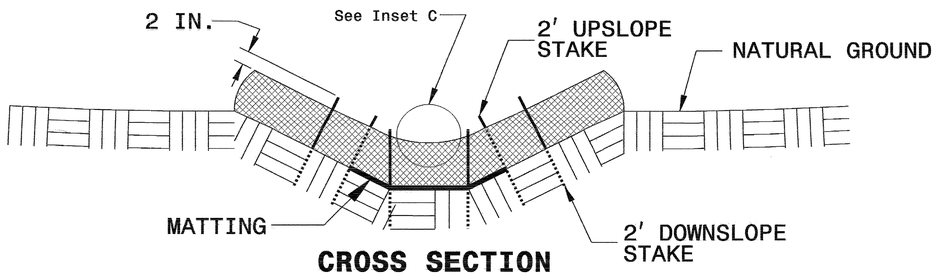
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

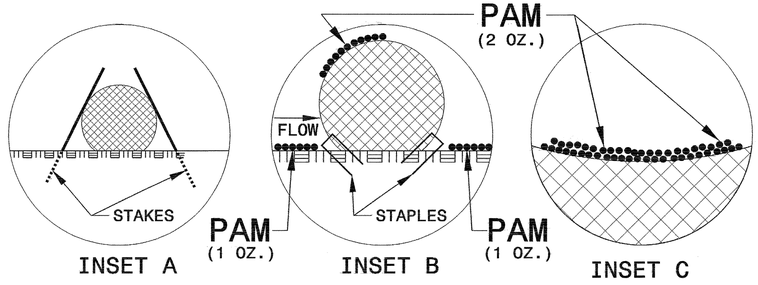
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

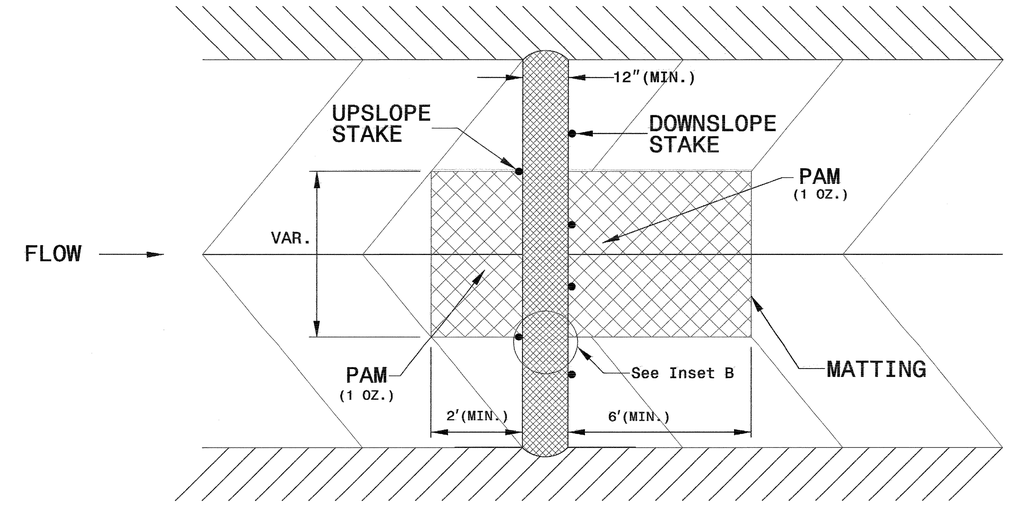
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

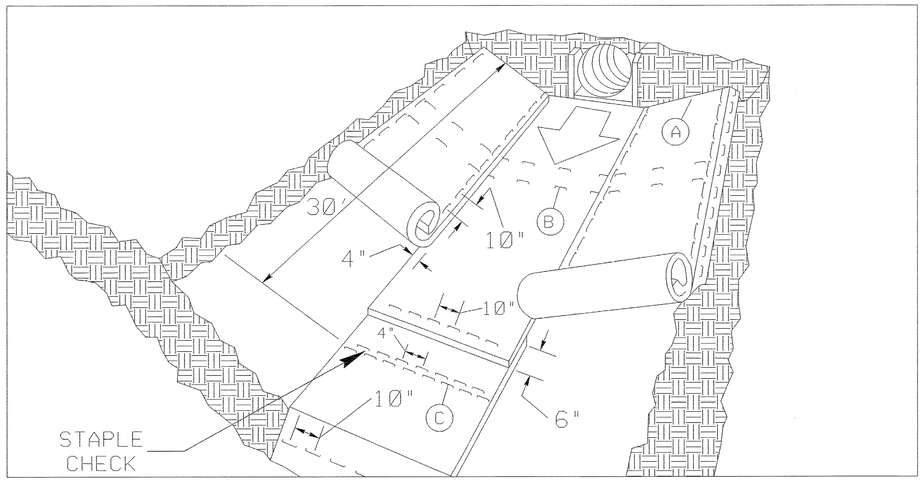




TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

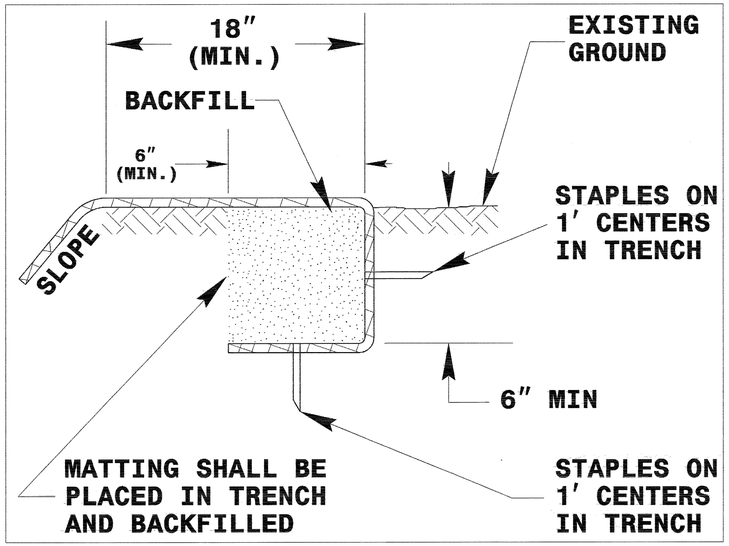
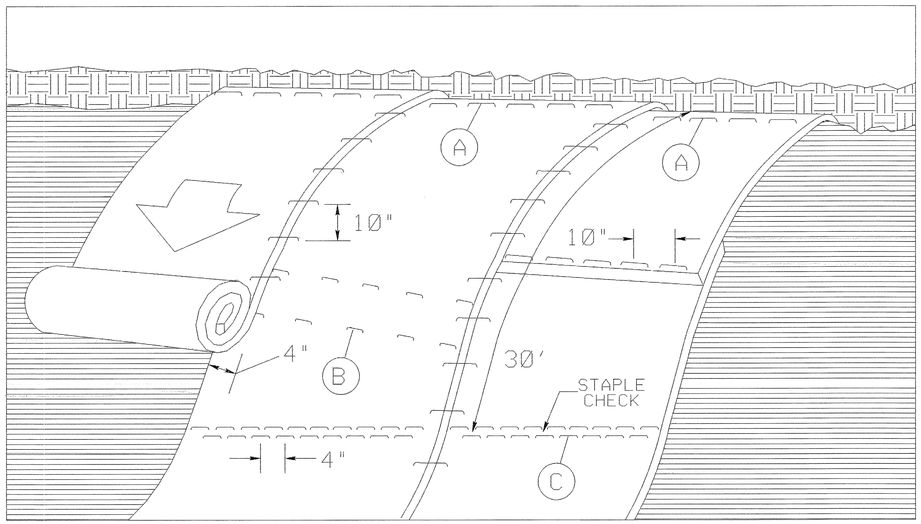


DIAGRAM (A)



MATTING ON SLOPES

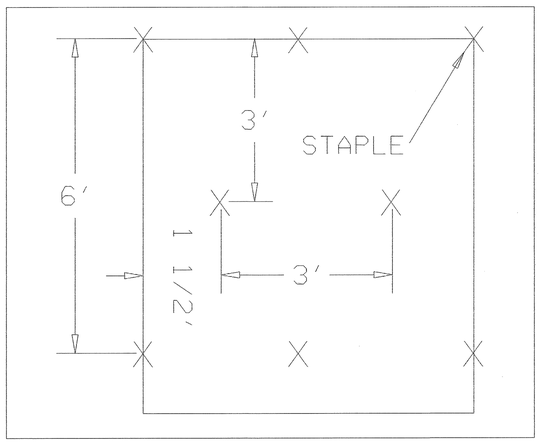


DIAGRAM (B)

STAPLE CHECK PATTERN

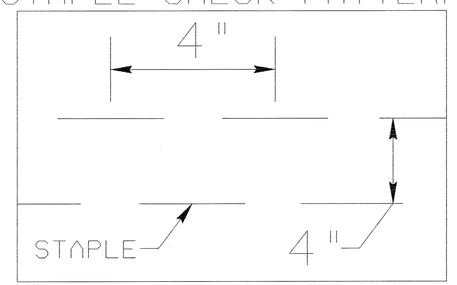


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	13+00	14+50	LT	170
4	-L-	14+50	16+00	RT	185
4	-L-	18+50	20+00	RT	105
4	-Y1-	10+50	12+50	LT	25
4	-Y1-	10+00	11+00	RT	105
4	-Y2-	21+00	22+00	LT	115
				SUBTOTAL	705
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					8070
				TOTAL	8775
				SAY	8800

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-Y3A-	8+50	13+26	RT	275
				SUBTOTAL	275
		ADDITIONAL PSRM TO BE INSTALLED			65
				TOTAL	340
				SAY	350

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-4/CONST 4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

34 x 17 x 3
1.5 inch Skimmer with 0.625 inch Orifice Diameter
9 ft. weir
ID 4.1 C&G

38 x 19 x 3
1.5 inch Skimmer with 0.625 inch Orifice Diameter
11 ft. weir
ID 4.2 C&G

60 x 30 x 3
1.5 inch Skimmer with 1.25 inch Orifice Diameter
22 ft. weir
ID 4.3 C&G

NAD 83/95

MATCH LINE

SEE SHEET NO.6

SEE SHEET NO.5

BEGIN PROJECT U-4401
-L- POT STA. 10 + 00.00

BEGIN CONSTRUCTION
-Y1- POC Sta.15+79.23

END CONSTRUCTION
-Y1- POT Sta.12+50.00

BEGIN CONSTRUCTION & RESURFACING
-Y2- POC Sta.18+85.00

NOTES: (1) SEE SHEET 7 FOR -L- PROFILE
(2) SEE SHEET 8 FOR -Y1- & -Y2- PROFILES
(3) ☆ PROPOSED SIGNAL

DETAIL "A"
SPECIAL CUT BASE DITCH
(Not to Scale)

Natural Ground, 2:1, D, B, 4:1 or Flatter, Front Ditch Slope

Min. D = 0.5 Ft.
B = 2 Ft.

-L- Sta. 12+00 TO -L- Sta. 13+00 (LT)

DETAIL "B"
TOE PROTECTION
(Not to Scale)

2:1 or Flatter Fill Slope, d, 2:1 or Flatter Fill Slope, Filter Fabric

d = 1 Ft.

Type of Liner = CLASS 'B' RIPRAP

-L- Sta. 16+00 TO -L- Sta. 18+00 (RT)

DETAIL "C"
SPECIAL CUT DITCH
(Not to Scale)

Natural Ground, 2:1, D, d, 4:1 or Flatter, Front Ditch Slope

Min. D = 0.5 Ft.

Type of Liner = PSRM

-Y2- Sta. 19+60 TO -Y2- Sta. 21+00 (LT)

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-5/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

88 x 44 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
36 ft. weir
ID 5.1 C&G

NAD 8395

DETAIL "D"
PIPE OUTLET CHANNEL
(Not to Scale)

Natural Ground — D — d — Natural Ground
GROUND SIDE

d = 1.0 ft
Length = 12' D = 3.0'
Est = 6 Tons of Class 1 RipRap

-L- Sta. 30+00 (LT)

DETAIL "E"
GRASS SWALE
(Not to Scale)

Natural Ground — 3:1 — D — 3:1 — Natural Ground
B

Min. D = 0.5 Ft.
B = 2 Ft.

-Y3A- Sta. 8+50 TO -Y3A- Sta. 13+26 (RT)

DETAIL "F"
TAIL DITCH
(Not to Scale)

Natural Ground — 2:1 — D — 2:1 — Natural Ground
B

Min. D = 0.5 Ft.
B = 2 Ft.

-Y3- Sta. 12+21 (LT)

DETAIL "G"
LATERAL BASE DITCH
(Not to Scale)

Natural Ground — 2:1 — D — 2:1 — Fill Slope
B — 1'/Ft. — b

Min. D = 0.5 Ft.
B = 2.0 Ft.
b = 5.0 Ft.

-L- Sta. 29+35 TO -L- Sta. 31+45 (RT)

DETAIL "B"
TOE PROTECTION
(Not to Scale)

2:1 or Flatter — Fill Slope — d — 2:1 or Flatter — Fill Slope — Filter Fabric

d = 1 Ft.

Type of Liner = CLASS 'B' RIPRAP

-L- Sta. 26+97 (RT) TO -Y3- Sta. 11+03 (RT)
-L- Sta. 30+00 TO -L- Sta. 30+70 (LT)

-L- STA.22+00.00

SEE SHEET NO.4

BL-22
-BL- PINC 40+95.79
-L- 24+99.83
1.89' LT.

CLASS 'B' RIP RAP
EST.1 TON
5 SY FILTER FABRIC

-L- PC Sta. 25+10.68

25+00

BL-23
-BL- PINC 43+17.81
-L- 27+22.47
2.67' LT.

-L- PT Sta. 27+55.52

-L- POT Sta. 28+65.00 =
-Y3- POT Sta. 10+00.00

CHANNEL OUTLET PROTECTION
SEE DETAIL "D"
CLASS 'I' RIP RAP
EST. 6 TONS

TOE PROTECTION
SEE DETAIL "B"
CLASS 'B' RIP RAP
EST. 14 TONS
75 SY FILTER FABRIC

-L- PC Sta. 30+28.21

BL-24
-BL- PINC 45+55.00
-L- 29+59.50
1.99' RT.

BY-14
-BL- PINC 47+98.73
-BY1- PINC 27+58.06
-L- 32+04.29
0.33' RT.

CLASS 'B' RIP RAP
EST.1 TON
5 SY FILTER FABRIC

BL-25
-BL- PINC 46+96.03
-L- 31+01.06
9.43' LT.

END PROJECT U-4401
-L- POT STA. 34+39.97

-L- PT Sta. 32+92.26

-L- POT Sta. 34+39.97

S 77° 39' 30.7" E

S 79° 39' 32.8" E

MONOLITHIC CONC. ISLAND

PROP. CONC. SIDEWALK

15" RCP-IV

2'-6" C&G

320' TAPER LEFT

150' TRANSITION TO EXISTING

TIE TO EXISTING C&G

GRAU 350

CAT-1

CB 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

TOE PROTECTION
SEE DETAIL "B"
CLASS 'B' RIP RAP
EST. 60 TONS
210 SY FILTER FABRIC

-Y3- PC Sta. 10+76.79

BY-11
-BY1- RINC 23+90.88
-BY3- POT 5+00.00
-Y3- 11+65.59 2.60' LT.

-Y3A- PC Sta. 10+57.24

CONTRACTOR TO AVOID VAULT

-Y3- POC Sta. 11+88.62 =
-Y3A- POT Sta. 13+63.89

-DRI- POT Sta. 10+00.00

-Y3A- PT Sta. 12+47.64

-Y3A- POT Sta. 10+00.00

-DRI- POT Sta. 11+20.00
-Y3A- POT Sta. 10+35.00

-Y3- POT Sta. 12+46.43

-Y3- POT Sta. 12+66.43

END CONSTRUCTION -Y3A-

N 74° 24' 14.9" E

S 84° 12' 11.6" E

S 52° 09' 07.2" E

S 55° 57' 50.2" E

CLASS 'B' RIP RAP
EST. 5 TONS
14 SY FILTER FABRIC

PIPE REMOVAL

CLASS 'B' RIP RAP
EST. 2 TONS
7 SY FILTER FABRIC

TAIL BASE DITCH
SEE DETAIL "F"
EST 67 CY DDE

LATERAL BASE DITCH
SEE DETAIL "G"
EST 293 CY DDE

REMOVE PORTION

RETAIN PORTION

REMOVE SIDEWALK

BM #7
-BY1- STA 22+16.46 RIGHT
ELEV=669.70'

GRASS SWALE
SEE DETAIL "E"
EST 252 CY DDE

BY2-18
-BY3- POT 7+58.33

MATCH LINE

SEE SHEET NO.4

WOODS

GENERATOR

CONTROLED ENVIRONMENT VAULT

METER

RETAIN

REMOVE

NORTHCHASE TRAN. DR.

NICOLETTE COURT

REEDY CREEK RD.

SR-2804

ISFD

2SFD

DK

METER

36" CONC

18" CONC

16" CONC

24" RCP

15" CSP

6" PVC (DATUM)

TV

TD

PDE

EXIST. R/W

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

REVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-6/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR CONSTRUCTION SHEET 6

NAD 83/95

-Y2- CURVE DATA
PI Sta 29+96.79
Δ = 29° 40' 24.1" (RT)
D = 5° 32' 38.6"
L = 535.23'
T = 273.76'
R = 1,033.46'
SE = EXISTING

-Y2- STA.28+00.00

SEE SHEET NO.4

MATCH LINE

MARK LEIF SWANSON &
JOANNA JOYCE SWANSON

ALAN K.BROWN
KAREN S.BROWN

GREGORY W.STEELE
JULIE A.HIERONYMUS

WYNDHAM WHYNOT
RUTH WHYNOT

WARREN D.McMANUS
JEWEL B.McMANUS

GREG TAYLOR
MARYON TAYLOR

JAY M.BONAKDAR

EDGER C.PHIFER,III
PEGGY F.PHIFER

GARY EDWARD ERDAKOS
MARY ELIZABETH MURPHY

STEEPLECHASE RESIDENT RECREATIONAL ASSOCIATION,INC.

HAROLD BITTLEMAN,JR.
MARILYN B. BITTLEMAN

DAVID ROMAN
MARTHA C.ROMAN

JOHNNY R. CRAVER
EARLENE W.CRAVER

DAVID O. VERGEAU
DEANA D. ROGERS

ROBERT J.GROULX
LINDA S.GROULX

JOHN M.LADD
SANDRA B.LADD

U4401-2
-BY2- PINC 17+10.38
-Y2- 28+38.69
0.48' LT.

-Y2- +00 72 EXIST.R/W

-Y2- +37 EXIST.R/W

458.26' TAPER TIE TO EXISTING CONC.ISLAND

MONOLITHIC CONC.ISLAND

BM #3
-BY2- STA.19+82
61' LEFT
ELEV=688.10'

BL-7
-BY2- PINC 21+27.69
-Y2- 32+54.24
20.15' LT.

-Y2- PT Sta.32+58.26

END CONSTRUCTION
-Y2- POT Sta.33+03.80

BL-8
-BY2- PINC 26+40.60
-BY4- PINC 7+09.44

BM #4
-BY2- STA.26+87
61' LEFT
ELEV=679.13'

BL-9
-BY2- POT 28+79.94

BY1-16
-BY4- POT 5+00.00

BY1-17
-BY4- POT 9+73.50

SR-4515 QUARTERHORSE COURT

SR-4514 SADDLEHORSE LANE

SR-2805 HARRISBURG ROAD

SR-4514 SADDLEHORSE LANE

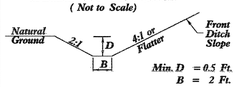
WALKING HORSE LANE

NOTE: SEE SHEET 8 FOR -Y2- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-7/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

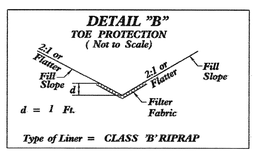
BEGIN PROJECT U-4401
-L- POT STA. 10+00.00

DETAIL "A"
SPECIAL CUT BASE DITCH
(Not to Scale)



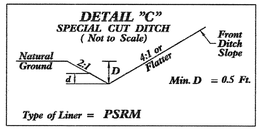
-L- Sta. 12+00 TO -L- Sta. 13+00 (LT)

DETAIL "B"
TOE PROTECTION
(Not to Scale)



-L- Sta. 16+00 TO -L- Sta. 18+00 (RT)

DETAIL "C"
SPECIAL CUT DITCH
(Not to Scale)



-Y2- Sta. 19+60 TO -Y2- Sta. 21+00 (LT)

BEGIN CONSTRUCTION & RESURFACING
-Y2- POC Sta.18+85.00

NOTES: (1) SEE SHEET 7 FOR -L- PROFILE
(2) SEE SHEET 8 FOR -Y1- & -Y2- PROFILES
(3) ☆ PROPOSED SIGNAL

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-8/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

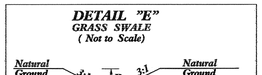
REVISIONS

DETAIL "D"
PIPE OUTLET CHANNEL
(Not to Scale)

d = 1.0 ft
Length = 12' D = 3.0'
Est = 6 Tons of Class I RipRap

-L- Sta. 30+00 (LT)

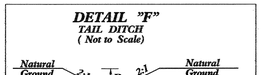
DETAIL "E"
GRASS SWALE
(Not to Scale)



Min. D = 0.5 Ft.
B = 2 Ft.

-Y3A- Sta. 8+50 TO -Y3A- Sta. 13+26 (RT)

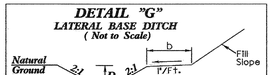
DETAIL "F"
TAIL DITCH
(Not to Scale)



Min. D = 0.5 Ft.
B = 2 Ft.

-Y3- Sta. 12+21 (LT)

DETAIL "G"
LATERAL BASE DITCH
(Not to Scale)



Min. D = 0.5 Ft.
B = 2.0 Ft.
b = 5.0 Ft.

-L- Sta. 29+35 TO -L- Sta. 31+45 (RT)

DETAIL "B"
TOE PROTECTION
(Not to Scale)

d = 1 Ft.
Type of Liner = CLASS 'B' RIPRAP

-L- Sta. 26+97 (RT) TO -Y3- Sta. 11+03 (RT)
-L- Sta. 30+00 TO -L- Sta. 30+70 (LT)

NAD 83/95

-L- STA.22+00.00

SEE SHEET NO.4

BL-22
-BL- PINC 40+95.79
-L- 24+99.83
1.89' LT.

CLASS 'B' RIP RAP
EST.1 TON
5 SY FILTER FABRIC

-L- PC Sta.25+10.68

BL-23
-BL- PINC 43+17.81
-L- 27+22.47
2.67' LT.

-L- PT Sta.27+55.52

-L- POT Sta.28+65.00 =
-Y3- POT Sta.10+00.00

CHANNEL OUTLET PROTECTION
SEE DETAIL "D"
CLASS 'I' RIP RAP
EST.6 TONS

TOE PROTECTION
SEE DETAIL "B"
CLASS 'B' RIP RAP
EST.14 TONS
73 SY FILTER FABRIC

-L- PC Sta.30+28.21

BY-14
-BL- PINC 47+98.73
-BY1- PINC 27+58.06
-L- 32+04.29
0.33' RT.

CLASS 'B' RIP RAP
EST.1 TON
5 SY FILTER FABRIC

BL-24
-BL- PINC 45+55.00
-L- 29+59.50
1.99' RT.

BL-25
-BL- PINC 46+96.03
-L- 31+01.06
9.43' LT.

-L- PT Sta.32+92.26

END PROJECT U-4401
-L- POT STA. 34+39.97

-L- POT Sta.34+39.97

TOE PROTECTION
SEE DETAIL "B"
CLASS 'B' RIP RAP
EST.60 TONS
210 SY FILTER FABRIC

-Y3- PC Sta.10+76.79

BY-11
-BY1- PINC 23+90.88
-BY3- POT 5+00.00
-Y3- 11+65.59 2.60' LT.

CLASS 'B' RIP RAP
EST.5 TONS
14 SY FILTER FABRIC

-Y3A- PC Sta.10+57.24

-Y3A-POT Sta.10+00.00

-DRI- POT Sta.10+00.00 =
-Y3A- POT Sta.13+63.89

-Y3A- PT Sta.12+47.64

-Y3- POC Sta.11+88.62 =
-Y3A- POT Sta.13+63.89

-Y3- PT Sta.11+95.42

-DRI- POT Sta.11+20.00 =
-Y3A- POT Sta.10+35.00

-Y3- POT Sta.12+46.43

-Y3- POT Sta.12+66.43

END CONSTRUCTION -Y3A-

BM #7
-BYI- STA 22+
46' RIGHT
ELEV=669.70'

BY2-18
-BY3- POT 7+58.33

CONTRACTOR TO AVOID VAULT

GENERATOR

CONTROLED ENVIROMENT VAULT

MATCH LINE

SEE SHEET NO.4

GRASS SWALE
SEE DETAIL "E"
EST 232 CY DDE

TOE PROTECTION
SEE DETAIL "B"
CLASS 'B' RIP RAP
EST.2 TONS
7 SY FILTER FABRIC

TAIL BASE DITCH
SEE DETAIL "F"
EST 67 CY DDE

LATERAL BASE DITCH
SEE DETAIL "G"
EST 293 CY DDE

REMOVE PORTION HDWL

RETAIN PORTION

REMOVE SIDEWALK

REMOVE

RETAIN

PIPE REMOVAL

120' TRANSITION TO EXISTING

TIE TO EXISTING C&G

SR-2804
REEDY CREEK RD.

NICOLETTE COURT

NORTHGATE TRAIL DR.

WOODS

15" RCP-IV

18" RCP

24" RCP

36" RCP

42" RCP

2'-6" C&G

MONOLITHIC CONC.ISLAND

PROP.CONC.SIDEWALK

320' TAPER LEFT

S 77° 39' 30.7" E

S 52° 09' 07.7" E

S 79° 39' 32.8" E

S 84° 12' 11.6" E

N 74° 24' 49.9" E

CAT-1

GRASS SWALE
SEE DETAIL "E"
EST 232 CY DDE

PROJECT REFERENCE NO.	SHEET NO.
U-4401	EC-9/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y2- CURVE DATA
PI Sta 29+96.79
△ = 29° 40' 24.1" (RT)
D = 5° 32' 38.6"
L = 535.23'
T = 273.76'
R = 1,033.46'
SE = EXISTING

NAD 83/95

-Y2- STA.28+00.00

SEE SHEET NO.4

MATCH LINE

U4401-2
-BY2- PINC 17+10.38
-Y2- 28+38.69
0.48' LT.

-Y2- PT Sta.32+58.26

END CONSTRUCTION
-Y2- POT Sta.33+03.80

BL-7
-BY2- PINC 21+27.69
-Y2- 32+54.24
20.15' LT.

BL-8
-BY2- PINC 26+40.60
-BY4- PINC 7+09.44

BL-9
-BY2- POT 28+79.94

BY1-16
-BY4- POT 5+00.00

BY1-17
-BY4- POT 9+73.50

BM #3
-BY2- STA 19+82
61' LEFT
ELEV=688.10'

BM #4
-BY2- STA 26+87
1' LEFT
ELEV=679.13'

MARK LEIF SWANSON & JOANNA JOYCE SWANSON

ALAN K.BROWN KAREN S.BROWN

GREGORY W.STEELE JULIE A.HIERONYMUS

WYNDHAM WHYNOT RUTH WHYNOT

WARREN D.McMANUS JEWEL B.McMANUS

GREG TAYLOR MARYON TAYLOR

JAY M.BONAKDAR

EDGER C.PHIFER,III PEGGY F.PHIFER

GARY EDWARD ERDAKOS MARY ELIZABETH MURPHY

STEEPLECHASE RESIDENT RECREATIONAL ASSOCIATION,INC.

HAROLD BITTLEMAN,JR. MARILYN B. BITTLEMAN

DAVID ROMAN MARTHA ROMAN

JOHNNY R. CRAVER EARLENE W.CRAVER

DAVID O. VERGEAU DEANA D. ROGERS

ROBERT J.GROULX LINDA S.GROULX

JOHN M.LADD SANDRA B.LADD

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NOTE: SEE SHEET 8 FOR -Y2- PROFILE