TIP PROJECT: B-4712

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4712	EC-1	

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

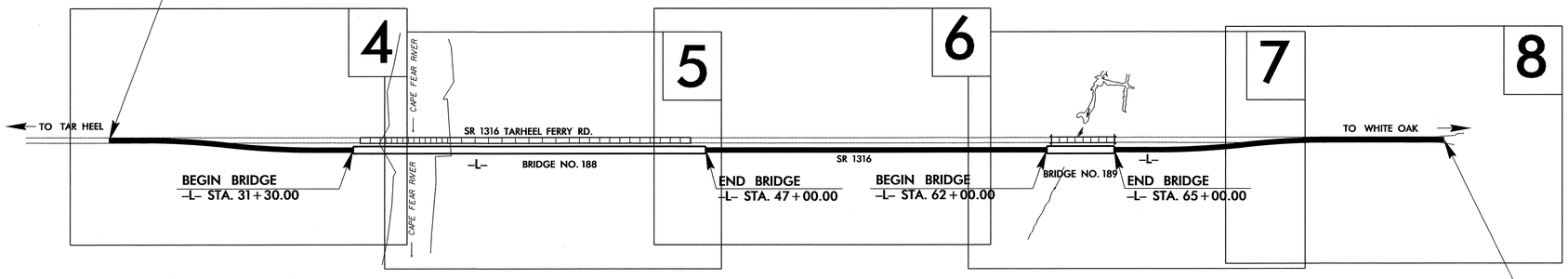
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
BLADEN COUNTY

LOCATION: BRIDGE NO. 188 AND NO. 189 OVER THE CAPE FEAR RIVER ON SR 1316

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURES

NAD 83/95

BEGIN TIP PROJECT B-4712
-L- STA. 20+21.00



END TIP PROJECT B-4712
-L- STA. 79+70.00

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	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	EW CFW
	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.

GRAPHIC SCALE

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

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:

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

2012 STANDARD SPECIFICATIONS

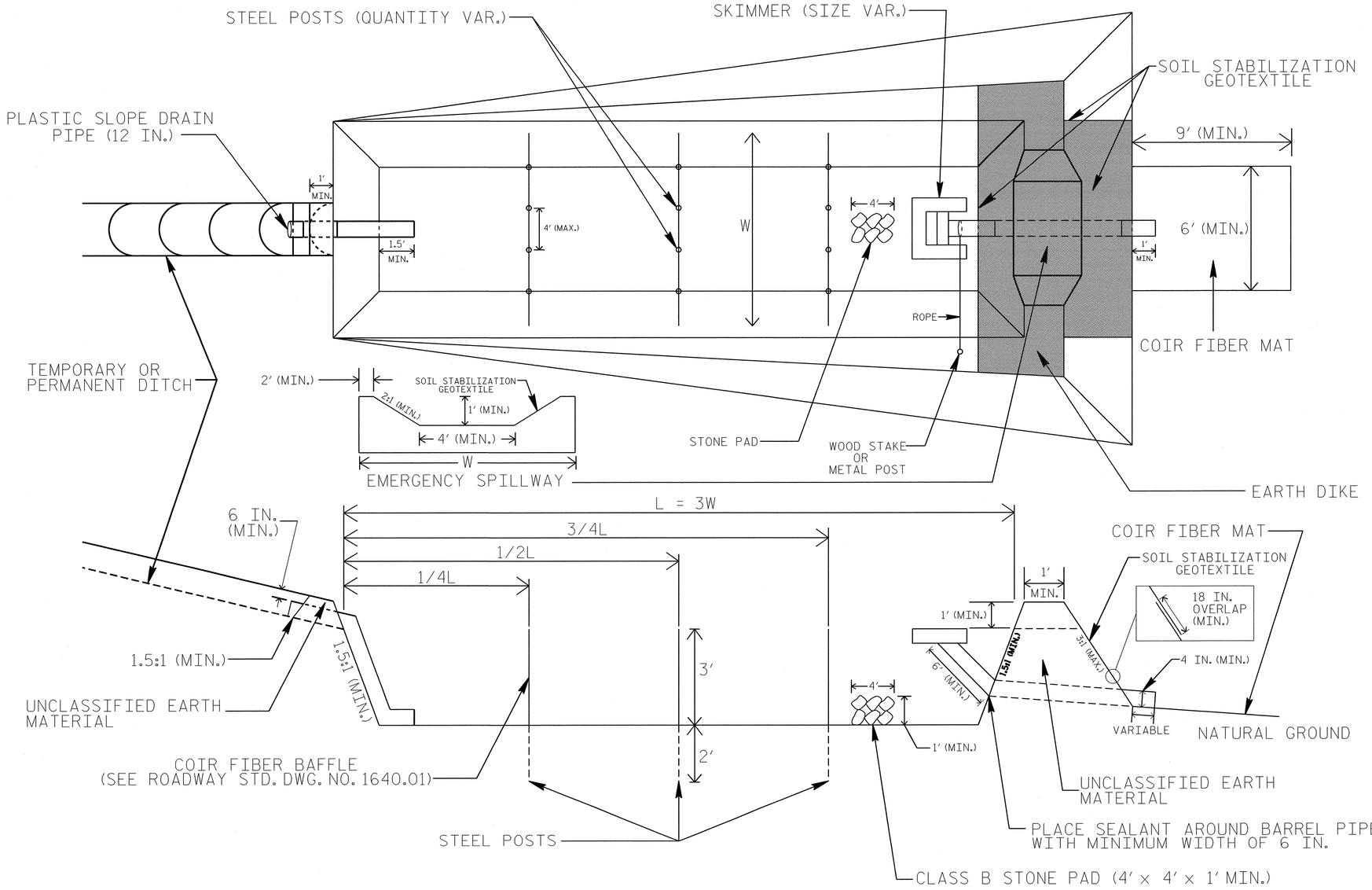
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

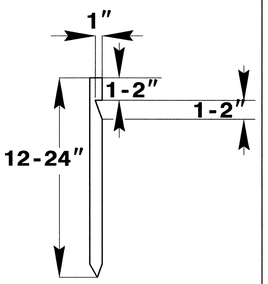
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-02
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

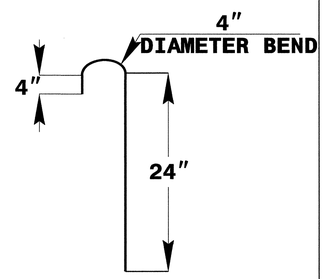
SKIMMER BASIN WITH BAFFLES DETAIL



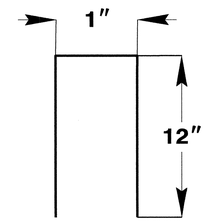
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

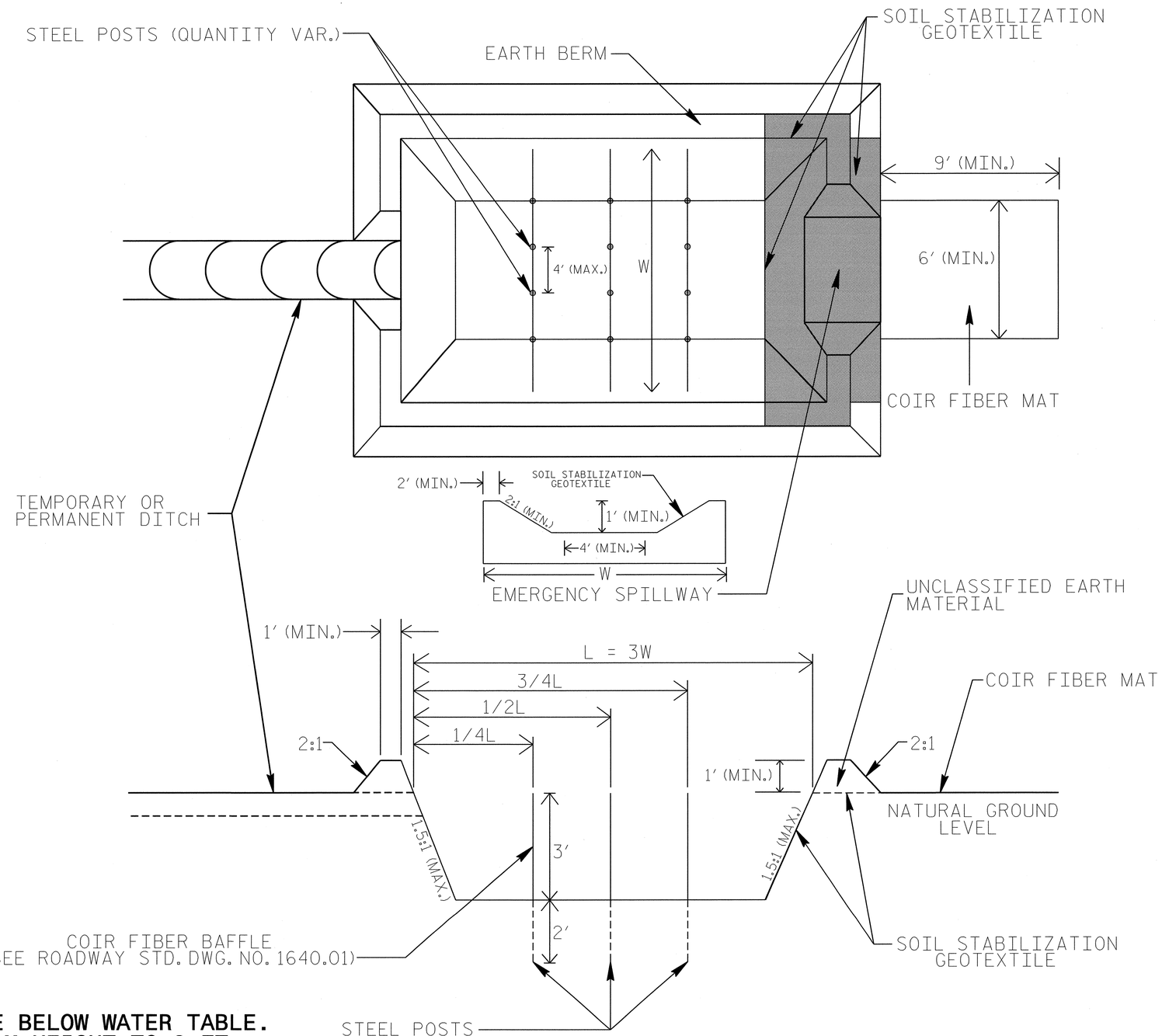
NOTES

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 WEIR 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 FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

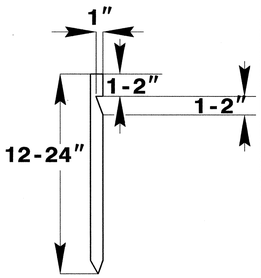
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

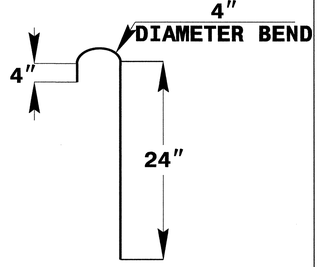
INFILTRATION BASIN WITH BAFFLES DETAIL



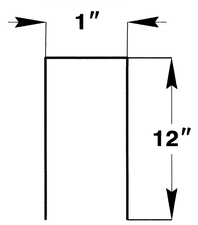
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

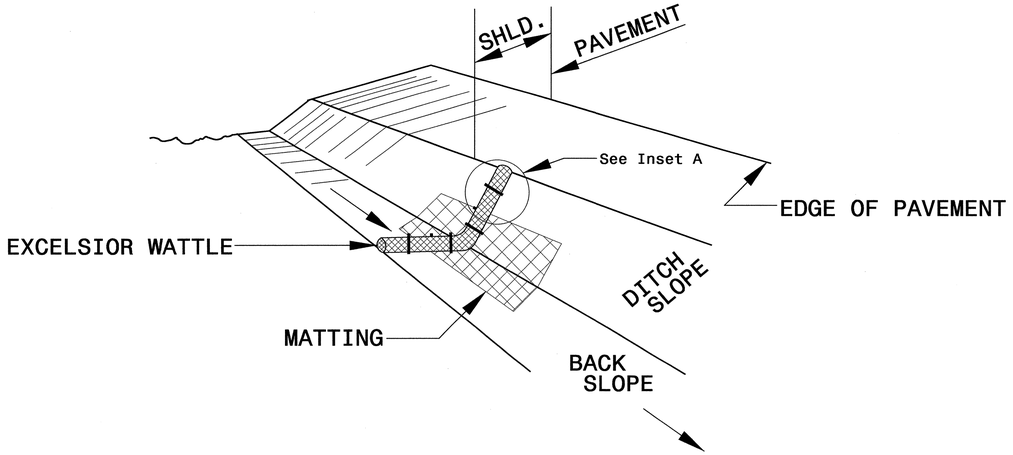
NOT TO SCALE

NOTES

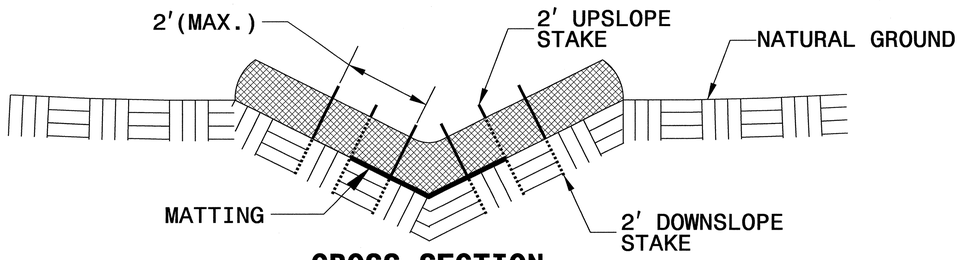
1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING Q/0.8, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

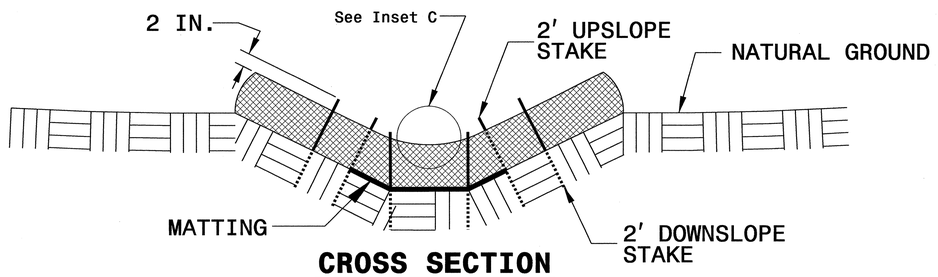
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



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.

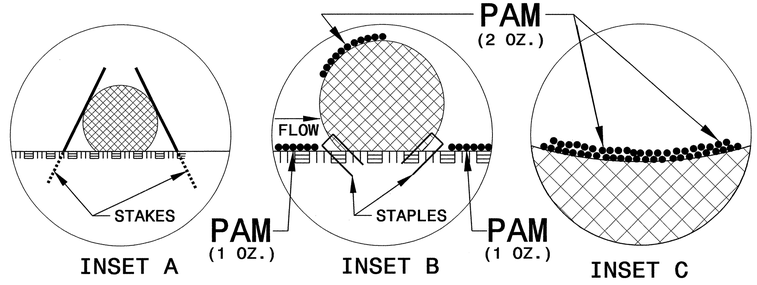
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

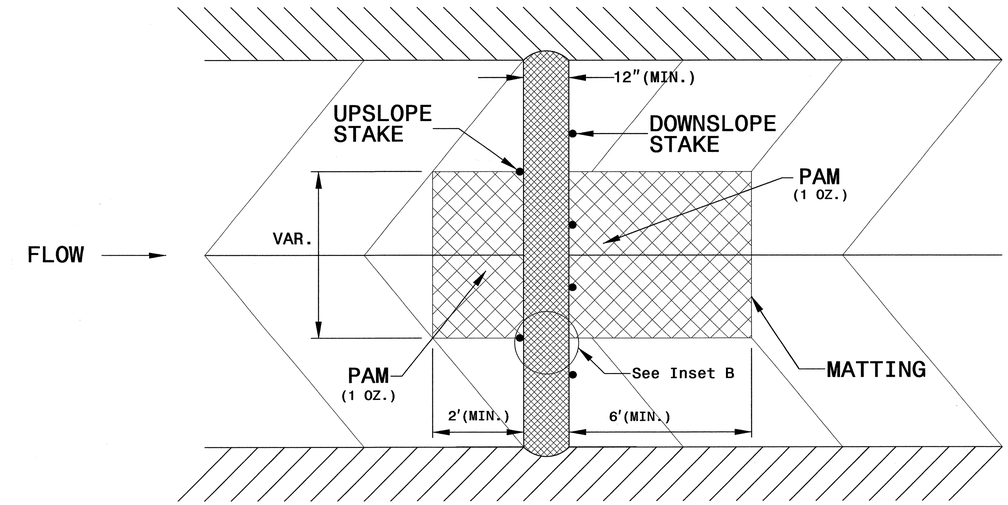
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

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.

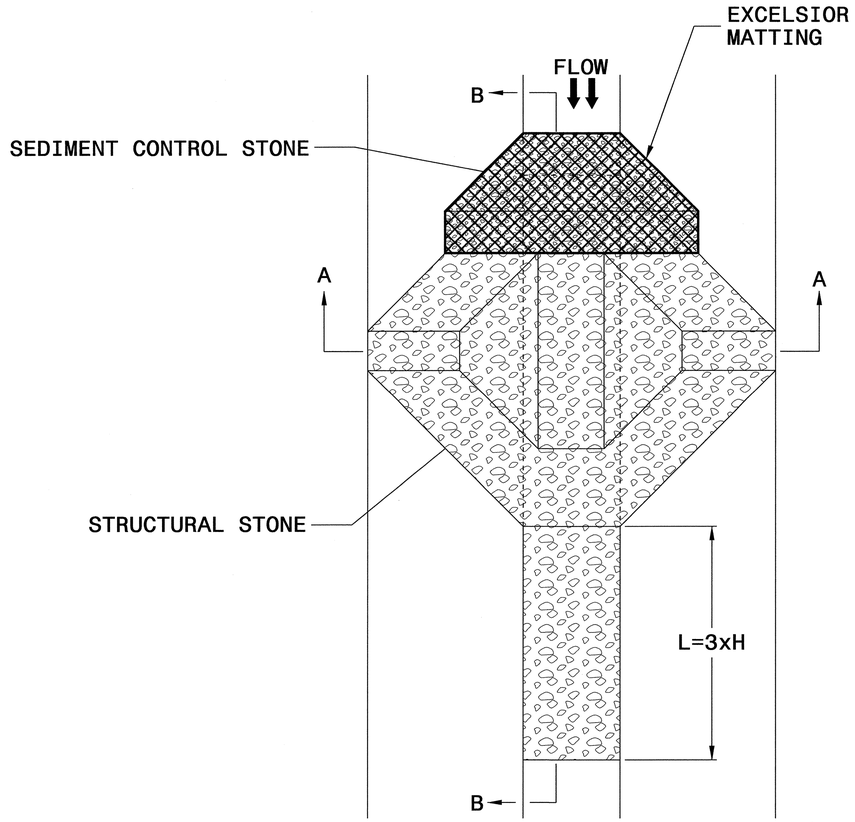




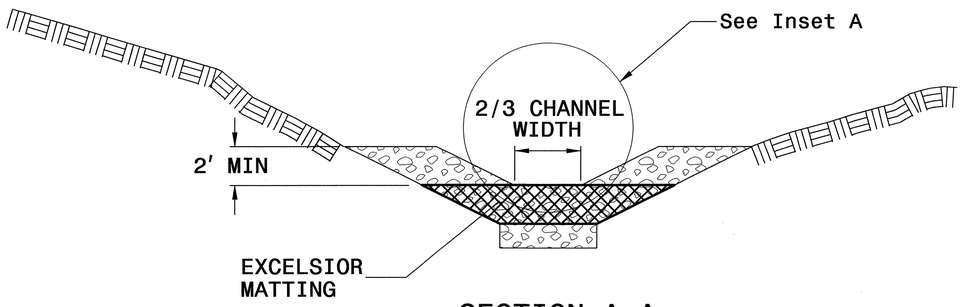
TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN



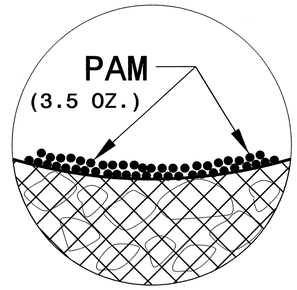
SECTION A-A

NOTES

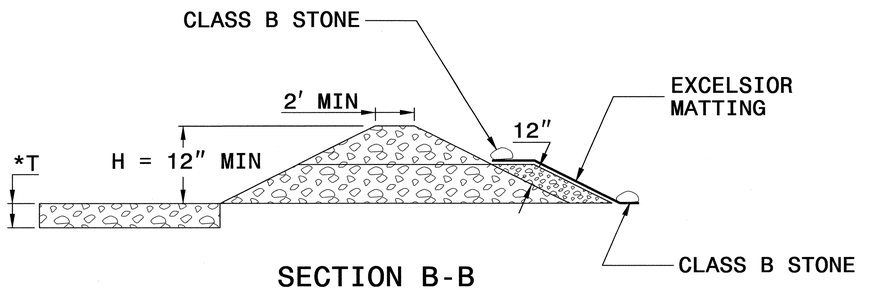
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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 ROCK SILT CHECK.

INITIALLY APPLY 3.5 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION B-B

*T = 12" MIN., 18" MAX.

NOT TO SCALE

BORROW PIT DEWATERING BASIN DETAIL

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-2D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GENERAL NOTES:

DETERMINE BORROW PIT DEWATERING BASIN SIZE USING V = 8.0203 * Q * T, WHERE V IS VOLUME (FT^3), Q IS PUMP FLOW RATE (GPM), AND T IS DEWATERING TIME (HR). USE MAXIMUM FLOW RATE OF 1000 GPM AND A MINIMUM DEWATERING TIME OF 2 HOURS.

RISER SHALL BE A NON-PERFORATED, SMOOTH OR CORRUGATED MATERIAL WITH A FLASHBOARD OPTION.

CONSTRUCT THE COIR FIBER BAFFLE IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1640.01 AND WITH MATERIAL THAT MEETS THE SPECIFICATIONS OF ROADWAY STANDARD 1060-14.

PROVIDE 5′ STEEL POSTS OF THE SELF-FASTENER ANGLE STEEL TYPE. INSTALL STEEL POSTS WITH NO MORE THAN 3′ OF THE POST APPEARING ABOVE THE GROUND.

ATTACH THE COIR FIBER MAT TO THE STEEL POSTS WITH WIRE OR OTHER ACCEPTABLE MEANS AND STAPLED INTO THE BOTTOM AND SIDE SLOPES OF THE BASIN WITH 12″ STAPLES.

INSTALL TYPE 2 GEOTEXTILE ON SIDESLOPES AND BOTTOM OF BASIN AT INLET AS SHOWN IN THE DETAIL.

USE THE TYPICAL SECTION SHOWN FOR THE BORROW PIT DEWATERING BASIN AS A GUIDE. THE BASIN MAY HAVE ANY TYPE CONFIGURATION AS LONG AS SUFFICIENT VOLUME IS PROVIDED AND PROVISIONS ARE MADE FOR A NON-PERFORATED RISER.

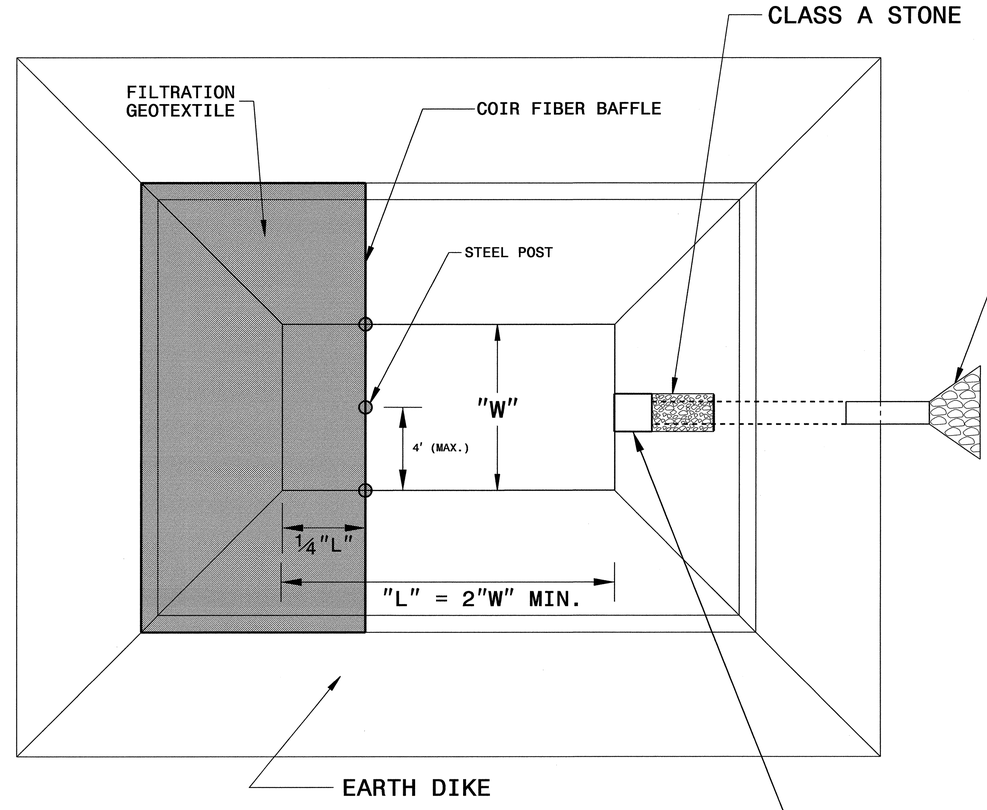
DO NOT EXCEED 3½ FT. IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR BORROW PIT DEWATERING BASIN.

THE BORROW PIT DEWATERING BASIN SIZE IS VARIABLE AND DEPENDENT ON SPECIFIC SITE REQUIREMENTS AS WELL AS PROPOSED CONSTRUCTION OPERATIONS.

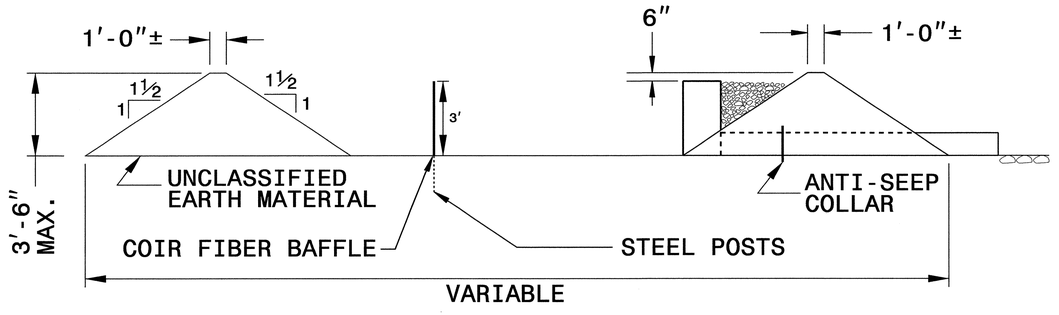
SUBMIT THE SIZE, LOCATION AND RISER PIPE MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

PUMP THE EFFLUENT INTO THE BORROW PIT DEWATERING BASIN TO A MAXIMUM DEPTH OF 6 IN. BELOW TOP OF EARTH DIKE.

PROVIDE A STONE ENERGY DISSIPATOR PAD AT THE OUTLET OF THE PUMP DISCHARGE HOSE AND OUTLET OF THE RISER BARREL IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 876.02 FOR OUTLET W/O DITCH.



PLAN



TYPICAL SECTION VIEW

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-03
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	21+00	25+75	RT	725
				SUBTOTAL	725
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					38,100
				TOTAL	38,825
				SAY	40,000

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

8/17/99

REVISIONS

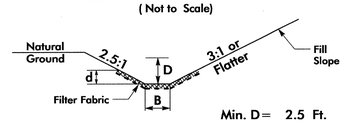
PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-04/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

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 04

DETAIL 'A'
SPECIAL LATERAL BASE DITCH
(Not to Scale)



Min. D= 2.5 Ft.
Max. d= 2.5 Ft.
B= 4 Ft.
Type of Liner= CLASS 'I' Rip-Rap
FROM STA. 21+00 LT. TO STA. 23+50 LT. –L–

"PERMANENT SOIL REINFORCEMENT MAT SHALL BE PLACED AT FULL HEIGHT OF 2.5:1 SLOPE FROM STATION 21+25+/- –L– (LEFT) TO 23+25+/- –L– (LEFT). SEE PERMANENT SOIL REINFORCEMENT MAT SPECIAL PROVISION."

NAD 83/95

S 53°57'52" W 463.09'

TAR HEEL BAPTIST CHURCH
DB 460 PG 448
PB A-183 PG 1837

TAR HEEL BAPTIST CHURCH
DB 440 PG 530
PB A-183 PG 1837

MARGARET HAMMOND
DB 653 PG 501
PB A-183 PG 1837

WILLIAM E. TRUMAN AND WIFE JANICE
DB 328 PG 858

20 25 30

PLASTIC POLES
BST PARKING
60' CONC
GRASS
72" CONC
2SBK
TAR HEEL BAPTIST CHURCH
EXISTING 60' FOUR COUNTY POWER TRANSMISSION LINE EASEMENT
EXISTING R/W
WOODS
BL - 2
BL - 3
BL - 4
LINE EXISTING DITCH W/60 TONS CLASS 'I' RIP RAP
4' SPECIAL LATERAL BASE DITCH LINED W/373 TONS CLASS 'I' RIP RAP AND 628 SY GEOTEXTILE SEE DETAIL 'A'
N 26°57' 37.0" E
SR 1316 TARHEEL FERRY RD
24' BST
50' LT. & RT. TAPER
-L- PC Sta. 21+61.33
-L- PRC Sta. 25+50.51
-L- PT Sta. 29+39.70
-L- CURVE DATA
PI Sta 23+56.13
Δ = 6°33' 30.4" (RT)
D = 1°41' 06.6"
L = 389.19'
T = 194.81'
R = 3,400.00'
SE = SEE PLANS
PI Sta 27+45.32
Δ = 6°33' 30.4" (LT)
D = 1°41' 06.6"
L = 389.19'
T = 194.81'
R = 3,400.00'
SE = SEE PLANS
N 26°41' 30" E
1424.96'
REMOVE
TEMP SHORING LOC 1 SEE TMP 4
BEGIN SBG STA. 30+19 LT.
END SBG BEGIN APP. SLAB LT.
BEGIN SBG STA. 30+19 RT.
END SBG BEGIN APP. SLAB RT.
GRAU 350
JB w/MH
15" W/ENDWALL
18" W/ENDWALL
CLASS II RIP RAP STRUCTURE PAY ITEM
4 TONS CL 'B' RIP RAP 8 SY GEOTEXTILE
2 TONS CL 'B' RIP RAP 6 SY GEOTEXTILE
LIMIT OF EXCAVATION
26 x 72 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 18 ft. weir ID 4.1
N 26°57' 37.0" E
MATCHLINE 33+00.00 SEE SHEET 5

BEGIN TIP PROJECT B-4712
–L– STA. 20+21.00

30-OCT-2012 09:15
R:\Environmental\Design\B-4712_EC_psh4.dgn
Schollen AT REN 24.7.8

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-05/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS

8/17/99

MATCHLINE 33+00.00 SEE SHEET 4

MATCHLINE 45+50.00 SEE SHEET 6

NAD 83/95

28 x 13 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
5 ft. weir
ID 6.5

BARBARA T. MERRITT AND
HUSBAND DANNY
DB 482 PG 661,663
DB 329 PG 771
3

STATE OF NORTH CAROLINA
DB 172 PG 167
5

ILEX PROPERTIES,LLC
DB 669 PG 856
PB A-183 PG 1837

BENJAMIN GRAY YOUNG
AND WIFE RUBY
DB 308 PG 823-826
2

CAPE FEAR RIVER

SR 1316 TAR HEEL FERRY RD.

BRIDGE NO. 188

EXISTING 100' FOUR COUNTY POWER TRANSMISSION LINE EASEMENT

25' CONC BOAT RAMP

WILDLIFE LANDING DR 12' GR

EXISTING R/W

WOODS

GR

BL-5

BL-6

-L-
N 26° 57' 37.0" E

N 53°25'58" W
344.02'

S 53°25'58" E
448.84'

N 53°25'58" W
97.97'

S 58°36'12" E
221.05'

+27
264.50'
294.50'

+48
264.50'
294.50'

+72.50
207'

+29.60
94.50'

+14.71
95.84'

+13.61
95.84'

+35.63
30.98'

+31.60
105.49'

+30.85
125'

END BRIDGE
-L- STA. 47+00.00

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

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

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

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schollen
ATT1 PEN#24768

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-06/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

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 06

N 25°04'20" E
292.65'

NAD 83/95

28 x 13 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
5 ft. weir
ID 6.5

BARBARA T. MERRITT AND
HUSBAND DANNY
DB 482 PG 661,663
DB 329 PG 771

3

50

55

+25
207'
227'

+45
207'
227'

+74
192.34'

LIMIT OF
EXCAVATION

PUE PUE PUE PUE PUE PUE PUE PUE

WOODS

EXISTING R/W

BL-7

BL-8

BL-9

3 STR WIRE

WILDLIFE LANDING DR 12' GR

REMOVE

SR 1316 TARHEEL FERRY RD 24' BST

END SBG
STA. 47+40 LT.

GRAU 350
8:1

N 26°57'37.0" E

TEMP SHORING TOE 2
SEE TMP-5

BEGIN SBG
END APP.
SLAB LT.

BEGIN SBG
END APP.
SLAB RT.

CLASS II
RIP RAP
STRUCTURE
PAY ITEM

0601 0602 0603 0604 0605 0606 0607 0608 0609 0610 0611 0612 0613 0614 0615 0616

TBDI

15" RCP IV

15" W/ELBOWS

TSD

RW

2 TONS
CL 'B' RIP RAP
6 SY
GEOTEXTILE

1 TON
CL 'B' RIP RAP
5 SY
GEOTEXTILE

+00.00
100'
125'

BENJAMIN GRAY YOUNG
AND WIFE RUBY
DB 306 PG 823-826

2

44 x 20 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
12 ft. weir
ID 6.1

13 x 42 x 3
5 ft. weir
(See Infiltration
Basin Detail)
ID 6.2

18 x 55 x 3
10 ft. weir
(See Infiltration
Basin Detail)
ID 6.3

16 x 38 x 3
8 ft. weir
(See Infiltration
Basin Detail)
ID 6.4

MATCHLINE 45+50.00 SEE SHEET 5

MATCHLINE 59+00.00 SEE SHEET 7

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adholian AT REVIZ4763

8/17/99

REVISIONS

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

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 07

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-07/CONST.07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

BARBARA T. MERRITT AND HUSBAND DANNY
DB 482 PG 661,663
DB 329 PG 771
3

ALONSO SANCHEZ
DB 586 PG 953

HUSBAND DANNY
DB 329 PG 771

DANNY MERRIT and wife
BARBARA MERRITT
DB 348 PG 584

NAD 83/95

S 25°06'49" W
209.00'
-E-
DB 586 PG 953

358.54'
S 63°09'44" E
146.14'

60 65 70

MATCHLINE 59+00.00 SEE SHEET 6

MATCHLINE 72+00.00 SEE SHEET 8

-L- PRC Sta. 70+78.88

-L- PC Sta. 66+89.70

BL- 10

GPS- B-4712-3

+69.18
122.79'

+65.13
107.85'

S 11°23'16" W
136.70'

S 4°27'41" E
103.41'

EXISTING R/W

EXISTING 100' FOUR COUNTY POWER TRANSMISSION LINE EASEMENT

GWENDOLYN COUNCIL LEWIS
DB 608 PG 097

CONC DECK

GRASS

HTR

EIP

3 STR WIRE

WILDLIFE LANDING DR 12' GR

24" CABLE EXISTING R/W

15' SOIL DR

BRIDGE NO. 189

LIMIT OF EXCAVATION

TEMP SHORING LOC 3 SEE TMP-3

TEMP SHORING LOC 4 SEE TMP-3

BEGIN SBG STA. 61+24 LT.

END SBG BEGIN APP. SLAB LT.

END SBG STA. 66+08 LT.

BEGIN SBG END APP. SLAB LT.

END SBG STA. 71+70 RT.

BEGIN SBG STA. 70+79 RT.

BEGIN SBG END APP. SLAB RT.

END SBG END APP. SLAB RT.

END SBG BEGIN APP. SLAB RT.

REMOVE

REMOVE SR 1316 TARHEEL FERRY RD 24' BST

30' INC.

GRAU 350

8:1

N 26°57'13.0" E

-L-

TBDI

0701 0702 0703 0704 0705 0706 0707 0708 0709 0710 0711

15" W/ELBOWS

100'

EXISTING R/W

13' SOIL

RETAIN

CLASS II RIP RAP STRUCTURE PAY ITEM

TSD

1 TON CL 'B' RIP RAP 5 SY GEOTEXTILE

2 TONS CL 'B' RIP RAP 6 SY GEOTEXTILE

+89.70
75'
100'

+78.88
75'

CHORD

WOODS LINE

WOODS

40 x 14 x 3
1.5 inch Skimmer
with 0.50 inch
Orifice Diameter
6 ft. weir
ID 7.1

55 x 23 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
15 ft. weir
ID 7.2

BENJAMIN GRAY YOUNG
AND WIFE RUBY
DB 306 PG 823-826
2

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Active Project: TIP# B-4712

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-08/CONST.08
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS 8/17/99

NAD 83/95

DANNY MERRIT and wife
BARBARA MERRITT
DB 348 PG 584

ALFONZA TUTT and wife
LAURA C. TUTT
DB 308 PG 581

JESSIE CAMPBELL JR
DB 409 PG 864

MARSHALL B PITTS SR.
and wife
CAROL W. PITTS
DB 278 PG 527

MARSHALL B PITTS SR.
DB 339 PG 693

BENJAMIN GRAY YOUNG
AND WIFE RUBY
DB 306 PG 823-826

75

80

B-4712-4

BL-11

POT Sta. 81+53.21 TO FAYETTEVILLE

SR 1308 RIVER RD

SR 1316 TARHEEL FERRY RD

TO WHITE OAK

MATCHLINE 72+00.00 SEE SHEET 7

-L- CURVE DATA
PI Sta 72+73.69
△ = 6° 33' 30.4" (RT)
D = 1° 41' 06.6"
L = 389.19'
T = 194.81'
R = 3,400.00'
SE = SEE PLANS

-L- PT Sta. 74+68.07

END TIP PROJECT B-4712
-L- STA. 79+70.00

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

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

2

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ashellen AT REN/247768

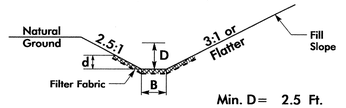
8/17/99

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-09/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

DETAIL 'A'
SPECIAL LATERAL BASE DITCH
(Not to Scale)



Min. D= 2.5 Ft.
Max. d= 2.5 Ft.
B= 4 Ft.

Type of Liner= CLASS 'I' Rip-Rap
FROM STA. 21+00 LT. TO STA. 23+50 LT. -L-

NAD 83/95

TAR HEEL BAPTIST CHURCH
DB 460 PG 448
PB A-183 PG 1837

S 53°57'52" W
463.09'

TAR HEEL BAPTIST CHURCH
DB 440 PG 530
PB A-183 PG 1837

"PERMANENT SOIL REINFORCEMENT MAT SHALL BE PLACED AT FULL HEIGHT OF 2.5:1 SLOPE FROM STATION 21+25+/- -L- (LEFT) TO 23+25+/- -L- (LEFT). SEE PERMANENT SOIL REINFORCEMENT MAT SPECIAL PROVISION."

Place Matting for Erosion Control on Slope as Work Allows.

20 | 25 | 30

PLASTIC POLES
BST PARKING
60' CONC
LT GRASS
72" CONC
GRASS
60' CONC
25BK
TAR HEEL BAPTIST CHURCH
EXISTING 50' FOUR COUNTY POWER TRANSMISSION LINE EASEMENT
EXISTING R/W
BL- 2
BST PARKING
PLASTIC POLES
EXISTING 50' FOUR COUNTY POWER TRANSMISSION LINE EASEMENT
FIP
N 83°23'33" W
160.33'
220.13'
EXISTING R/W
WOODS
BL- 3
LINE EXISTING DITCH W/60 TONS CLASS 'I' RIP RAP
4' SPECIAL LATERAL BASE DITCH LINED W/372 TONS CLASS 'I' RIP RAP AND 628 SY GEOTEXTILE SEE DETAIL 'A'
MARGARET HAMMOND
DB 653 PG 531
PB A-183 PG 1837
4
+94 185.30'
+31 205.50'
-L- PT Sta. 29+39.70
+49.50 207'
+73.89 198.11'
PL 215'
S 35°32'24" E 101.28'
+19.80 192.72'
BL- 4
LIMIT OF EXCAVATION
F/O SPLICE BOX
F/O PED
REMOVE
TEMP SHORING LOC. 1 SEE TMP-4
BEGIN SBG STA. 30+19 LT.
END SBG BEGIN APP. SLAB LT.
GRAU 350
TBD!
CONC
N 26° 57' 37.0" E
SR 1316 TARHEEL FERRY RD
24' BST
50' LT. & RT. TAPER
30' INC.
4' PS
20' R
20' DR.
WOODS
-L-
-L- PC Sta. 21+61.33
-L- PRC Sta. 25+50.51
+88 74.87'
+00 85'
+50 89'
+50 105'
+50.51 52.77'
+63 56'
+50 80'
0405
0406
0407
0402
18" W/ELBOWS
JB w/MH
18"
155'
+99
30' INC.
BEGIN SBG STA. 30+19 RT.
EXISTING R/W
ECM
+27.83 29.88'
15" W/ELBOWS
CLASS II RIP RAP STRUCTURE PAY ITEM
END SBG BEGIN APP. SLAB RT.
S 55°41'59" E 316.40'
+31.57 30.11'
+39.70 155'
4 TONS CL 'B' RIP RAP 8 SY GEOTEXTILE
2 TONS CL 'B' RIP RAP 6 SY GEOTEXTILE
+12.20 155'
ISBKD
S
WILLIAM L. TRUMAN AND WIFE JANICE
DB 326 PG 858
1
Place Matting for Erosion Control on Slope as Work Allows.
26 x 72 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 18 ft. weir ID 4.1
N 26°41'30" E
1424.96'

-L- CURVE DATA

PI Sta 23+56.13	PI Sta 27+45.32
Δ = 6° 33' 30.4" (RT)	Δ = 6° 33' 30.4" (LT)
D = 1° 41' 06.6"	D = 1° 41' 06.6"
L = 389.19'	L = 389.19'
T = 194.81'	T = 194.81'
R = 3,400.00'	R = 3,400.00'
SE = SEE PLANS	SE = SEE PLANS

BEGIN TIP PROJECT B-4712
-L- STA. 20+21.00

MATCHLINE 33+00.00 SEE SHEET 5

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adholian AT RENV247768

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-10/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS 8/17/99

MATCHLINE 33+00.00 SEE SHEET 4

MATCHLINE 45+50.00 SEE SHEET 6

NAD 83/95

28 x 13 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
5 ft. weir
ID 6.5

35

40

STATE OF NORTH CAROLINA
DB 172 PG 167
5

BARBARA T. MERRITT AND
HUSBAND DANNY
DB 482 PG 661,663
DB 329 PG 771
3

ILEX PROPERTIES,LLC
DB 669 PG 856
PB A-183 PG 1837

BENJAMIN GRAY YOUNG
AND WIFE RUBY
DB 308 PG 823-826
2

CAPE FEAR RIVER

SR 1316 TAR HEEL FERRY RD.

BRIDGE NO. 188

BL- 5

BL- 6

-L-
N 26° 57' 37.0" E

448.84'
S 53° 25' 58" E

N 53° 25' 58" W
344.02'

N 53° 25' 58" W
97.97'

S 53° 25' 58" E
296.76'

S 58° 36' 12" E
221.05'

S 61° 51' 12" E
74.69'

+27
264.50'
294.50'

+48
264.50'
294.50'

+72.50
207'

+13.61
95.84'

+14.71
95.84'

+29.60
94.50'
EXISTING R/W

+31.04
105.20'

+35.63
30.98'

+31.60
105.49'

+30.85
125'

PL
248'

PUE

ST

WOODS

GR

EXISTING 100' FOUR COUNTY POWER TRANSMISSION LINE EASEMENT

25' CONC BOAT RAMP

WILDLIFE LANDING DR 12' GR

EXISTING R/W

EIP

EIP

8' SOIL

7' SOIL

T FO

WLB

125'

24'

02

02

END BRIDGE
-L- STA. 47+00.00

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

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dchollen
Preliminary Plans
Not for Construction
Not for Right-of-Way
Not for Bidding
PE
SEAL
027768

8/17/99

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-11/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

N 25°04'20" E
292.65'

NAD 83/95

**28 x 13 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
5 ft. weir
ID 6.5**

Place Matting for Erosion Control on Slope as Work Allows.

BARBARA T. MERRITT AND
HUSBAND DANNY
DB 482 PG 661,663
DB 329 PG 771

3

MATCHLINE 45+50.00 SEE SHEET 5

MATCHLINE 59+00.00 SEE SHEET 7

50

55

LIMIT OF EXCAVATION

WOODS

EXISTING R/W

PUE

+25
207'
227'

+45
207'
227'

+74
192.34'

WLB

BL-7

BL-8

BL-9

3 STR WIRE

WILDLIFE LANDING DR 12' GR

REMOVE

BEGIN SBG
END APP.
SLAB LT.

TEMP SHORING TOC 2
SEE TMP-5

END SBG
STA. 47+40 LT.

SR 1316 TARHEEL FERRY RD 24' BST

GRAU 350

4' PS

8:1

N 26° 57' 37.0" E

-L-

15" W/ELBOWS

(0601) (0602) (0603) (0604) (0605) (0606) (0607) (0608) (0609) (0610) (0611) (0612) (0613) (0614) (0615) (0616)

TBDI

TSD

CLASS II
RIP RAP
STRUCTURE
PAY ITEM

BEGIN SBG
END APP.
SLAB RT.

2 TONS
CL 'B' RIP RAP
6 SY
GEOTEXTILE

1 TON
CL 'B' RIP RAP
5 SY
GEOTEXTILE

+00.00
100'
125'

1 TON
CL 'B' RIP RAP
5 SY
GEOTEXTILE

1 TON
CL 'B' RIP RAP
5 SY
GEOTEXTILE

1 TON
CL 'B' RIP RAP
5 SY
GEOTEXTILE

1 TON
CL 'B' RIP RAP
5 SY
GEOTEXTILE

BENJAMIN GRAY YOUNG
AND WIFE RUBY
DB 306 PG 823-826

2

**44 x 20 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
12 ft. weir
ID 6.1**

**13 x 42 x 3
5 ft. weir
(See Infiltration
Basin Detail)
ID 6.2**

**18 x 55 x 3
10 ft. weir
(See Infiltration
Basin Detail)
ID 6.3**

**16 x 38 x 3
8 ft. weir
(See Infiltration
Basin Detail)
ID 6.4**

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ashelton AT REN/24776B

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-12/CONST.07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE SKIMMER BASIN OR SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.

REVISIONS 8/17/99

NAD 83/95

BARBARA T. MERRITT AND HUSBAND DANNY
DB 482 PG 661,663
DB 329 PG 771
3

ALONSO SANCHEZ
DB 586 PG 953

HUSBAND DANNY
DB 329 PG 771

DANNY MERRIT and wife
BARBARA MERRITT
DB 348 PG 584

GWENDOLYN COUNCIL LEWIS
DB 608 PG 097

BENJAMIN GRAY YOUNG AND WIFE RUBY
DB 306 PG 823-826
2

S 25°06'49" W 209.00'
-E- DB 586 PG 953
S 63°09'44" E 356.54'
S 11°23'16" W 136.70'
S 41°21'41" E 13.41'
S 63°09'44" E 146.14'
-L- PRC Sta. 70+78.88
-L- PC Sta. 66+89.70
N 26°57'37.0" E

MATCHLINE 59+00.00 SEE SHEET 6

MATCHLINE 72+00.00 SEE SHEET 8

BL- 10
GPS- B-4712-3
BRIDGE NO. 189
EXISTING R/W
WILDLIFE LANDING DR 12' GR
3 STR WIRE
EXISTING 100' FOUR COUNTY POWER TRANSMISSION LINE EASEMENT
24" CABLE EXISTING R/W
15' SOIL DR
10' SOIL DR
CONC DECK
GRASS
WOODS LINE
WOODS
CHORD
HTR
+69.18 122.79'
+65.13 107.85'
+78.88 75'
+89.70 75' 100'

LIMIT OF EXCAVATION
TEMP SHORING LOC 3 SEE TMP-6
TEMP SHORING LOC 4 SEE TMP-6
BEGIN SBG STA. 61+24 LT.
END SBG BEGIN APP. SLAB LT.
END SBG STA. 66+08 LT.
BEGIN SBG END APP. SLAB RT.
END SBG BEGIN APP. SLAB RT.
END SBG STA. 66+08 RT.
BEGIN SBG STA. 70+79 RT.
REMOVE
REMOVE SR 1316 TARHEEL FERRY RD 24' BST
30' INC.
GRAU 350
8:1
15" W/ELBOW RCP
24" RCP
18" RCP
TBD
CLASS II RIP RAP STRUCTURE PAY ITEM
13' SOIL
RETAIN
1 TON CL 'B' RIP RAP 5 SY GEOTEXTILE
2 TONS CL 'B' RIP RAP 6 SY GEOTEXTILE

40 x 14 x 3
1.5 inch Skimmer
with 0.50 inch
Orifice Diameter
6 ft. weir
ID 7.1

55 x 23 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
15 ft. weir
ID 7.2

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apholley AT REN247768

PROJECT REFERENCE NO.	SHEET NO.
B-4712	EC-13/CONST.08
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

NAD 83/95

DANNY MERRIT and wife
BARBARA MERRITT
DB 348 PG 584

ALFONZA TUTT and wife
LAURA C. TUTT
DB 308 PG 581

JESSIE CAMPBELL JR
DB 409 PG 864

MARSHALL B PITTS SR.
and wife
CAROL W. PITTS
DB 278 PG 927

MARSHALL B PITTS SR.
DB 339 PG 693

BENJAMIN GRAY YOUNG
AND WIFE RUBY
DB 306 PG 823-826

75

80

B-4712-4

BL-11

POT Sta. 81+53.21

SR 1318 RIVER RD TO FAYETTEVILLE

SR 1316 TARHEEL FERRY RD

WHITE OAK RD

MATCHLINE 72+00.00 SEE SHEET 7

-L- CURVE DATA

PI Sta 72+73.69
△ = 6° 33' 30.4" (RT)
D = 1° 41' 06.6"
L = 389.19'
T = 194.81'
R = 3,400.00'
SE = SEE PLANS

-L- PT Sta. 74+68.07

END TIP PROJECT B-4712
-L- STA. 79+70.00