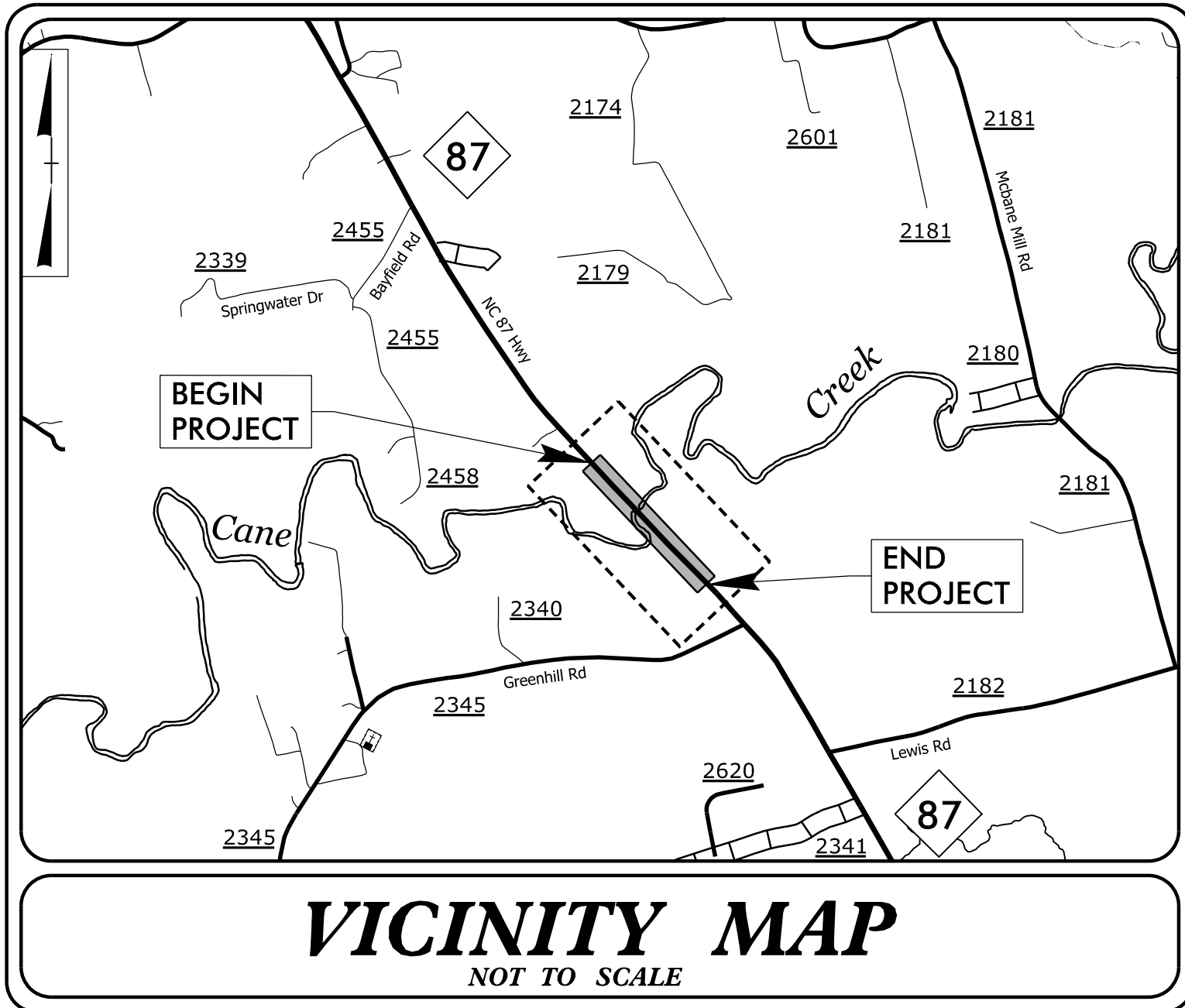


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JDAVENPORT

TIP PROJECT: BR-0060



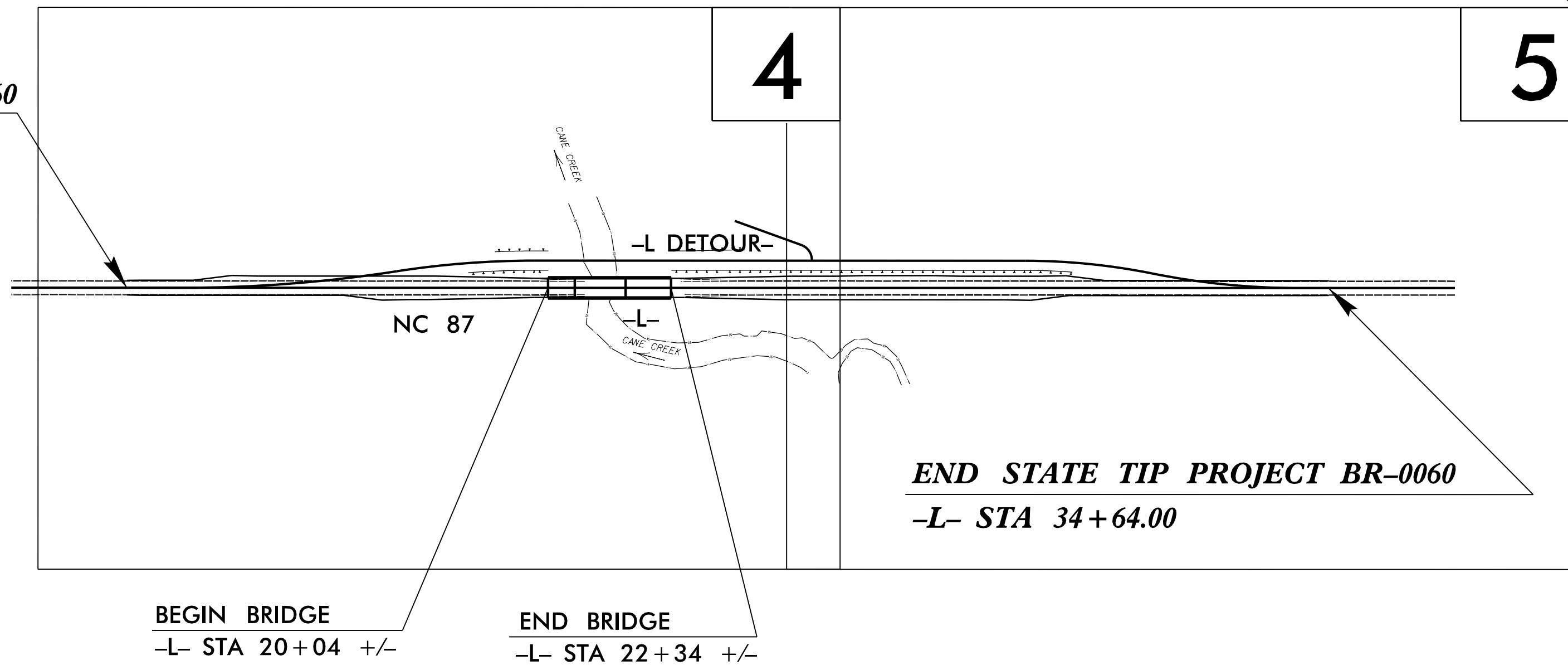
VICINITY MAP
NOT TO SCALE

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

LOCATION: REPLACE BRIDGE 000014 ON NC 87 OVER CANE CREEK
TYPE OF WORK: PAVING, GRADING, GUARDRAIL, DRAINAGE,
AND STRUCTURES

BEGIN STATE TIP PROJECT BR-0060
-L- STA 12+16.55

TO LEWIS RD

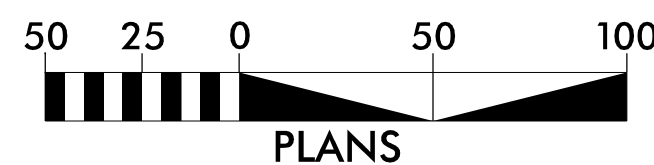


END STATE TIP PROJECT BR-0060
-L- STA 34+64.00

TO GREENHILL RD

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE APPLICABLE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL STORMWATER CONSTRUCTION PERMIT
AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY DIVISION OF ENERGY,
MINERAL, AND LAND RESOURCES


moffatt & nichol

Prepared in the Office of:
MOFFATT & NICHOL
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
(919)781-4626 PHONE (919)781-4869 FAX

Designed by:
JUSTIN DAVENPORT 3989
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C.
Department of Transportation - Raleigh, N. C., dated January 2024
and the latest revision thereto are applicable to this project and by
reference hereby are considered a part of these plans.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0060	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67060.1.1	N/A	PE	

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

THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.

ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT

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

PROJECT REFERENCE NO.
BR-0060

SHEET NO.
EC-2

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

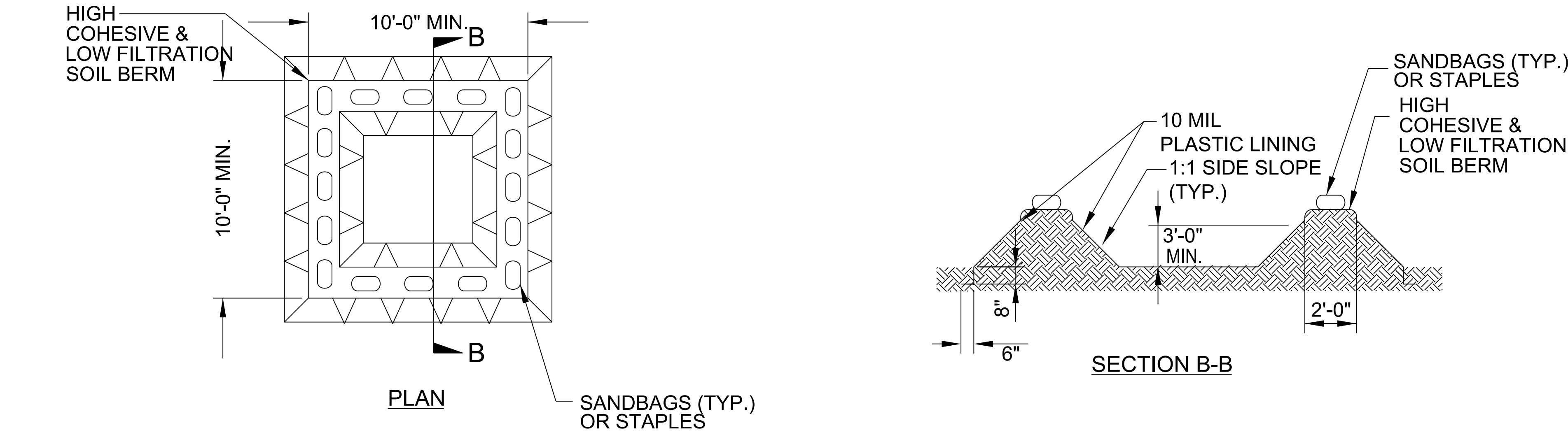
Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE



- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

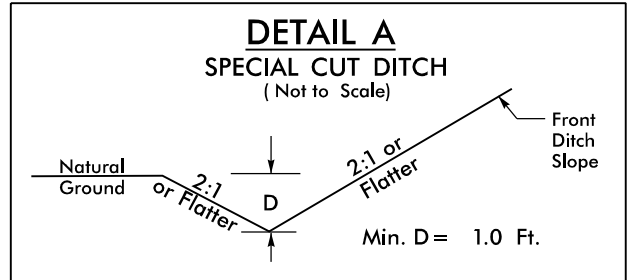
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
20-1	LDET	12+88	13+20	LT	65
20-1	LDET	13+20	15+50	LT	535
20-1	LDET	15+50	18+00	LT	580
20-1	LDET	18+00	19+30	LT	305
20-1/2	LDET	23+00	25+50	RT	275
20-2	LDET	25+50	27+00	RT	125
20-2	LDET	26+20	27+50	LT	330
20-2	LDET	28+50	29+50	LT	120
20-2	LDET	30+50	31+00	LT	95
4	L	12+17	13+20	LT	200
4	L	13+20	15+48	LT	440
4	L	14+00	18+50	RT	610
4	L	15+48	17+94	LT	475
4	L	17+94	19+24	LT	255
			SUBTOTAL		4,410
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					17,650
TOTAL MATTING FOR EROSION CONTROL					22,060
				SAY	22,100

[illegible]

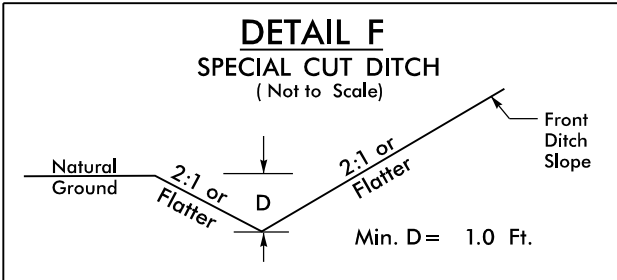
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES



FROM STA.-L- 12+17 LT TO STA.-L- 19+24 LT

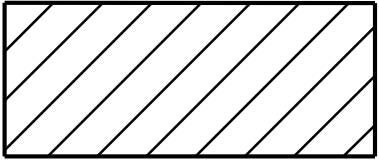


FROM STA.-L- 14+00 RT TO STA.-L- 18+50 RT

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

NOTE:

PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

BEGIN TIP PROJECT BR-0060
-L- STA. 12+16.55

SPECIAL CUT DITCH
SEE DETAIL A

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BEGIN CONSTRUCTION BR-0060
-L- POT STA 11+45.84

RICHARD EVAN GALLOWAY
DAVID B. GALLOWAY
CRAIG H. GALLOWAY
DB 3642 PG 348
PB 35 PG 179
PB 64 PG 183

5 5Z

66 x 32 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 4.2

CUT AND REMOVE EXISTING ABUTMENT
AND WINGWALLS ABOVE ELEV. = 423.0'
AND LEAVE REMAINING EXISTING
ABUTMENT AND WINGWALLS IN PLACE

DAYLIGHT DITCH
TO NATURAL GROUND

BEGIN APPROACH SLAB
-L- STA. 19+79.00

BEGIN BRIDGE
-L- STA. 20+104+/-

MIN. EXCAVATION - ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

5 5Z

FLOATING
TURBIDITY
CURTAIN

END BRIDGE
STA. 22+34+/-

END APPROACH SLAB
-L- STA. 22+59.00

5 5Z

CLASS II RIPRAP
TO SHLD. PT.
EST. 1170 SY GEOTEXTILE
EST. 1155 TONS CL II RIPRAP
STRUCTURE PAY ITEM

RIP RAP OUTLET PAD
EST. 2 TONS CL B RIPRAP
EST. 7 SY GEOTEXTILE

18" CSP
WELBOWS
END SBC
+75.00

END BRIDGE
STA. 22+34+/-

5 5Z

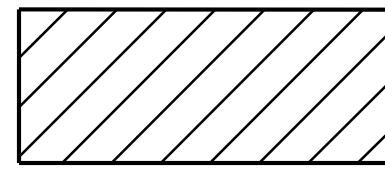
RONNEY HADLEY NEWLIN
DB 551 PG 480
PB 37 PG 181

MATCHLINE SHEET 5
-L- STA 25+00.00

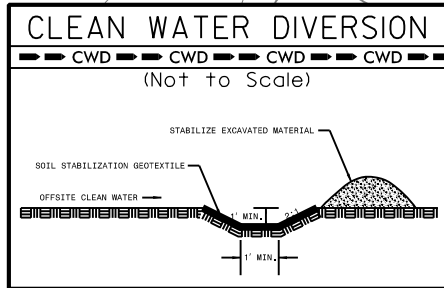
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

NOTE:

PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

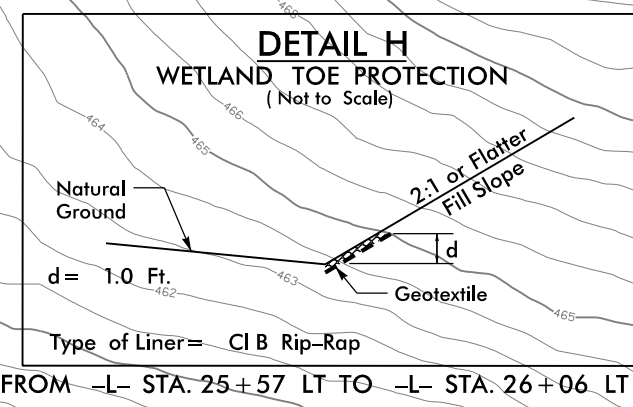
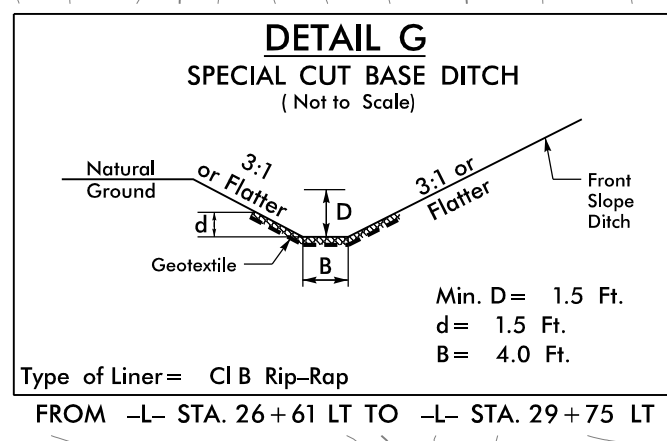
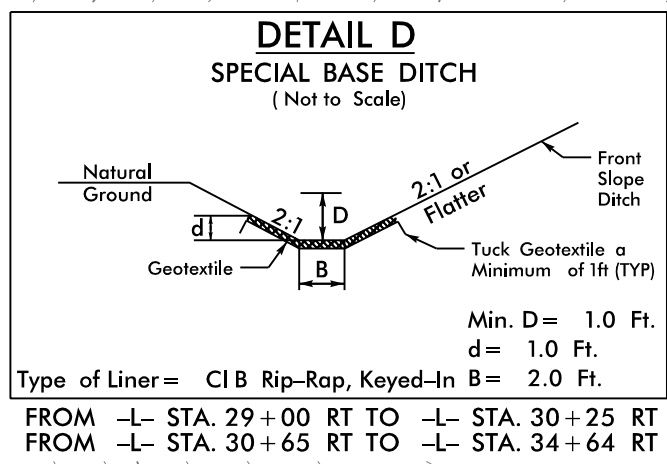
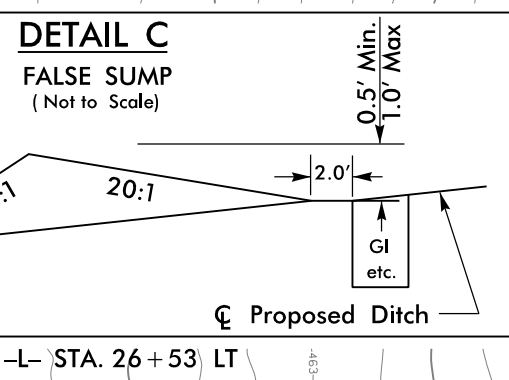


70 x 32 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 5.1

DIRECT SKIMMER
BASIN OUTFLOW
INTO EXISTING
24" CROSS PIPE

24 INCH
TEMPORARY
PIPE

101 x 30 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
12 ft. weir
ID 5.2



MATCHLINE SHEET 4
-L- STA 25+00.00

POT Sta. 37+00.02

END CONSTRUCTION BR-0060
-L- STA 35+16.10

END TIP PROJECT BR-0060
-L- STA. 34+64.00

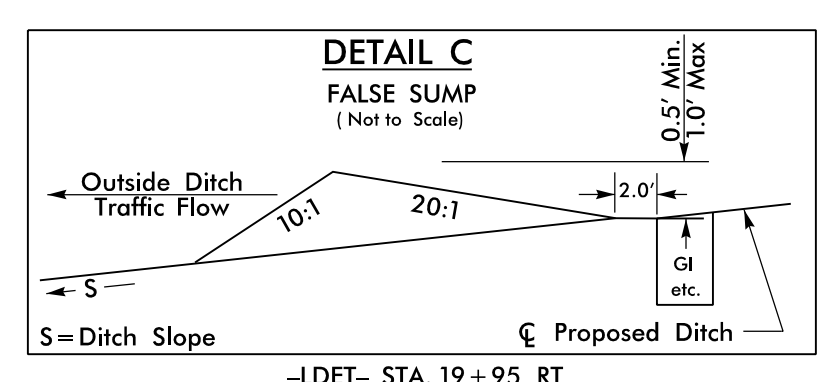
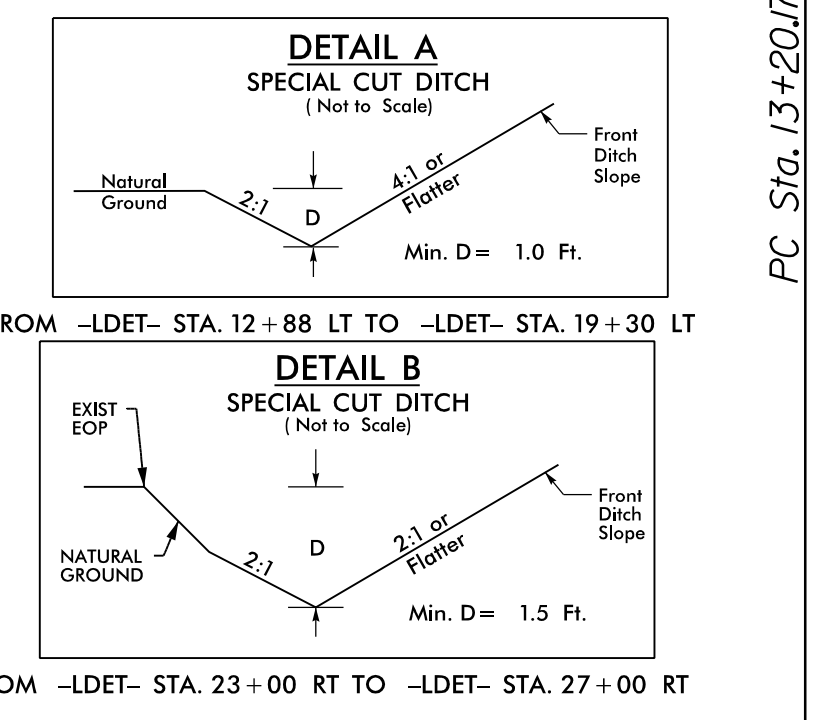
8/17/99

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B:\RA\10011-108\BR-0060\Roadside\04 - PSH\BR-0060_REL\EC05_PSH05.dgn
10/20/2025

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C:\RA\10011-108\BR-0060\Roadside\04 - PSH\BR-0060_REL\EC06_PSH2B-1_DET.dgn

-LDET-
PI Sta 15+21.46
 $\Delta = 8' 51" 13.9' (LT)$
 $D = 2' 12' 13.3"$
 $L = 401.78'$
 $T = 201.29'$
 $R = 2,600.00'$
 $DS = 45 MPH$
 $Runoff = 69'$
 $SE = 03$

PI Sta 18+52.01
 $\Delta = 8' 51" 13.9' (RT)$
 $D = 3' 24' 37.7"$
 $L = 259.61'$
 $T = 130.06'$
 $R = 1,680.00'$
 $DS = 45 MPH$
 $Runoff = 92'$
 $SE = 04$



CLARENCE ALVIS & SHARON LAMBE PICKARD
DB 1292 PG 110
PB 63 PG 140

1 12

-LDET-

Place Matting for Erosion Control
on Slope as Work Allows.

-LDET- Sta. 19+00 LT to Sta. 20+00 LT
-LDET- Sta. 22+35 LT to Sta. 25+00 LT
-LDET- Sta. 18+00 RT to Sta. 20+00 RT

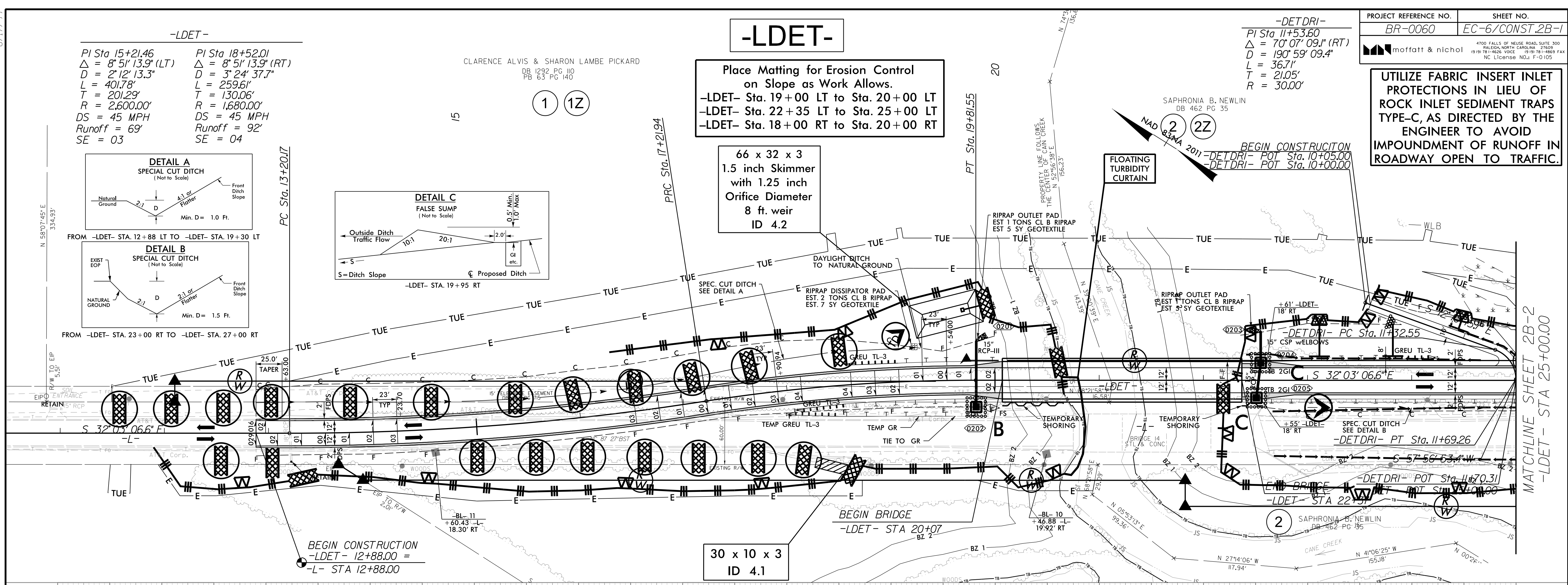
66 x 32 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 4.2

30 x 10 x 3
ID 4.1

PROJECT REFERENCE NO. BR-0060
SHEET NO. EC-6/CONST.2B-1

4700 FALLS OF NEUSE ROAD, SUITE 300
WALTON, NORTH CAROLINA 27159
(919) 781-4626 VOICE (919) 781-4869 FAX
NC License NO. F-0105

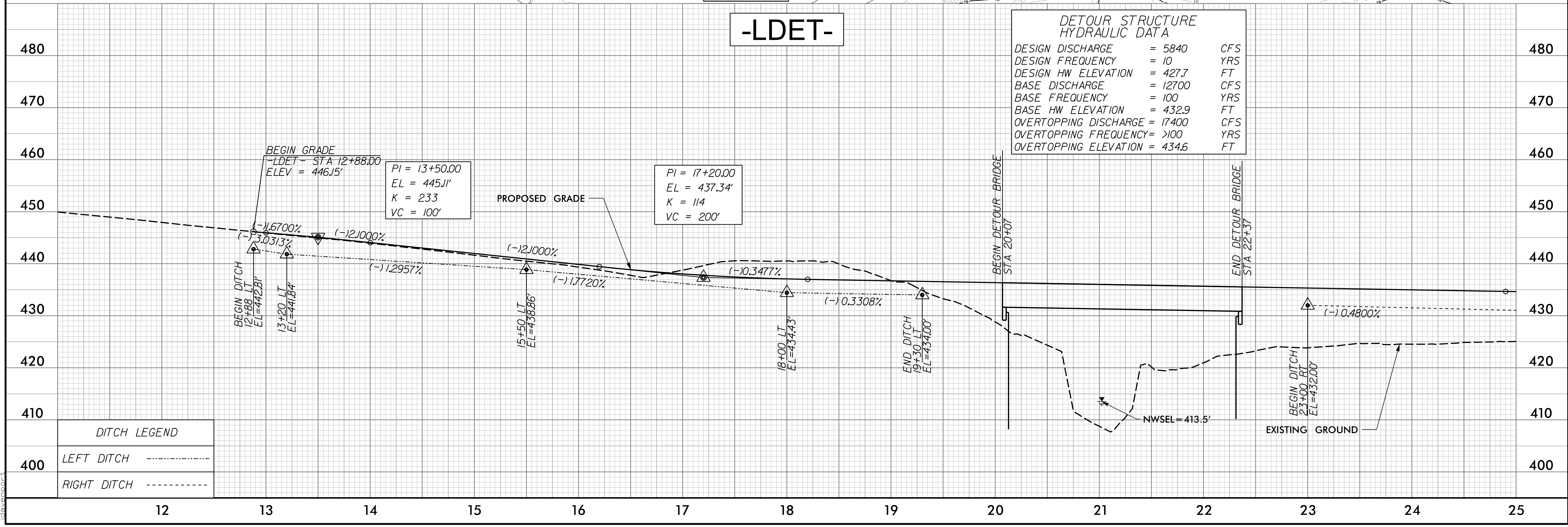
UTILIZE FABRIC INSERT INLET
PROTECTIONS IN LIEU OF
ROCK INLET SEDIMENT TRAPS
TYPE-C, AS DIRECTED BY THE
ENGINEER TO AVOID
IMPOUNDMENT OF RUNOFF IN
ROADWAY OPEN TO TRAFFIC.



-LDET-

DETOUR STRUCTURE
HYDRAULIC DATA

DESIGN DISCHARGE	= 5840	CFS
DESIGN FREQUENCY	= 10	YRS
DESIGN HW ELEVATION	= 427.7	FT
BASE DISCHARGE	= 12700	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 432.9	FT
OVERTOPPING DISCHARGE	= 17400	CFS
OVERTOPPING FREQUENCY	= 100	YRS
OVERTOPPING ELEVATION	= 434.6	FT



DITCH LEGEND

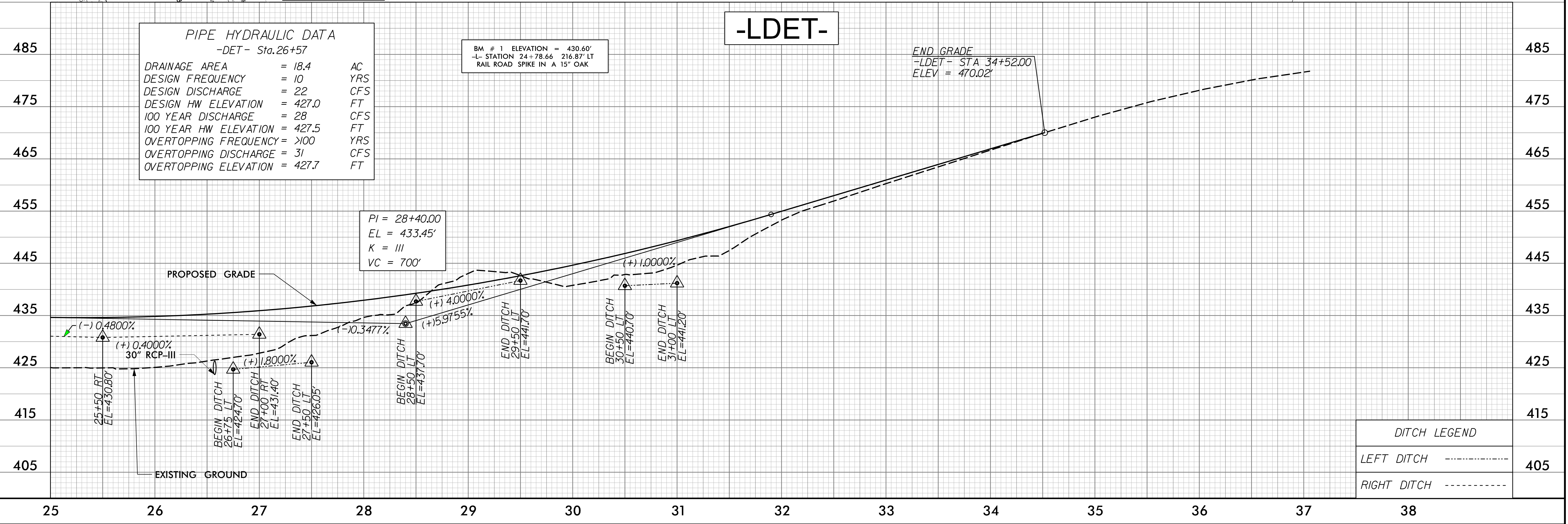
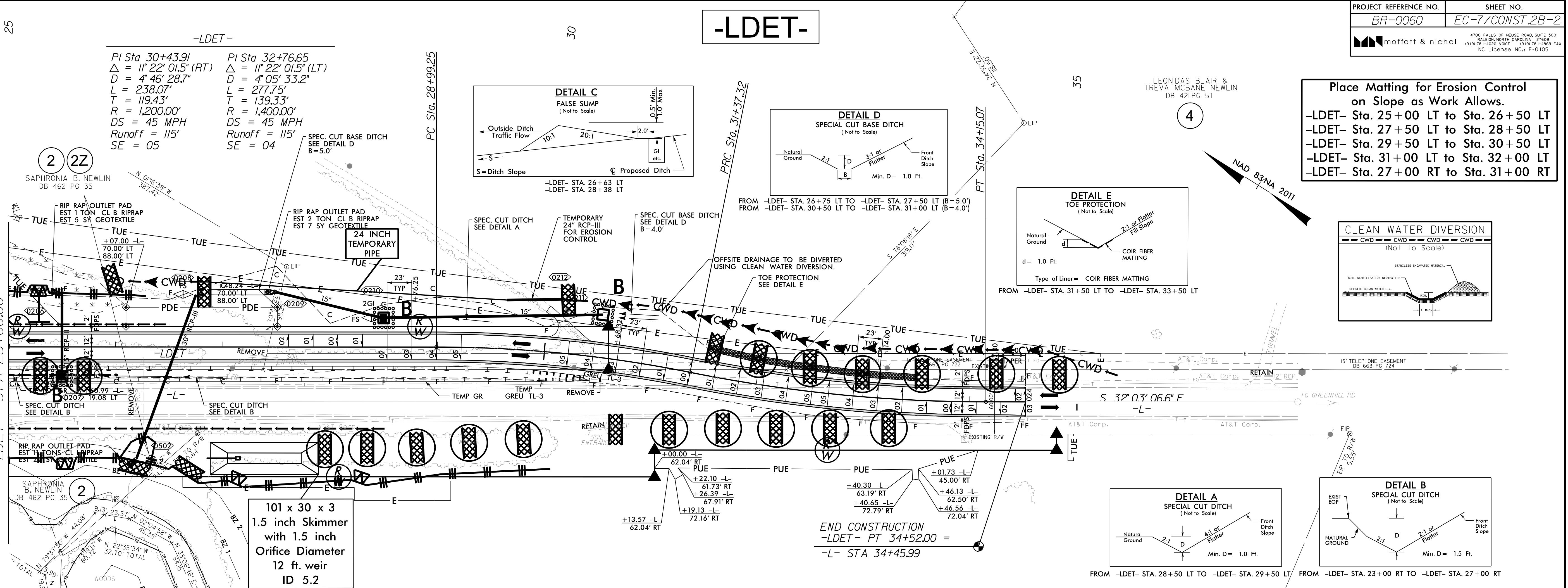
LEFT DITCH	-----
RIGHT DITCH	-----

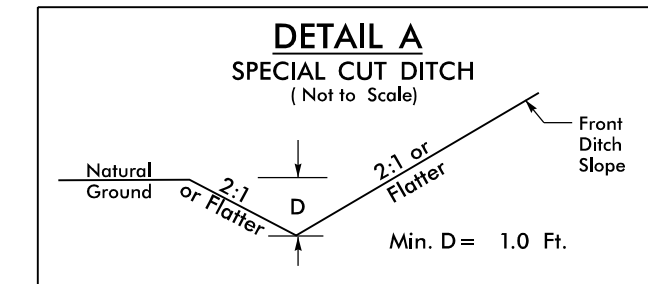
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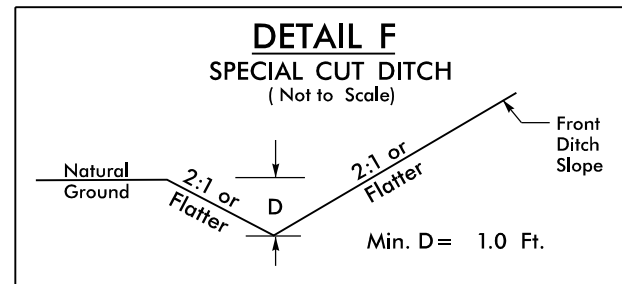
35

MATCHLINE SHEET 2B-1
-LDET- STA 25+00.00





FROM STA. -L- 12+17 LT TO STA. -L- 19+24 LT



FROM STA. -L- 14+00 RT TO STA. -L- 18+50 RT

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE-C, AS DIRECTED BY THE ENGINEER TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

CLARENCE ALVIS & SHARON LAMBE PICKARD
DB 1292 PG 110
PB 63 PG 140

1 12

15

66 x 32 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 4.2

CUT AND REMOVE EXISTING ABUTMENT AND WINGWALLS ABOVE ELEV. = 423.0' AND LEAVE REMAINING EXISTING ABUTMENT AND WINGWALLS IN PLACE

FLOATING TURBIDITY CURTAIN

CLASS II RIPRAP TO SHLD. PT.
EST. 1170 SY GEOTEXTILE
EST. 1155 TONS CL II RIPRAP
STRUCTURE PAY ITEM

BMI ELEVATION = 430.60
N 77°58'49" E 1912.715
BL STATION 20+09.00 203 LEFT
RAIL ROAD SPIKE IN A 15' OAK

BMI#1
+78.66
+216.87 LT

BEGIN TIP PROJECT BR-0060
-L- STA. 12+16.55

SPECIAL CUT DITCH
SEE DETAIL A

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BEGIN CONSTRUCTION BR-0060
-L- POT STA 11+45.84

RICHARD EVAN GALLOWAY
DAVID B. GALLOWAY
CRAIG H. GALLOWAY
DB 3642 PG 348
PB 35 PG 179
PB 64 PG 183

5 5Z

30 x 10 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
4 ft. weir
ID 4.3

BEGIN BRIDGE
-L- STA 20+04+/-

CLASS II RIPRAP TO SHLD. PT.
EST. 896 SY GEOTEXTILE
EST. 847 TONS CL II RIPRAP
STRUCTURE PAY ITEM

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

BEGIN BRIDGE
-L- STA 20+04+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

BEGIN BRIDGE
-L- STA 20+04+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

BEGIN BRIDGE
-L- STA 20+04+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

BEGIN BRIDGE
-L- STA 20+04+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

BEGIN BRIDGE
-L- STA 20+04+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

BEGIN BRIDGE
-L- STA 20+04+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

CLASS II RIPRAP TO SHLD. PT.
EST. 896 SY GEOTEXTILE
EST. 847 TONS CL II RIPRAP
STRUCTURE PAY ITEM

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

CLASS II RIPRAP TO SHLD. PT.
EST. 896 SY GEOTEXTILE
EST. 847 TONS CL II RIPRAP
STRUCTURE PAY ITEM

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

END BRIDGE
-L- STA 22+34+/-

MIN. EXCAVATION ELEV = 423.0'
1% GRADE
EST. 1730 CY EXCAVATION

MATCHLINE SHEET 5
-L- STA 25+00.00

RONNEY HADLEY NEWLIN
DB 551 PG 480
PB 37 PG 81

RICHARD EVAN GALLOWAY
DAVID B. GALLOWAY
CRAIG H. GALLOWAY
DB 3642 PG 348
PB 35 PG 179
PB 64 PG 183

5 5Z

8/17/99

8/18/2025
C:\RA\10011-108\BR-0060\Roadside\04 - PSH\BR-0060_REL\EC08_PSH04_Final.dgn

