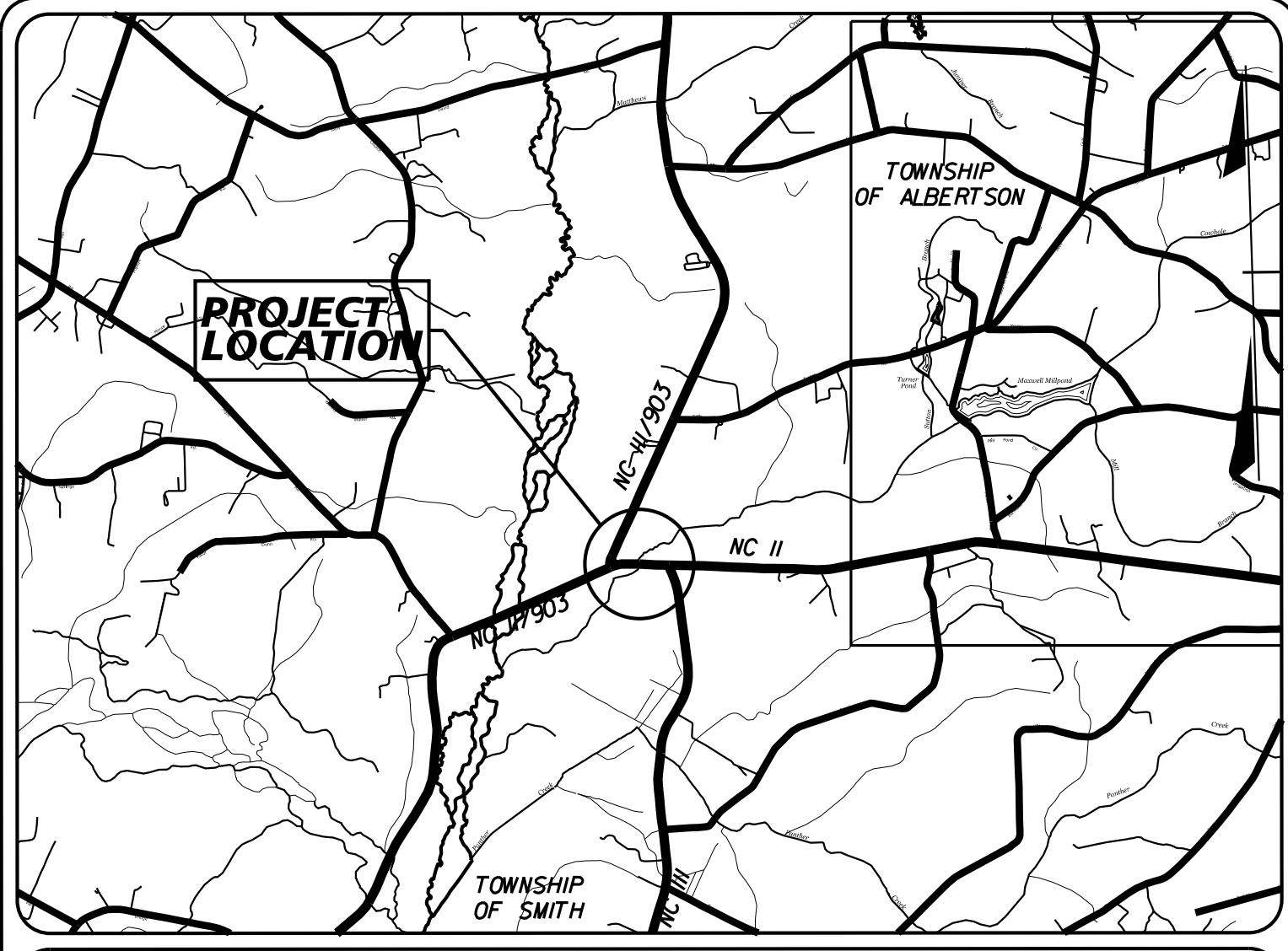


TIP PROJECT: B-5534

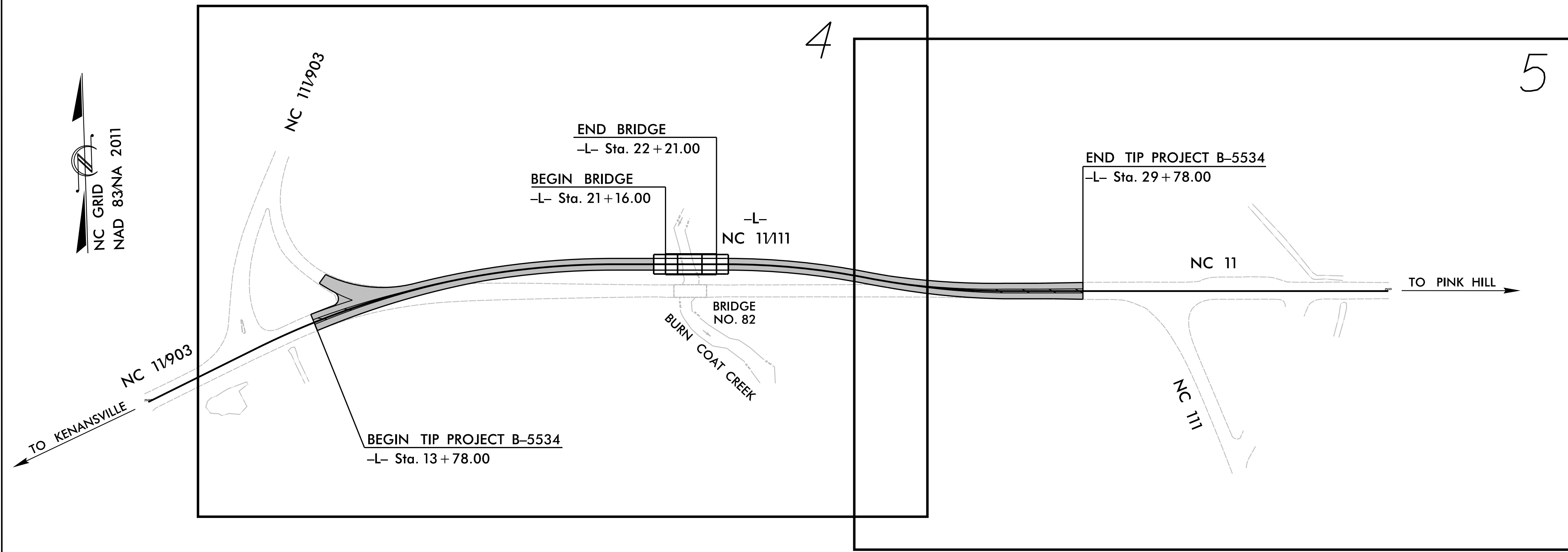


VICINITY MAP
NOT TO SCALE

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

LOCATION: BRIDGE 82 OVER BURN COAT CREEK ON NC 111

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, AND STRUCTURE



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5534	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
55034.1.1		P.E.	

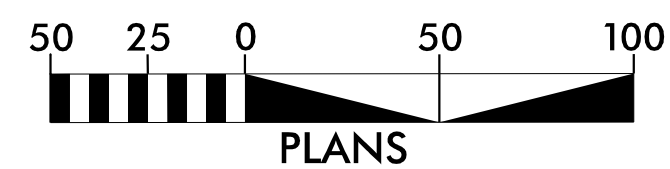
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	---X---
1622.01	Temporary Berms and Slope Drains	T
1630.02	Silt Basin Type B	[Symbol]
1633.01	Temporary Rock Silt Check Type-A	[Symbol]
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	[Symbol]
1633.02	Temporary Rock Silt Check Type-B	[Symbol]
	Wattle / Coir Fiber Wattle	[Symbol]
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	[Symbol]
1634.01	Temporary Rock Sediment Dam Type-A	[Symbol]
1634.02	Temporary Rock Sediment Dam Type-B	[Symbol]
1635.01	Rock Pipe Inlet Sediment Trap Type-A	[Symbol]
1635.02	Rock Pipe Inlet Sediment Trap Type-B	[Symbol]
1630.04	Stilling Basin	[Symbol]
1630.06	Special Stilling Basin	[Symbol]
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	[Symbol]
	Tiered Skimmer Basin	[Symbol]
	Infiltration Basin	[Symbol]

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

THE OUTSIDE BUFFER, WETLAND OR WATER BOUNDARY SHALL BE CLEARLY MARKED BY HIGHLY VISIBLE FENCING (ORANGE SAFETY FENCE).

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.

Kimley » Horn

Prepared in the Office of:
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

Designed by:

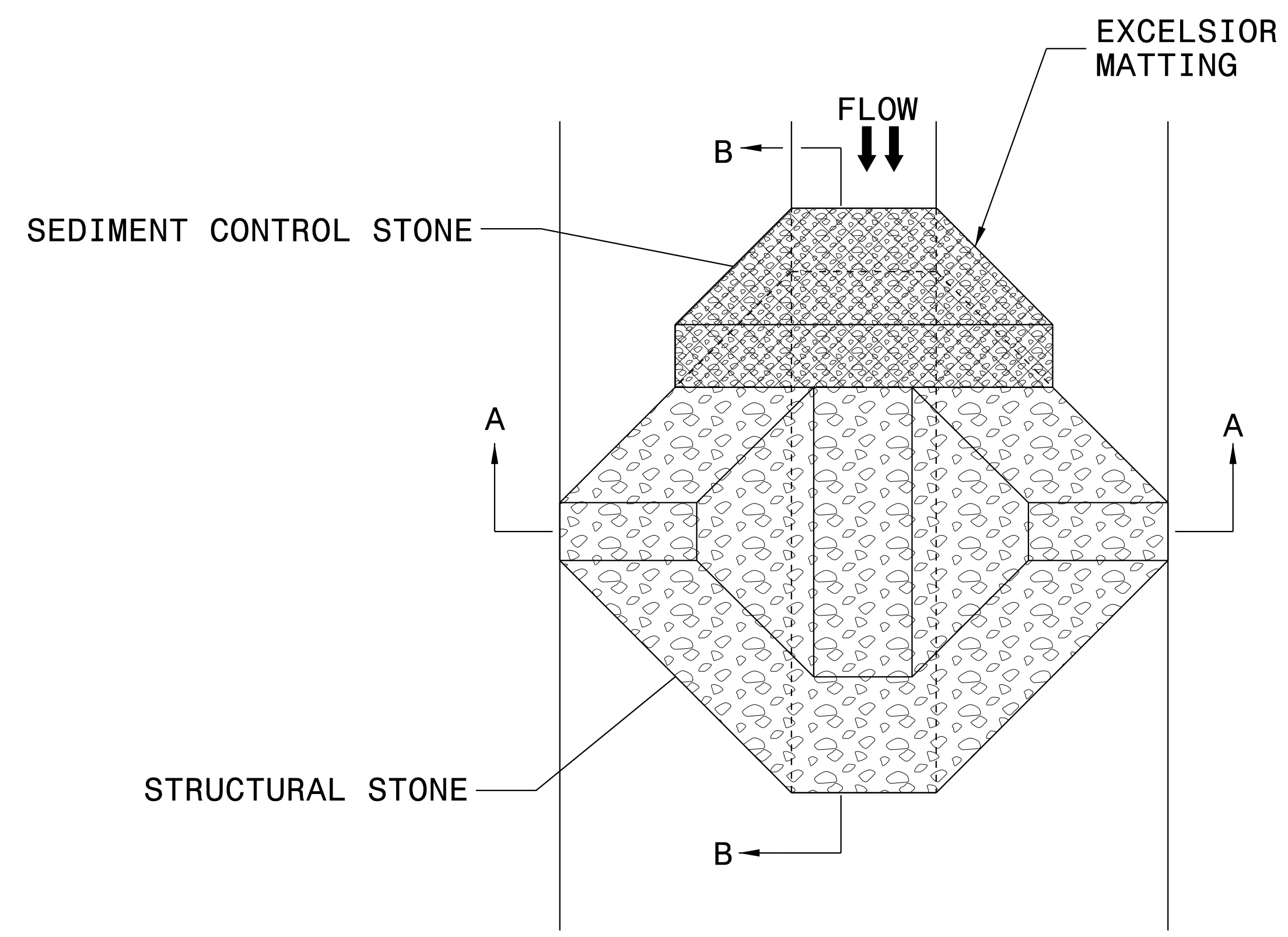
VANCE BLANTON 3708
NAME LEVEL III CERTIFICATION NO.

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 2018 and the latest revision 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	

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



PLAN

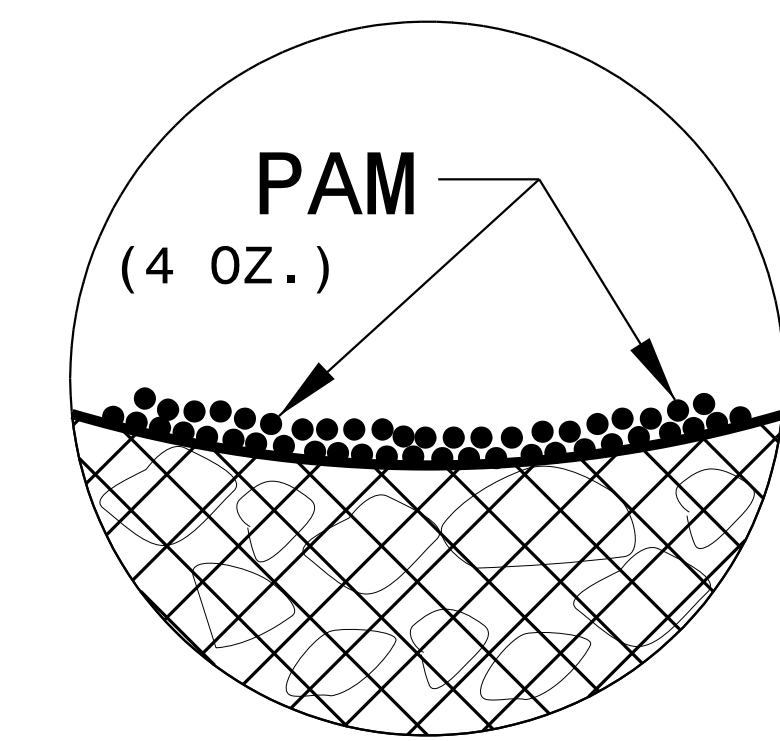
NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

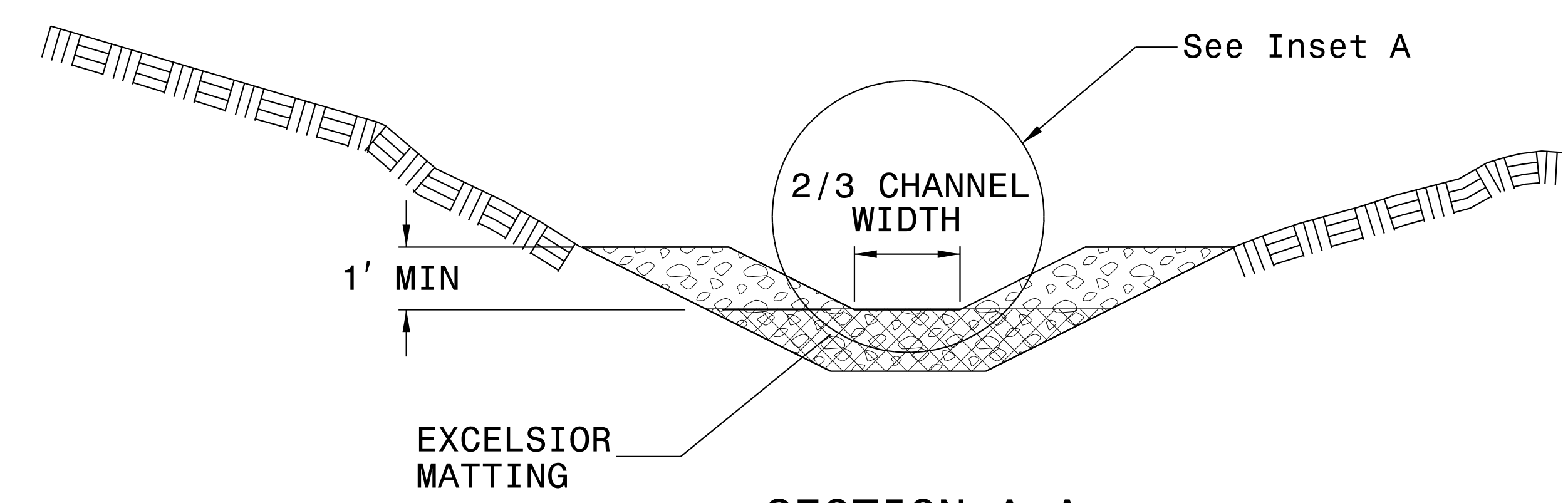
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

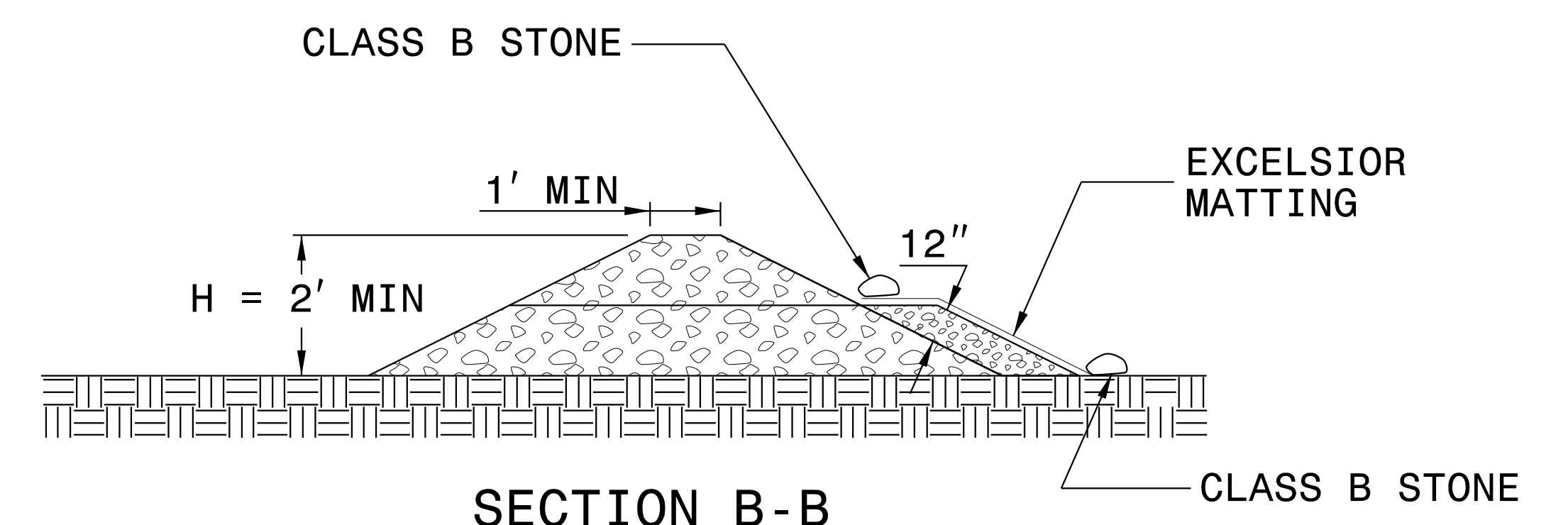
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



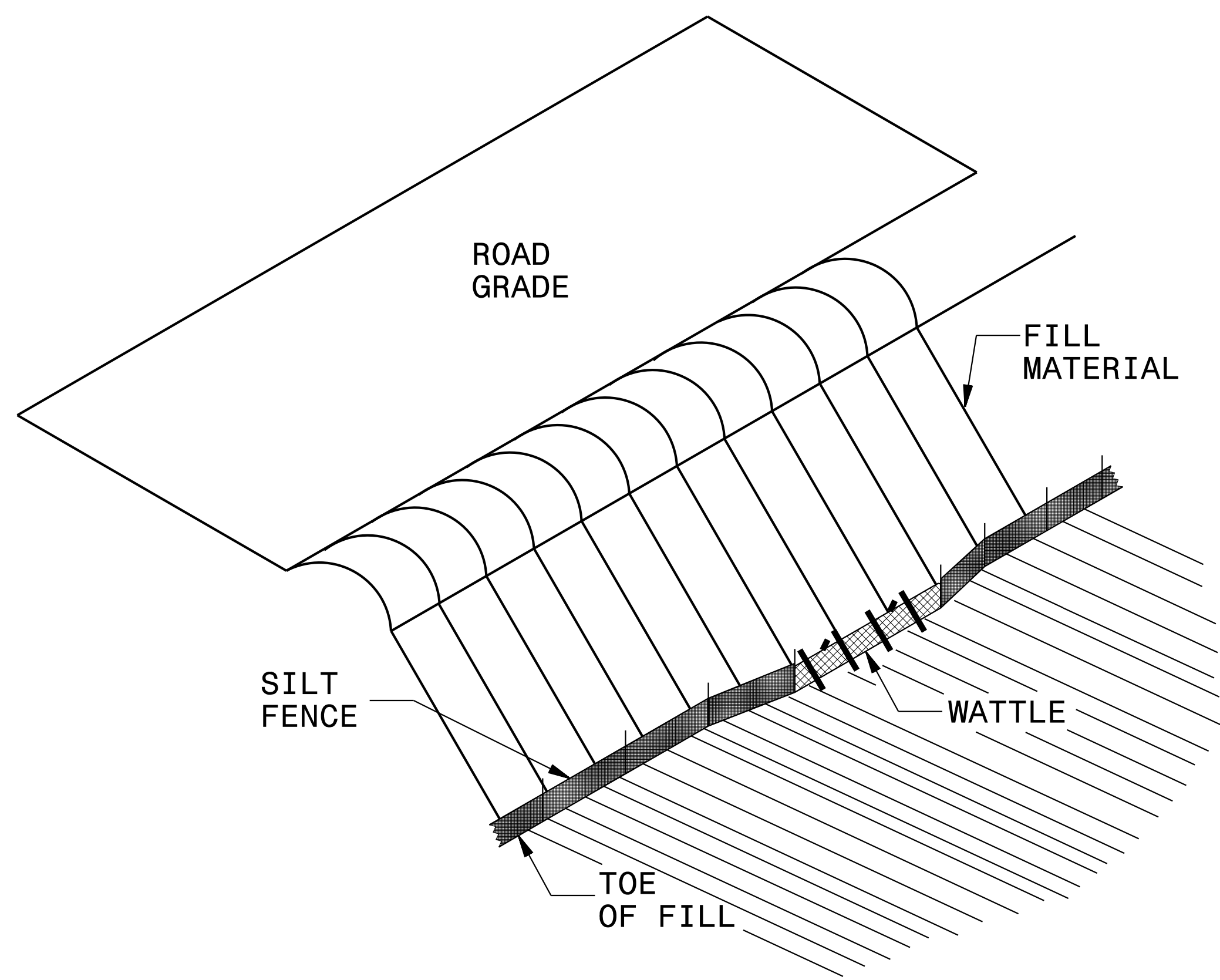
SECTION A-A



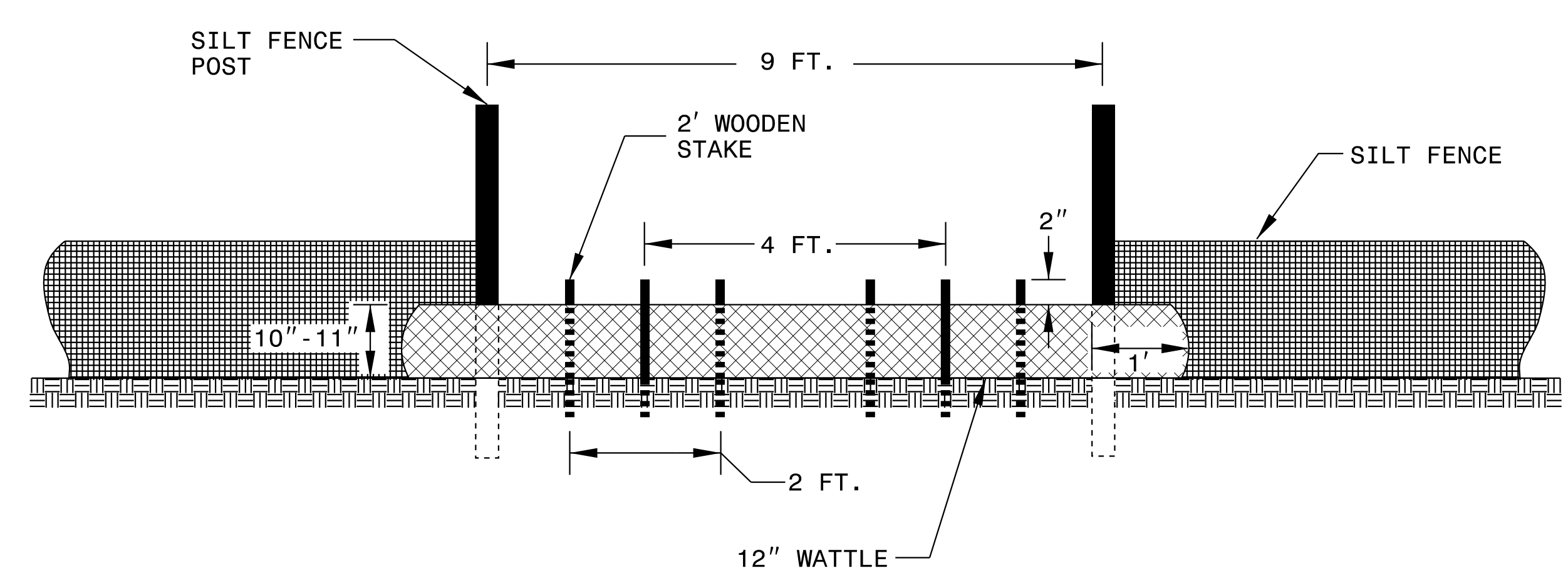
SECTION B-B

NOT TO SCALE

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW

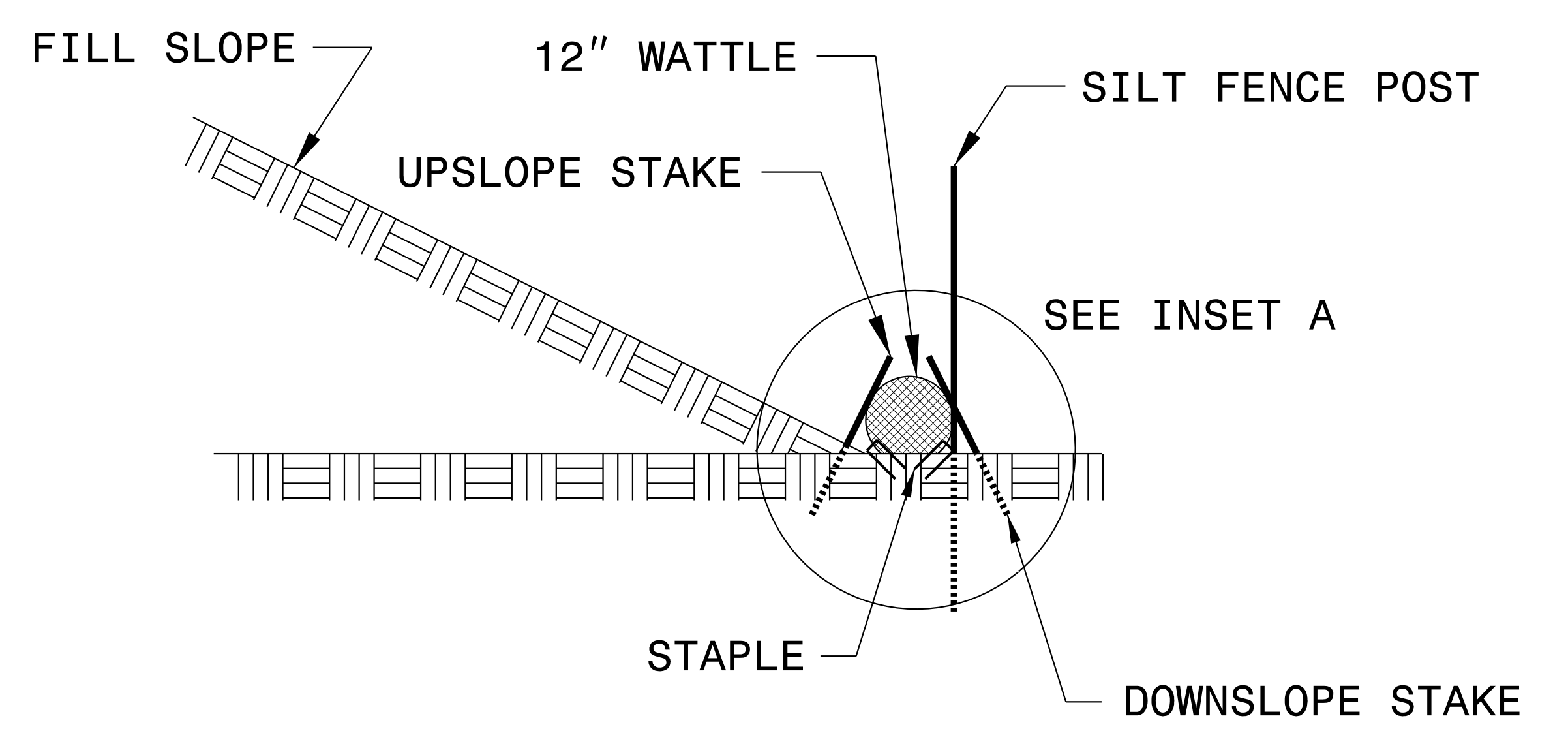
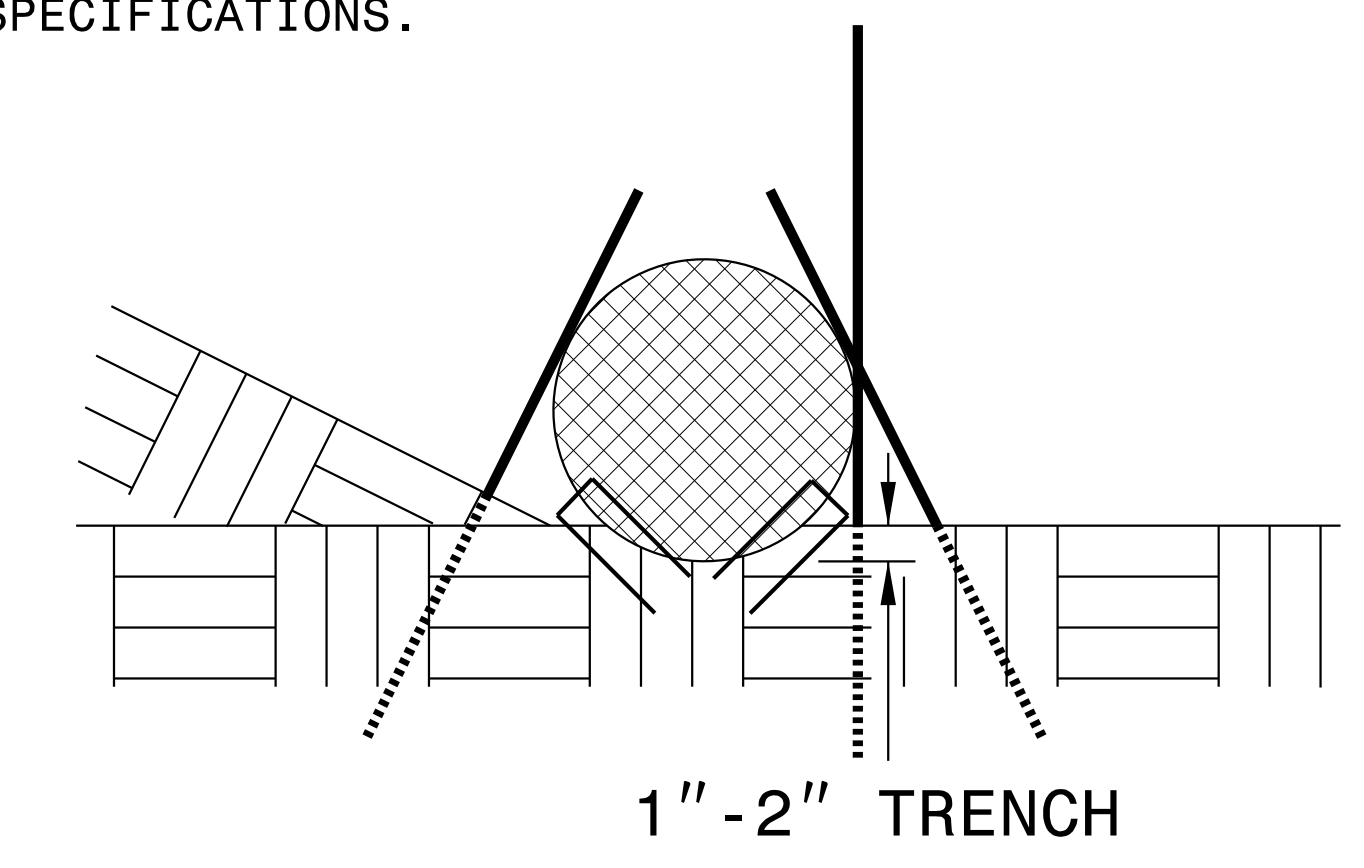


VIEW FROM SLOPE

NOTES:

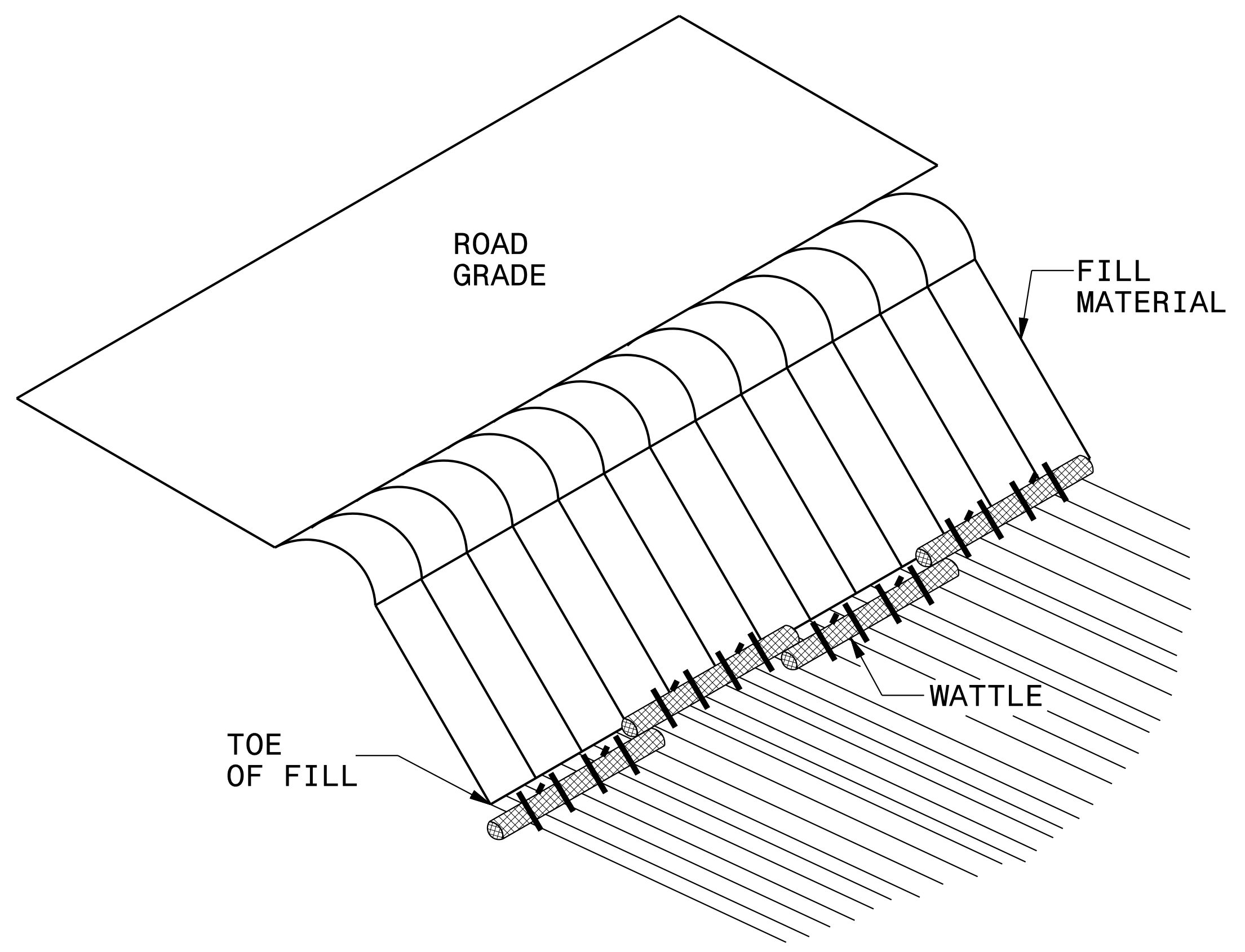
- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- 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.
- WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
- INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A

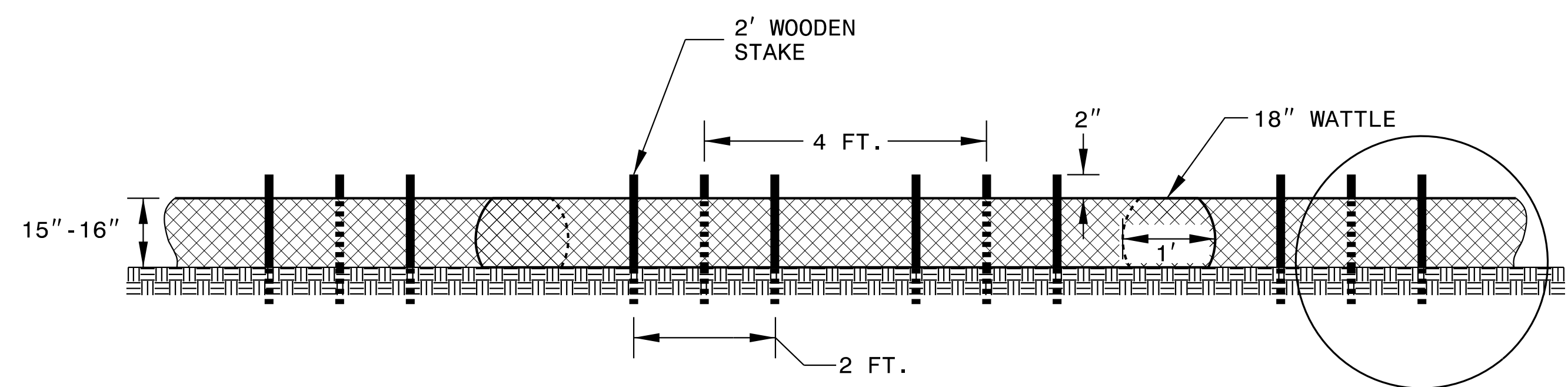


SIDE VIEW

COIR FIBER WATTLE BARRIER DETAIL



ISOMETRIC VIEW



FRONT VIEW

NOTES:

USE MINIMUM 18 IN. NOMINAL DIAMETER COIR FIBER (COCONUT) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 2 TO 3 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLES ON TOE OF SLOPE.

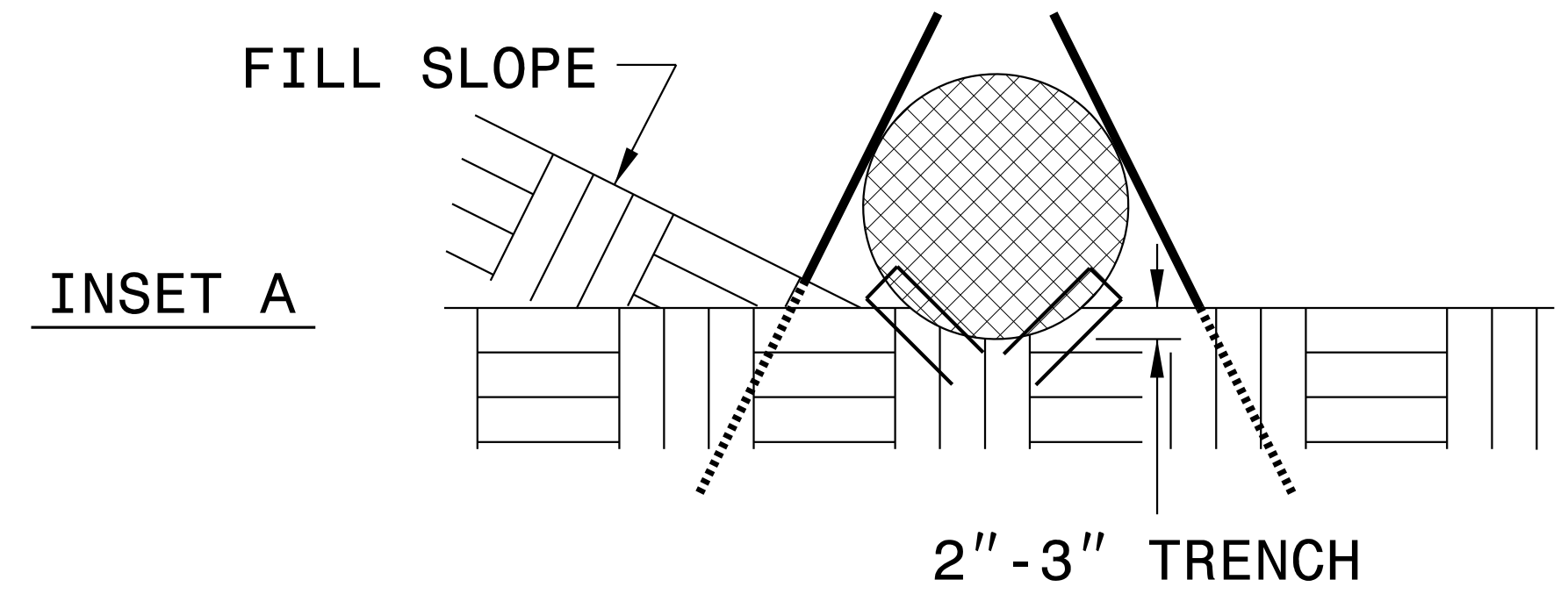
USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

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

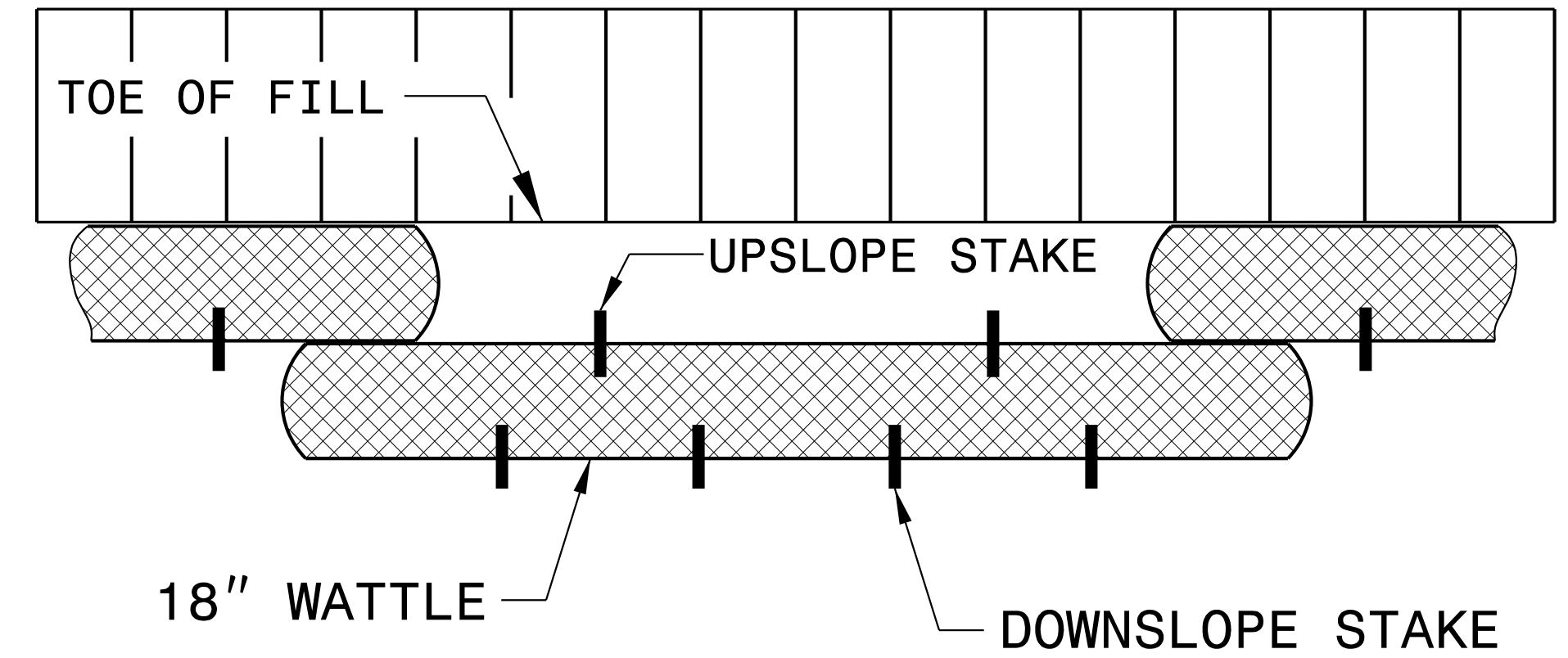
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

FOR BREAKS ALONG LARGE SLOPES, USE MAXIMUM SPACING OF 25 FT.



INSET A



TOP VIEW

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
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.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

NOTE: THE OUTSIDE BUFFER, WETLAND, OR WATER BOUNDARY SHALL BE CLEARLY MARKED BY HIGHLY VISIBLE FENCING (ORANGE SAFETY FENCE).

NOTE: IMPERVIOUS DIKES MAY BE MODIFIED AND/OR ELIMINATED AS DIRECTED.

-L-		
PI Sta 16+37.50	PI Sta 23+85.79	PI Sta 26+73.45
$\Delta = 26^{\circ} 22' 00.6" (RT)$	$\Delta = 10^{\circ} 59' 17.3" (RT)$	$\Delta = 10^{\circ} 59' 17.3" (LT)$
$D = 3' 28" 20.9"$	$D = 3' 49' 11.0"$	$D = 3' 49' 11.0"$
$L = 759.31'$	$L = 287.67'$	$L = 287.67'$
$T = 386.50'$	$T = 144.28'$	$T = 144.28'$
$R = 1,650.00'$	$R = 1,500.00'$	$R = 1,500.00'$
$SE = 0.04$	$SE = 0.04$	$SE = 0.04$
$RO = 108'$	$RO = 108'$	$RO = 108'$

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

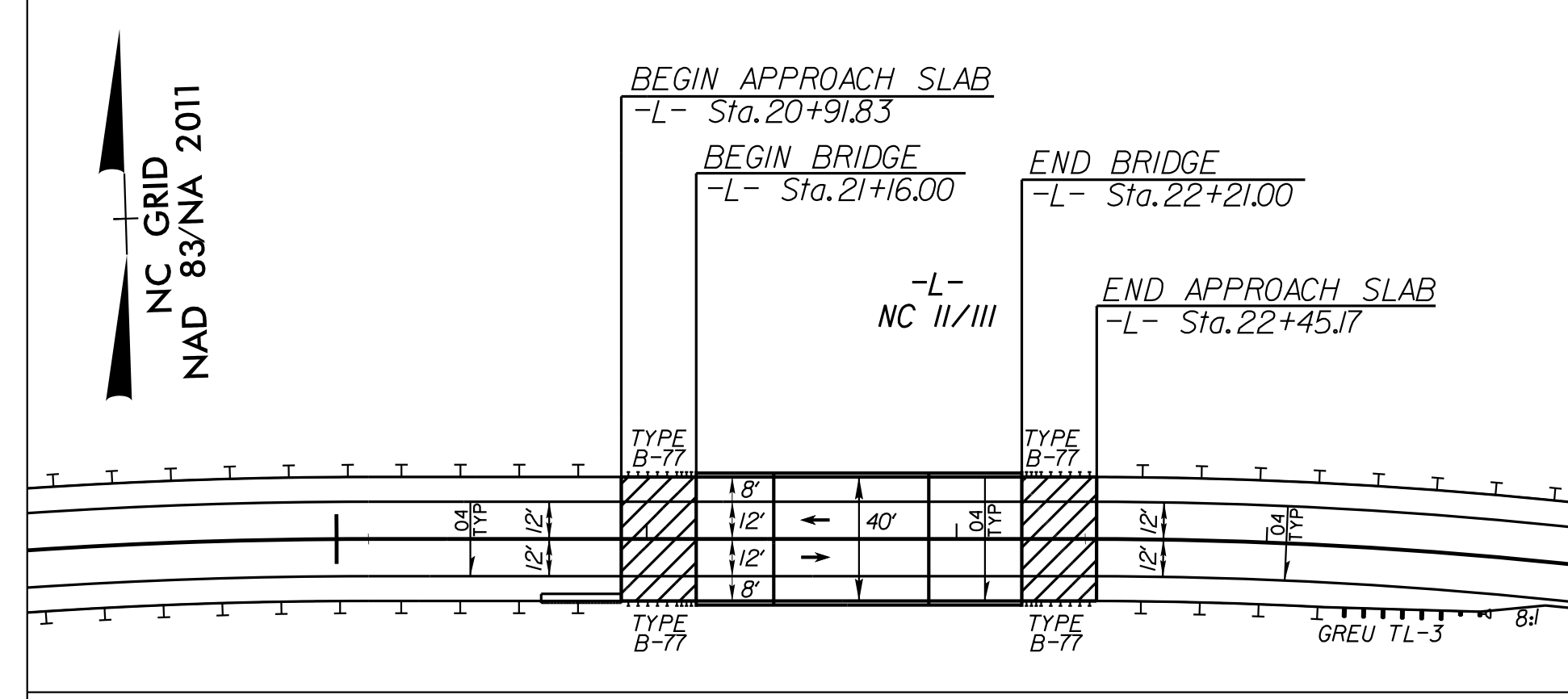
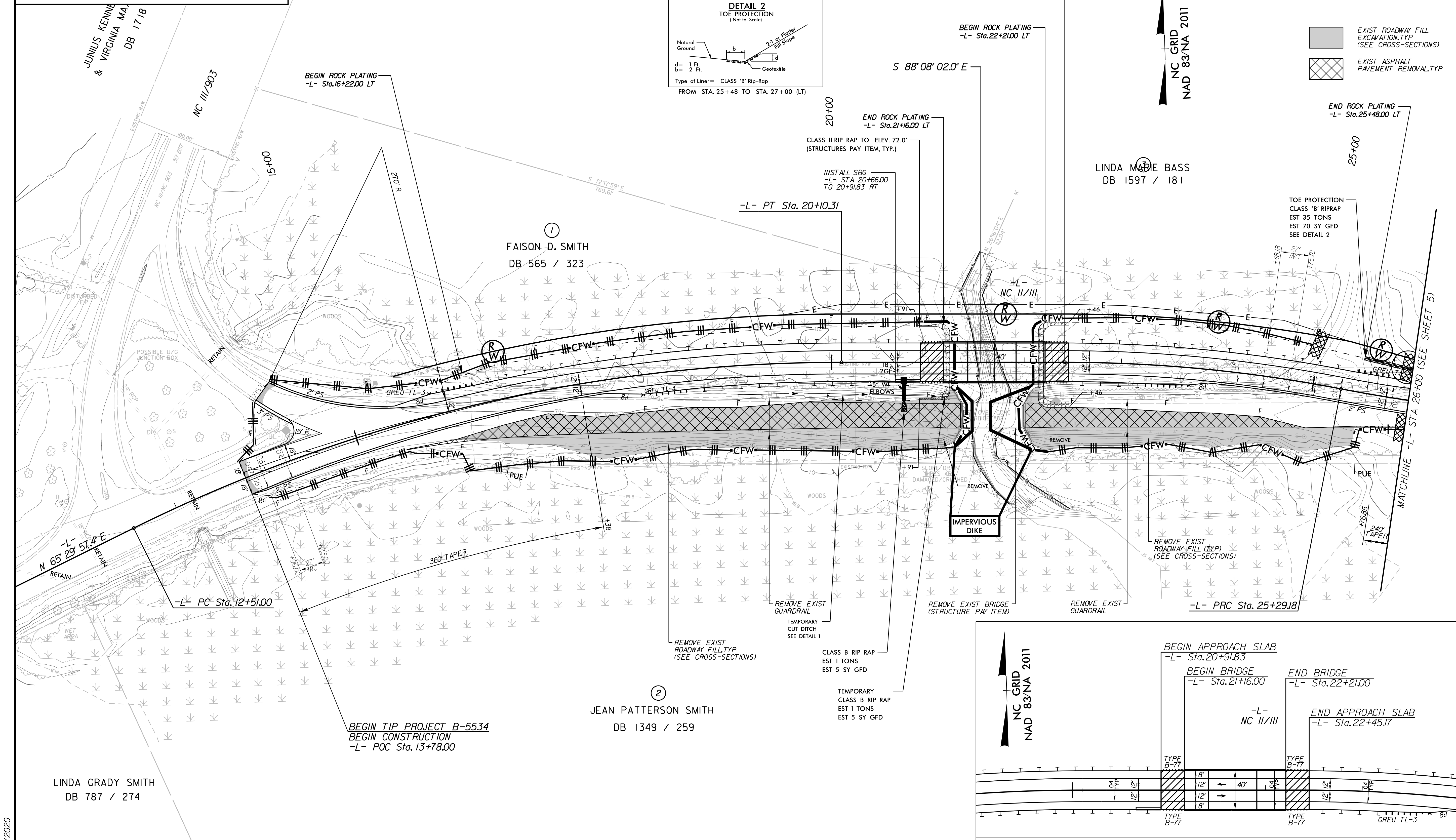
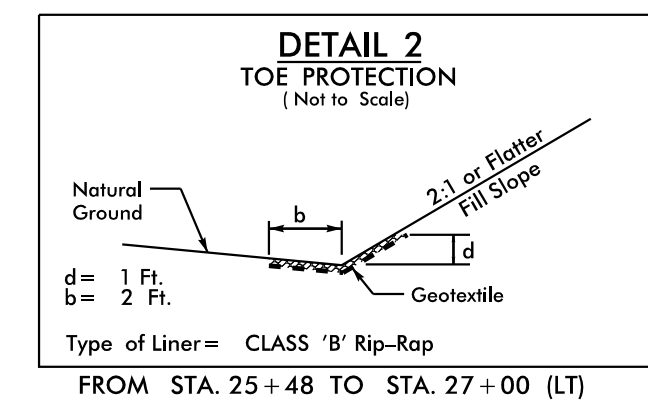
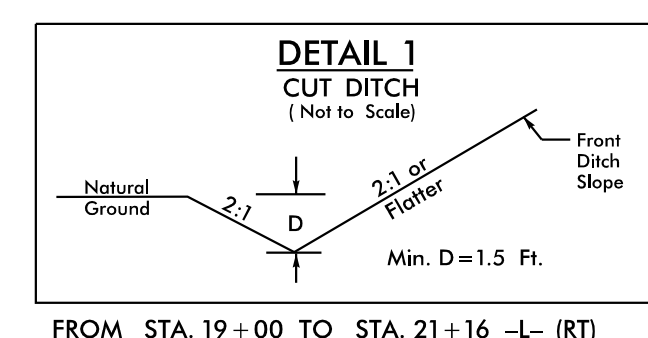
NOTE: UTILIZE TEMPORARY SEDIMENT BASIN OR SPECIAL STILLING BASIN(S) AS STILLING BASIN WHERE APPLICABLE.

NOTE: USE 1.0 FT WEIR HEIGHT FOR TEMPORARY ROCK SILT CHECKS TYPE - A THAT ARE NOT LABELED.

PROJECT REFERENCE NO.	SHEET NO.
B-5534	EC-4/CONST.4

Kimley Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, N.C. 27601

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 4



SEE SHEET 6 FOR -L- PROFILE

DETAIL SHOWING BRIDGE / PAVEMENT RELATIONSHIP

3/13/2020

5/14/1999

-L-
 PI Sta 26+73.45
 $\Delta = 10^{\circ} 59' 17.3''$ (LT)
 $D = 3^{\circ} 49' 11.0''$
 $L = 287.67'$
 $T = 144.28'$
 $R = 1,500.00'$
 $SE = 0.04$
 $RO = 108'$

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

 ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

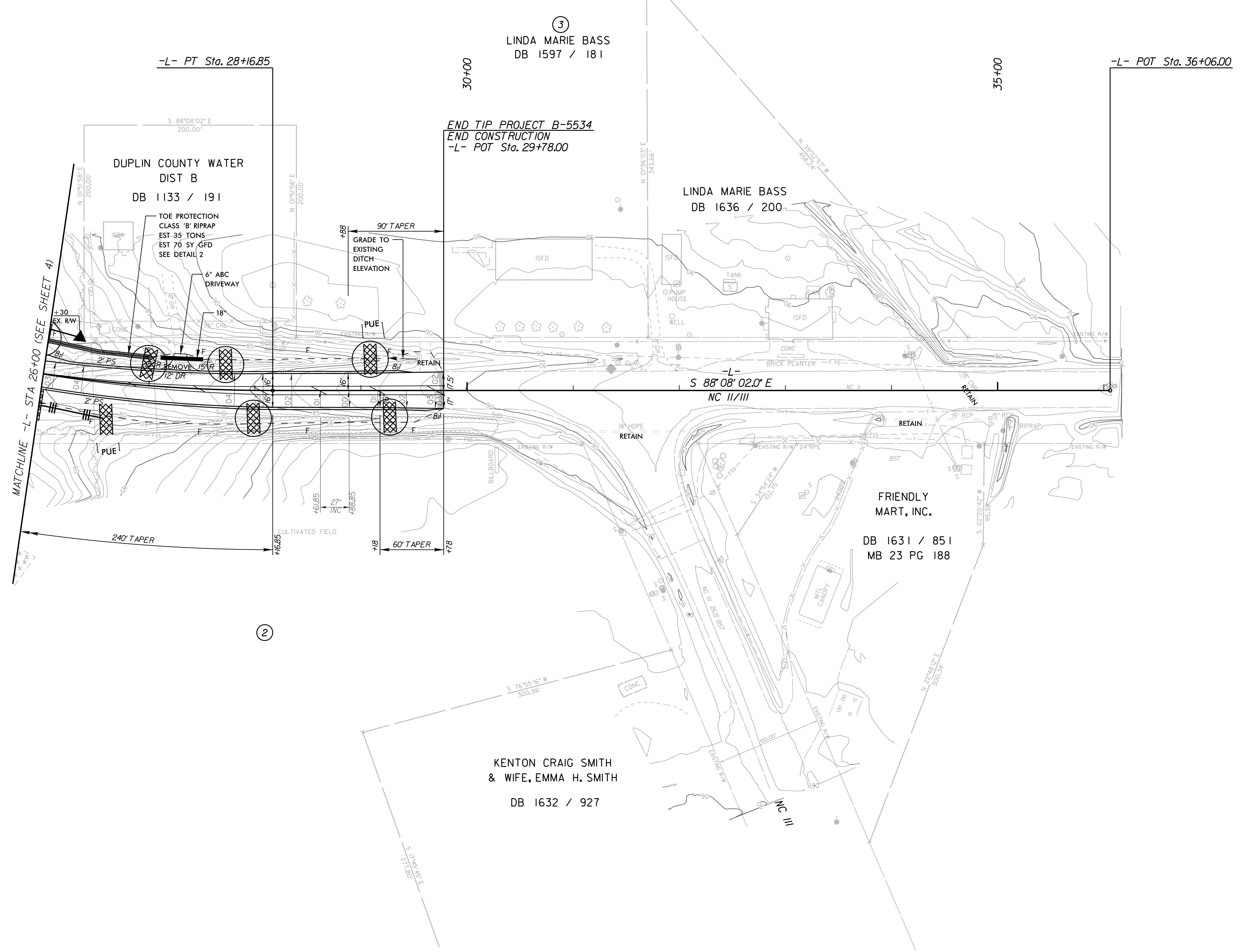
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

 NOTE: USE 1.0 FT WEIR HEIGHT FOR TEMPORARY ROCK SILT CHECKS TYPE - A THAT ARE NOT LABELED.

Kimley Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, N.C. 27601

 CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 5

PROJECT REFERENCE NO.	SHEET NO.
B-5534	EC-5/CONST.5



NAD 83/NA 2011

SEE SHEET 6 FOR -L- PROFILE

3/13/2020

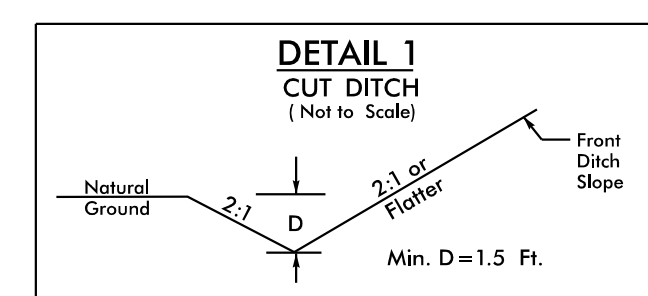
NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

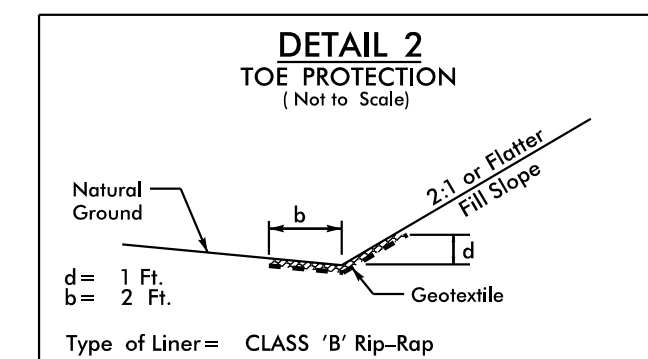
NOTE: THE OUTSIDE BUFFER, WETLAND, OR WATER BOUNDARY SHALL BE CLEARLY MARKED BY HIGHLY VISIBLE FENCING (ORANGE SAFETY FENCE).

-L-		
PI Sta 16+37.50	PI Sta 23+85.79	PI Sta 26+73.45
$\Delta = 26^{\circ} 22' 00.6" (RT)$	$\Delta = 10^{\circ} 59' 17.3" (RT)$	$\Delta = 10^{\circ} 59' 17.3" (LT)$
D = 3' 28" 20.9"	D = 3' 49" 11.0"	D = 3' 49" 11.0"
L = 759.31'	L = 287.67'	L = 287.67'
T = 386.50'	T = 144.28'	T = 144.28'
R = 1,650.00'	R = 1,500.00'	R = 1,500.00'
SE = 0.04	SE = 0.04	SE = 0.04
RO = 108'	RO = 108'	RO = 108'

Place Matting for Erosion Control in Temporary Ditches and Diversions.



FROM STA. 19+00 TO STA. 21+16 -L- (RT)



FROM STA. 25+48 TO STA. 27+00 (LT)

NOTE: UTILIZE TEMPORARY SEDIMENT BASIN OR SPECIAL STILLING BASIN(S) AS STILLING BASIN WHERE APPLICABLE.

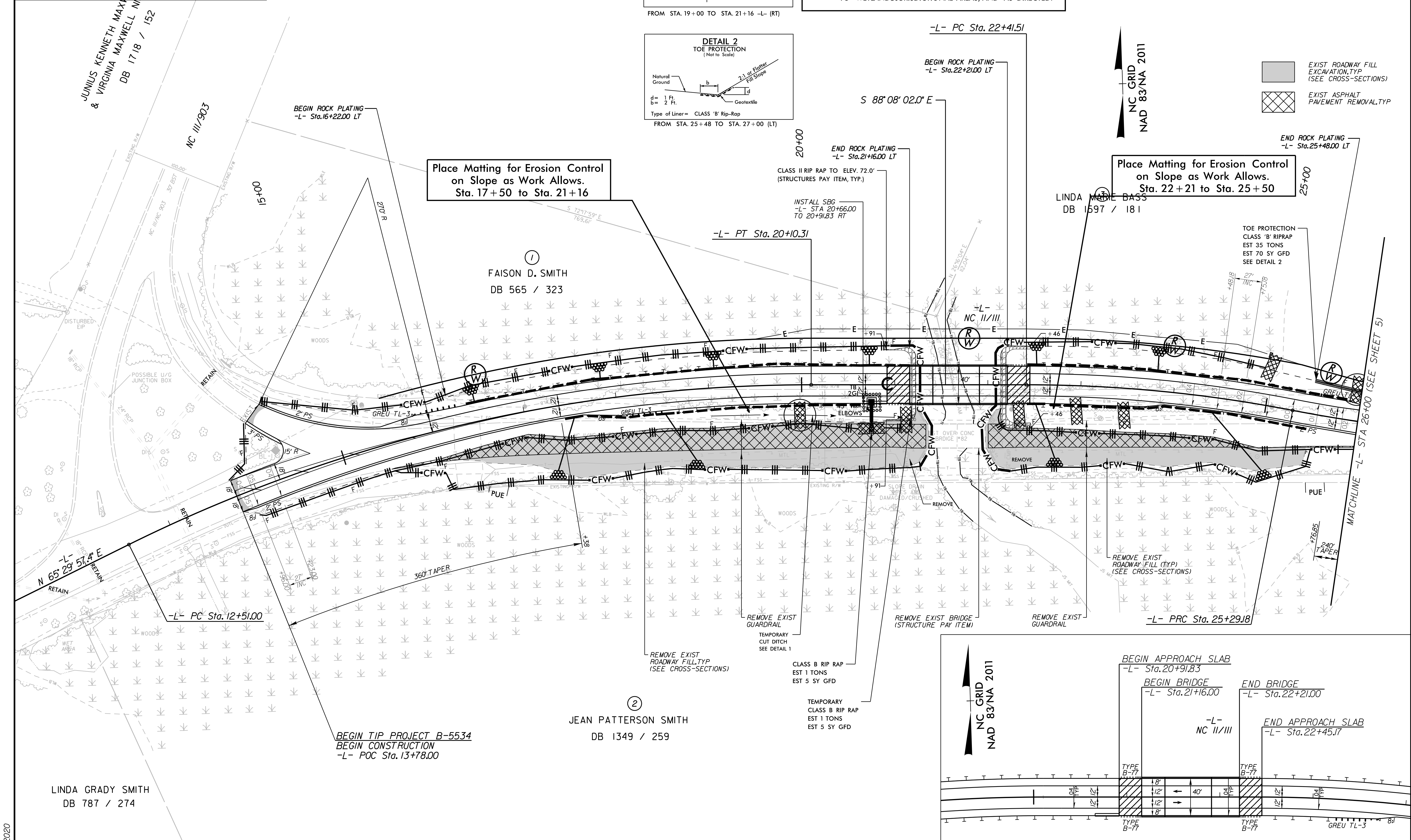
NOTE: USE 1.0 FT WEIR HEIGHT FOR TEMPORARY ROCK SILT CHECKS TYPE - A THAT ARE NOT LABELED.

NOTE: UTILIZE COIR FIBER MATTING ADJACENT TO WETLANDS/JURISDICTIONAL AREAS, AND AS DIRECTED.

Kimley Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, N.C. 27601

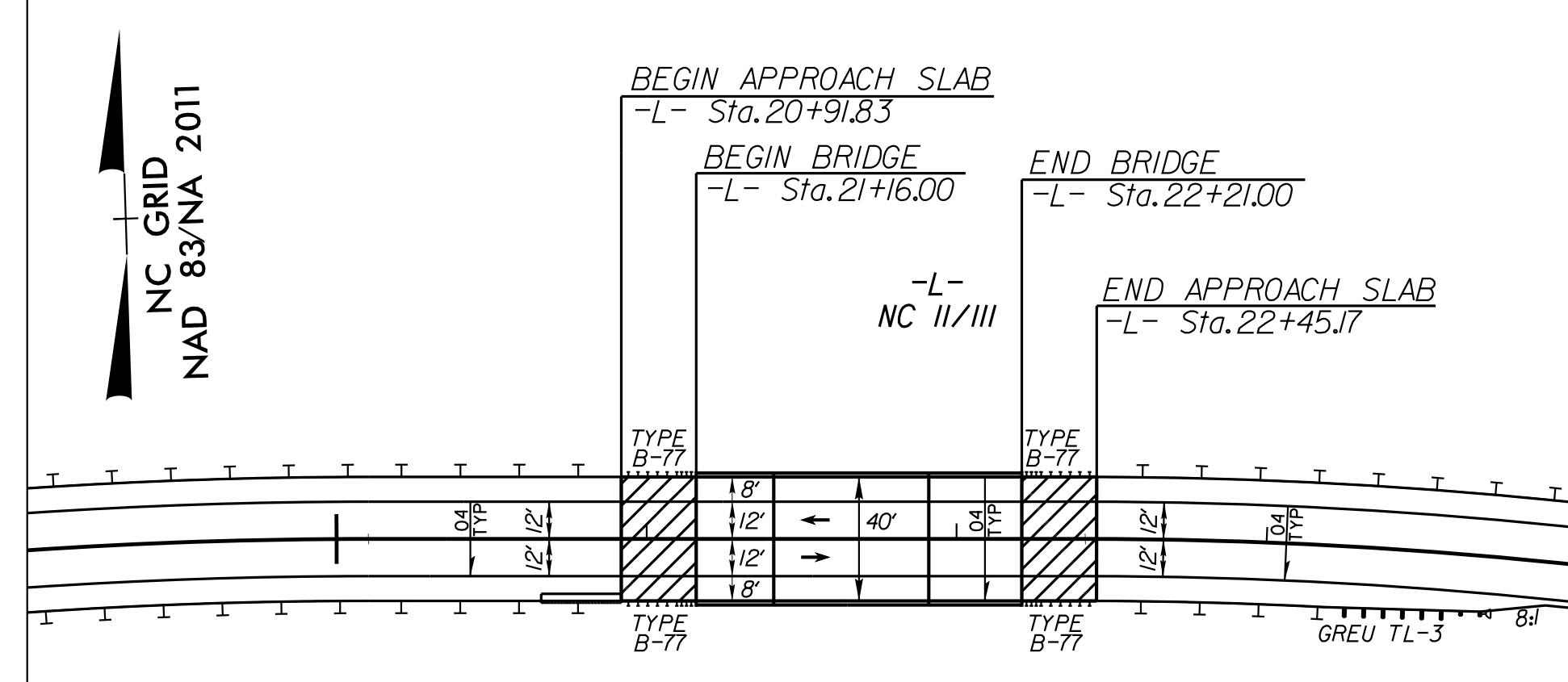
FINAL
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 4

PROJECT REFERENCE NO.	SHEET NO.
B-5534	EC-6/CONST.4



Place Matting for Erosion Control on Slope as Work Allows. Sta. 17+50 to Sta. 21+16

Place Matting for Erosion Control on Slope as Work Allows. Sta. 22+21 to Sta. 25+50



SEE SHEET 6 FOR -L- PROFILE

DETAIL SHOWING BRIDGE / PAVEMENT RELATIONSHIP

3/13/2020

LINDA GRADY SMITH
DB 787 / 274

JEAN PATTERSON SMITH
DB 1349 / 259

BEGIN TIP PROJECT B-5534
BEGIN CONSTRUCTION
-L- POC Sta. 13+78.00

EXIST ROADWAY FILL
 EXCAVATION, TYP
 (SEE CROSS-SECTIONS)

EXIST ASPHALT
 PAVEMENT REMOVAL, TYP

TOE PROTECTION
CLASS 'B' RIPRAP
EST 35 TONS
EST 70 SY GFD
SEE DETAIL 2

REMOVE EXIST BRIDGE
(STRUCTURE PAY ITEM)

REMOVE EXIST GUARDRAIL

REMOVE EXIST GUARDRAIL

REMOVE EXIST ROADWAY FILL, TYP
(SEE CROSS-SECTIONS)

CLASS B RIP RAP
EST 1 TONS
EST 5 SY GFD

TEMPORARY CLASS B RIP RAP
EST 1 TONS
EST 5 SY GFD

BEGIN APPROACH SLAB
-L- Sta. 20+91.83

BEGIN BRIDGE
-L- Sta. 21+16.00

END BRIDGE
-L- Sta. 22+21.00

END APPROACH SLAB
-L- Sta. 22+45.17

TYPE B-77

TYPE B-77

TYPE B-77

TYPE B-77

TYPE B-77

TYPE B-77

TYPE B-77

TYPE B-77

TYPE B-77

TYPE B-77

GREU TL-3

5/14/1999

-L-
 PI Sta 26+73.45
 $\Delta = 10^{\circ} 59' 17.3''$ (LT)
 D = 3' 49' 11.0"
 L = 287.67'
 T = 144.28'
 R = 1,500.00'
 SE = 0.04
 RO = 108'

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 5

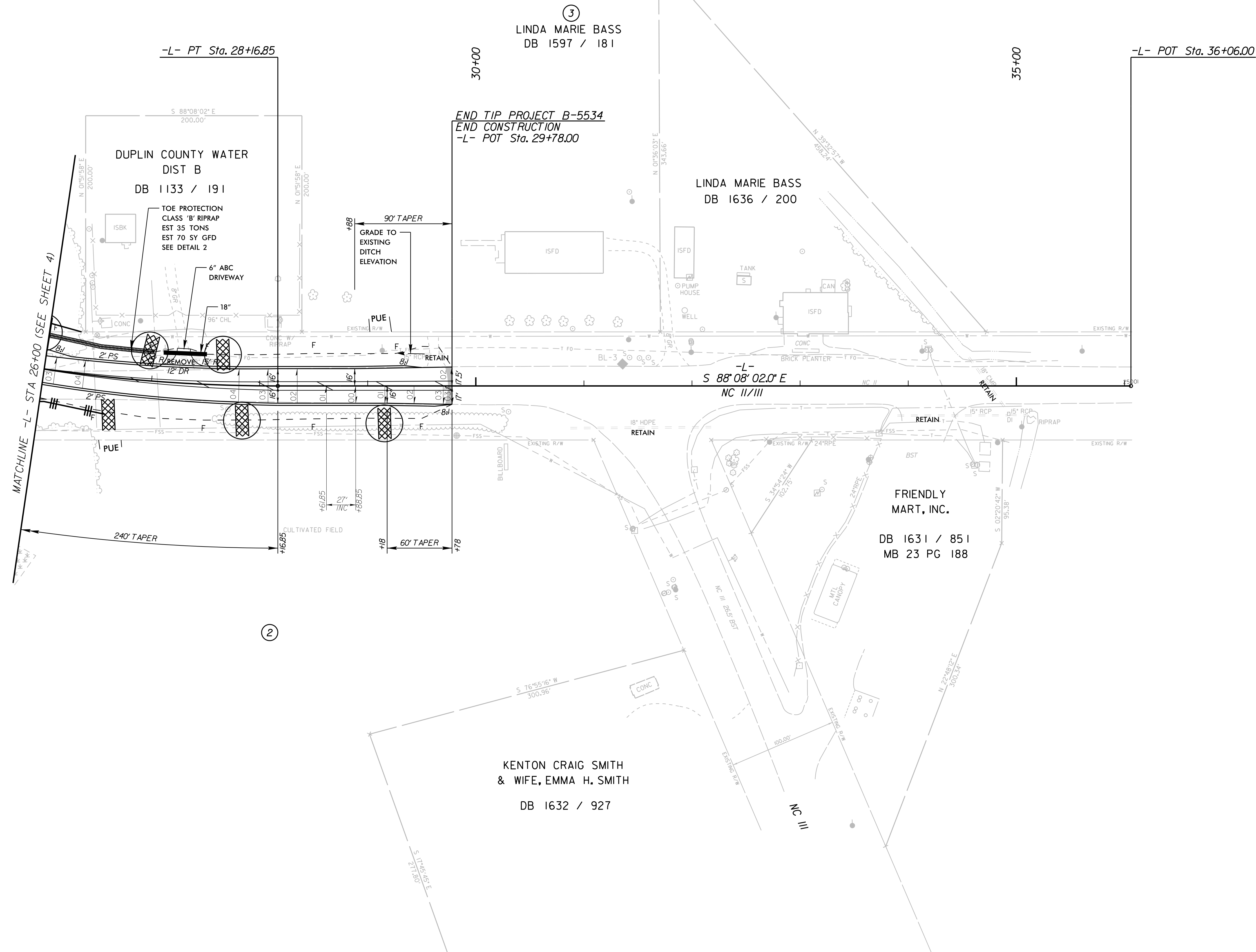
NOTE: USE 1.0 FT WEIR HEIGHT FOR TEMPORARY ROCK SILT CHECKS TYPE - A THAT ARE NOT LABELED.

NOTE: UTILIZE COIR FIBER MATTING ADJACENT TO WETLANDS/JURISDICTIONAL AREAS, AND AS DIRECTED.

Kimley & Horn

421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
B-5534	EC-7/CONST.5



NAD 83/NA 2011

SEE SHEET 6 FOR -L- PROFILE

3/13/2020