

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0041	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67041.1.1		PE	

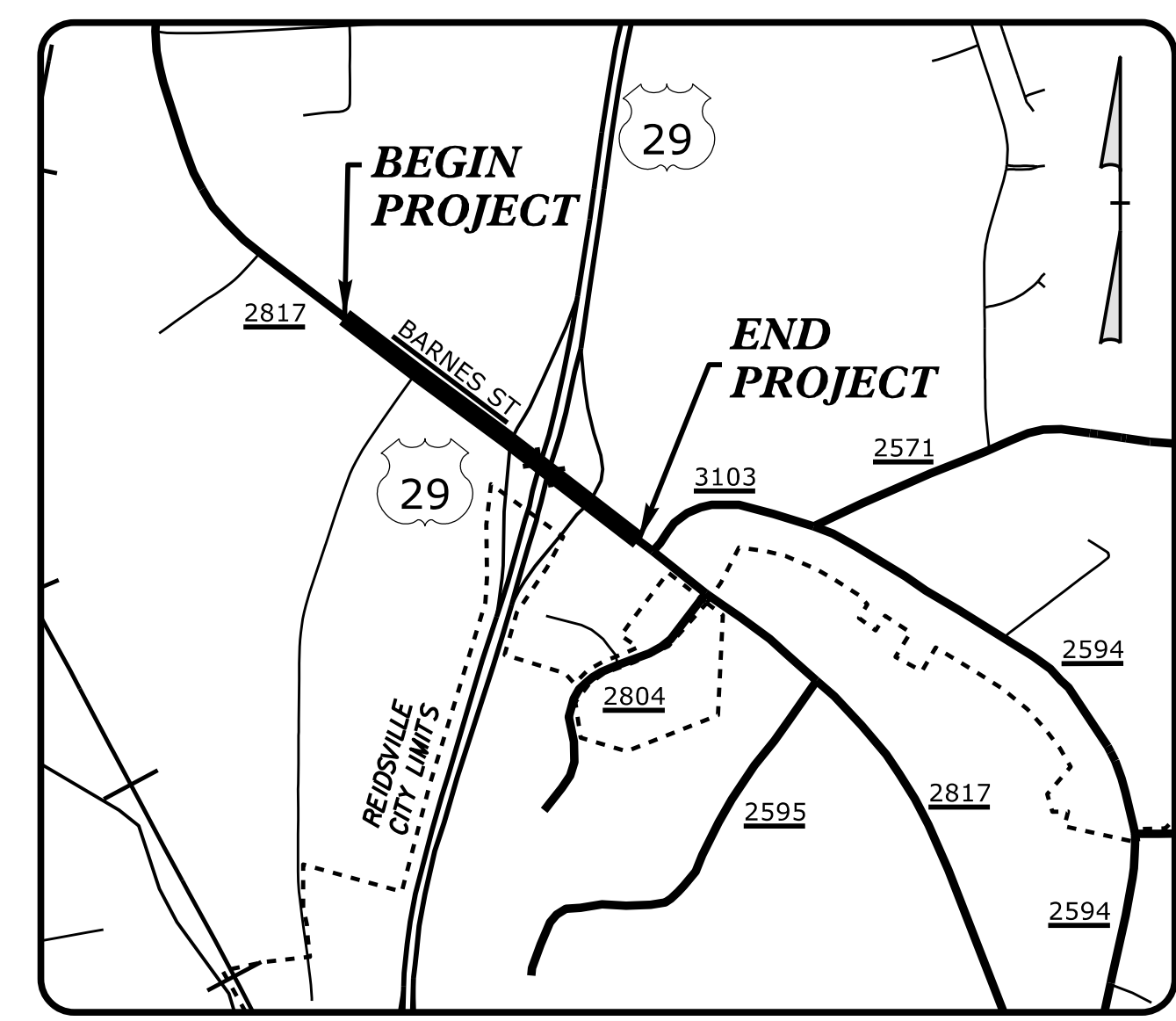
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

ROCKINGHAM COUNTY

LOCATION: BRIDGE 780001 ON SR 2817 (BARNES ST) OVER US 29

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

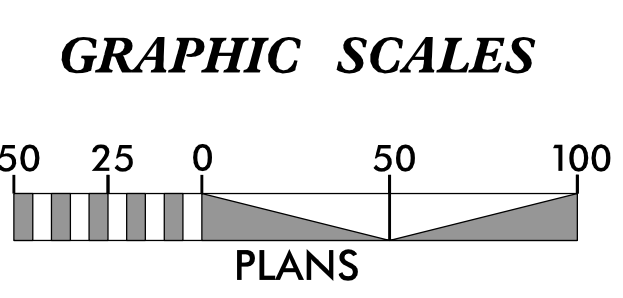
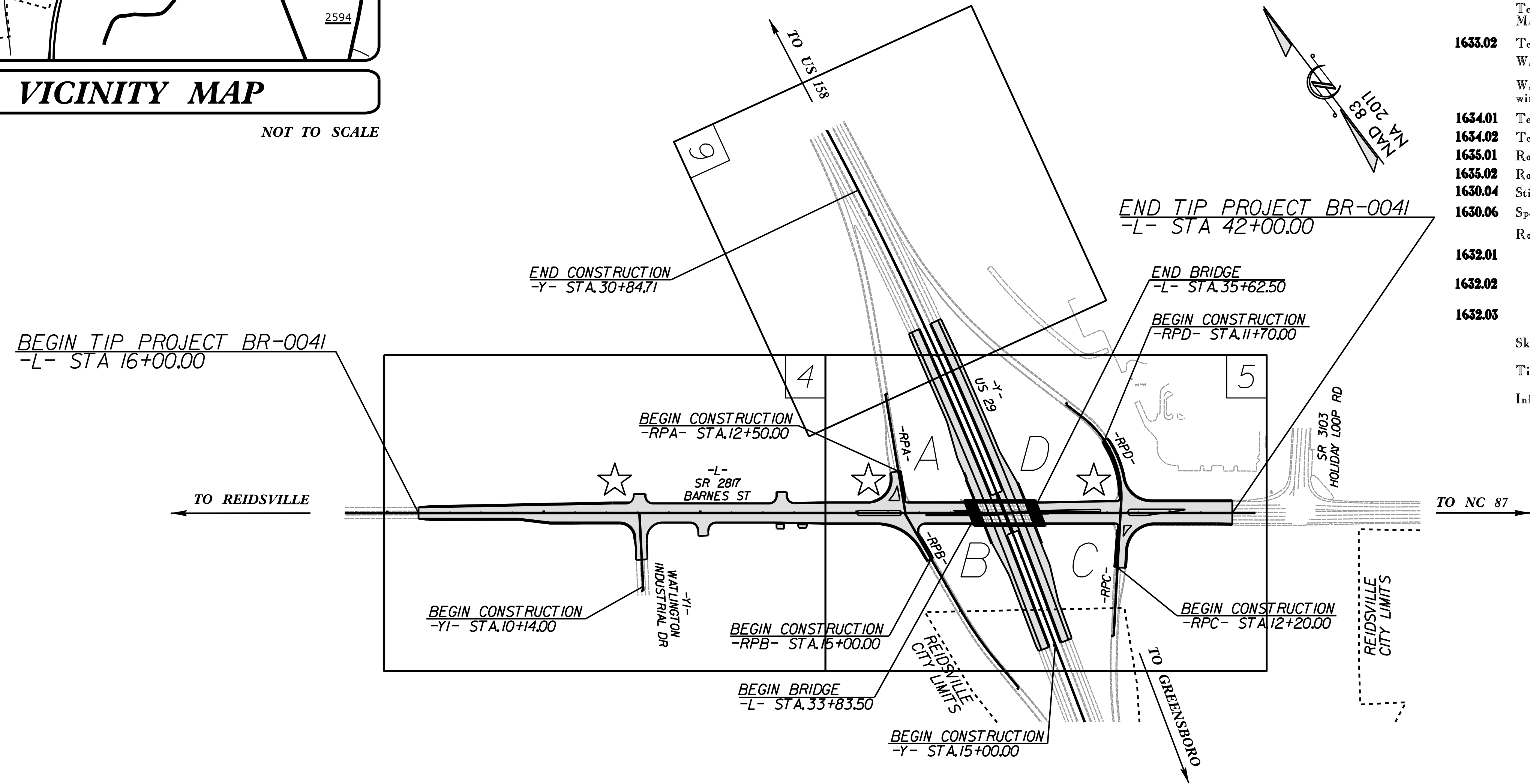


VICINITY MAP

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EROSION AND SEDIMENT CONTROL MEASURES

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



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.



Prepared in the Office of:
AECOM
Firm License No. F-0342
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Raleigh NC 27607
+1-919-461-1100

Designed by:
RENE REMY, CPESC, CPSWQ 3125
NAME LEVEL III CERTIFICATION NO.

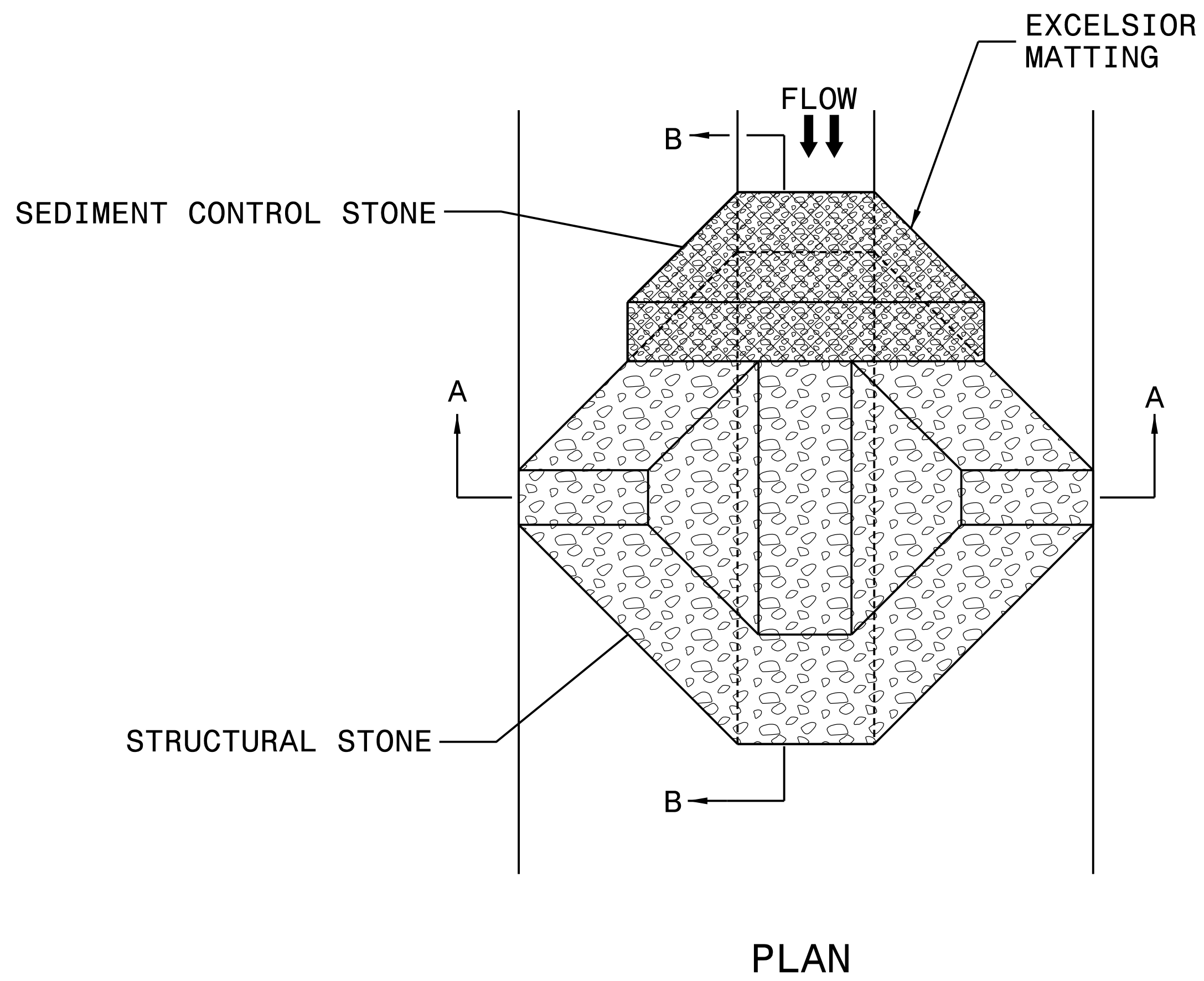
Roadway Standard Drawings

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	1640.01	Coir Fiber Baffle
1631.01	Matting Installation	1645.01	Temporary Stream Crossing

CONTRACT: C204793 TIP PROJECT: BR-0041
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TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



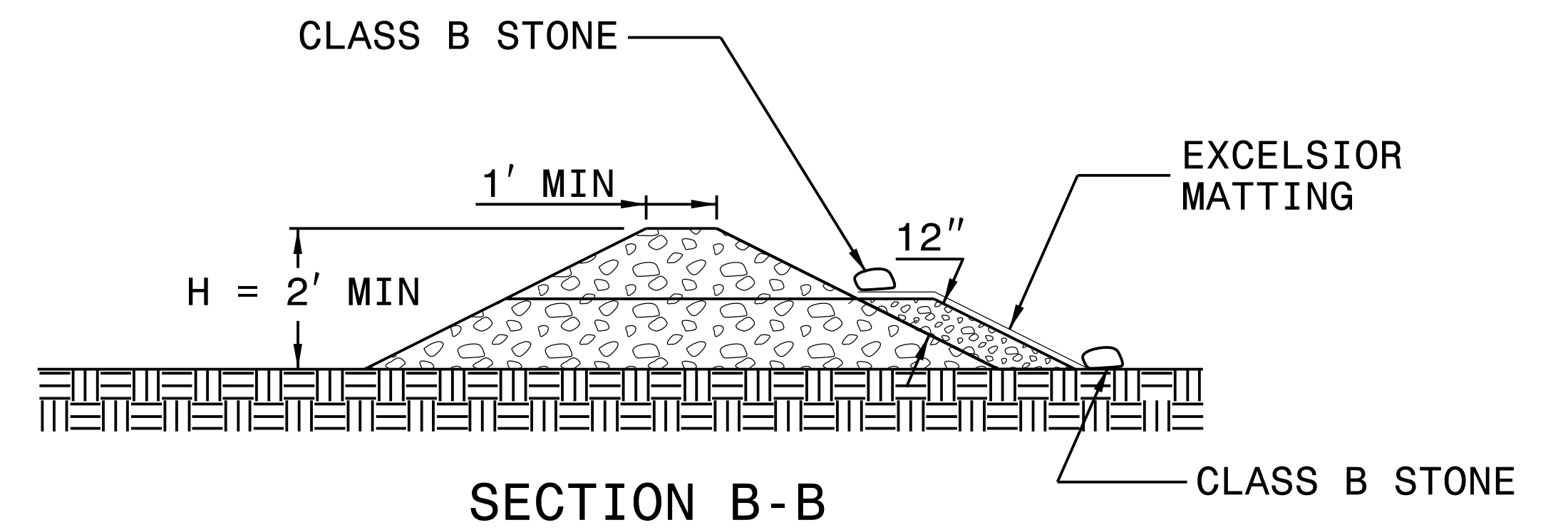
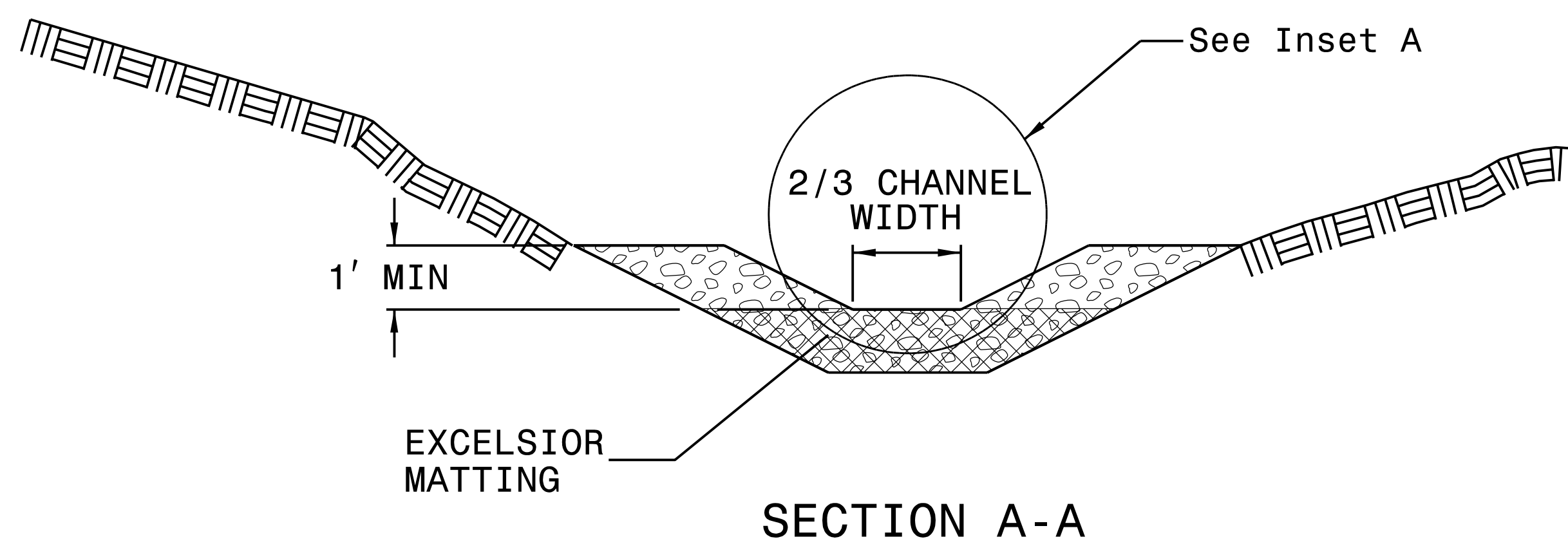
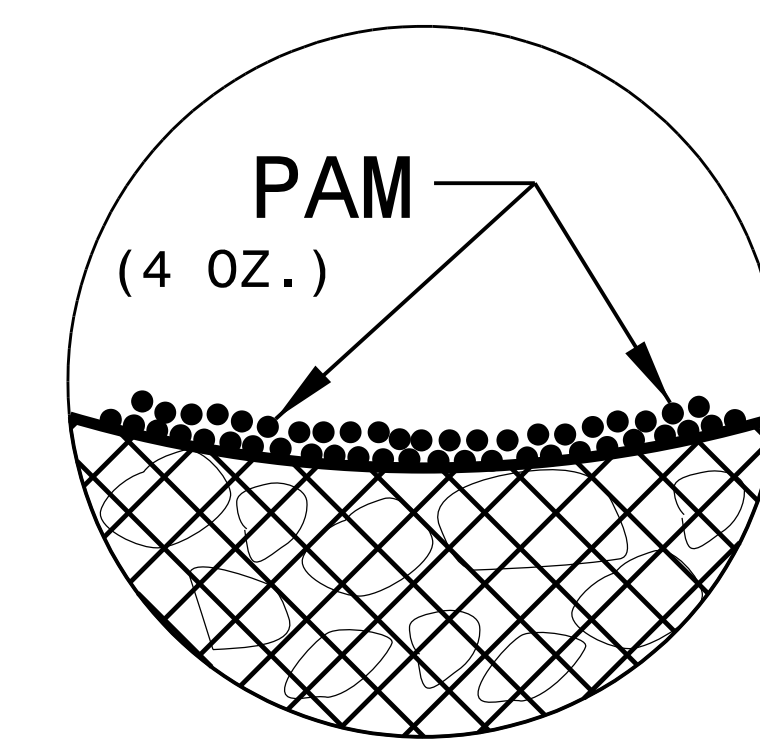
NOTES:

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.

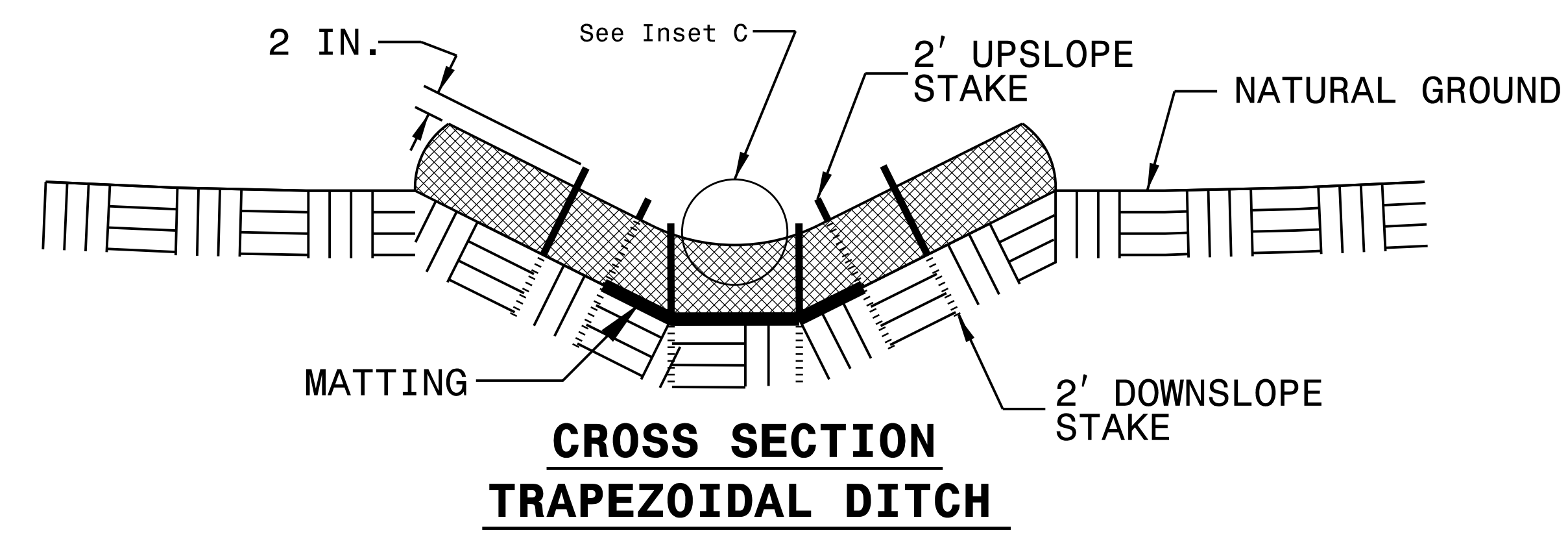
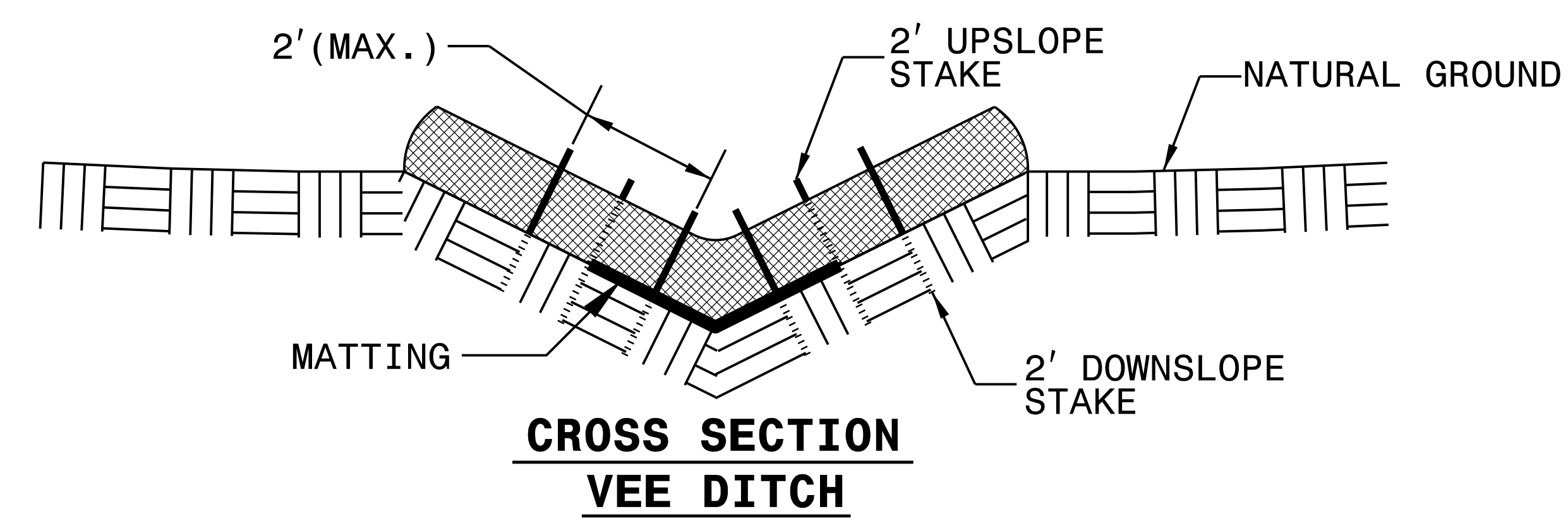
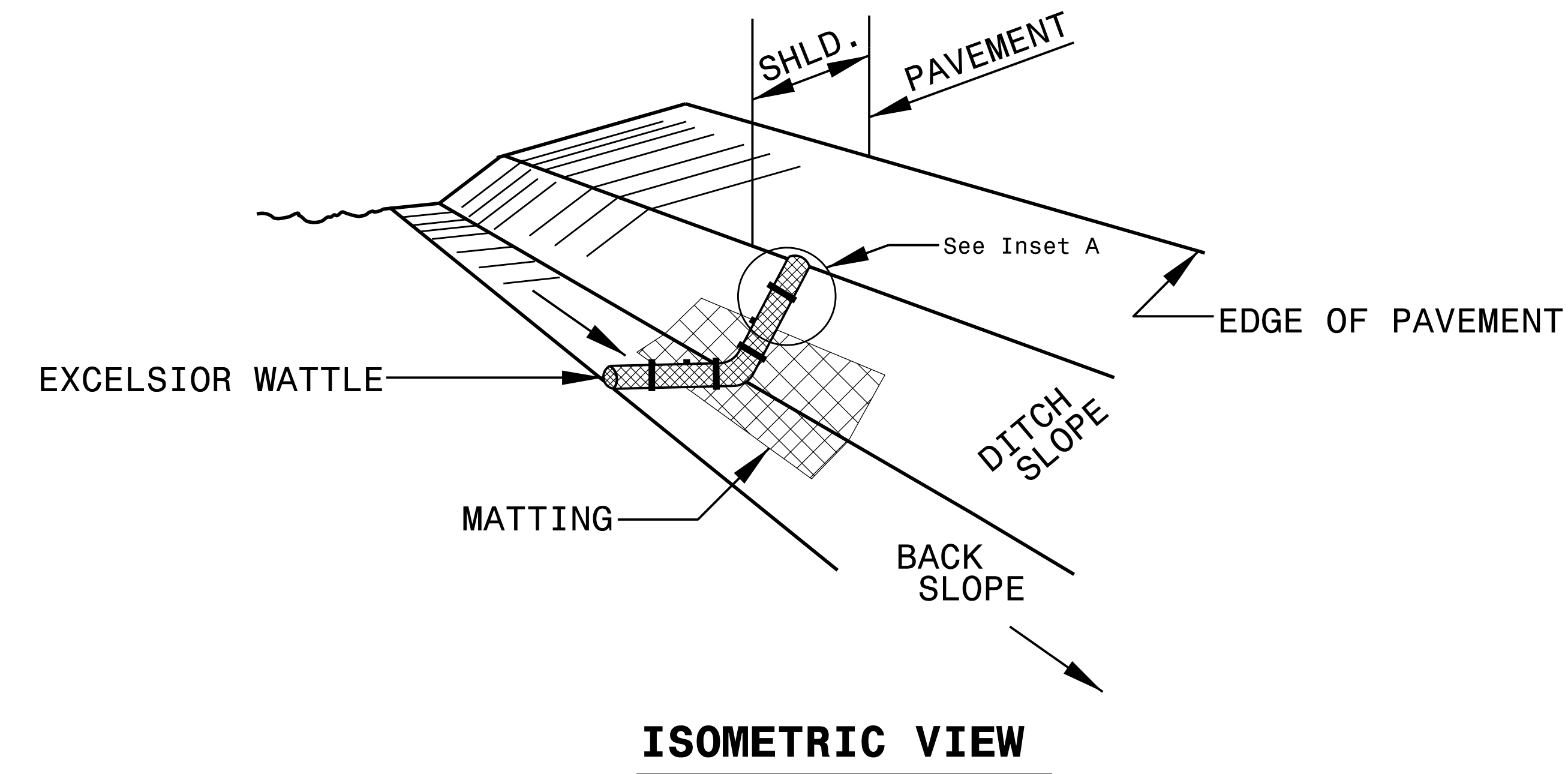
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



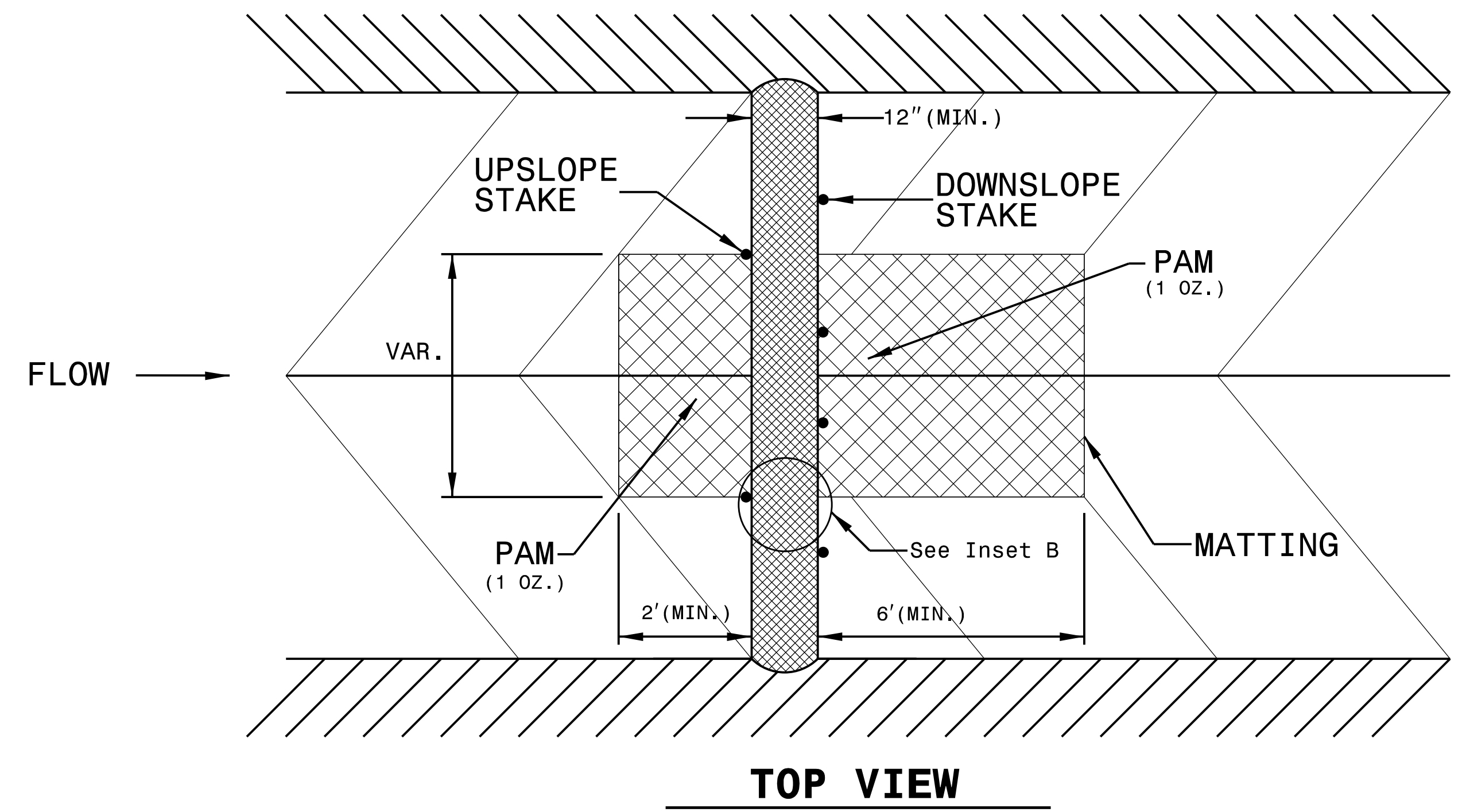
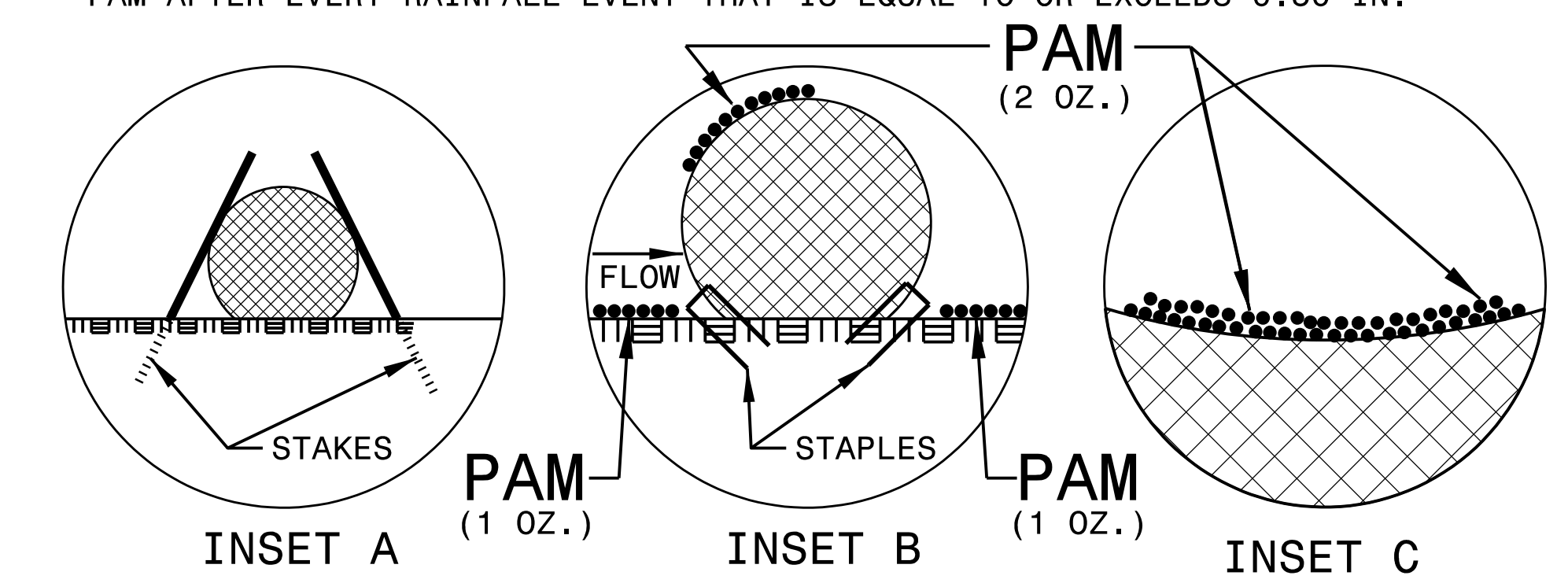
NOT TO SCALE

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I:\74561\SMU BR-0041\900-CAD\GIS\910-CAD\70-CAD\70-NCDDOT-TIP\Erosion Control\Design\230-BR-0041-EC-02-TRAC A with PAM Detail.dgn

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



- 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.



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-Y-
 PI Sta 18+01.07
 Δs = 0° 28' 38.9"
 Ls = 200.00'
 LT = 133.33'
 ST = 66.67'

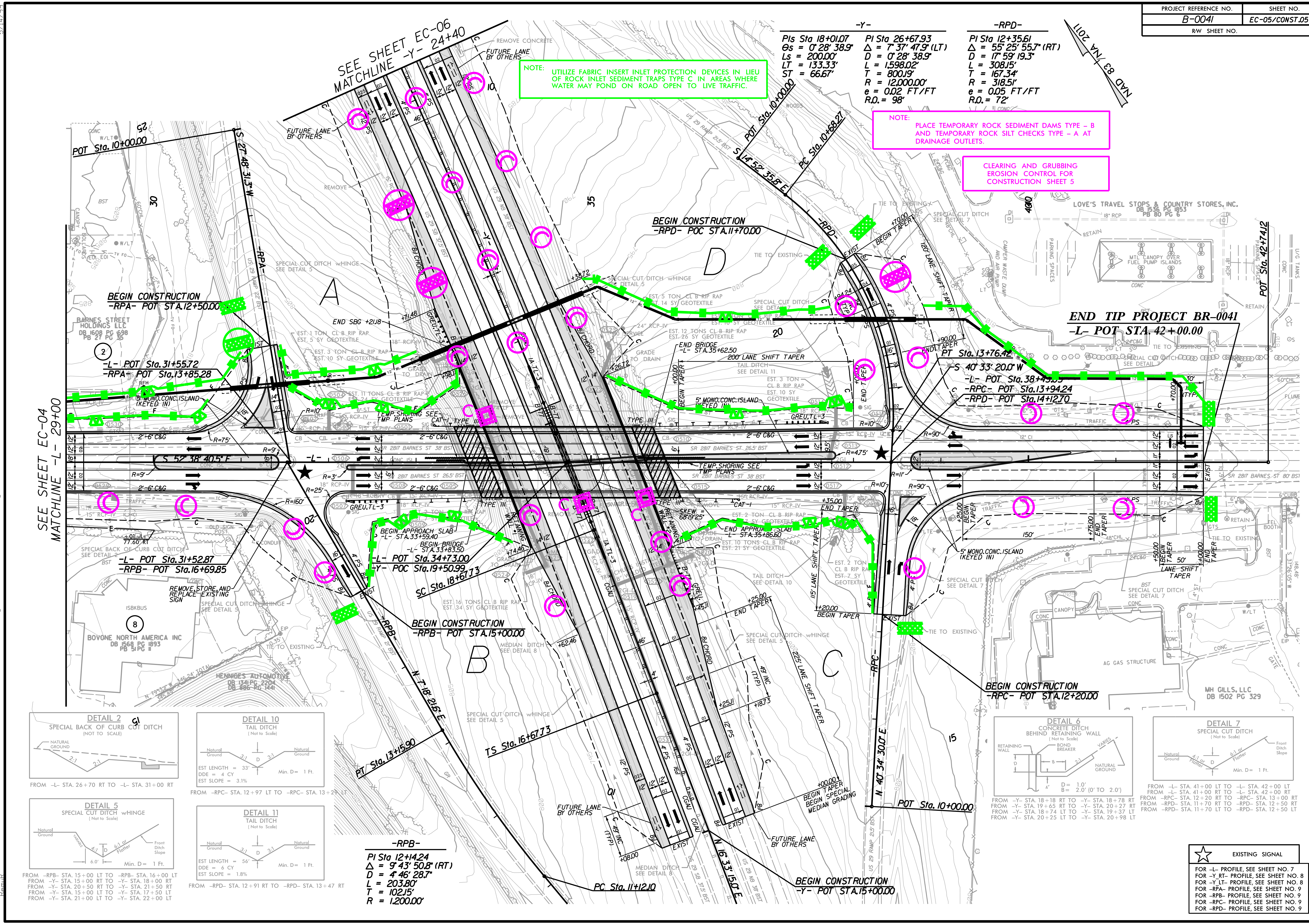
 PI Sta 26+67.93
 Δ = 7° 37' 47.9" (LT)
 D = 0° 28' 38.9"
 L = 1,598.02'
 T = 800.19'
 R = 12,000.00'
 e = 0.02 FT/FT
 R.O. = 98'

 -RPD-
 PI Sta 12+35.61
 Δ = 55° 25' 55.7" (RT)
 D = 17° 59' 19.3"
 L = 308.15'
 T = 167.34'
 R = 318.51'
 e = 0.05 FT/FT
 R.O. = 72'

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE C IN AREAS WHERE WATER MAY POND ON ROAD OPEN TO LIVE TRAFFIC.

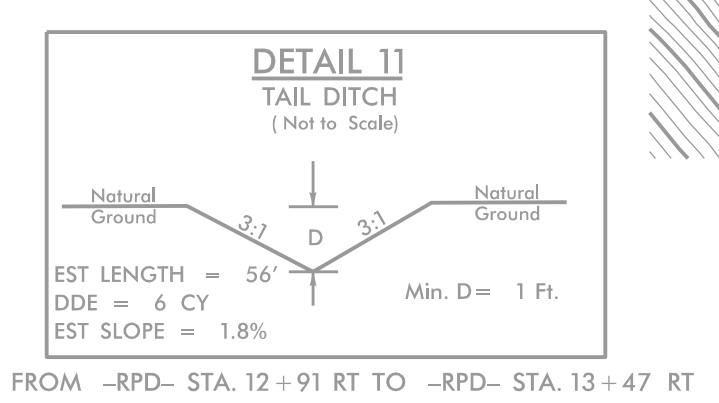
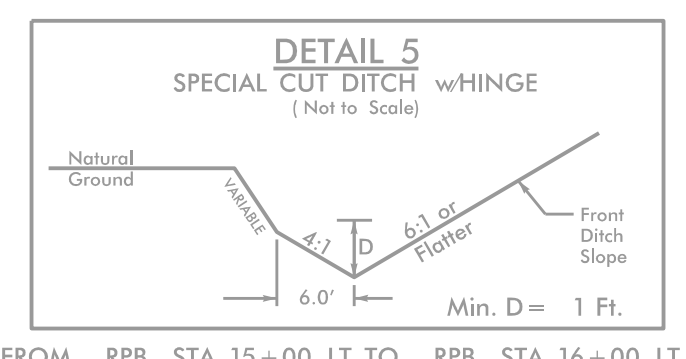
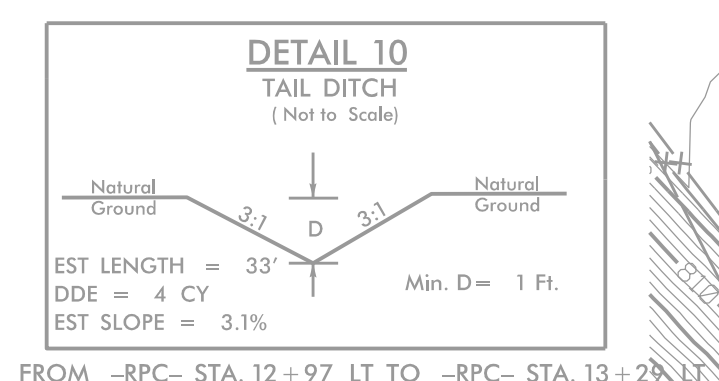
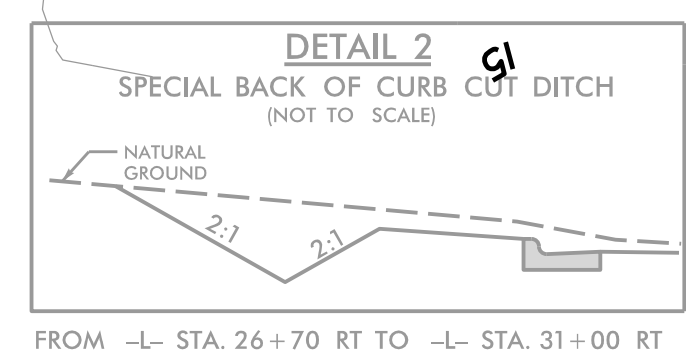
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

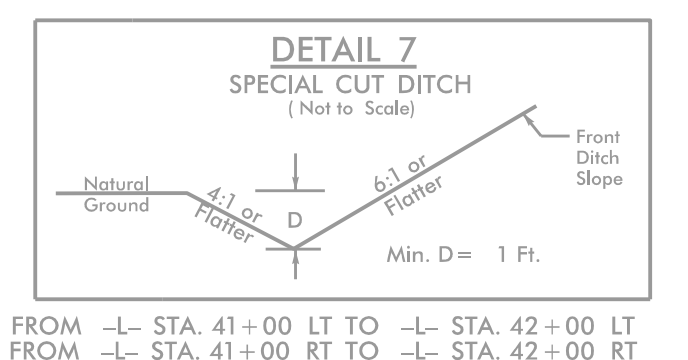
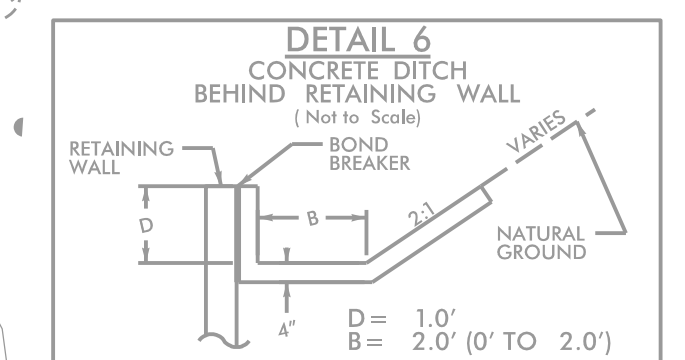


SEE SHEET EC-04
MATCHLINE -L- 29+00

SEE SHEET EC-06
MATCHLINE -Y- 24+40



-RPB-
PI Sta 12+14.24
Δ = 9° 43' 50.8" (RT)
D = 4' 46" 28.7"
L = 203.80'
T = 102.15'
R = 1,200.00'



★ EXISTING SIGNAL

FOR -L- PROFILE, SEE SHEET NO. 7
FOR -Y- RT- PROFILE, SEE SHEET NO. 8
FOR -Y- LT- PROFILE, SEE SHEET NO. 8
FOR -RPA- PROFILE, SEE SHEET NO. 9
FOR -RPB- PROFILE, SEE SHEET NO. 9
FOR -RPC- PROFILE, SEE SHEET NO. 9
FOR -RPD- PROFILE, SEE SHEET NO. 9

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135.38 PW BR-0041-900-CAD GIS\910 CAD\70 NCDOT_TIP\Erosion Control\Design\230 BR0041 EC.PSH06.CC.dgn
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-Y-

PI Sta 26+67.93 PIS Sta 35+32.42
 $\Delta = 7' 37.479''$ (LT) $\Theta_s = 0' 28' 38.9''$
 $D = 0' 28' 38.9''$ $L_s = 200.00'$
 $L = 1598.02'$ $LT = 133.33'$
 $T = 800.19'$ $ST = 66.67'$
 $R = 12,000.00'$
 $e = 0.02$ FT/FT
 $R.O. = 98'$

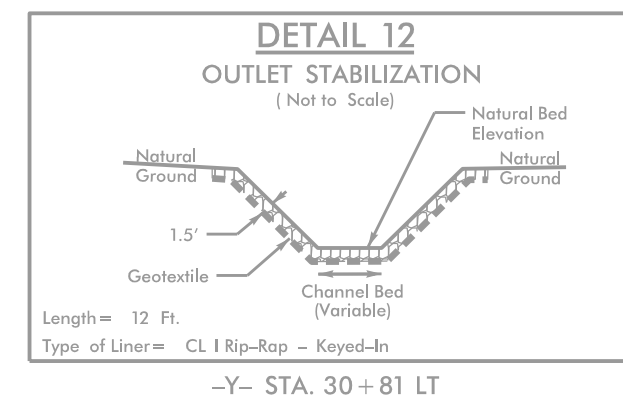
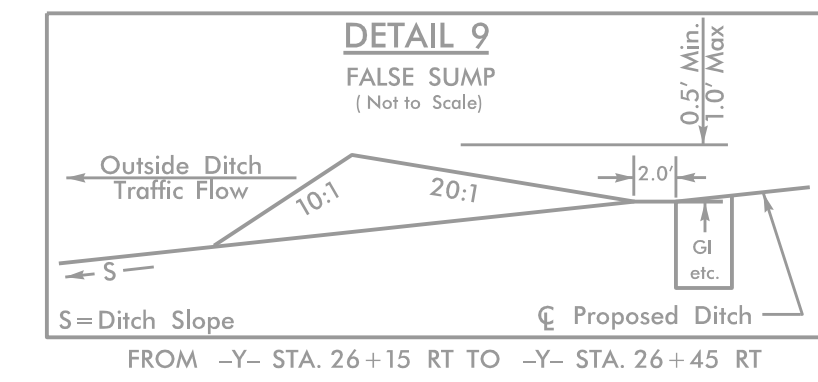
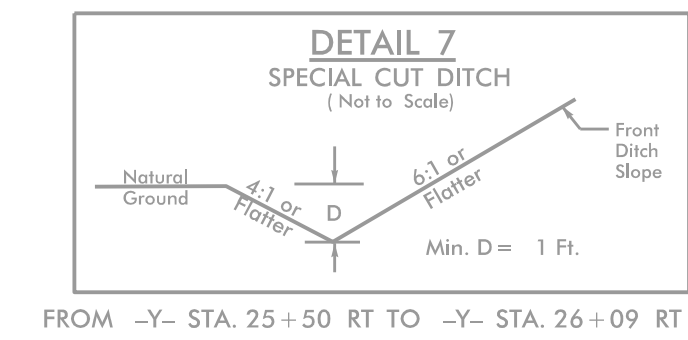
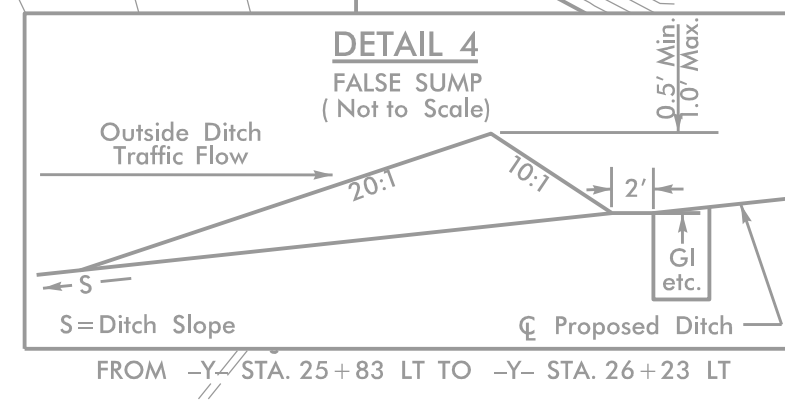
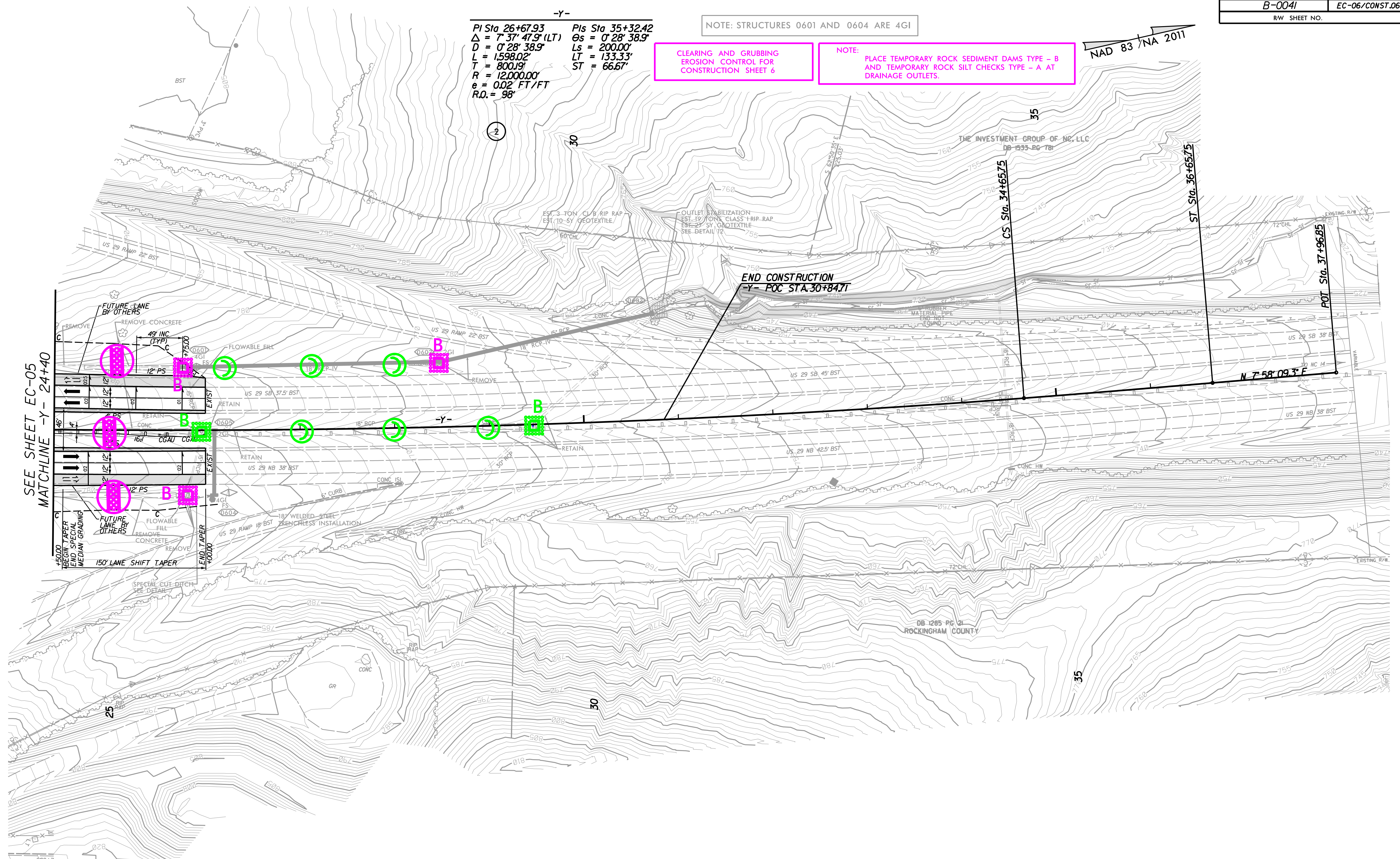
NOTE: STRUCTURES 0601 AND 0604 ARE 4GI

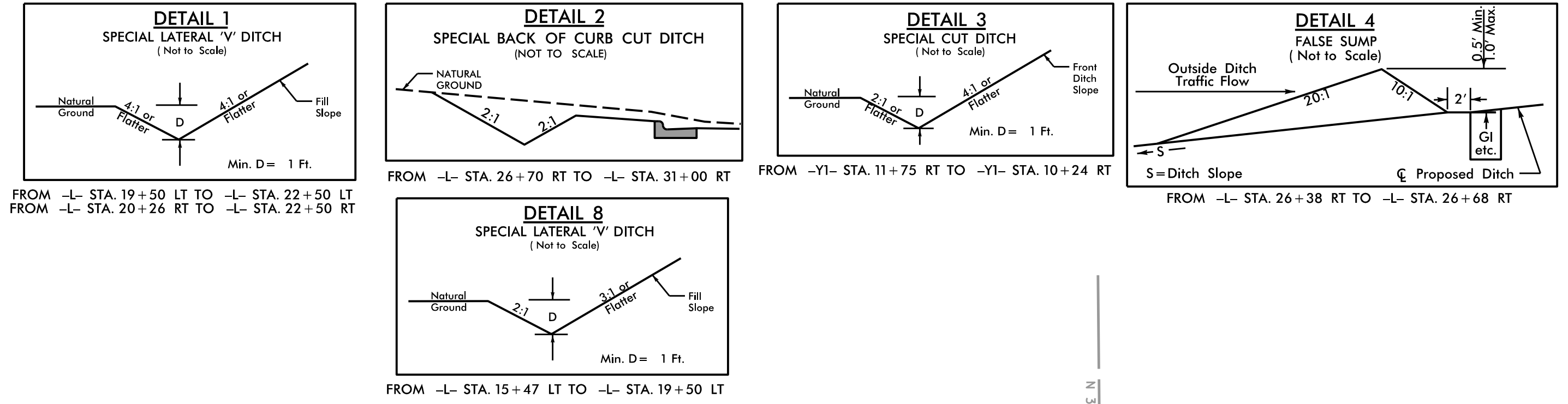
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

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

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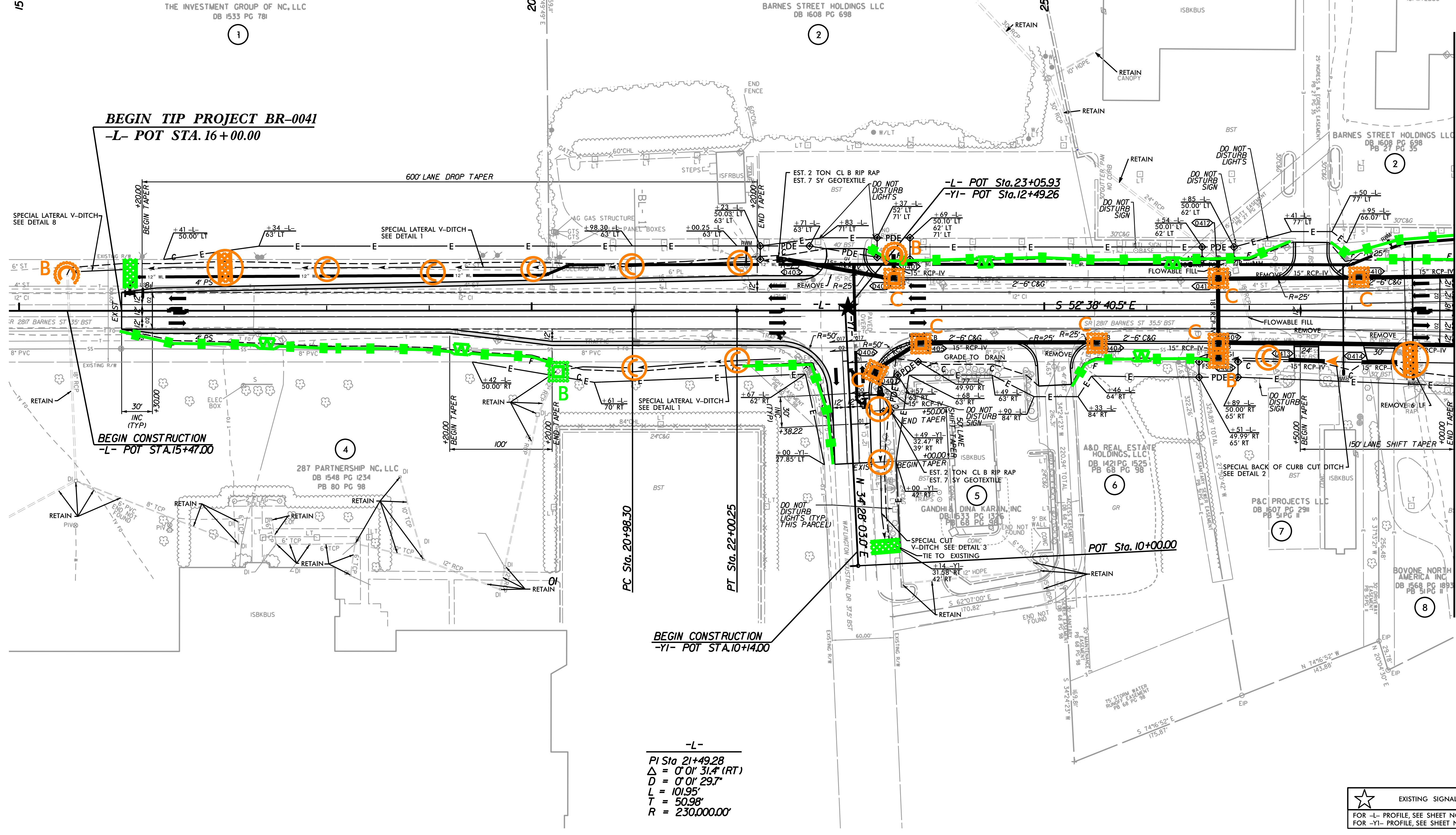
SEE SHEET EC-05
MATCHLINE -Y- 24+40





NOTE: STRUCTURE 0412 TO BE CONSTRUCTED ON EXISTING PIPE

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE C IN AREAS WHERE WATER MAY POND ON ROAD OPEN TO LIVE TRAFFIC.



-L-
 PI Sta 21+49.28
 $\Delta = 0' 01' 31.4''$ (RT)
 $D = 0' 01' 29.7''$
 $L = 101.95'$
 $T = 50.98'$
 $R = 230,000.00'$

★ EXISTING SIGNAL
 FOR -L- PROFILE, SEE SHEET NO. 7
 FOR -YI- PROFILE, SEE SHEET NO. 10

MATCHLINE -L- 29+00
SEE SHEET EC-08

REVISIONS

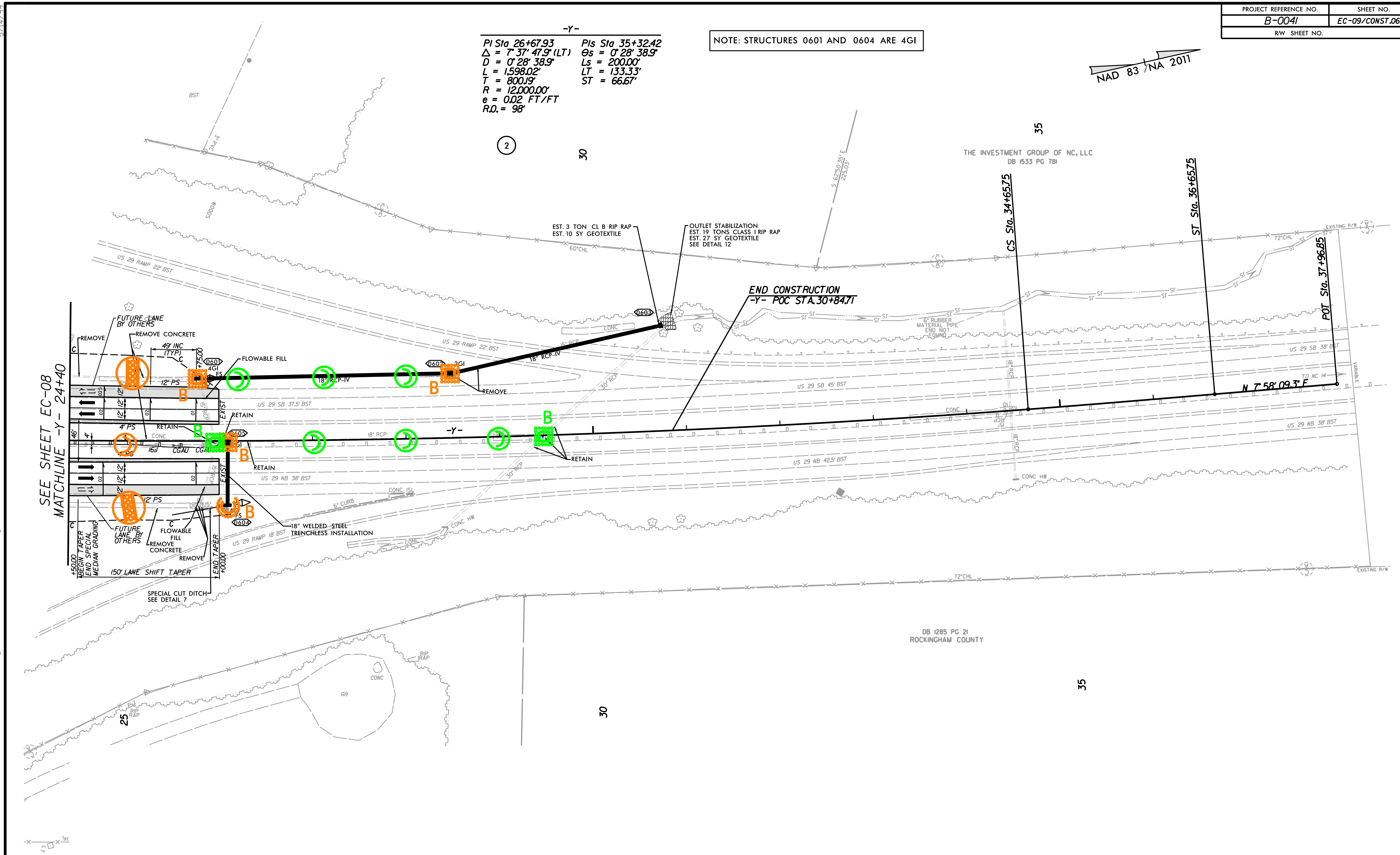
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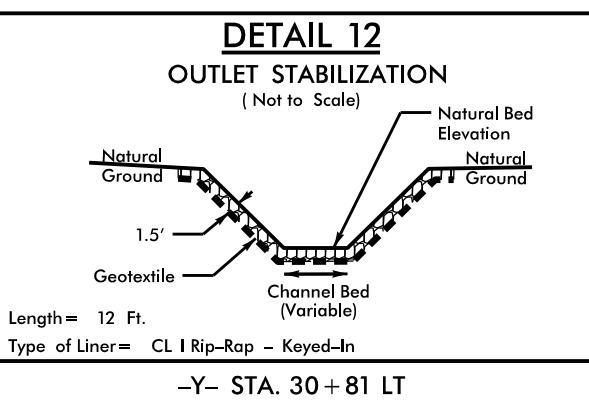
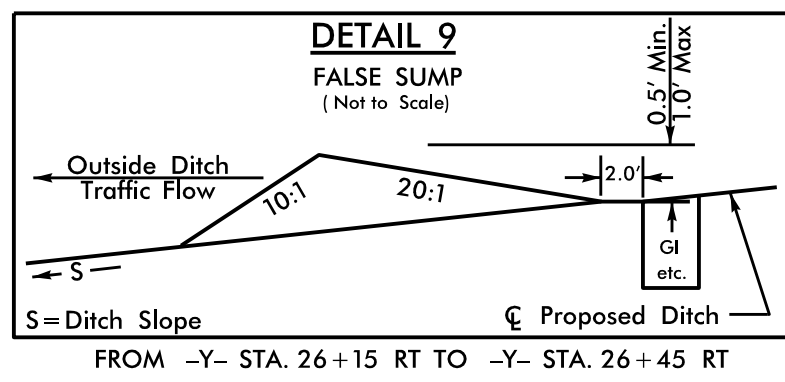
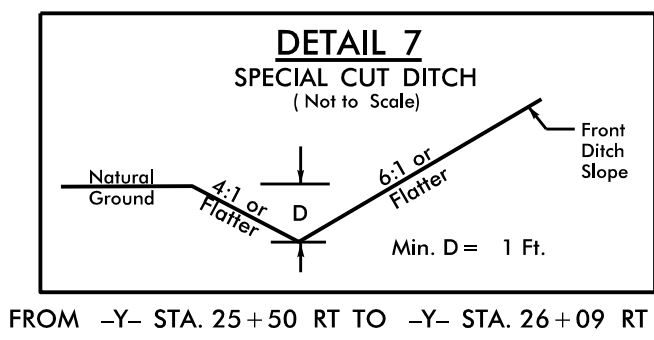
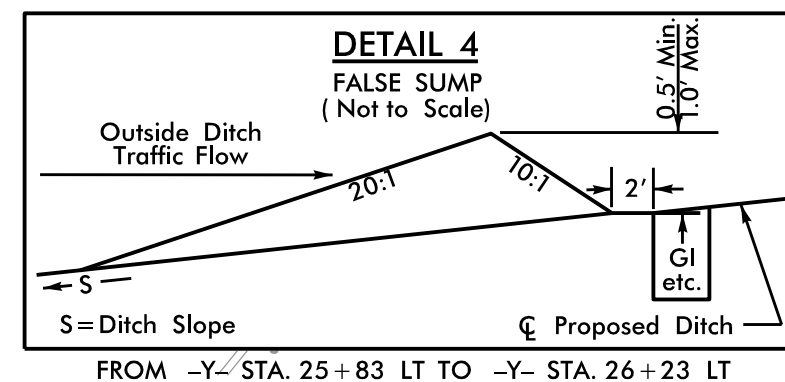
PI Sta 26+67.93	PIs Sta 35+32.42
$\Delta = 7' 37' 47.9"$ (LT)	$\Theta_s = 0' 28' 38.9"$
$D = 0' 28' 38.9"$	$L_s = 200.00'$
$L = 1,598.02'$	$LT = 133.33'$
$T = 800.19'$	$ST = 66.67'$
$R = 12,000.00'$	
$e = 0.02$ FT/FT	
$R.O. = 98'$	

NOTE: STRUCTURES 0601 AND 0604 ARE 4GI

NAD 83 / NA 2011



SEE SHEET EC-08 MATCHLINE -Y- 24+40



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