

**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

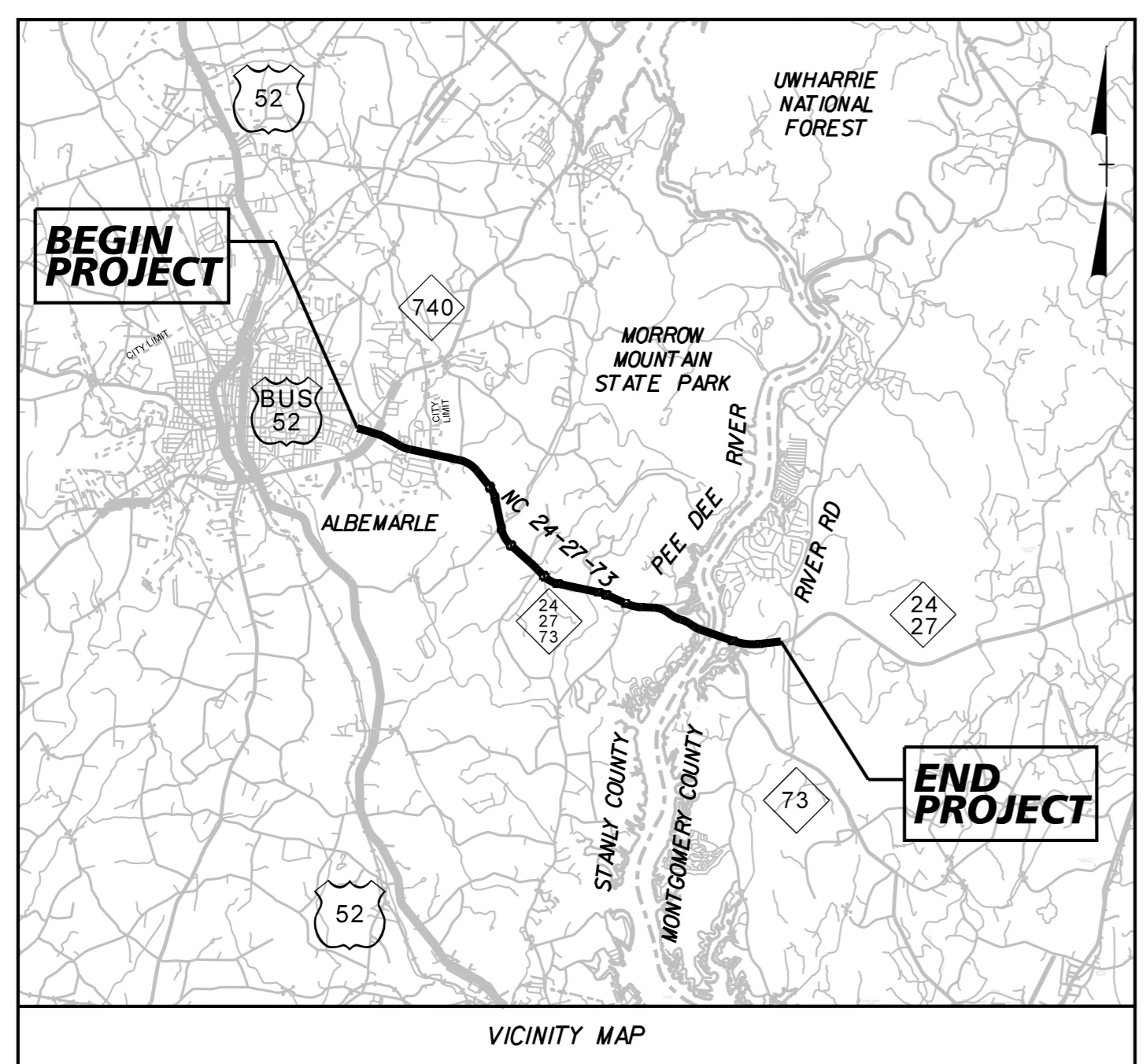
**This file or an individual page
shall not be considered a certified document.**

TIP PROJECT: R-2530B

CONTRACT: C203751

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PLAN FOR PROPOSED HIGHWAY EROSION CONTROL STANLY COUNTY



LOCATION: NC 24-27 FROM NC 740 IN ALBEMARLE TO EAST OF THE PEE DEE RIVER
TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS, AND STRUCTURES

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

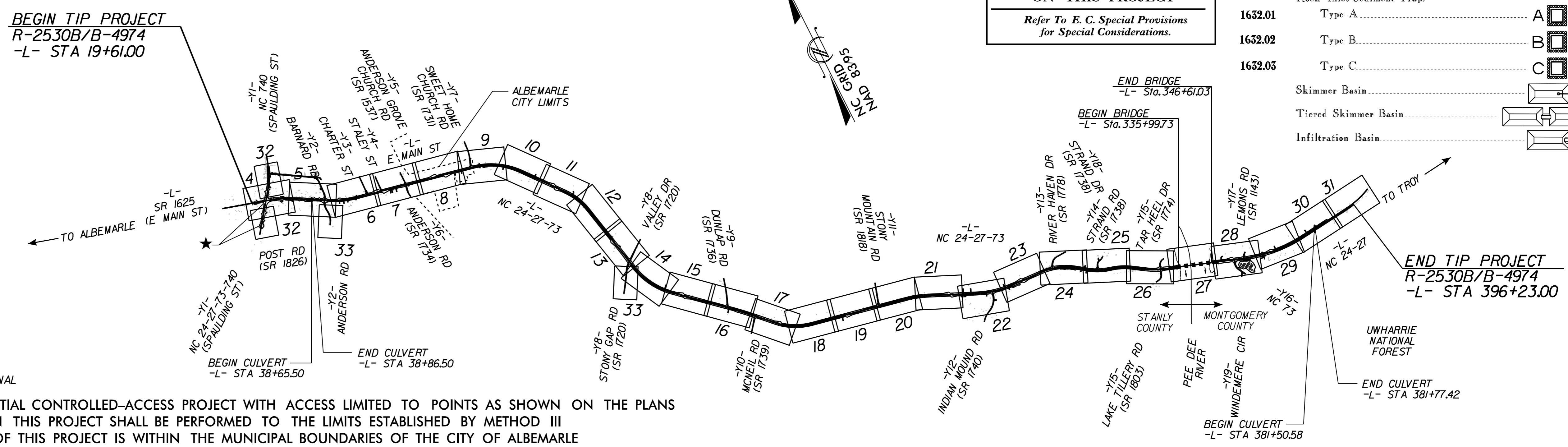
ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2530B	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34446.1.6		P.E. (R-2530B)	
34446.2.5	STBG-0024(083)	R/W (R-2530B)	
34446.2.6	STBG-0024(083)	UTL (R-2530B)	

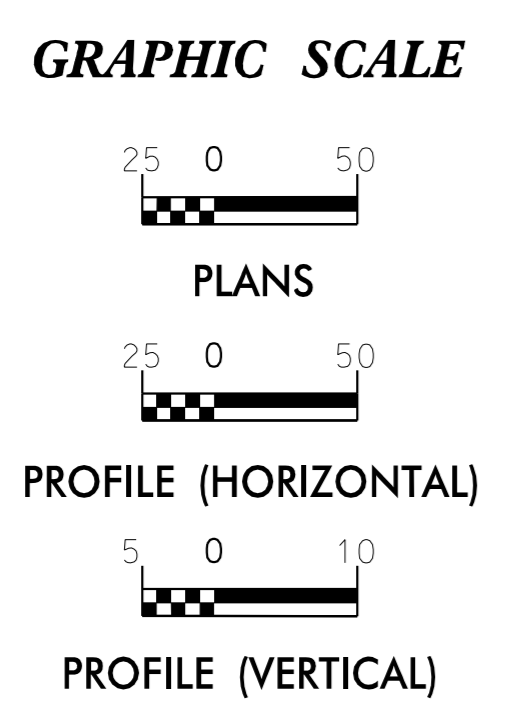
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle/Coir Fiber Wattle	WCFW
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	WCFW-PAM
1634.01	Temporary Rock Sediment Dam Type-A	TRSDA
1634.02	Temporary Rock Sediment Dam Type-B	TRSDB
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRB
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SKB
	Tiered Skimmer Basin	TSKB
	Infiltration Basin	IB



★ TRAFFIC SIGNAL

THIS IS A PARTIAL CONTROLLED-ACCESS PROJECT WITH ACCESS LIMITED TO POINTS AS SHOWN ON THE PLANS. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III. A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF ALBEMARLE.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared in the Office of:

Kimley»Horn

©2018

NC LICENSE #F-0102
P.O. BOX 33068
RALEIGH, NORTH CAROLINA 27636
PHONE: (919) 677-2000

Designed by:

Vance Blanton 3708
NAME LEVEL III CERTIFICATION NO.

Reviewed in the Office of:

ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2018 STANDARD SPECIFICATIONS

Reviewed by:

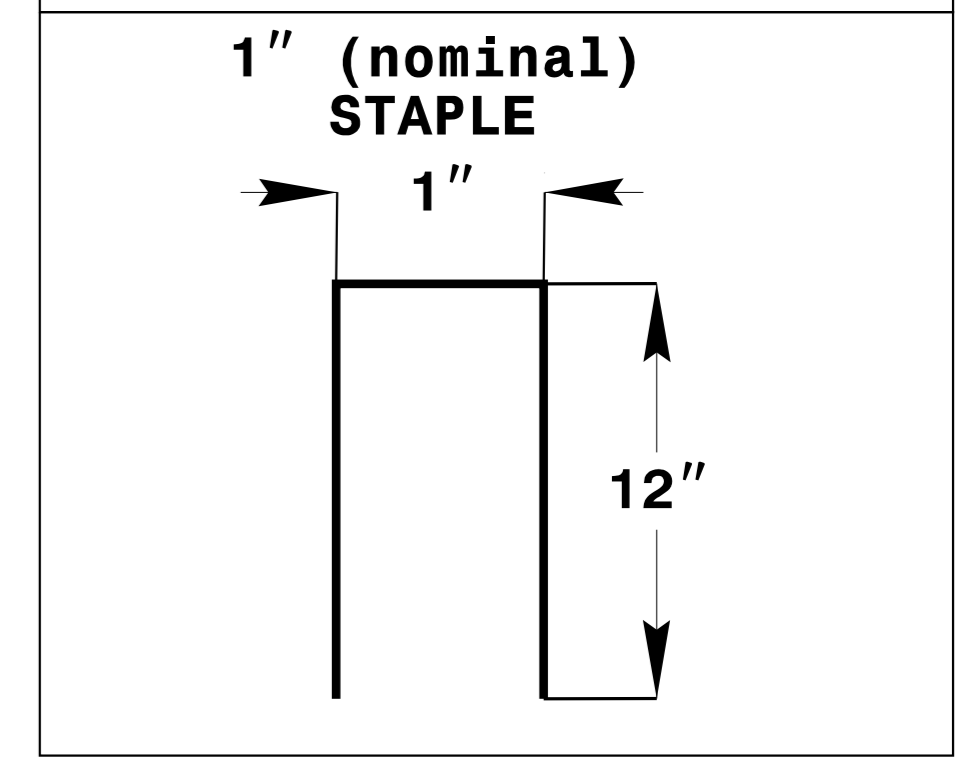
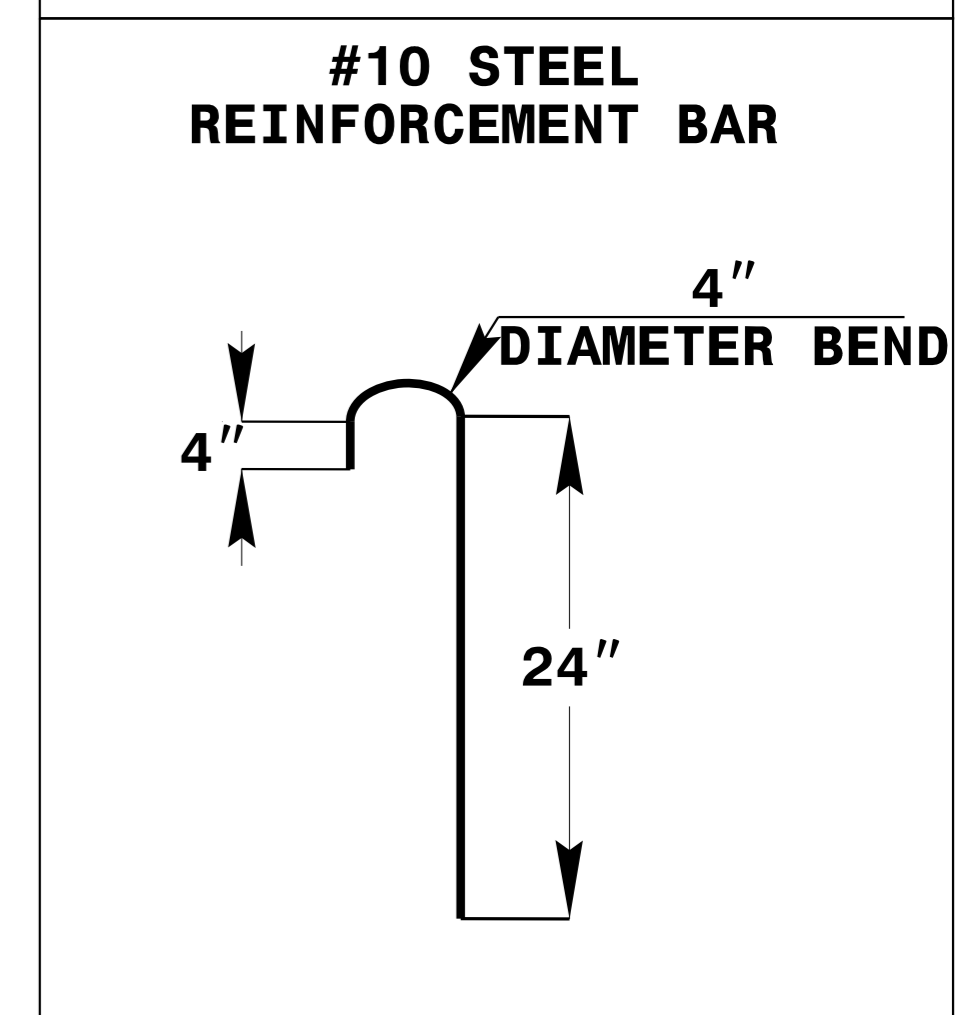
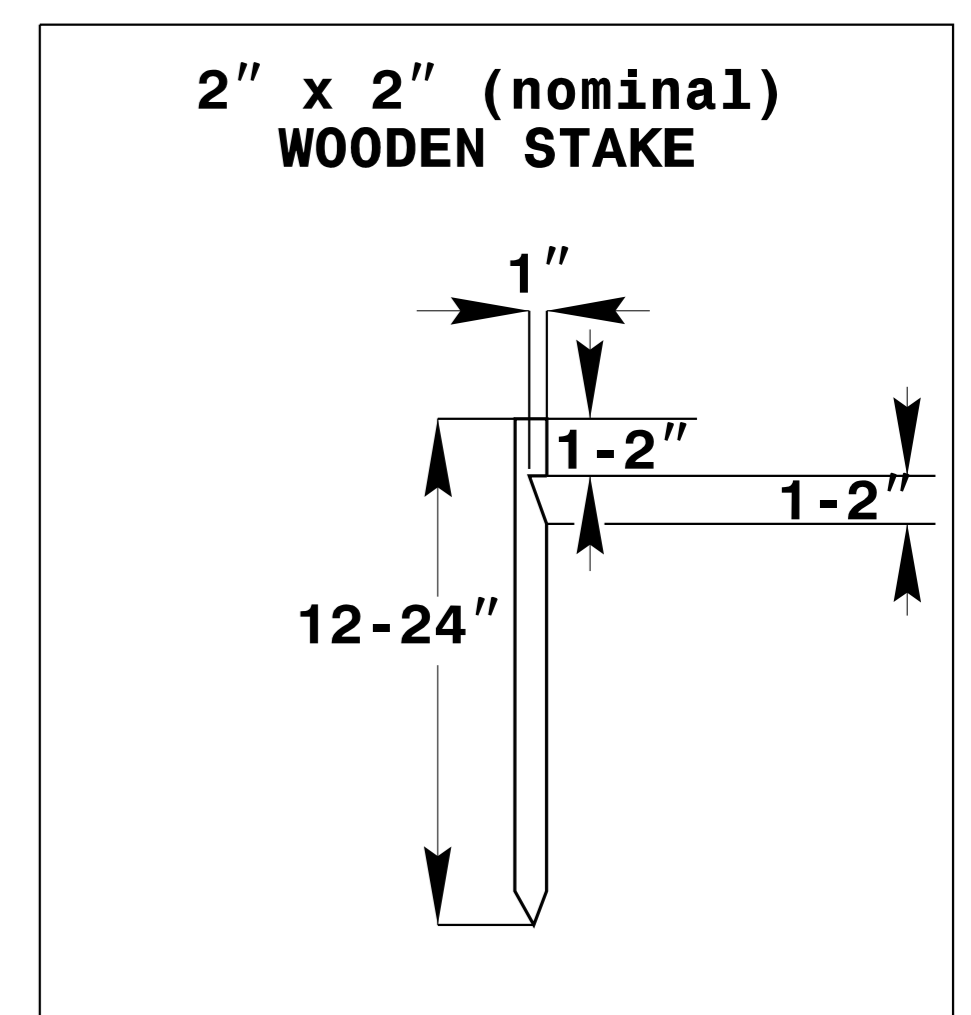
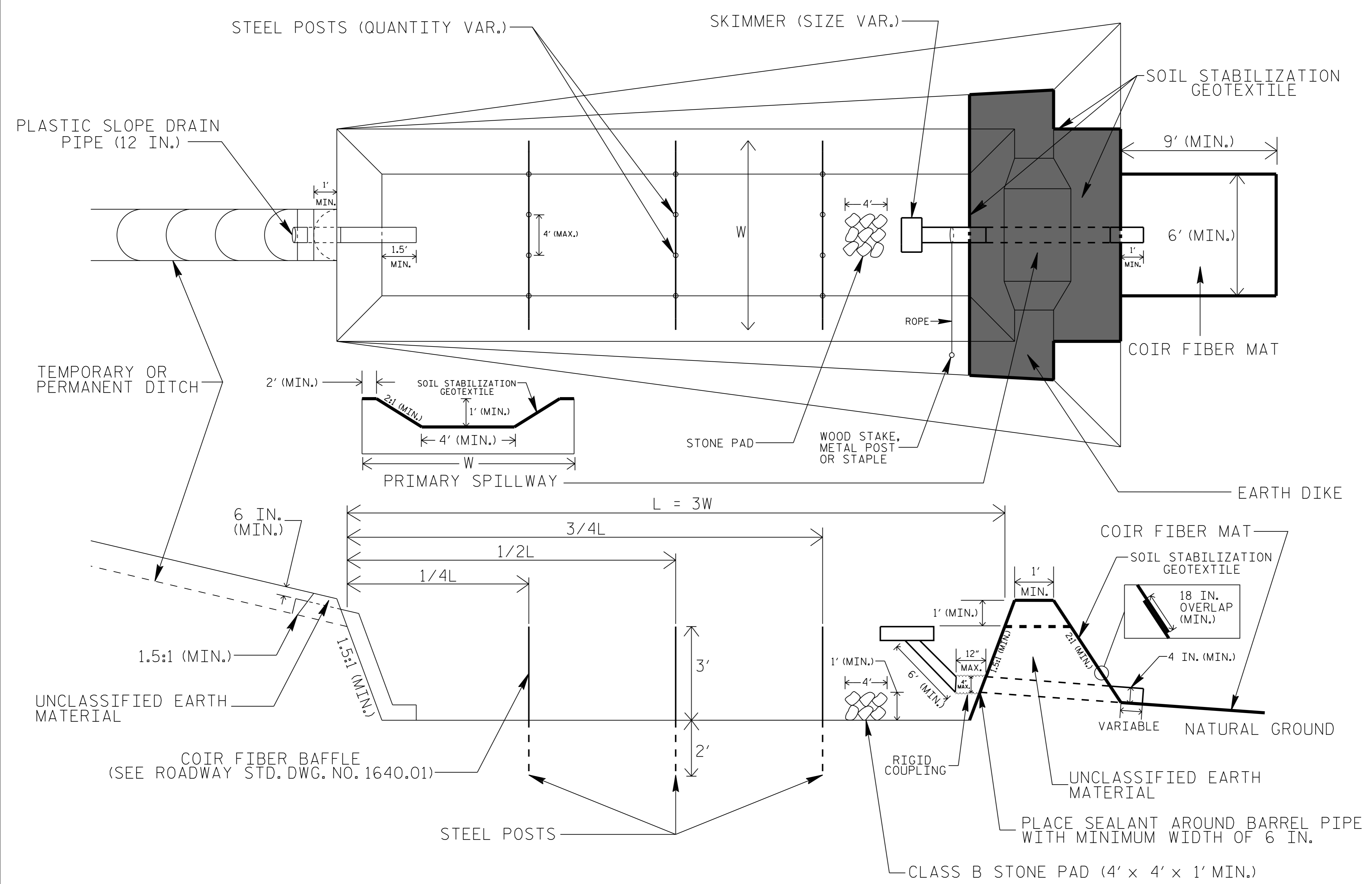
Wes Chandler

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	1633.02	Temporary Rock Silt Check Type B
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	1640.01	Coir Fiber Baffle
1631.01	Matting Installation	1645.01	Temporary Stream Crossing

SKIMMER BASIN WITH BAFFLES DETAIL



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 PRIMARY 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 PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

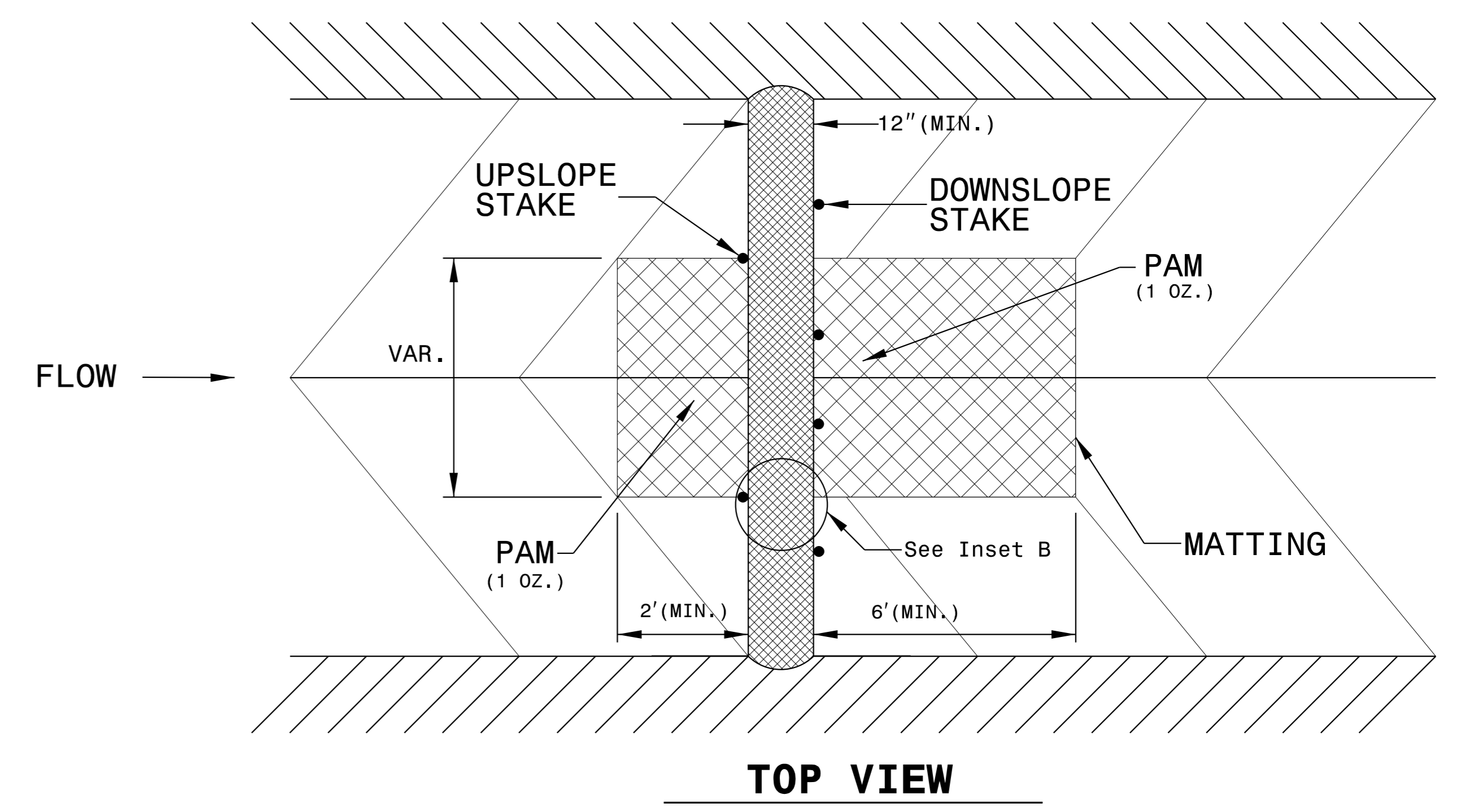
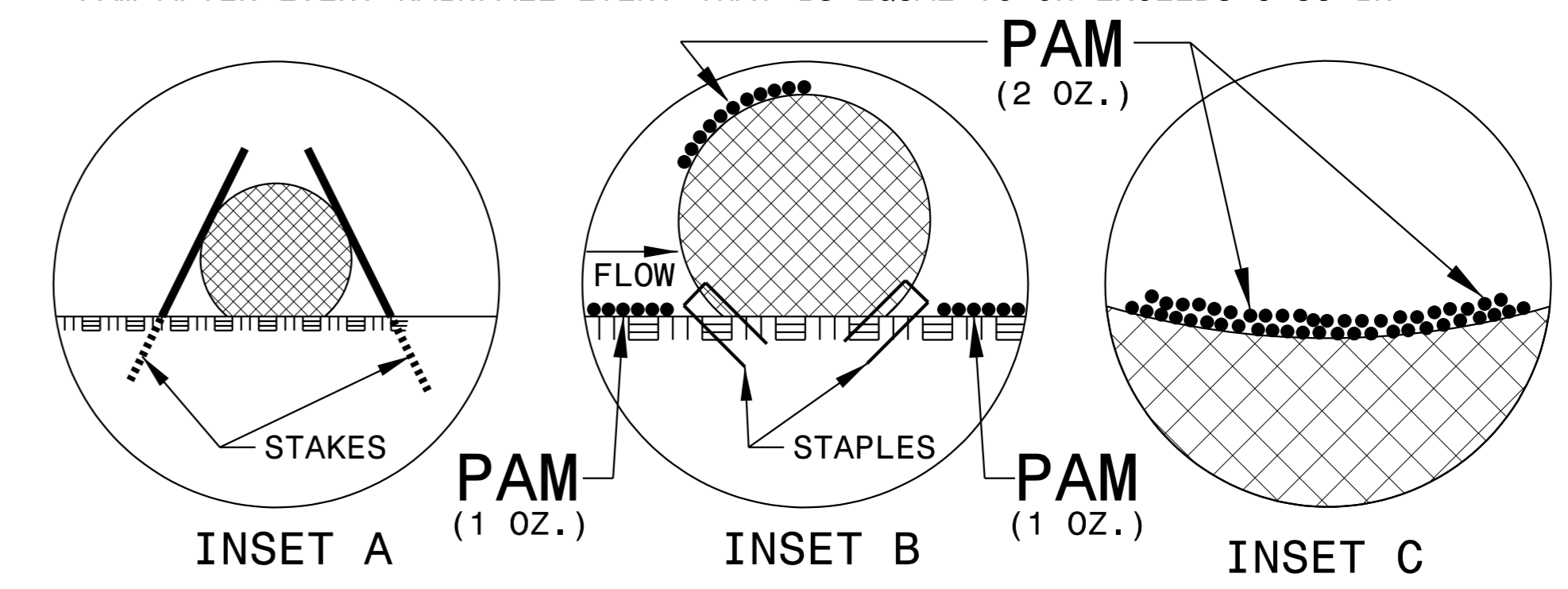
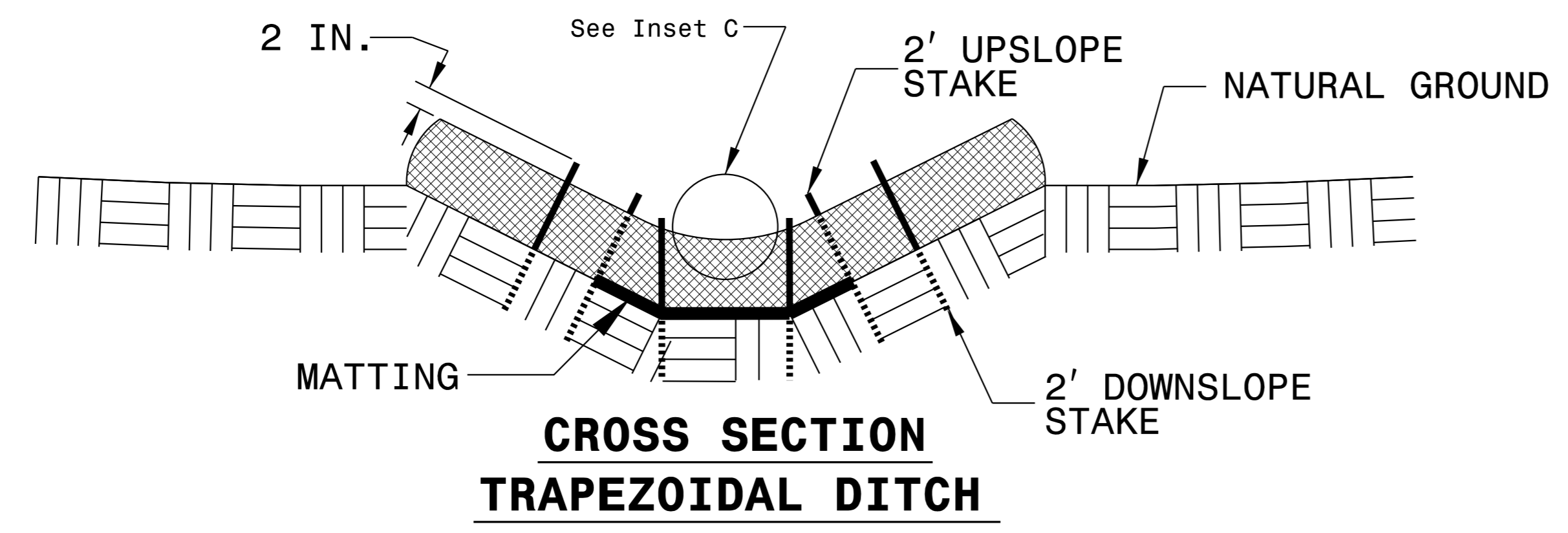
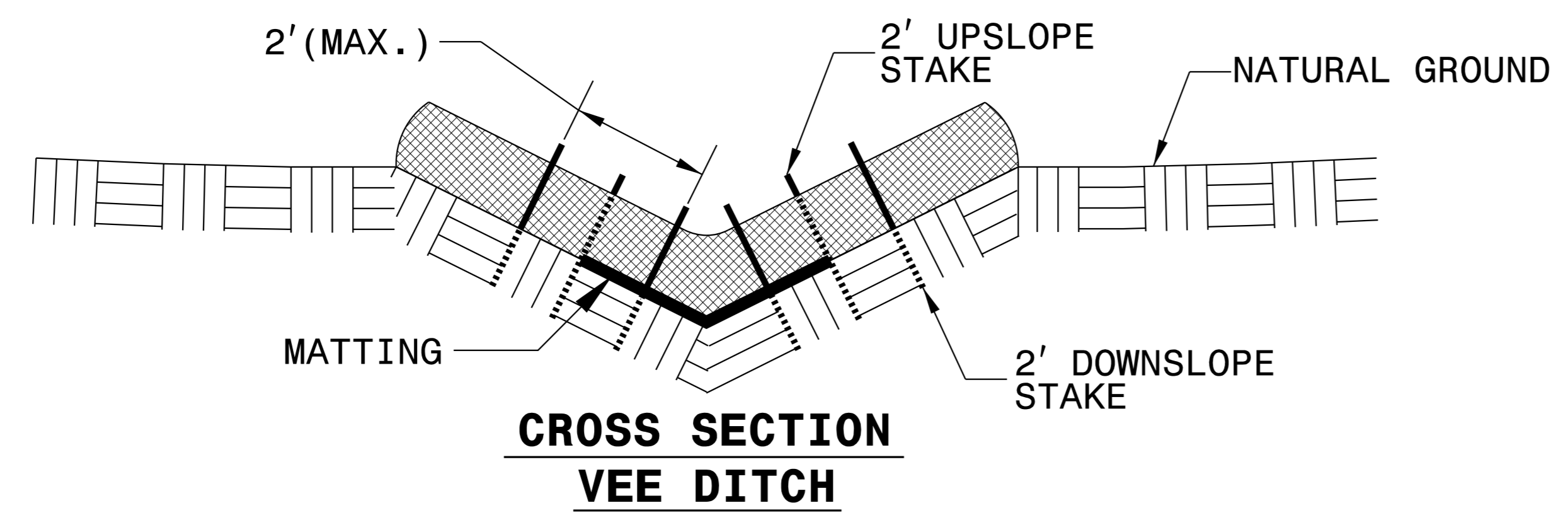
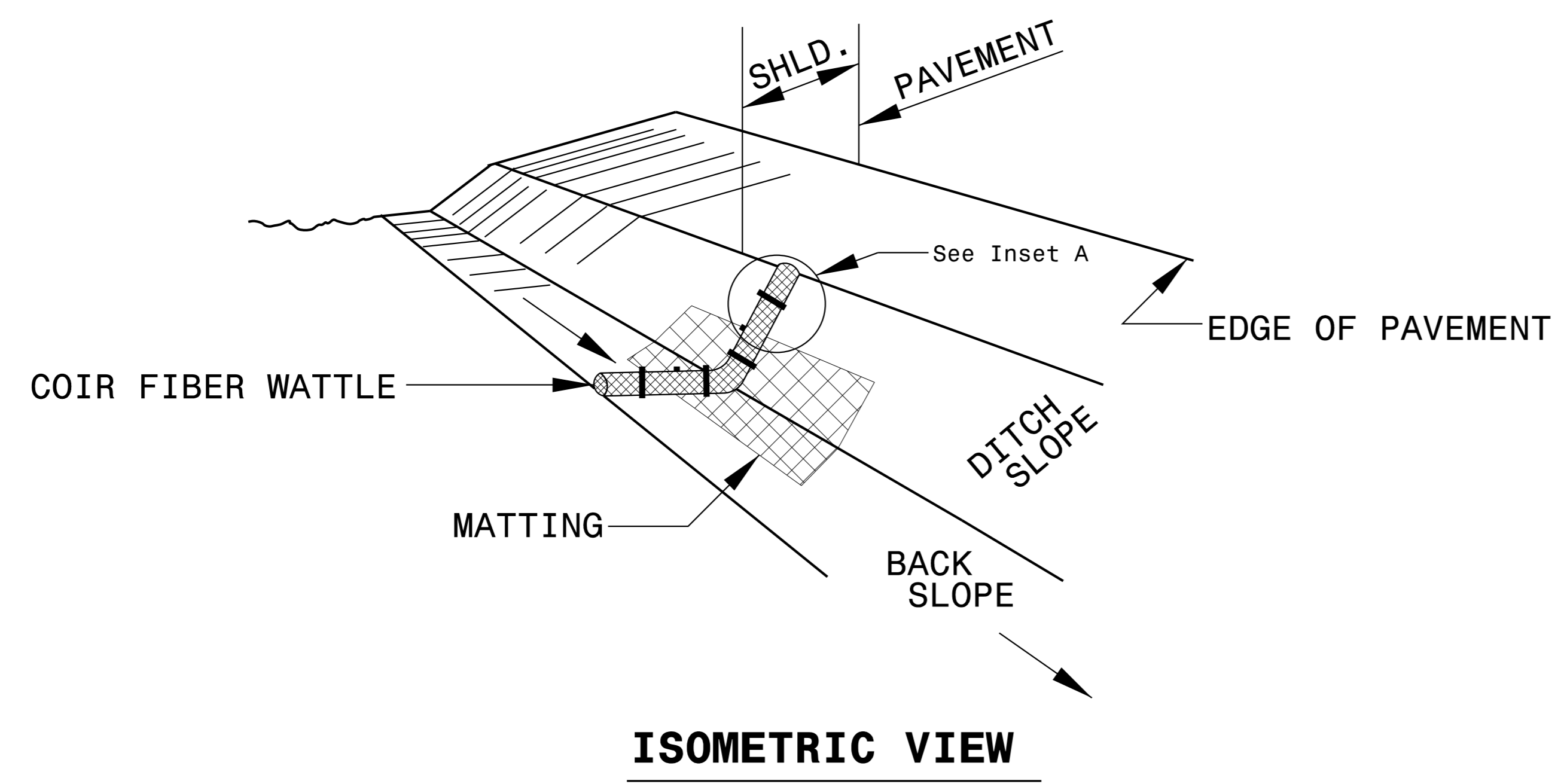
5/14/99

11/1/2018

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

NOTES:

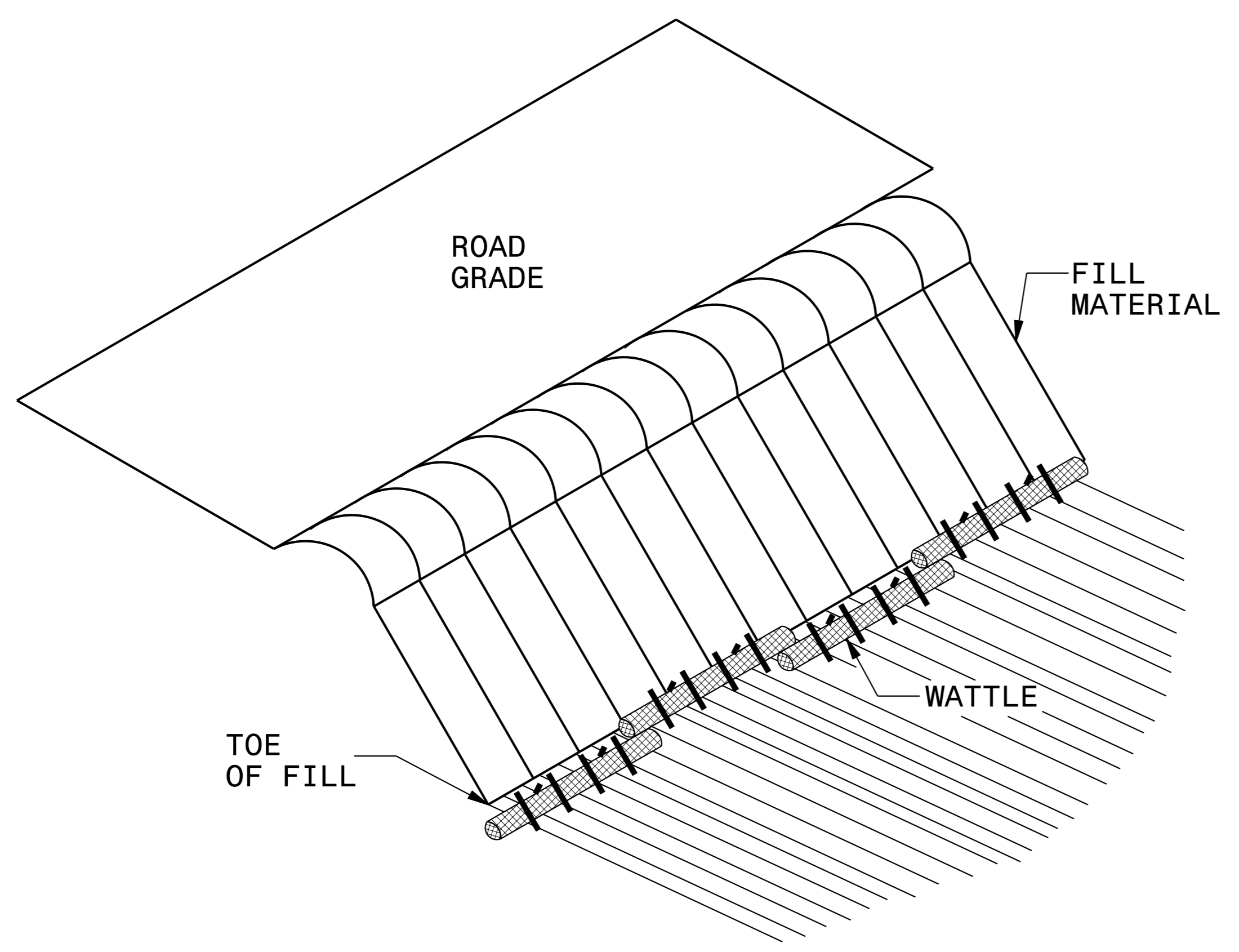
- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 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.



5/14/99

11/1/2018

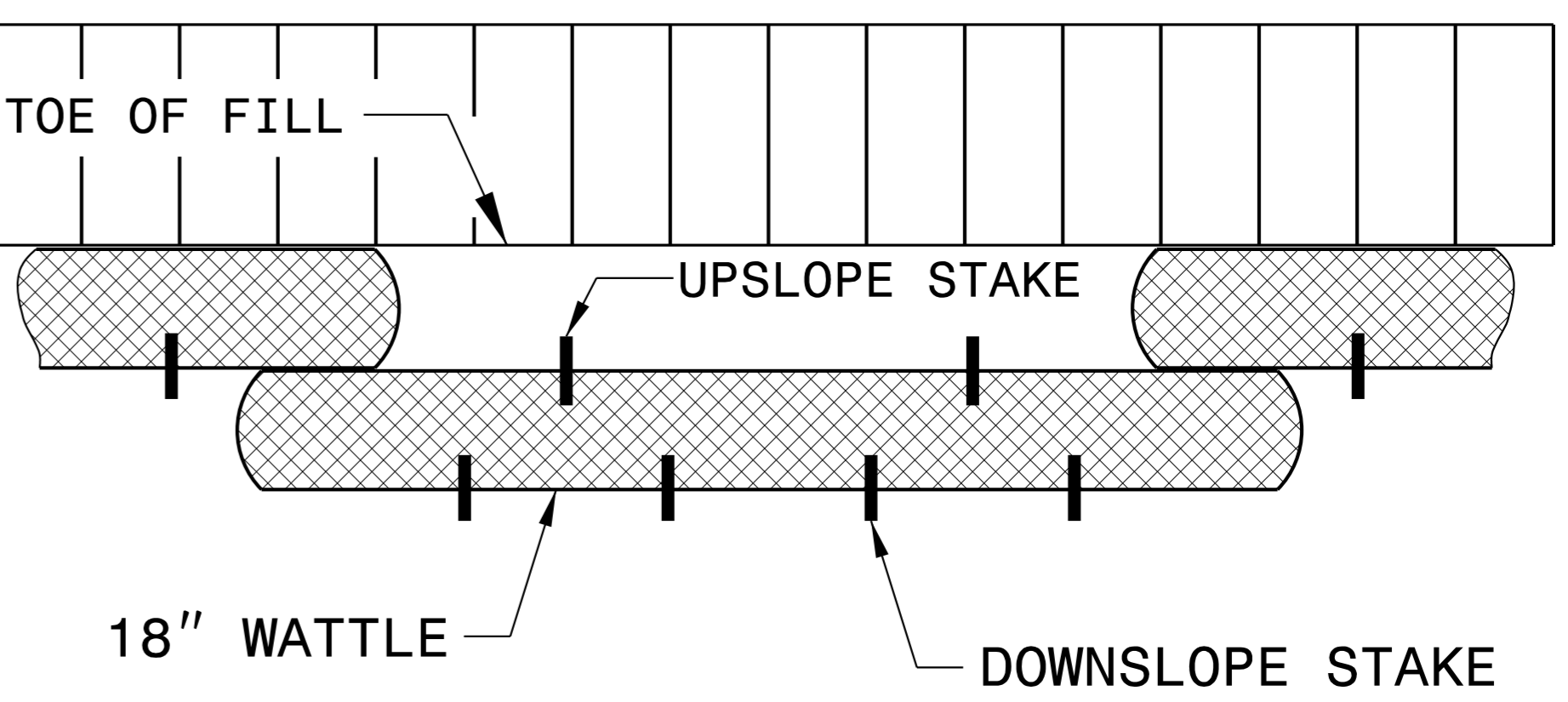
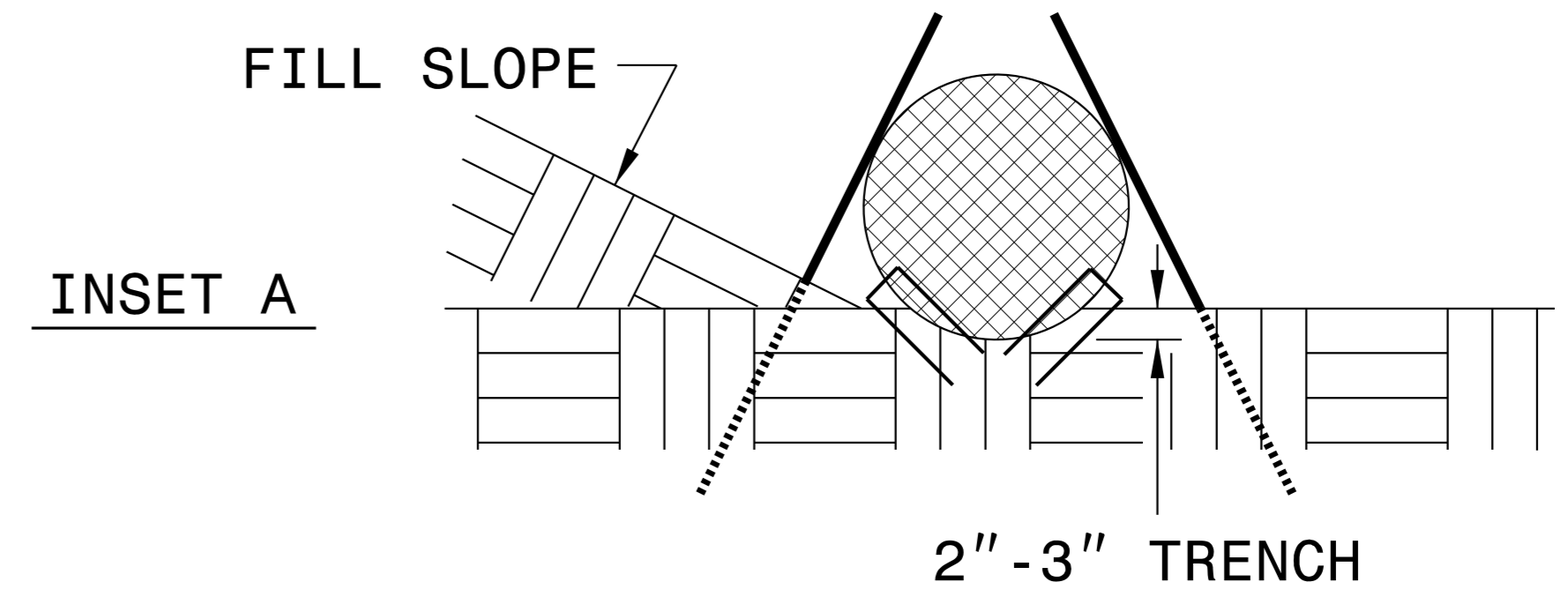
COIR FIBER WATTLE BARRIER DETAIL



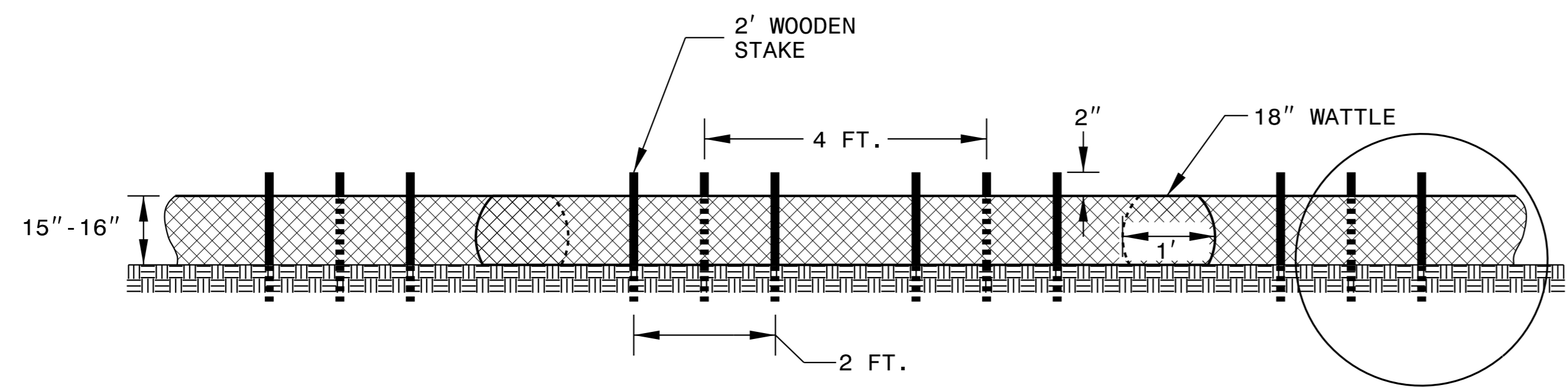
ISOMETRIC VIEW

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.



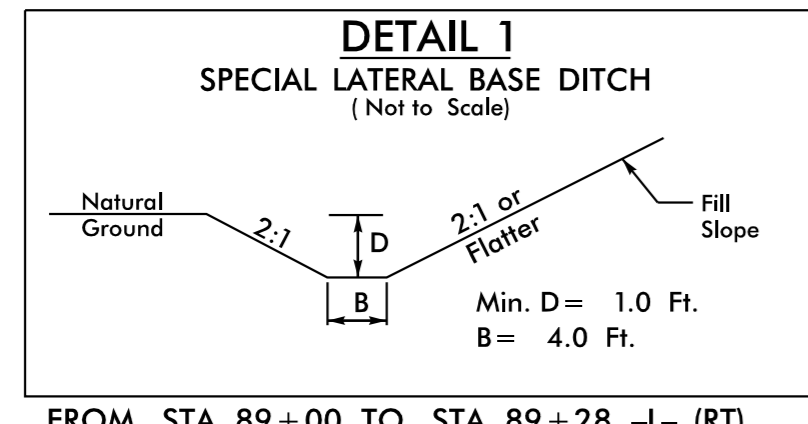
TOP VIEW



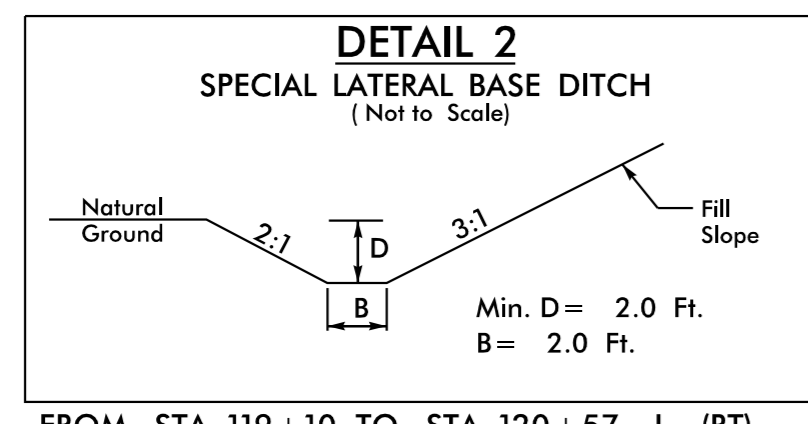
FRONT VIEW

5/14/99

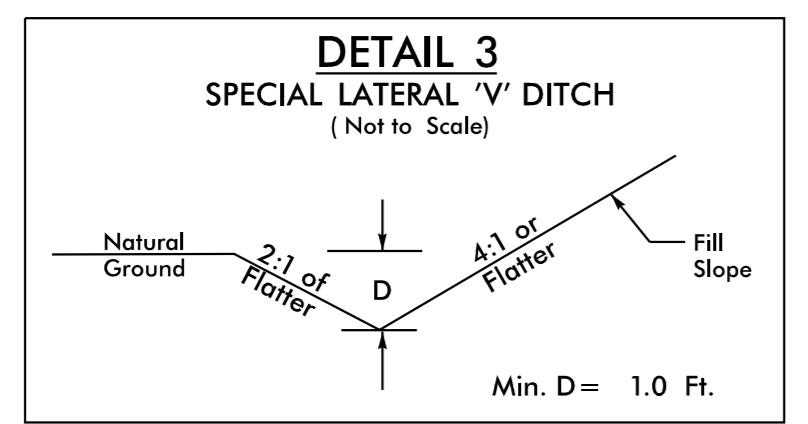
11/1/2018



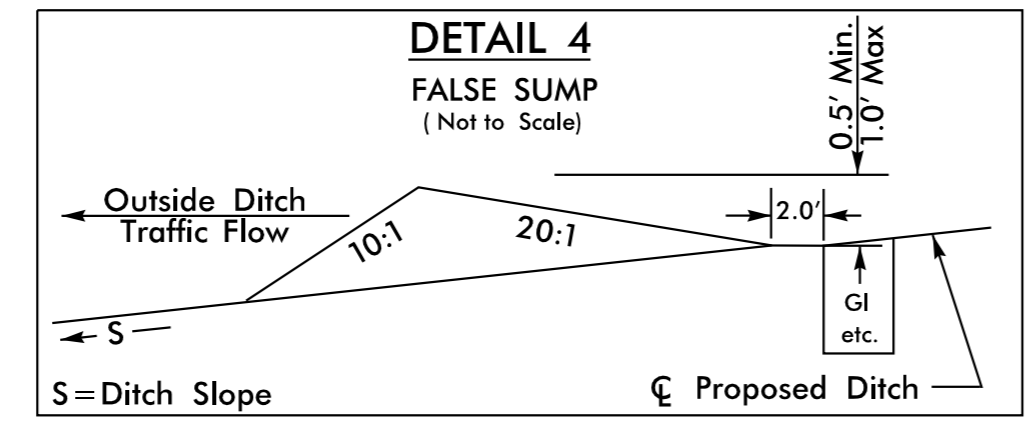
FROM STA. 89+00 TO STA. 89+28 -L- (RT)



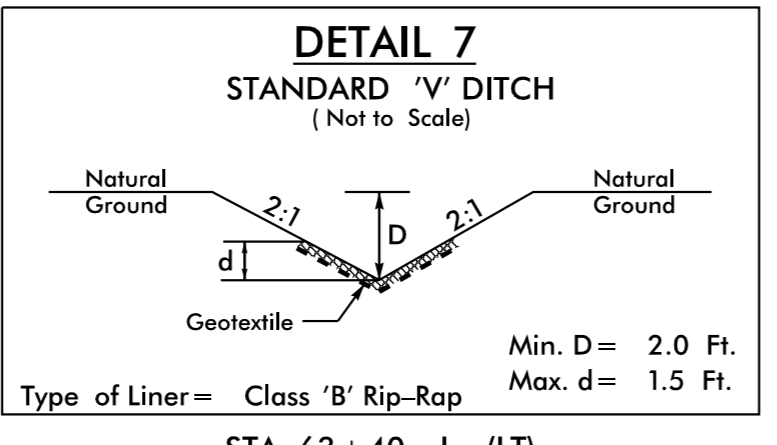
FROM STA. 119+10 TO STA. 120+57 -L- (RT)



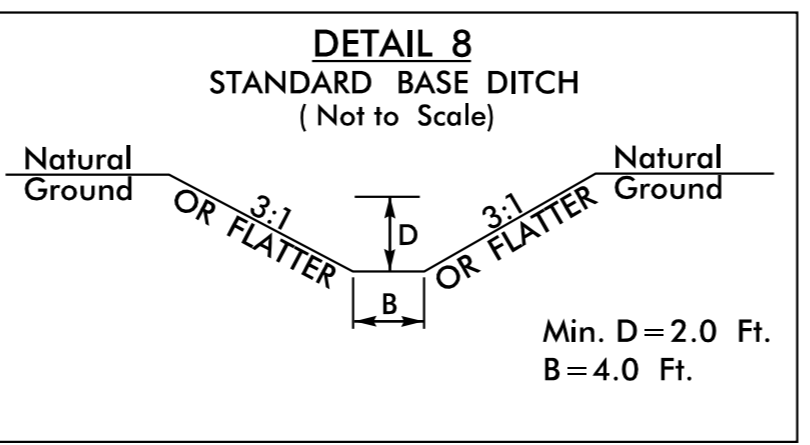
FROM STA. 21+00 TO STA. 23+50 -Y2- (RT)
 FROM STA. 24+90 TO STA. 29+00 -Y2- (RT)
 FROM STA. 14+00 TO STA. 14+50 -Y2A- (RT)
 FROM STA. 43+79 TO STA. 47+00 -L- (LT)
 FROM STA. 14+00 TO STA. 14+50 -Y4- (LT)
 FROM STA. 61+56 TO STA. 61+75 -L- (LT)
 FROM STA. 61+75 TO STA. 63+00 -L- (LT)
 FROM STA. 72+96 TO STA. 74+00 -L- (LT)
 FROM STA. 74+60 TO STA. 75+00 -L- (LT)
 FROM STA. 75+00 TO STA. 76+00 -L- (LT)
 FROM STA. 79+50 TO STA. 81+16 -L- (LT)
 FROM STA. 81+60 TO STA. 83+00 -L- (LT)
 FROM STA. 84+15 TO STA. 85+00 -L- (LT)
 FROM STA. 85+50 TO STA. 86+75 -L- (LT)
 FROM STA. 87+25 TO STA. 89+90 -L- (LT)
 FROM STA. 89+90 TO STA. 90+47 -L- (LT)
 FROM STA. 17+10 TO STA. 18+00 -Y7- (RT)
 FROM STA. 16+00 TO STA. 18+00 -Y7- (LT)
 FROM STA. 91+33 TO STA. 93+00 -L- (LT)
 FROM STA. 96+27 TO STA. 97+50 -L- (RT)
 FROM STA. 101+50 TO STA. 102+40 -L- (RT)
 FROM STA. 102+40 TO STA. 104+00 -L- (RT)
 FROM STA. 103+20 TO STA. 104+50 -L- (LT)
 FROM STA. 131+00 TO STA. 134+00 -L- (RT)
 FROM STA. 134+20 TO STA. 136+00 -L- (RT)
 FROM STA. 148+00 TO STA. 149+62 -L- (RT)
 FROM STA. 149+62 TO STA. 153+00 -L- (RT)
 FROM STA. 18+80 TO STA. 19+50 -Y8- (RT)
 FROM STA. 13+50 TO STA. 15+50 -Y8- (RT)
 FROM STA. 13+50 TO STA. 14+00 -Y8- (LT)
 FROM STA. 25+00 TO STA. 26+50 -Y8- (RT)
 FROM STA. 153+00 TO STA. 155+50 -L- (LT)
 FROM STA. 154+00 TO STA. 157+10 -L- (RT)
 FROM STA. 18+20 TO STA. 18+30 -Y9- (RT)
 FROM STA. 163+50 TO STA. 169+00 -L- (RT)
 FROM STA. 171+00 TO STA. 173+00 -L- (LT)
 FROM STA. 176+00 TO STA. 177+00 -L- (LT)
 FROM STA. 178+50 TO STA. 180+50 -L- (RT)
 FROM STA. 181+00 TO STA. 187+75 -L- (LT)
 FROM STA. 182+15 TO STA. 184+00 -L- (RT)
 FROM STA. 221+50 TO STA. 222+50 -L- (LT)
 FROM STA. 227+50 TO STA. 230+00 -L- (LT)
 FROM STA. 243+00 TO STA. 246+00 -L- (LT)
 FROM STA. 250+70 TO STA. 251+50 -L- (LT)
 FROM STA. 251+50 TO STA. 253+00 -L- (LT)
 FROM STA. 251+50 TO STA. 253+00 -L- (RT)
 FROM STA. 253+00 TO STA. 254+30 -L- (RT)
 FROM STA. 11+00 TO STA. 12+50 -Y12- (RT)
 FROM STA. 13+00 TO STA. 15+00 -Y12- (RT)
 FROM STA. 14+90 TO STA. 16+00 -Y12- (LT)
 FROM STA. 276+65 TO STA. 277+50 -L- (LT)
 FROM STA. 15+50 TO STA. 16+72 -Y13- (RT)
 FROM STA. 11+50 TO STA. 13+00 -Y14- (LT)
 FROM STA. 13+50 TO STA. 14+00 -Y14- (LT)
 FROM STA. 11+50 TO STA. 12+00 -Y15- (RT)
 FROM STA. 15+00 TO STA. 16+95 -Y15- (RT)
 FROM STA. 331+50 TO STA. 332+50 -L- (RT)
 FROM STA. 364+50 TO STA. 369+50 -L- (RT)
 FROM STA. 379+00 TO STA. 381+00 -L- (LT)



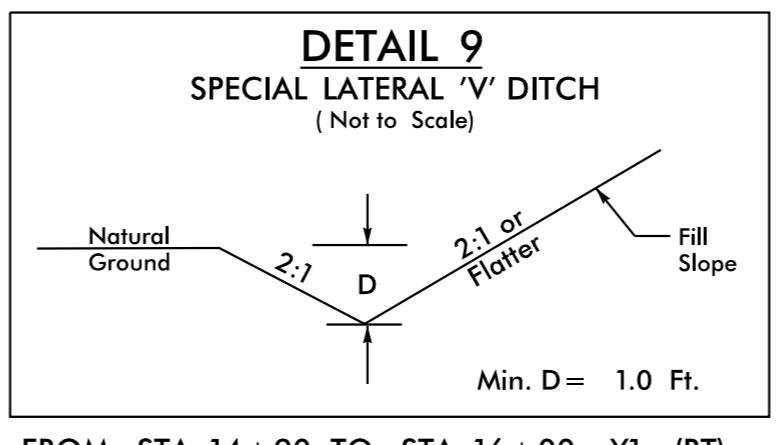
STA. 116+85 -L- (LT) STA. 199+85 -L- (LT) STA. 326+64 -L- (RT)
 STA. 118+85 -L- (LT) STA. 206+15 -L- (RT) STA. 329+63 -L- (RT)
 STA. 121+85 -L- (LT) STA. 208+15 -L- (RT) STA. 335+13 -L- (RT)
 STA. 130+15 -L- (RT) STA. 209+65 -L- (RT) STA. 364+85 -L- (LT)
 STA. 134+15 -L- (RT) STA. 251+15 -L- (RT) STA. 387+85 -L- (LT)
 STA. 136+15 -L- (RT) STA. 260+84 -L- (LT) STA. 393+70 -L- (LT)
 STA. 158+35 -L- (LT) STA. 269+15 -L- (RT)
 STA. 191+65 -L- (RT)



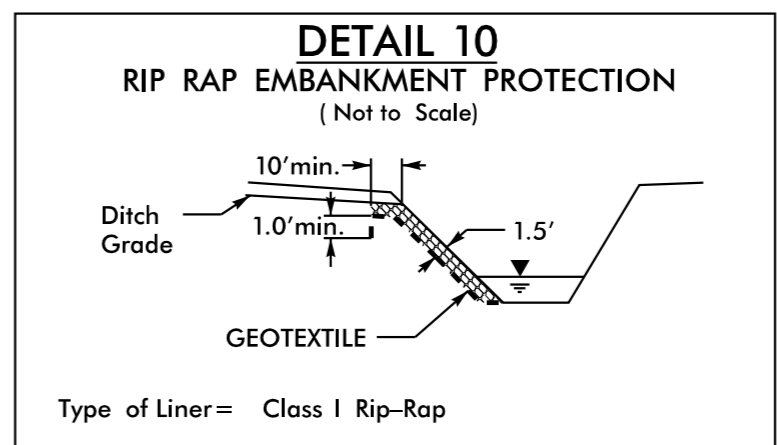
STA. 63+40 -L- (LT)



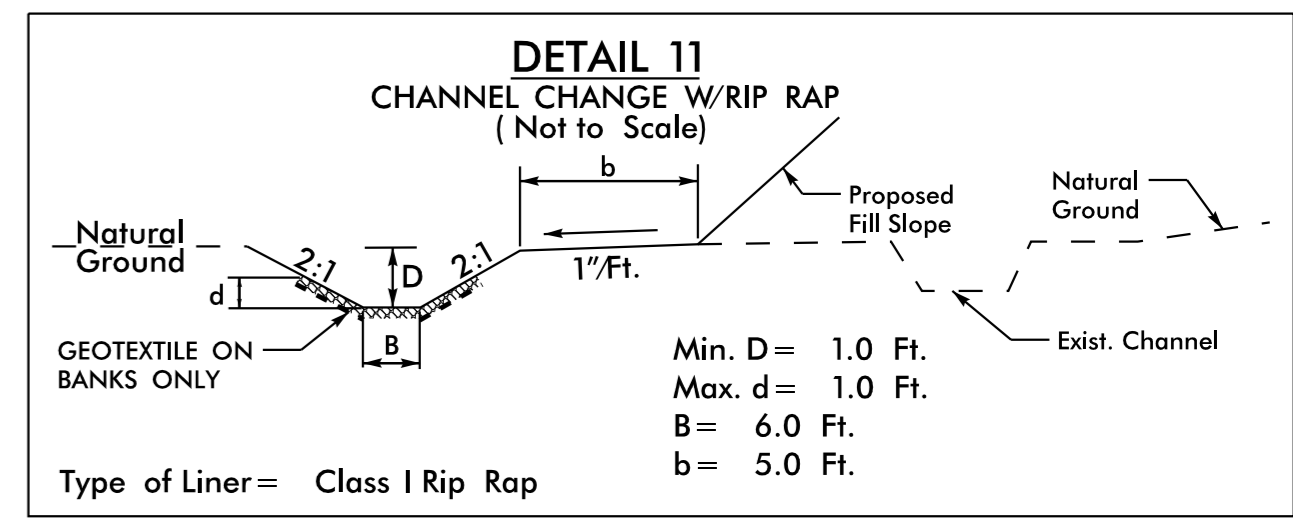
FROM STA. 53+86 TO STA. 54+50 -L- (LT)
 FROM STA. 253+00 TO STA. 253+53 -L- (RT)



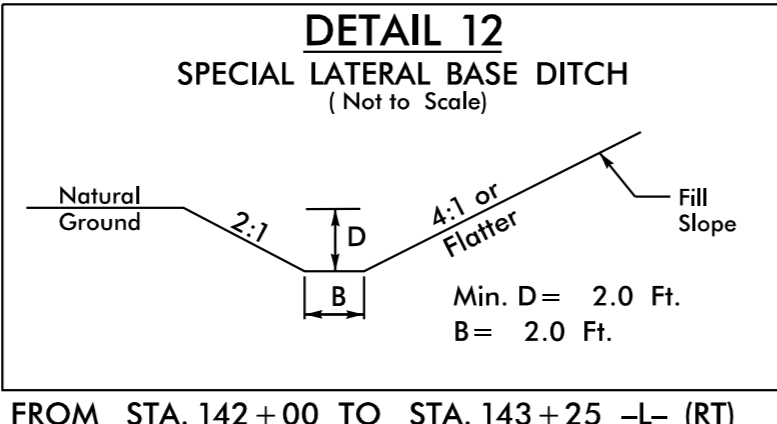
FROM STA. 14+90 TO STA. 16+00 -Y1- (RT)
 FROM STA. 27+00 TO STA. 31+00 -Y2- (LT)
 FROM STA. 48+50 TO STA. 51+50 -L- (LT)
 FROM STA. 65+65 TO STA. 67+00 -L- (LT)
 FROM STA. 67+00 TO STA. 68+50 -L- (LT)
 FROM STA. 10+85 TO STA. 12+25 -Y6- (LT)



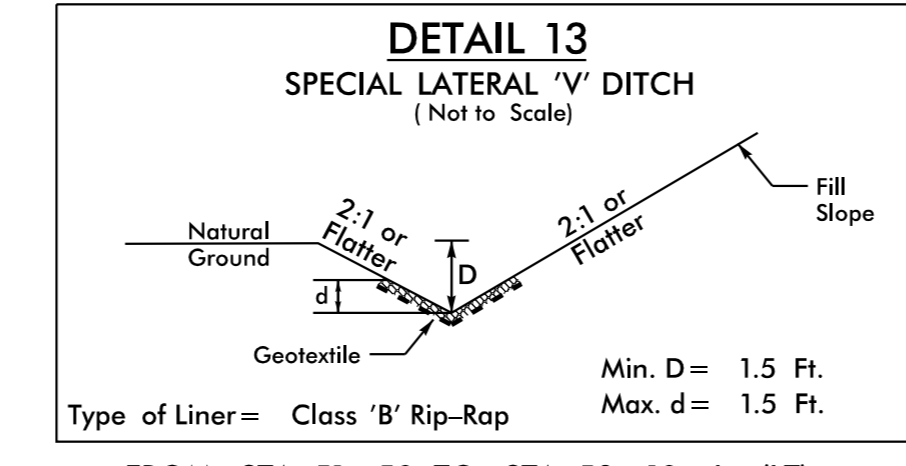
STA. 53+35 -L- (LT)
 STA. 53+86 -L- (LT)
 STA. 232+50 -L- (RT)
 STA. 233+50 -L- (RT)
 STA. 375+40 -L- (LT)
 STA. 375+45 -L- (LT)
 STA. 380+60 -L- (RT)



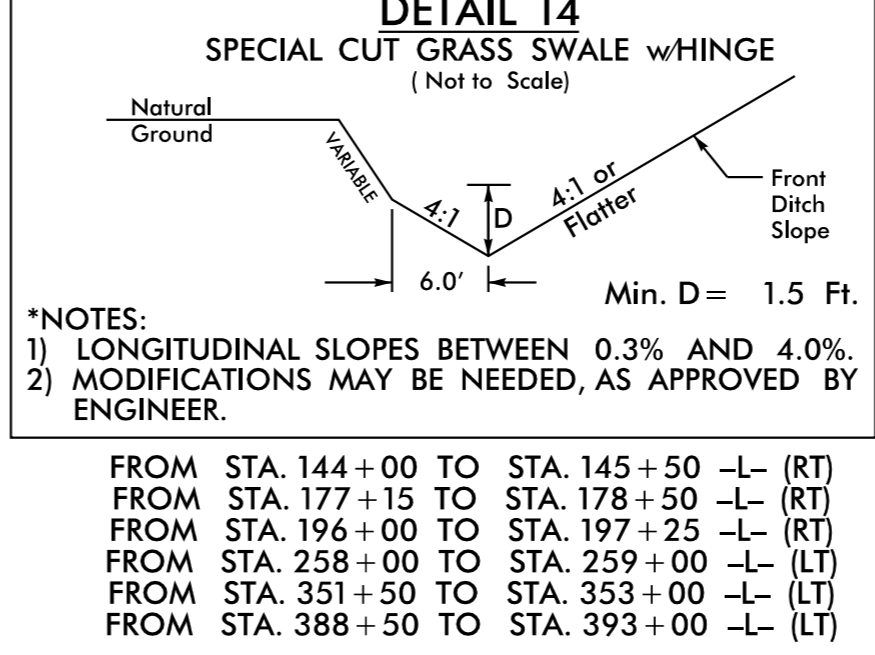
FROM STA. 52+72 TO STA. 53+25 -L- (RT)



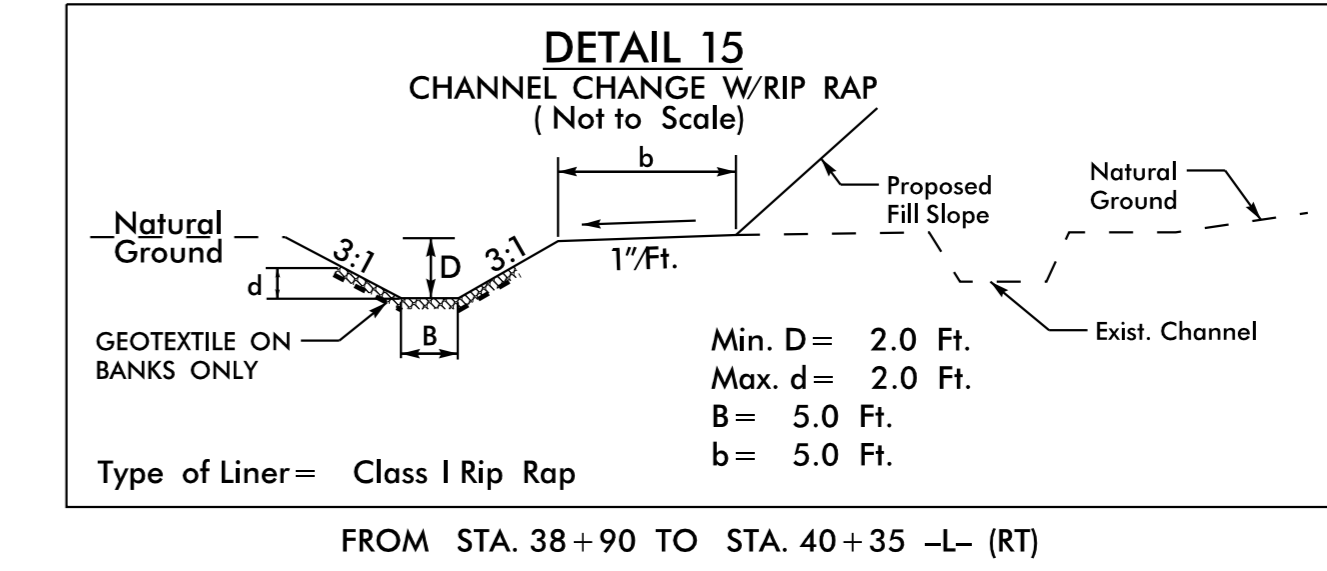
FROM STA. 142+00 TO STA. 143+25 -L- (RT)



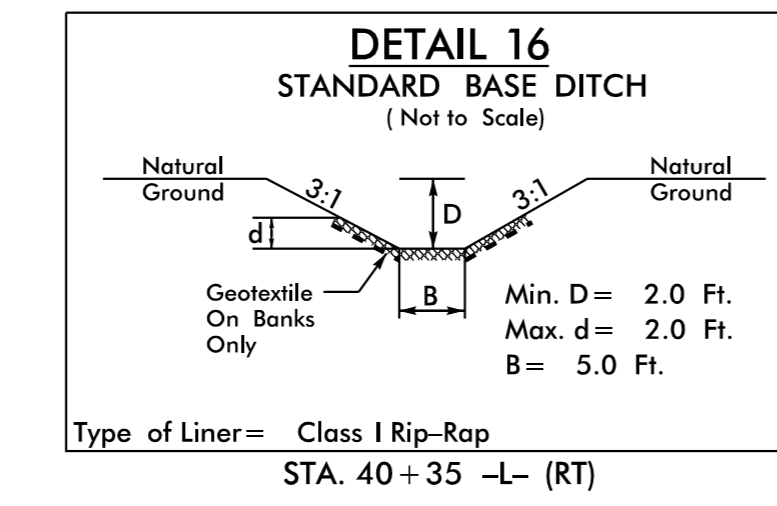
FROM STA. 51+50 TO STA. 53+10 -L- (LT)



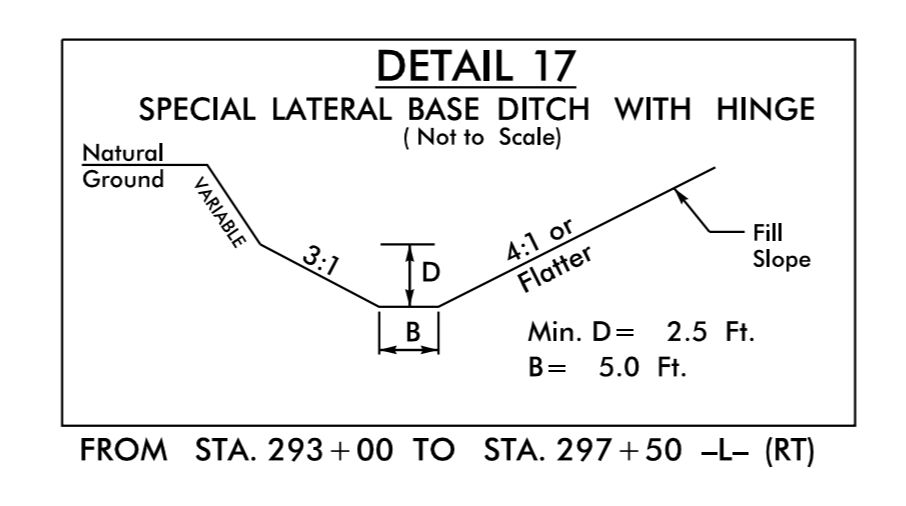
FROM STA. 144+00 TO STA. 145+50 -L- (RT)
 FROM STA. 177+15 TO STA. 178+50 -L- (RT)
 FROM STA. 196+00 TO STA. 197+25 -L- (RT)
 FROM STA. 258+00 TO STA. 259+00 -L- (LT)
 FROM STA. 351+50 TO STA. 353+00 -L- (LT)
 FROM STA. 388+50 TO STA. 393+00 -L- (LT)



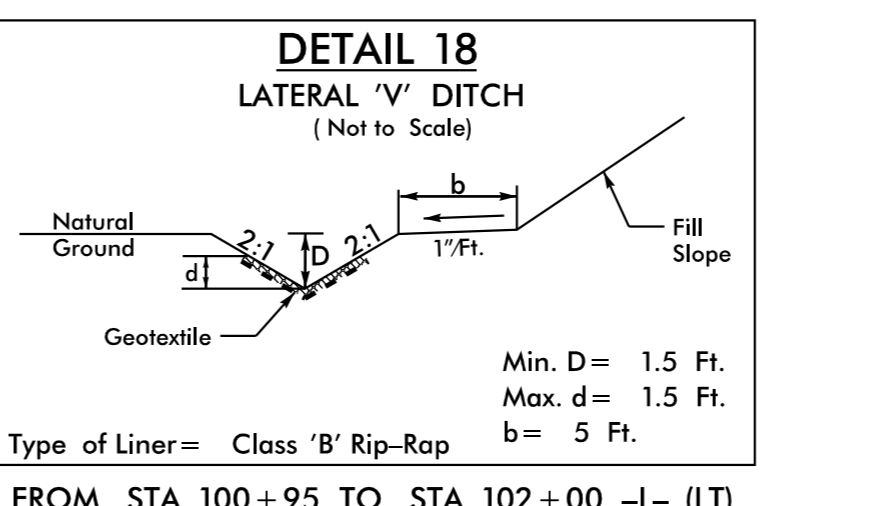
FROM STA. 38+90 TO STA. 40+35 -L- (RT)



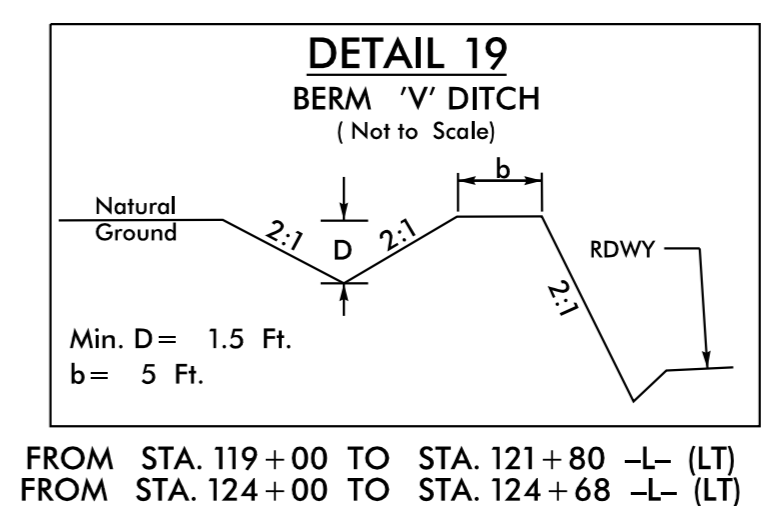
STA. 40+35 -L- (RT)



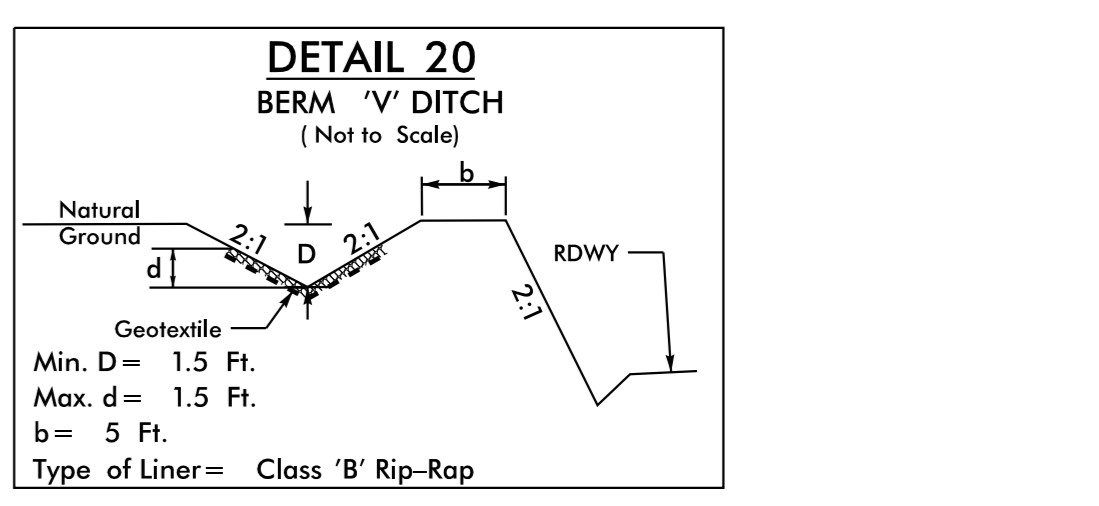
FROM STA. 293+00 TO STA. 297+50 -L- (RT)



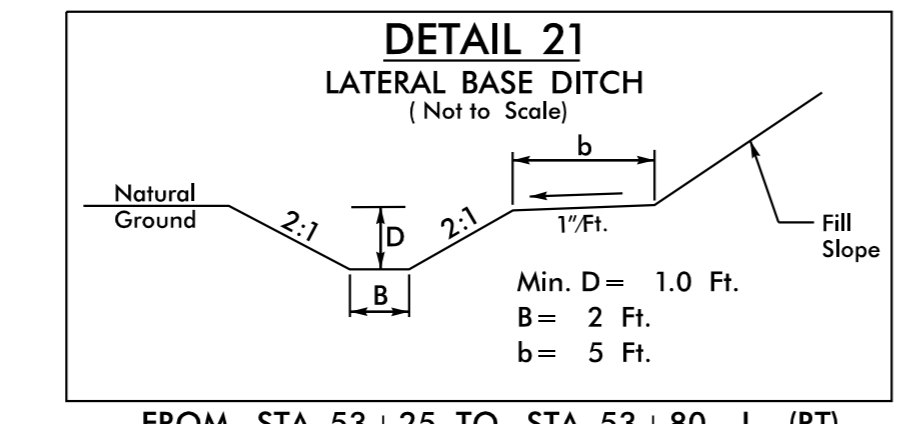
FROM STA. 100+95 TO STA. 102+00 -L- (LT)
 FROM STA. 126+50 TO STA. 129+00 -L- (LT)
 FROM STA. 363+32 TO STA. 364+50 -L- (RT)
 FROM STA. 375+45 TO STA. 377+50 -L- (LT)



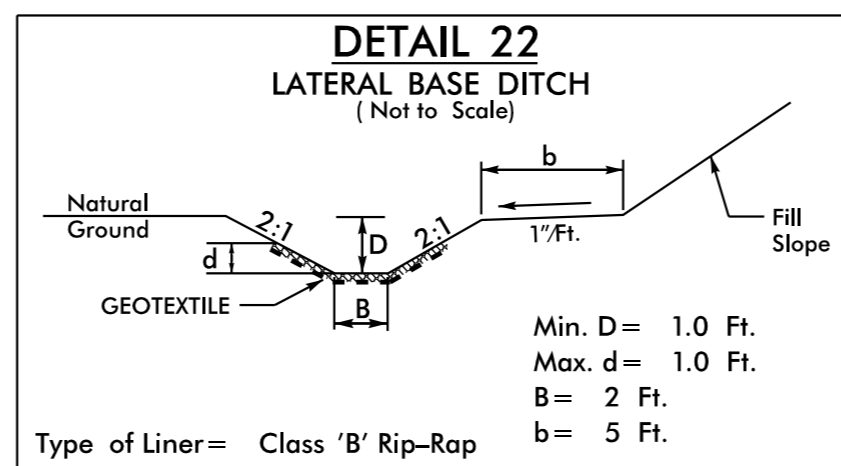
FROM STA. 119+00 TO STA. 121+80 -L- (LT)
 FROM STA. 124+00 TO STA. 124+68 -L- (LT)
 FROM STA. 127+50 TO STA. 129+00 -L- (RT)
 FROM STA. 129+00 TO STA. 130+00 -L- (RT)
 FROM STA. 186+50 TO STA. 188+89 -L- (RT)
 FROM STA. 189+21 TO STA. 190+40 -L- (RT)
 FROM STA. 190+40 TO STA. 192+35 -L- (RT)
 FROM STA. 203+00 TO STA. 203+50 -L- (RT)
 FROM STA. 203+50 TO STA. 205+00 -L- (RT)
 FROM STA. 208+50 TO STA. 209+50 -L- (LT)
 FROM STA. 208+50 TO STA. 208+50 -L- (RT)
 FROM STA. 268+50 TO STA. 269+85 -L- (LT)
 FROM STA. 272+00 TO STA. 273+00 -L- (LT)
 FROM STA. 296+20 TO STA. 297+50 -L- (LT)
 FROM STA. 297+50 TO STA. 300+00 -L- (LT)
 FROM STA. 300+00 TO STA. 301+00 -L- (LT)
 FROM STA. 301+00 TO STA. 302+00 -L- (LT)



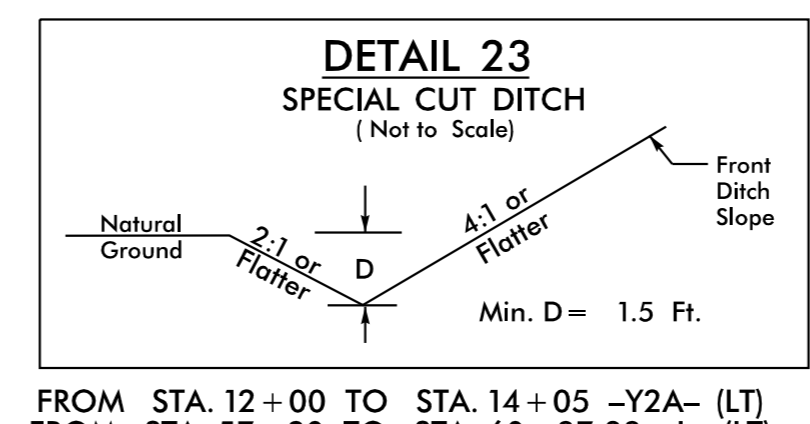
FROM STA. 122+00 TO STA. 124+00 -L- (LT)
 FROM STA. 136+00 TO STA. 138+00 -L- (LT)
 FROM STA. 138+00 TO STA. 141+50 -L- (LT)
 FROM STA. 205+00 TO STA. 208+00 -L- (RT)
 FROM STA. 209+50 TO STA. 212+00 -L- (LT)
 FROM STA. 270+15 TO STA. 272+00 -L- (LT)
 FROM STA. 273+00 TO STA. 274+50 -L- (LT)
 FROM STA. 274+50 TO STA. 275+25 -L- (LT)
 FROM STA. 302+00 TO STA. 304+00 -L- (LT)
 FROM STA. 311+00 TO STA. 313+80 -L- (RT)
 FROM STA. 314+00 TO STA. 317+80 -L- (RT)
 FROM STA. 318+00 TO STA. 320+50 -L- (RT)



FROM STA. 53+25 TO STA. 53+80 -L- (RT)
 FROM STA. 150+00 TO STA. 152+00 -L- (LT)
 FROM STA. 198+30 TO STA. 199+00 -L- (RT)

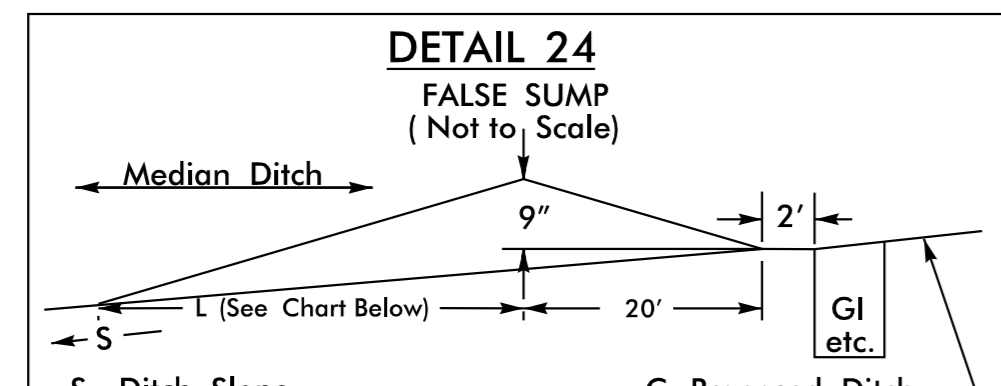


FROM STA. 148+70 TO STA. 150+00 -L- (LT)
 FROM STA. 199+00 TO STA. 200+50 -L- (RT)
 FROM STA. 362+00 TO STA. 363+05 -L- (LT)
 FROM STA. 381+00 TO STA. 382+20 -L- (LT)



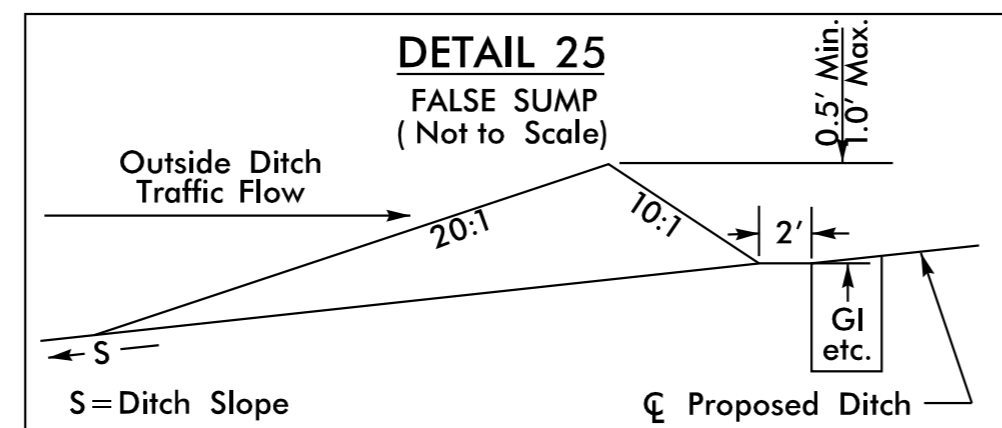
FROM STA. 12+00 TO STA. 14+05 -Y2A- (LT)
 FROM STA. 57+90 TO STA. 60+87.38 -L- (LT)
 FROM STA. 14+00 TO STA. 14+31.28 -Y4- (RT)
 FROM STA. 77+00 TO STA. 79+50 -L- (LT)
 FROM STA. 19+50 TO STA. 20+00 -Y8- (RT)
 FROM STA. 17+50 TO STA. 18+00 -Y9- (LT)
 FROM STA. 173+50 TO STA. 174+50 -L- (RT)
 FROM STA. 247+00 TO STA. 249+00 -L- (LT)
 FROM STA. 277+50 TO STA. 278+50 -L- (LT)
 FROM STA. 13+72 TO STA. 14+50 -Y13- (LT)

REVISIONS

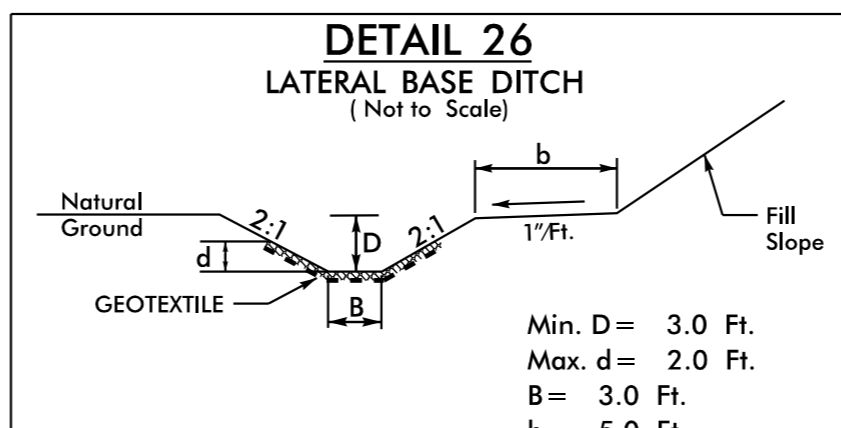


Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

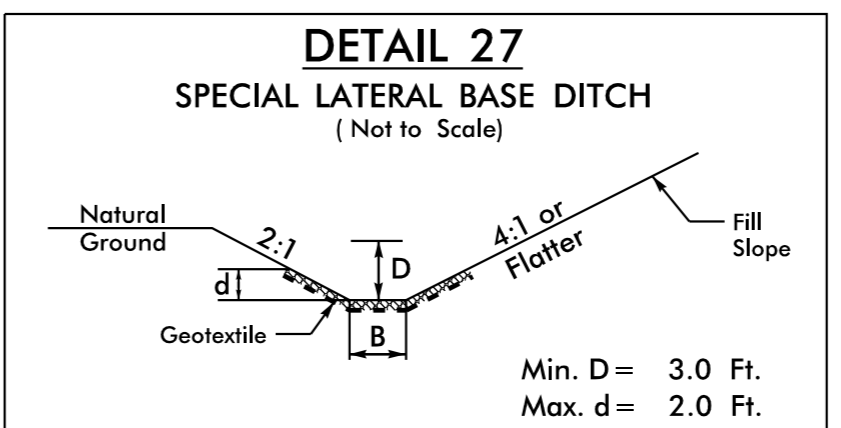
STA. 101+59 -L	STA. 215+65 -L	STA. 302+14 -L
STA. 107+36 -L	STA. 221+14 -L	STA. 308+86 -L
STA. 113+17 -L	STA. 232+14 -L	STA. 310+36 -L
STA. 122+85 -L	STA. 243+18 -L	STA. 313+86 -L
STA. 130+15 -L	STA. 251+20 -L	STA. 317+86 -L
STA. 134+15 -L	STA. 253+20 -L	STA. 325+13 -L
STA. 136+15 -L	STA. 260+30 -L	STA. 326+64 -L
STA. 155+85 -L	STA. 269+15 -L	STA. 335+13 -L
STA. 156+85 -L	STA. 272+15 -L	STA. 351+65 -L
STA. 159+85 -L	STA. 276+15 -L	STA. 357+15 -L
STA. 163+35 -L	STA. 278+70 -L	STA. 359+13 -L
STA. 166+85 -L	STA. 281+40 -L	STA. 362+65 -L
STA. 170+85 -L	STA. 287+14 -L	STA. 363+85 -L
STA. 178+65 -L	STA. 289+13 -L	STA. 371+50 -L
STA. 191+65 -L	STA. 293+14 -L	STA. 374+85 -L
STA. 212+15 -L	STA. 297+65 -L	STA. 380+85 -L
		STA. 382+85 -L



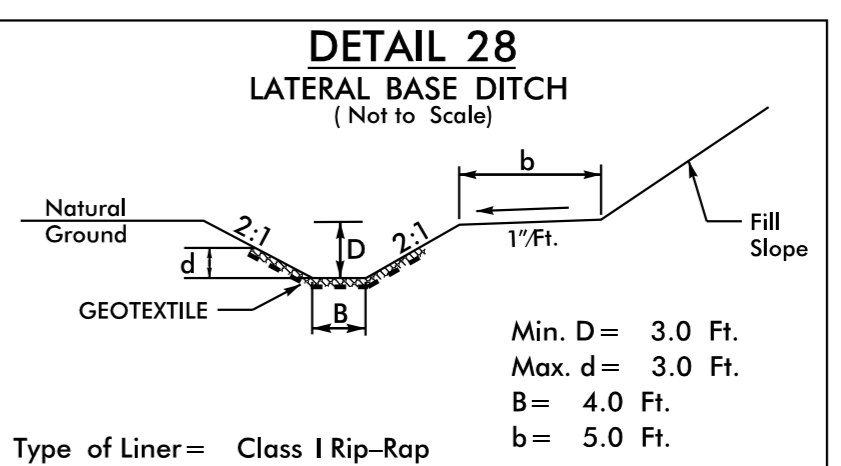
STA. 93+15 -L (LT)	STA. 274+65 -L (LT)
STA. 122+84 -L (RT)	STA. 276+15 -L (LT)
STA. 139+15 -L (LT)	STA. 291+64 -L (LT)
STA. 141+65 -L (LT)	STA. 297+63 -L (LT)
STA. 184+40 -L (RT)	STA. 301+14 -L (LT)
STA. 205+15 -L (LT)	STA. 304+64 -L (LT)
STA. 208+65 -L (LT)	STA. 310+37 -L (RT)
STA. 212+15 -L (LT)	STA. 313+87 -L (RT)
STA. 215+65 -L (LT)	STA. 317+86 -L (RT)
STA. 221+14 -L (LT)	STA. 326+64 -L (LT)
STA. 230+15 -L (LT)	STA. 329+14 -L (LT)
STA. 272+15 -L (LT)	STA. 334+10 -L (LT)
	STA. 393+50 -L (RT)



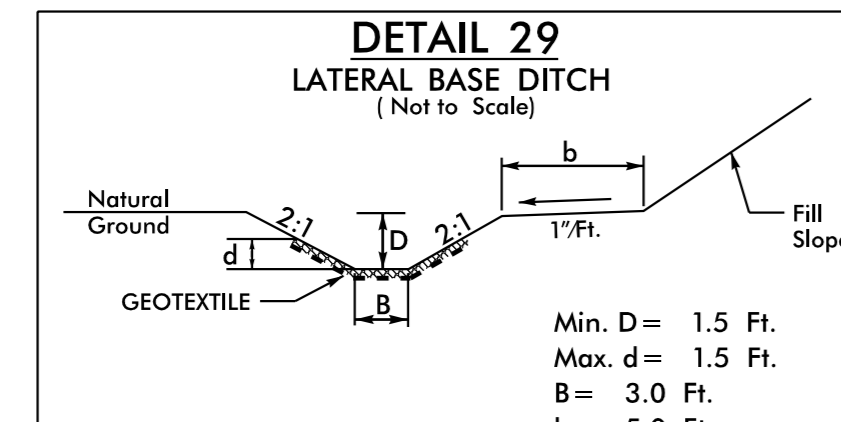
Type of Liner = Class I Rip-Rap
 FROM STA. 129+00 TO STA. 131+60 -L (LT)
 FROM STA. 134+50 TO STA. 135+50 -L (LT)
 FROM STA. 210+00 TO STA. 212+00 -L (RT)



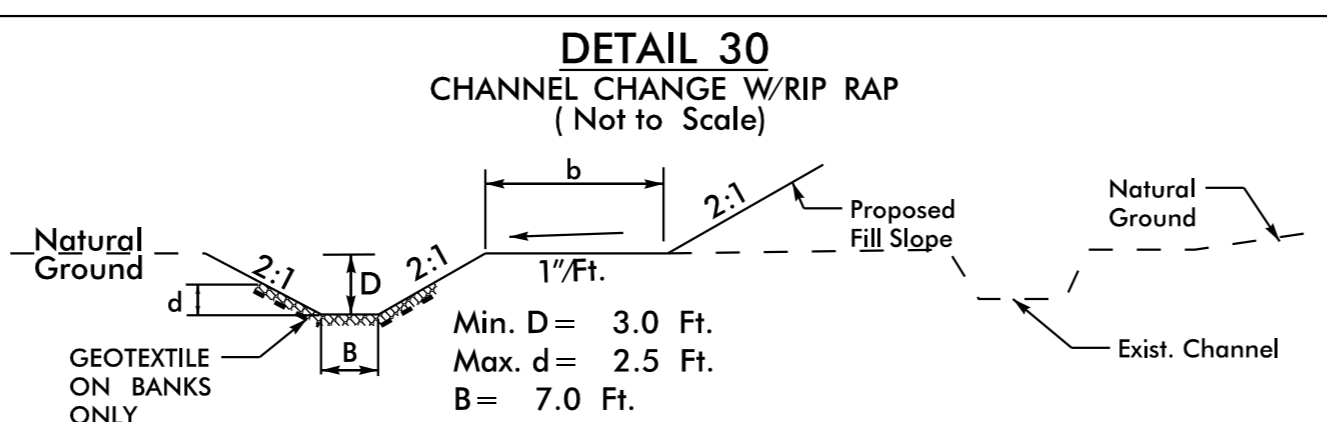
Type of Liner = Class I Rip-Rap
 FROM STA. 145+50 TO STA. 147+50 -L (RT)
 FROM STA. 384+00 TO STA. 384+50 -L (RT)



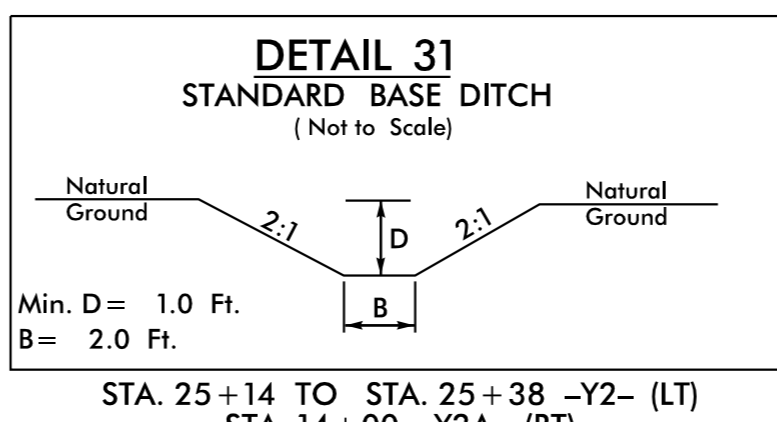
Type of Liner = Class I Rip-Rap
 FROM STA. 89+71 TO STA. 93+50 -L (RT)
 FROM STA. 143+75 TO STA. 144+00 -L (LT)



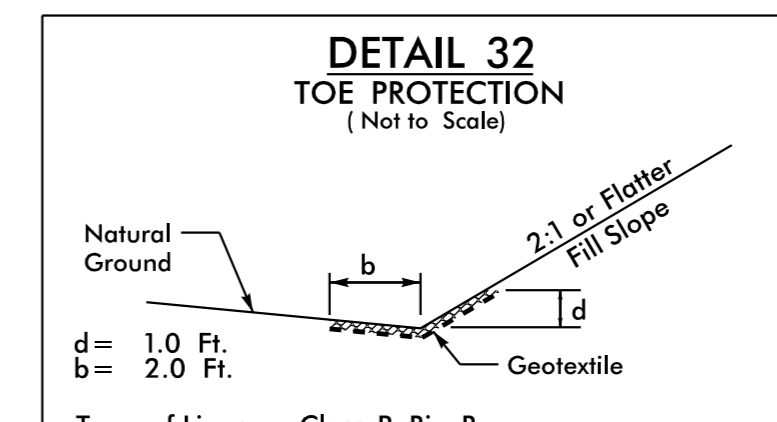
Type of Liner = Class I Rip-Rap
 FROM STA. 115+35 TO STA. 116+50 -L (LT)
 FROM STA. 304+85 TO STA. 307+00 -L (RT)
 FROM STA. 381+05 TO STA. 381+85 -L (RT)



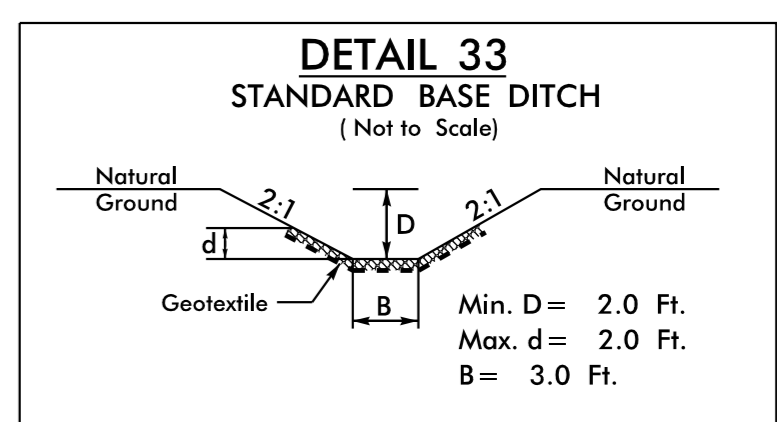
Type of Liner = Class I Rip-Rap
 FROM STA. 235+27 TO STA. 238+00 -L (RT)



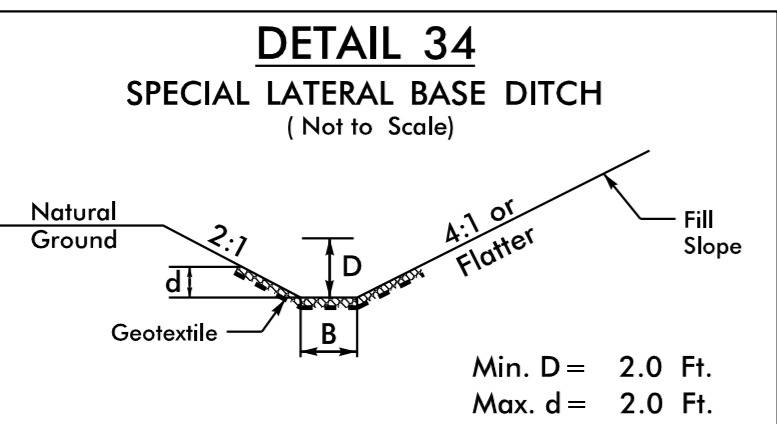
Min. D = 1.0 Ft.
 B = 2.0 Ft.
 STA. 25+14 TO STA. 25+38 -Y2- (LT)
 STA. 14+00 -Y2A- (RT)
 STA. 66+95 -L (RT)
 STA. 233+50 -L (RT)



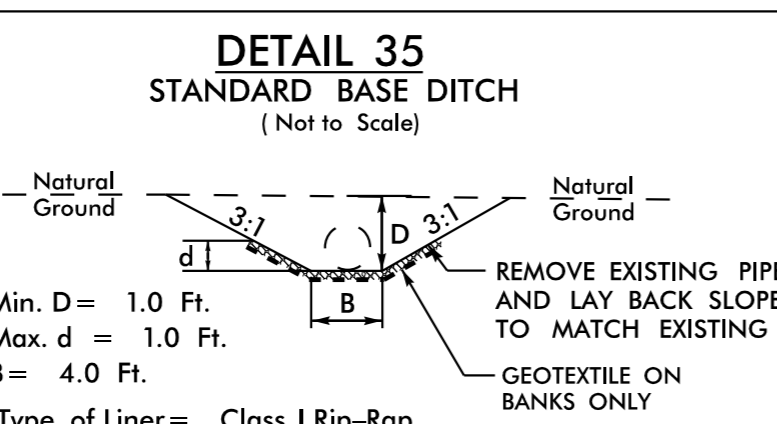
Type of Liner = Class B Rip-Rap
 FROM STA. 157+50 TO STA. 158+50 -L (LT)
 FROM STA. 232+50 TO STA. 233+50 -L (RT)
 FROM STA. 259+00 TO STA. 259+55 -L (LT)
 FROM STA. 259+65 TO STA. 260+00 -L (LT)
 FROM STA. 359+00 TO STA. 359+62 -L (RT)



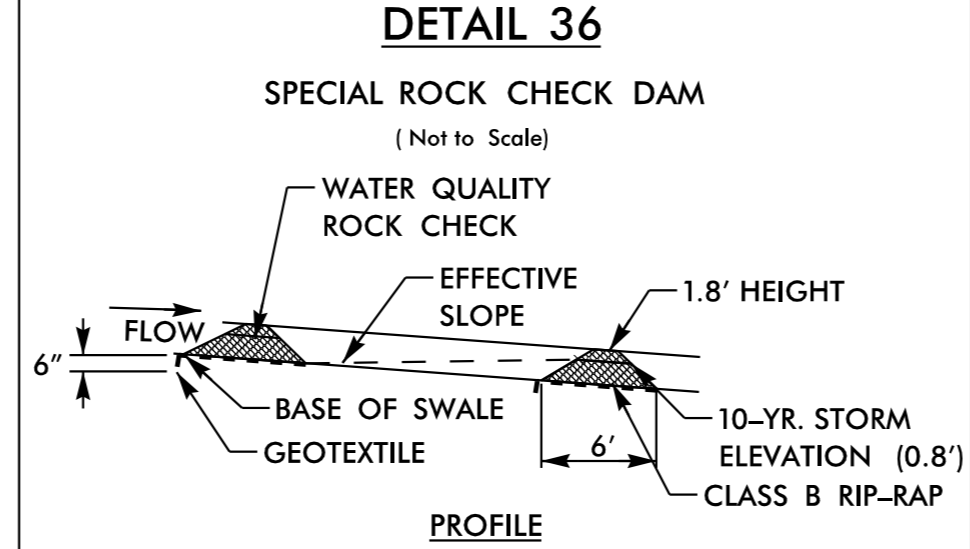
Type of Liner = Class I Rip-Rap
 FROM STA. 216+00 TO STA. 216+50 -L (LT)
 FROM STA. 232+00 TO STA. 232+50 -L (RT)



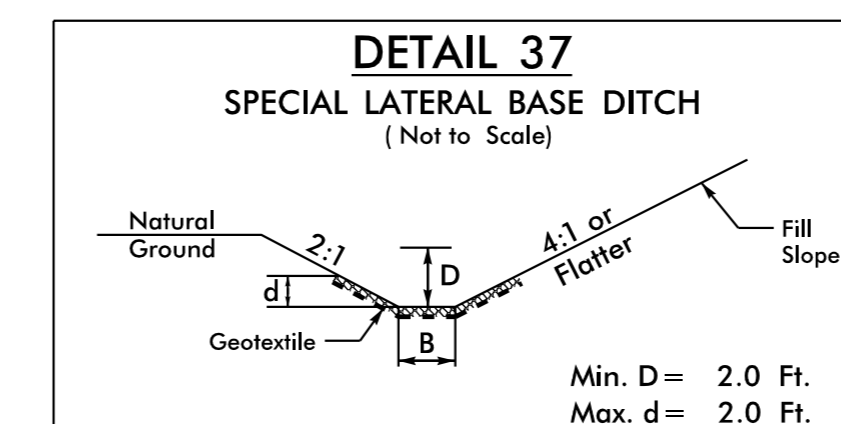
Type of Liner = Class I Rip-Rap
 FROM STA. 228+50 TO STA. 232+00 -L (RT)
 FROM STA. 307+00 TO STA. 310+00 -L (RT)



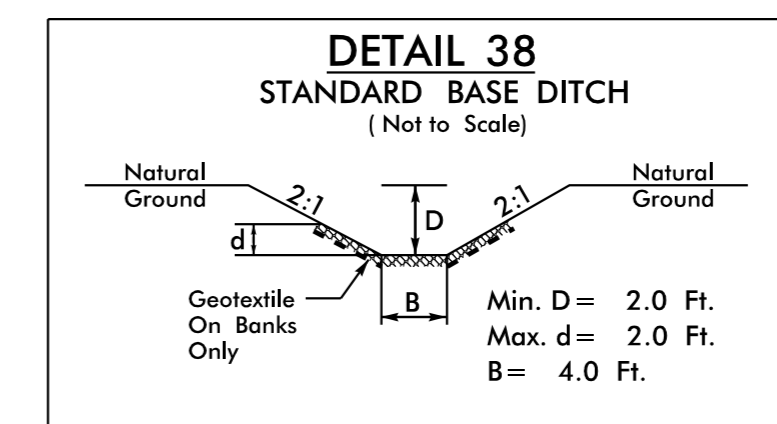
Type of Liner = Class I Rip-Rap
 FROM STA. 147+98 TO STA. 148+21 -L (LT)



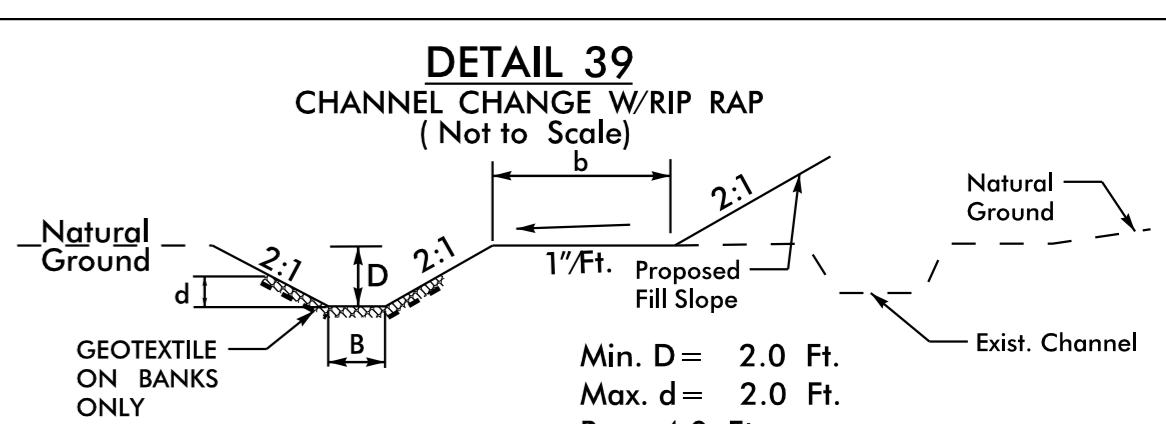
PROFILE
 FROM STA. 276+50 TO STA. 277+75 -L (RT)
 FROM STA. 290+50 TO STA. 297+50 -L (RT)
 FROM STA. 307+00 TO STA. 308+50 -L (LT)
 FROM STA. 331+25 TO STA. 334+00 -L (LT)



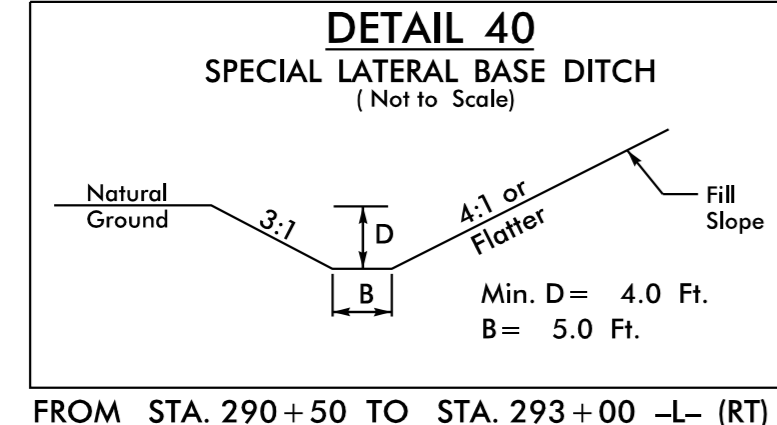
Type of Liner = Class B Rip-Rap
 FROM STA. 12+00 TO STA. 14+50 -Y16- (RT)



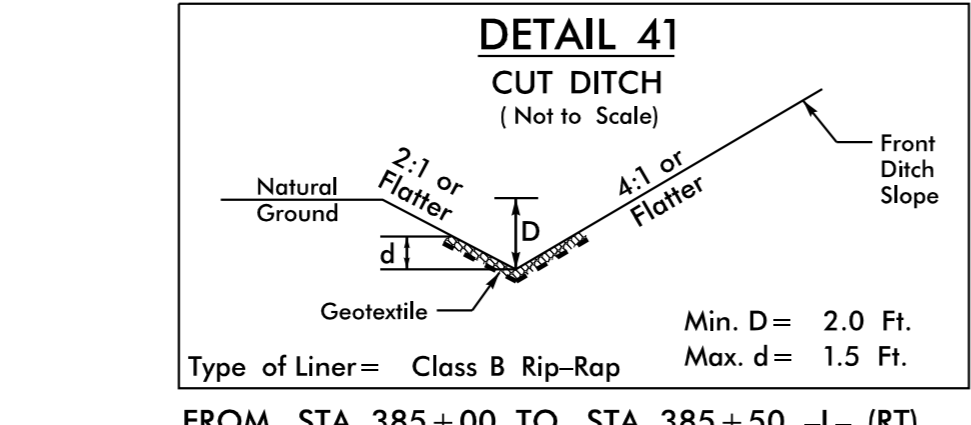
Type of Liner = Class I Rip-Rap
 FROM STA. 144+00 TO STA. 144+48 -L (LT)
 FROM STA. 148+58 TO STA. 148+70 -L (LT)
 FROM STA. 149+62 -L (RT)
 FROM STA. 157+37 -L (LT)
 FROM STA. 198+80 -L (LT)
 FROM STA. 216+44 TO STA. 217+11 -L (LT)
 FROM STA. 219+00 TO STA. 219+21 -L (RT)
 FROM STA. 259+54 -L (RT)



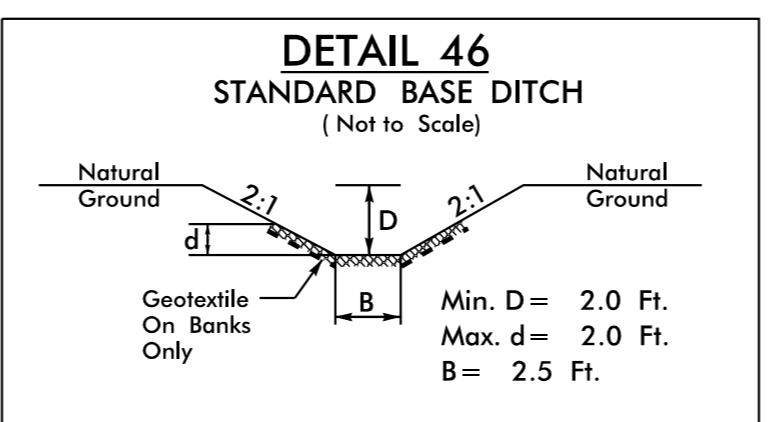
Type of Liner = Class I Rip-Rap
 FROM STA. 292+50 TO STA. 295+27 -L (LT)



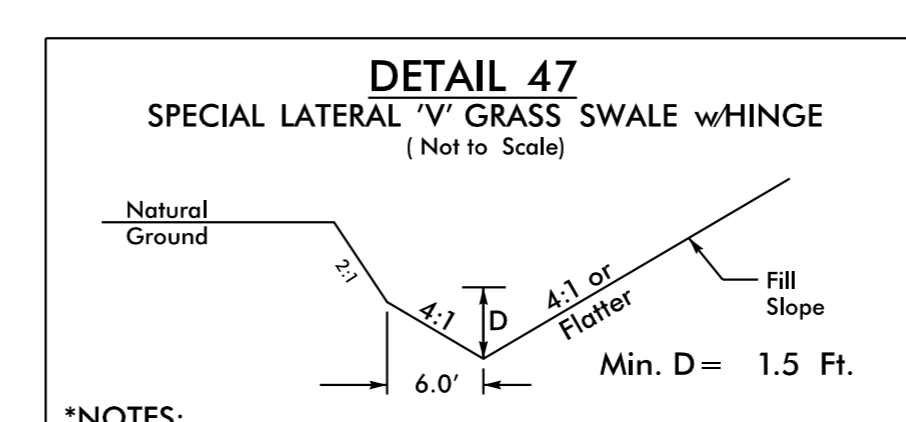
FROM STA. 290+50 TO STA. 293+00 -L (RT)



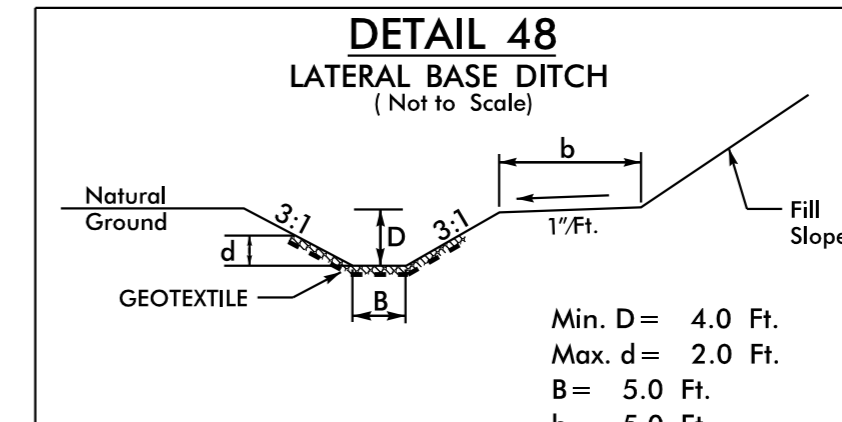
Type of Liner = Class B Rip-Rap
 FROM STA. 385+00 TO STA. 385+50 -L (RT)



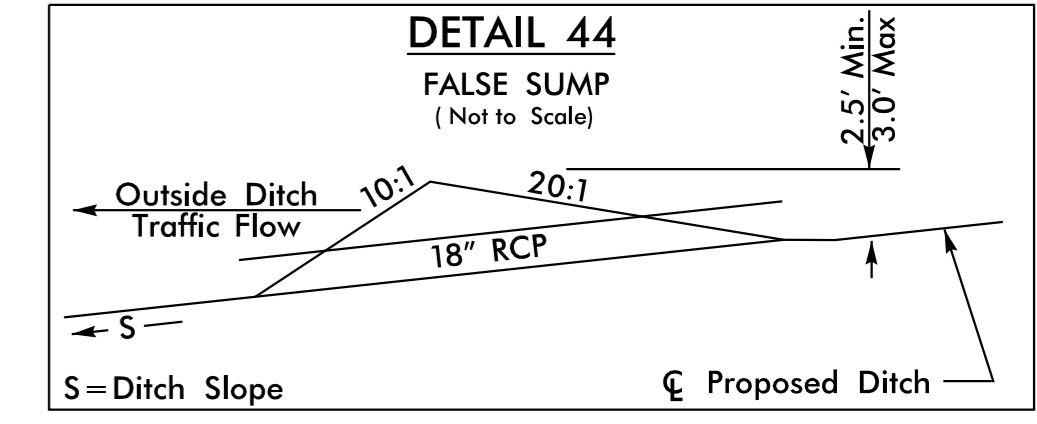
Type of Liner = Class B Rip-Rap
 FROM STA. 128+81 TO STA. 129+00 -L (LT)
 FROM STA. 192+13 TO STA. 192+25 -L (LT)
 FROM STA. 238+66 -L (RT)
 FROM STA. 276+27 TO STA. 276+60 -L (LT)
 FROM STA. 371+67 TO STA. 371+75 -L (LT)



*NOTES:
 1) LONGITUDINAL SLOPES BETWEEN 0.3% AND 4.0%.
 2) MODIFICATIONS MAY BE NEEDED, AS APPROVED BY ENGINEER.
 FROM STA. 349+50 TO STA. 351+50 -L (LT)



Type of Liner = Class I Rip-Rap
 FROM STA. 276+50 TO STA. 277+75 -L (RT)
 FROM STA. 306+04 TO STA. 306+50 -L (LT)
 FROM STA. 307+00 TO STA. 308+50 -L (LT)
 FROM STA. 375+00 TO STA. 375+40 -L (LT)



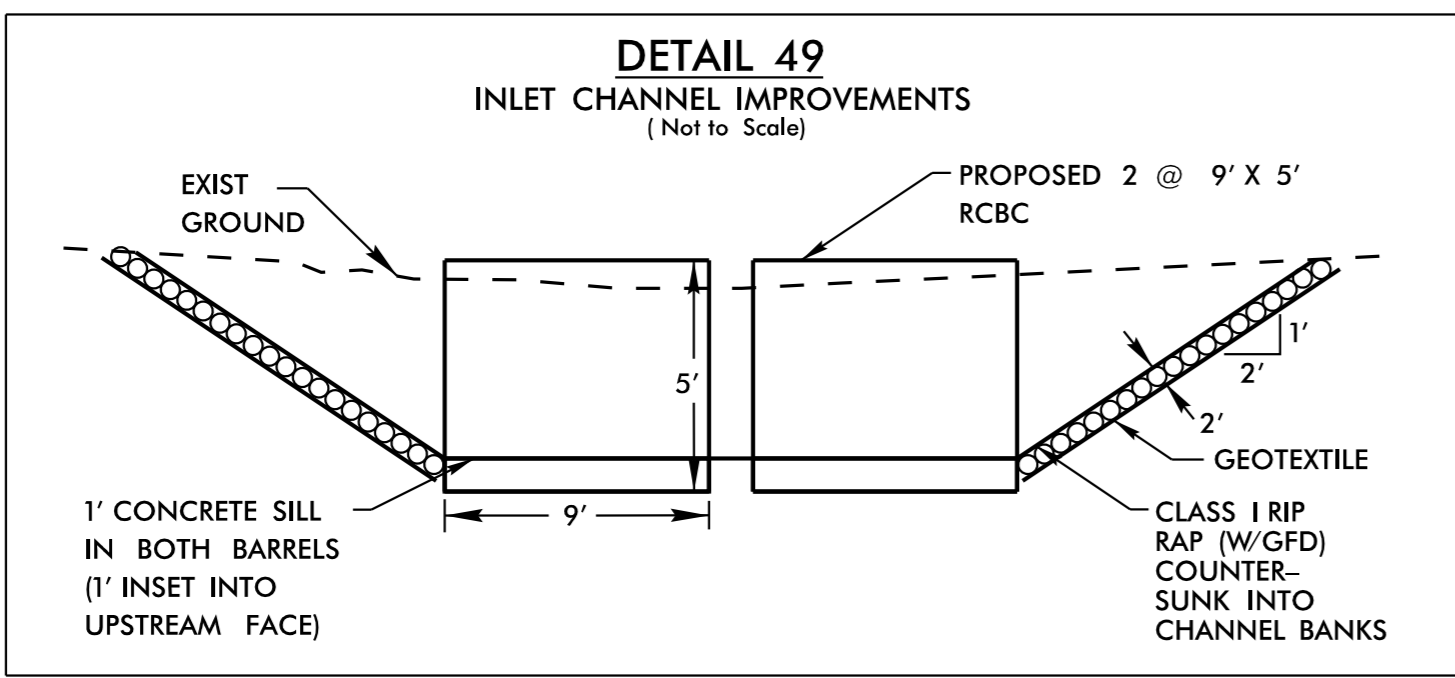
277+90 -L (RT)

REVISIONS

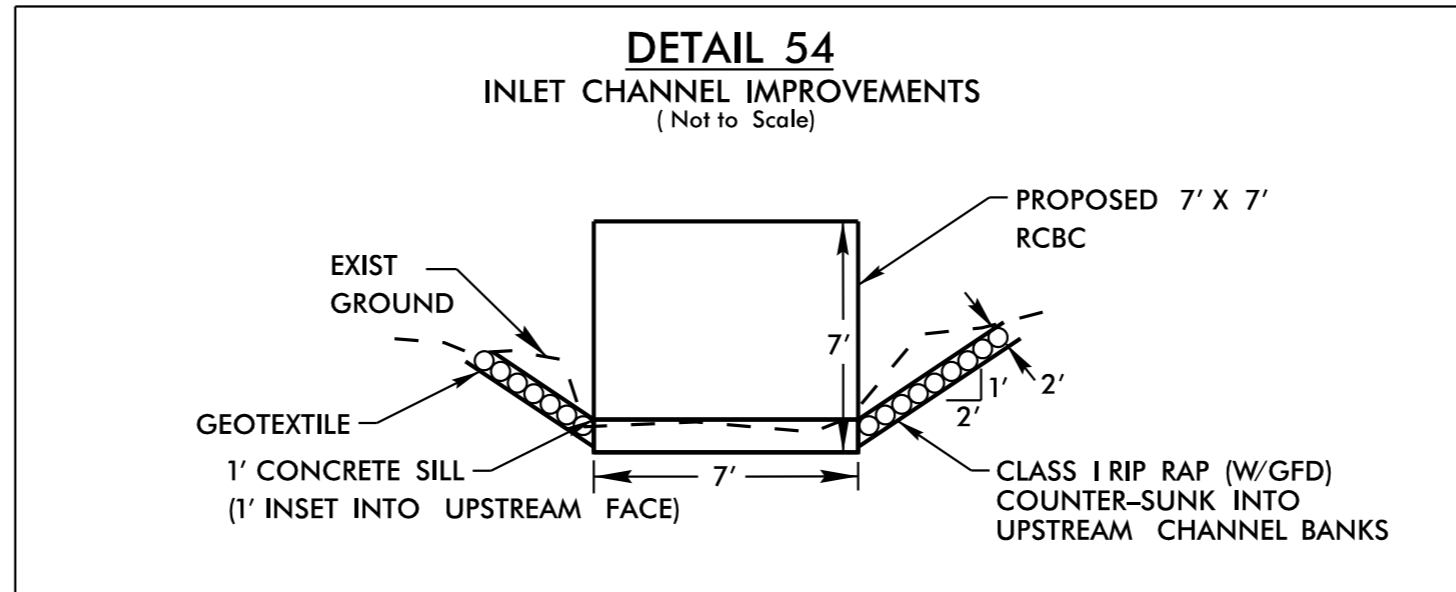
5/14/99

11/1/2018

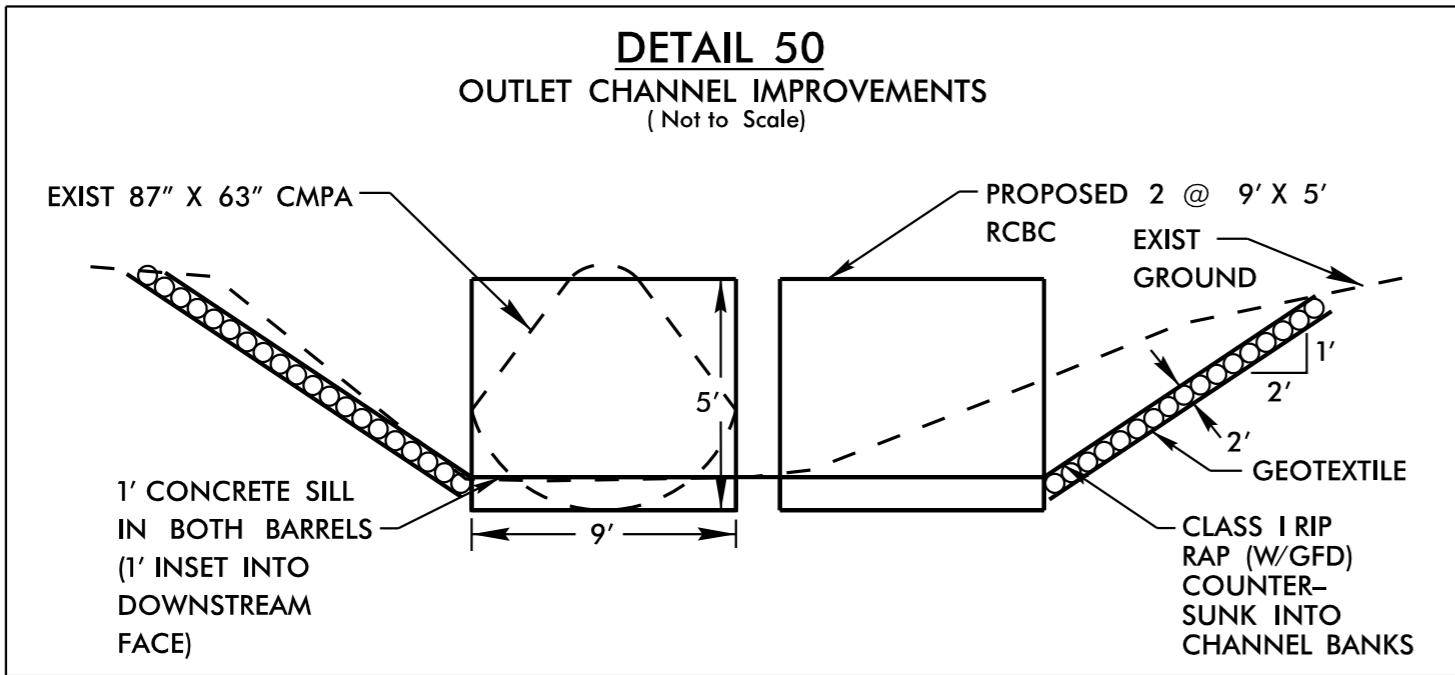
5/14/99



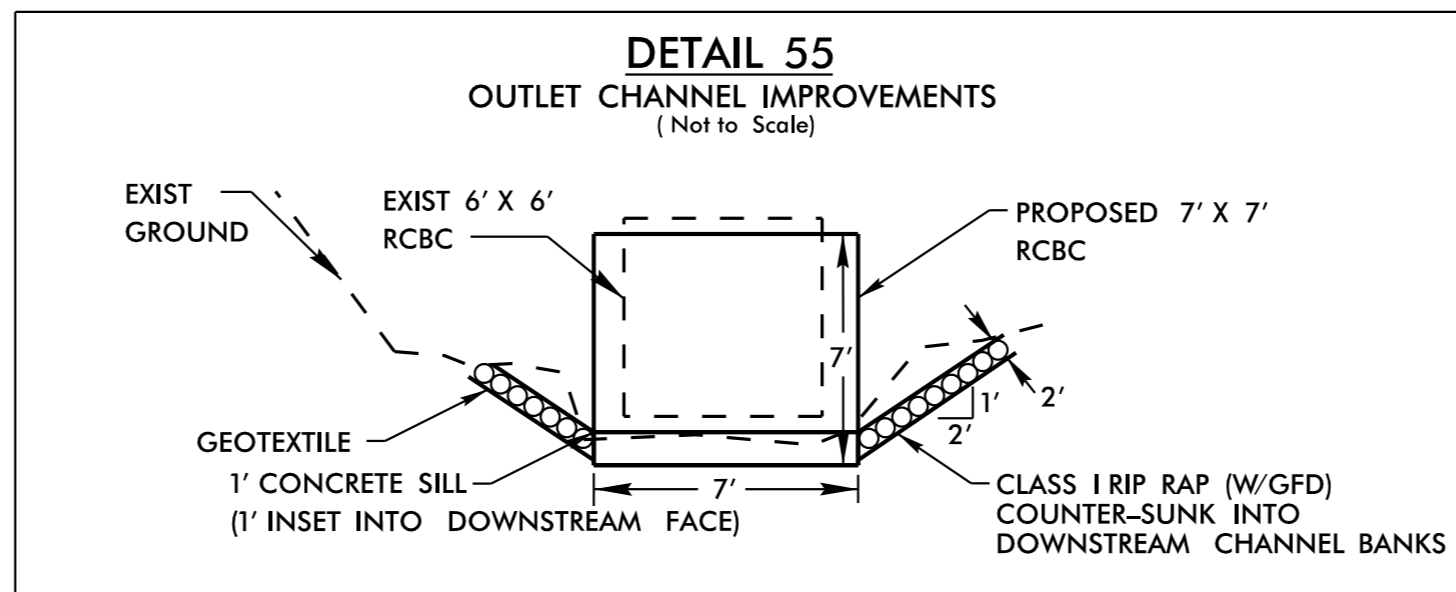
STA. 38+90 -L- (RT)



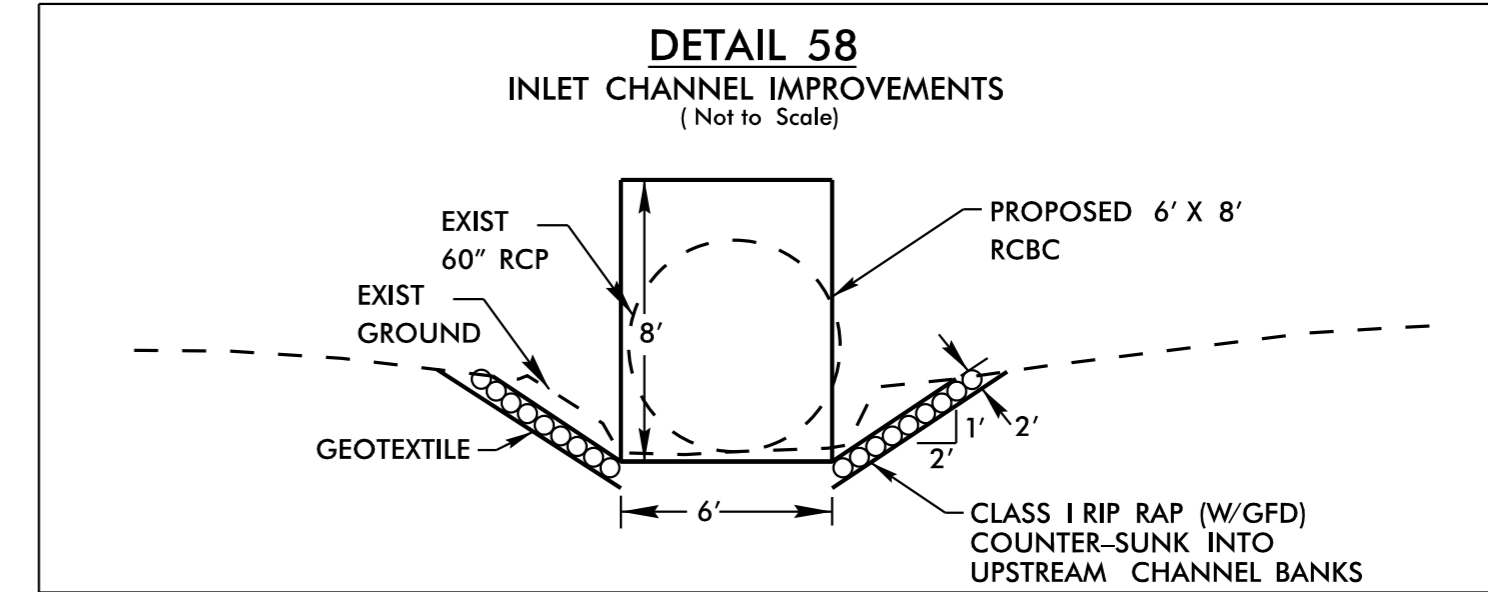
STA. 93+60 -L- (RT)



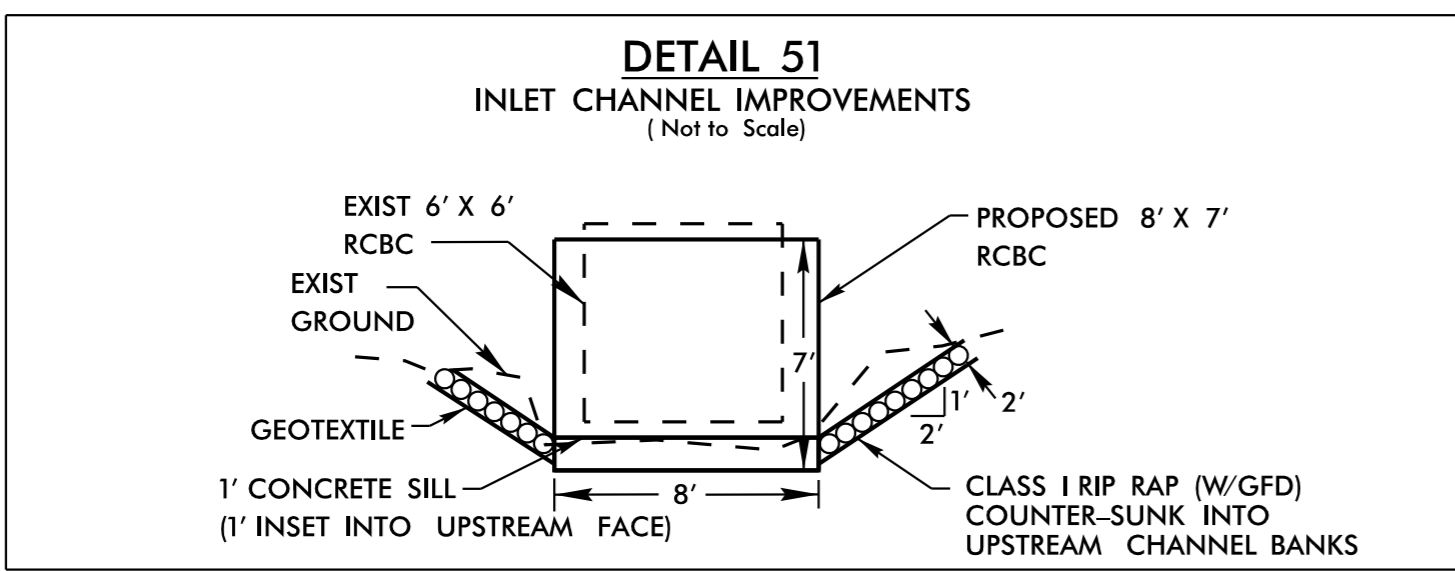
STA. 38+76 -L- (LT)



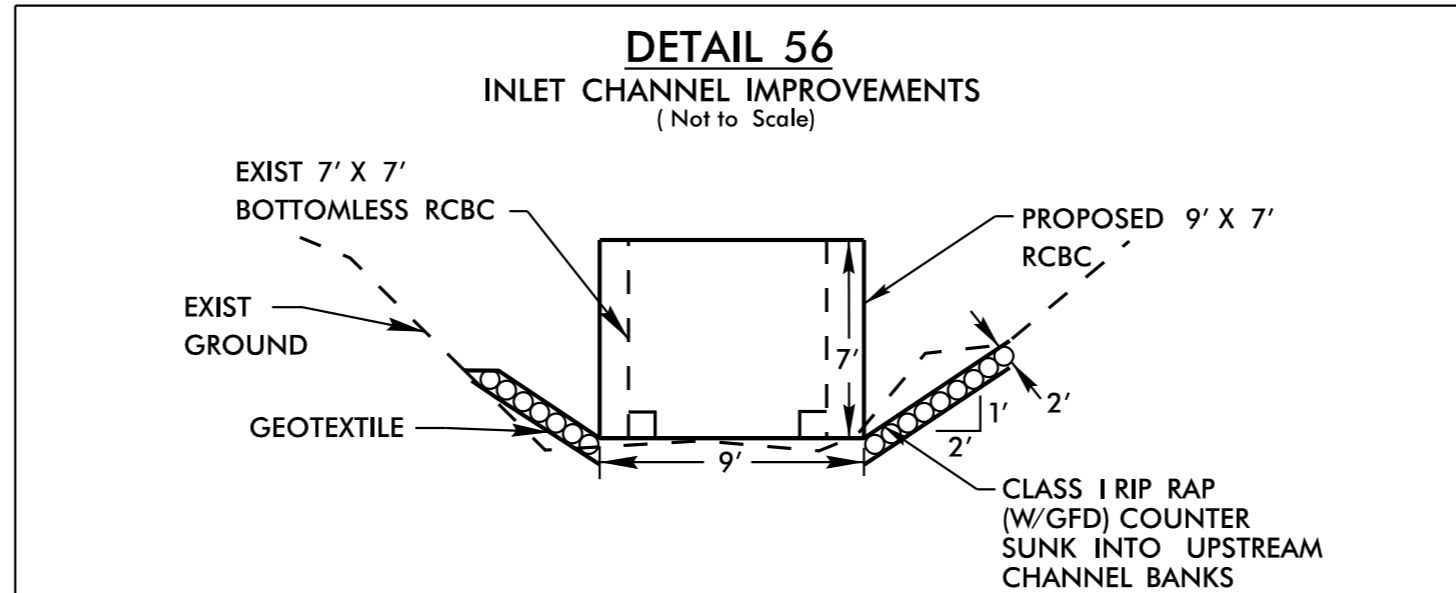
STA. 93+56 -L- (LT)



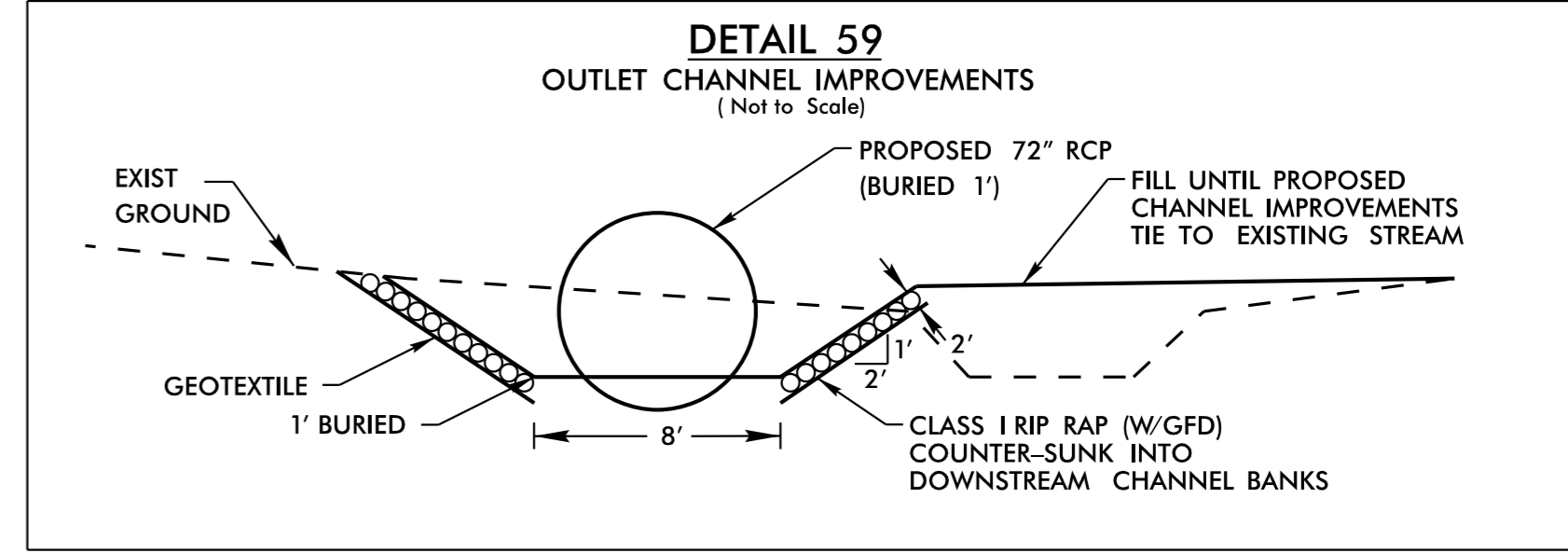
STA. 363+08 -L- (LT)



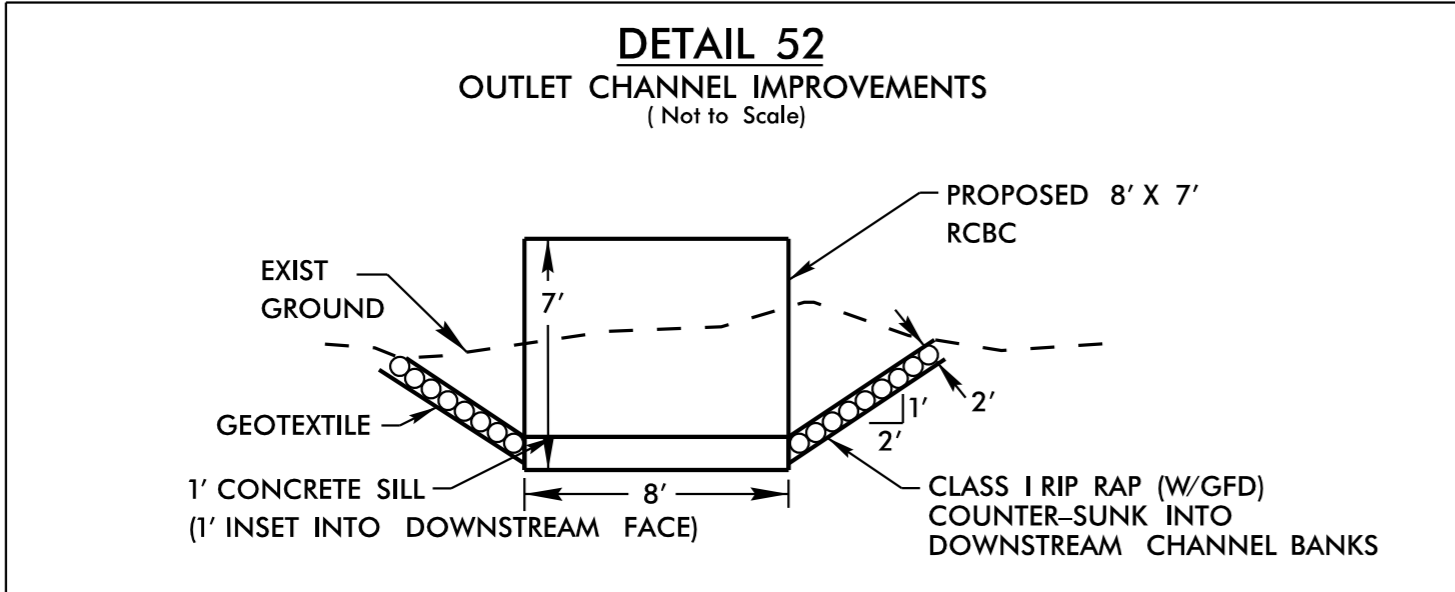
STA. 52+78 -L- (RT)



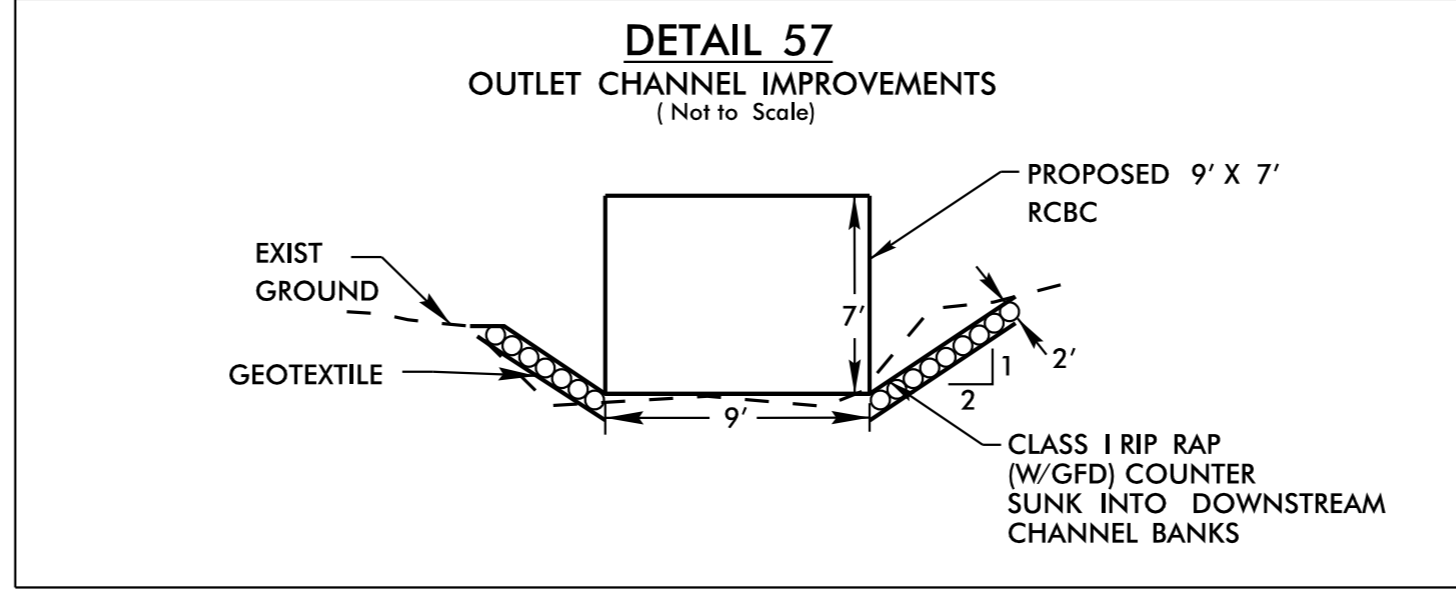
STA. 304+69 -L- (RT)



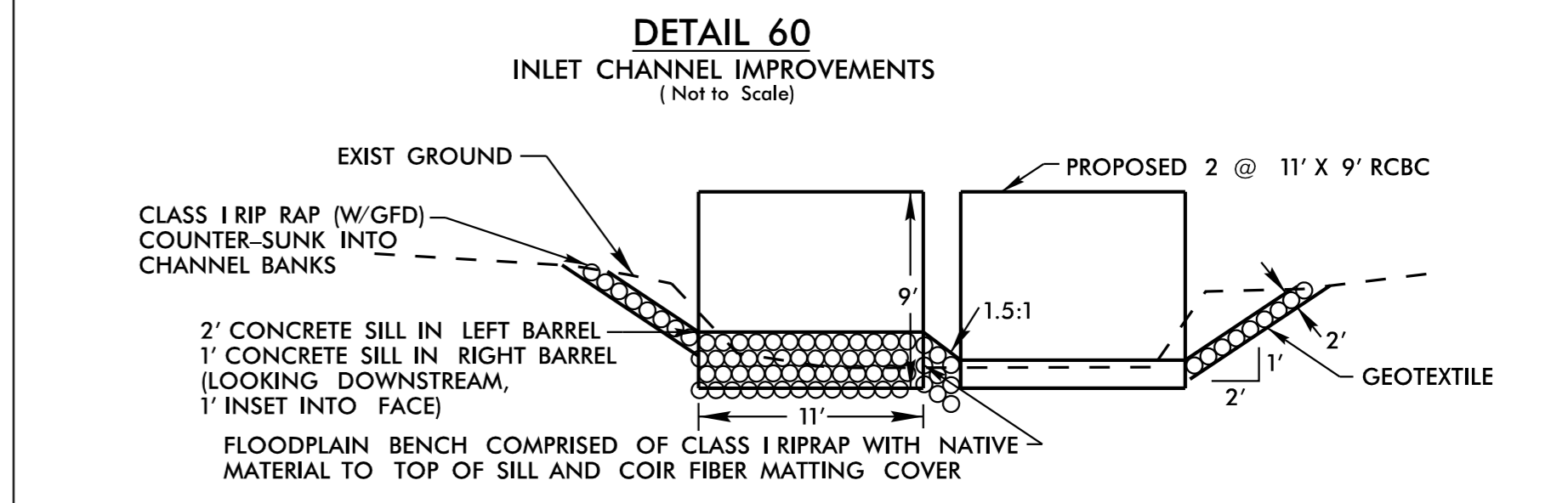
STA. 375+19 -L- (RT)



STA. 53+25 -L- (LT)

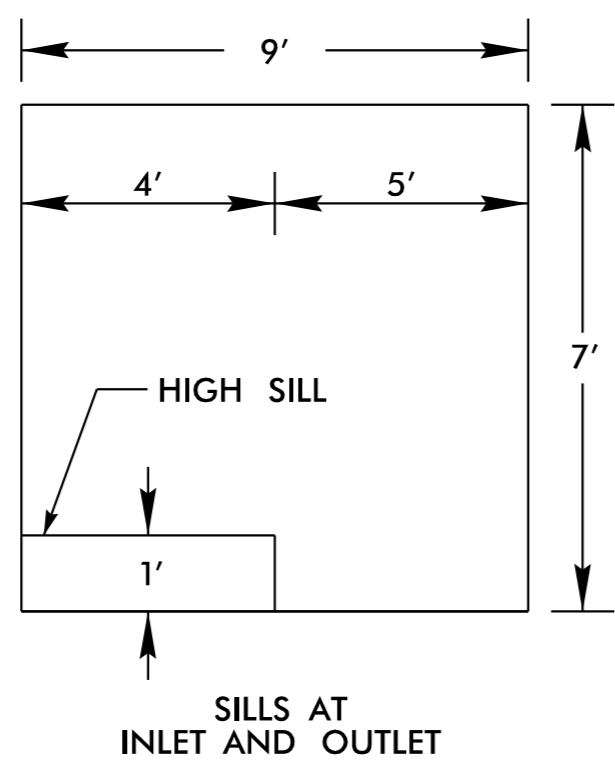


STA. 305+92 -L- (LT)

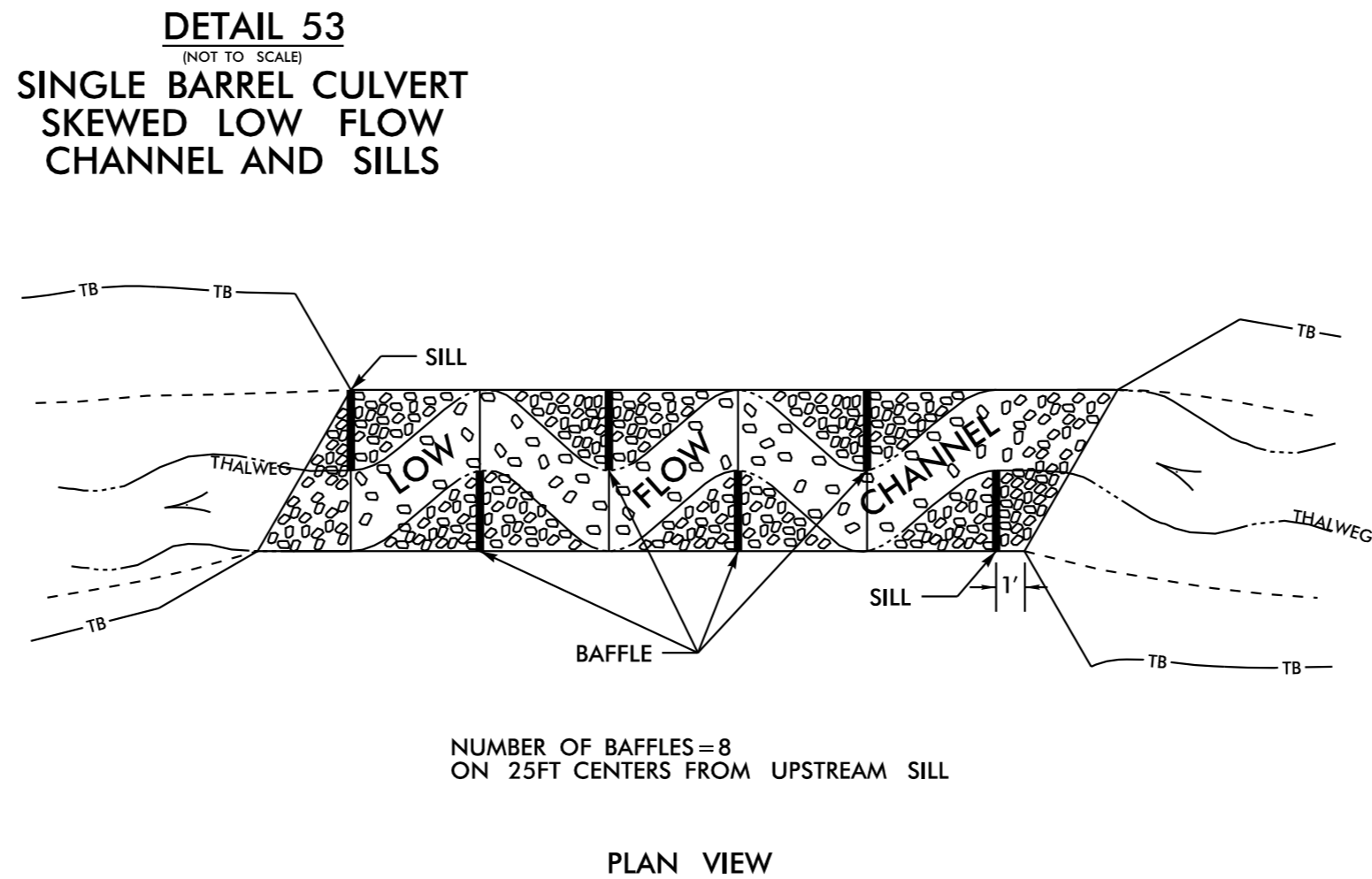


STA. 382+22 -L- (LT)

- *NOTES:
- 1) CLASS B RIP RAP BETWEEN SILLS/BAFFLES IN THE CULVERT SHALL PROVIDE A CONTINUOUS LOW FLOW CHANNEL EXISTING CHANNEL CONSISTS OF ROCK THEREFORE EXCAVATED NATIVE MATERIAL IS NOT ANTICIPATED FROM THE STREAM BED AT THE PROJECT SITE DURING CONSTRUCTION.
 - 2) SILLS/BAFFLES ARE TO BE 1.0 FT. WIDE, CAST SEPARATELY AND ATTACHED BY DOWELS.
 - 3) NO LOW FLOW SILLS/BAFFLES WILL BE REQUIRED AT UPSTREAM AND DOWNSTREAM CULVERT FACE AS CULVERT WILL NOT BE BURIED DUE TO PRESENCE OF ROCK IN STREAM BED.
 - 4) SILLS/BAFFLES ARE TO BE 1' HIGH.
 - 5) NUMBER OF SILLS/BAFFLES DETERMINED BY THE ENGINEER.
 - 6) CULVERT SHOULD BE BACKFILLED WITH CLASS B RIP RAP TO SILLS/BAFFLE HEIGHT.

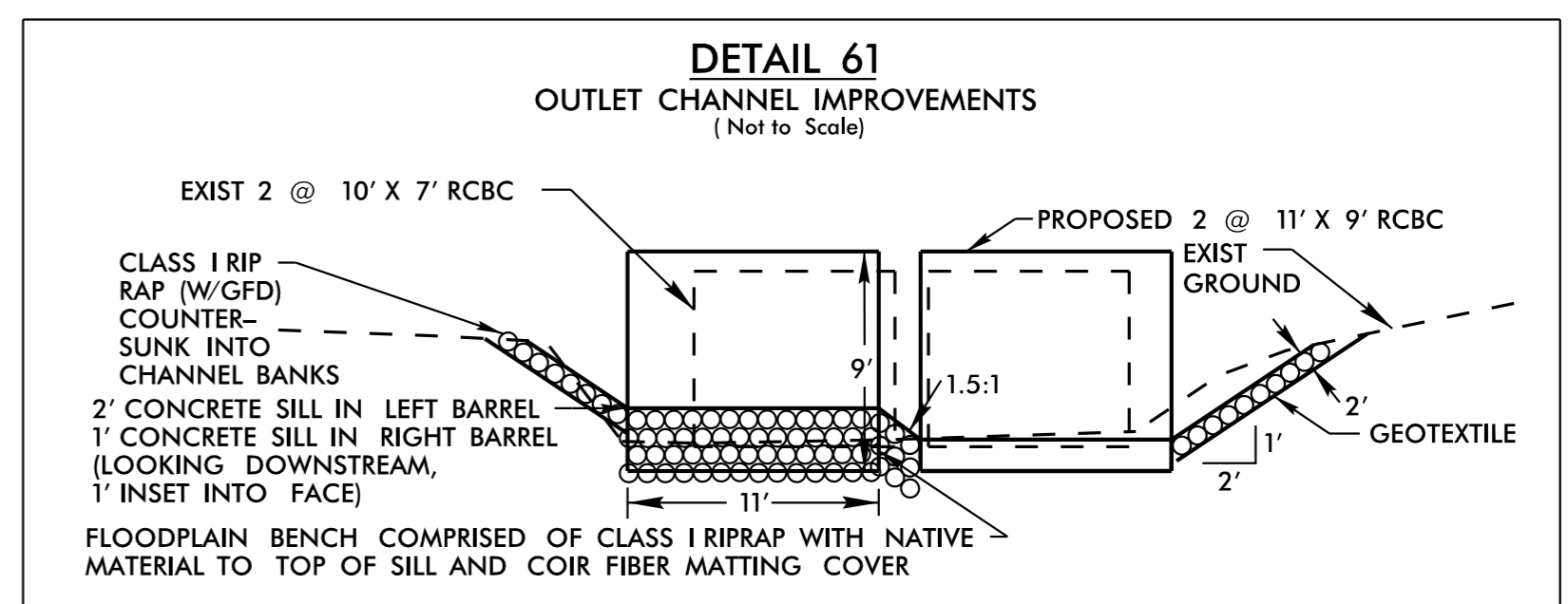


STA. 305+27 -L-



NUMBER OF BAFFLES=8 ON 25FT CENTERS FROM UPSTREAM SILL

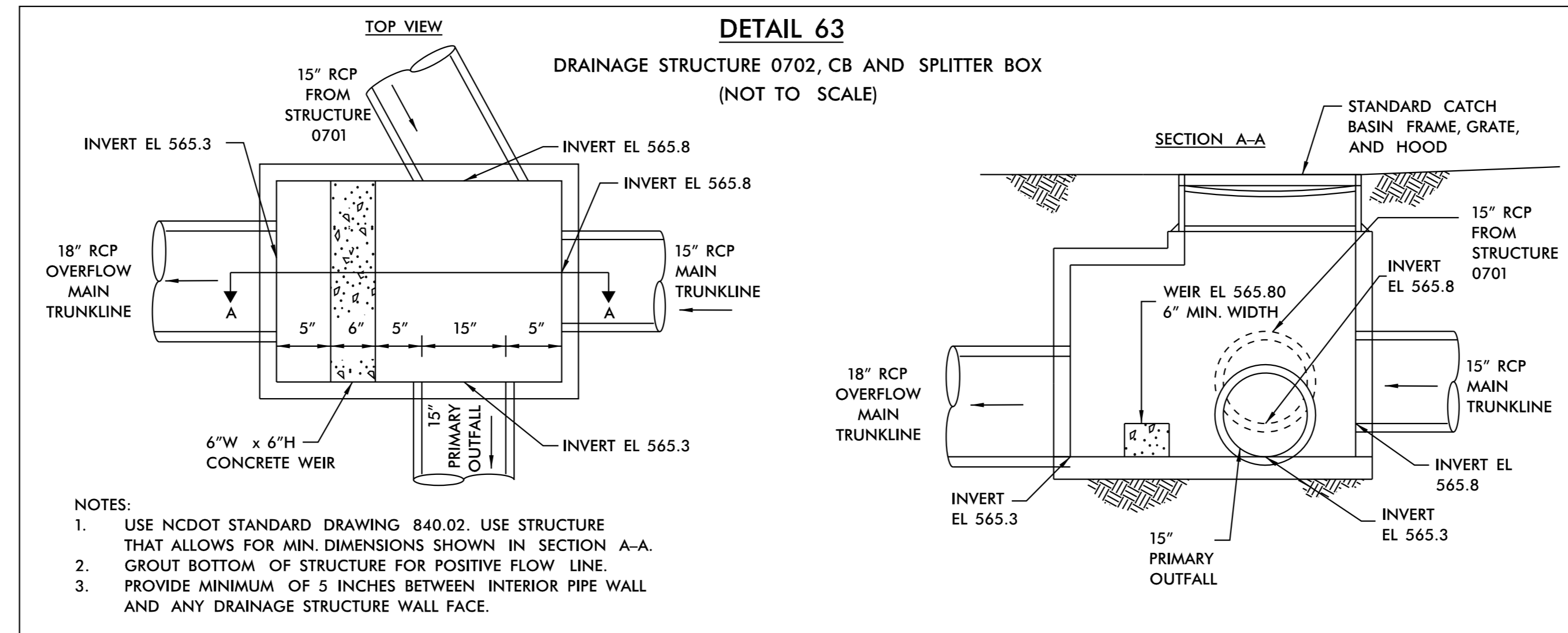
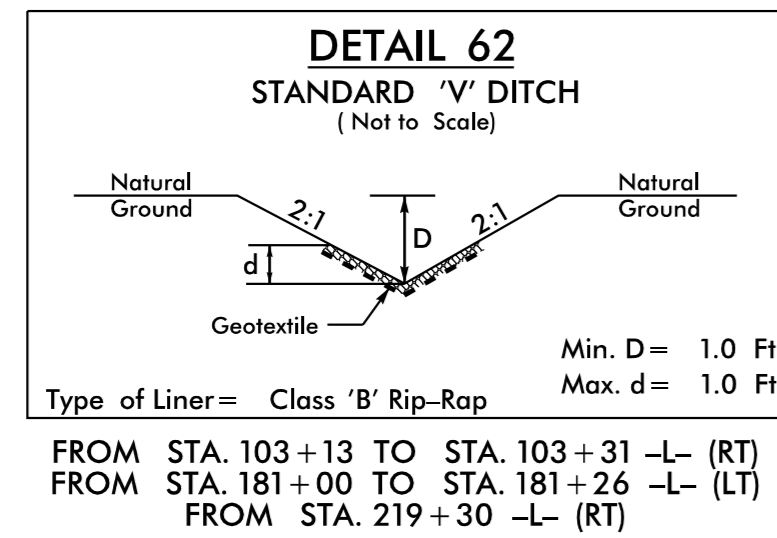
PLAN VIEW



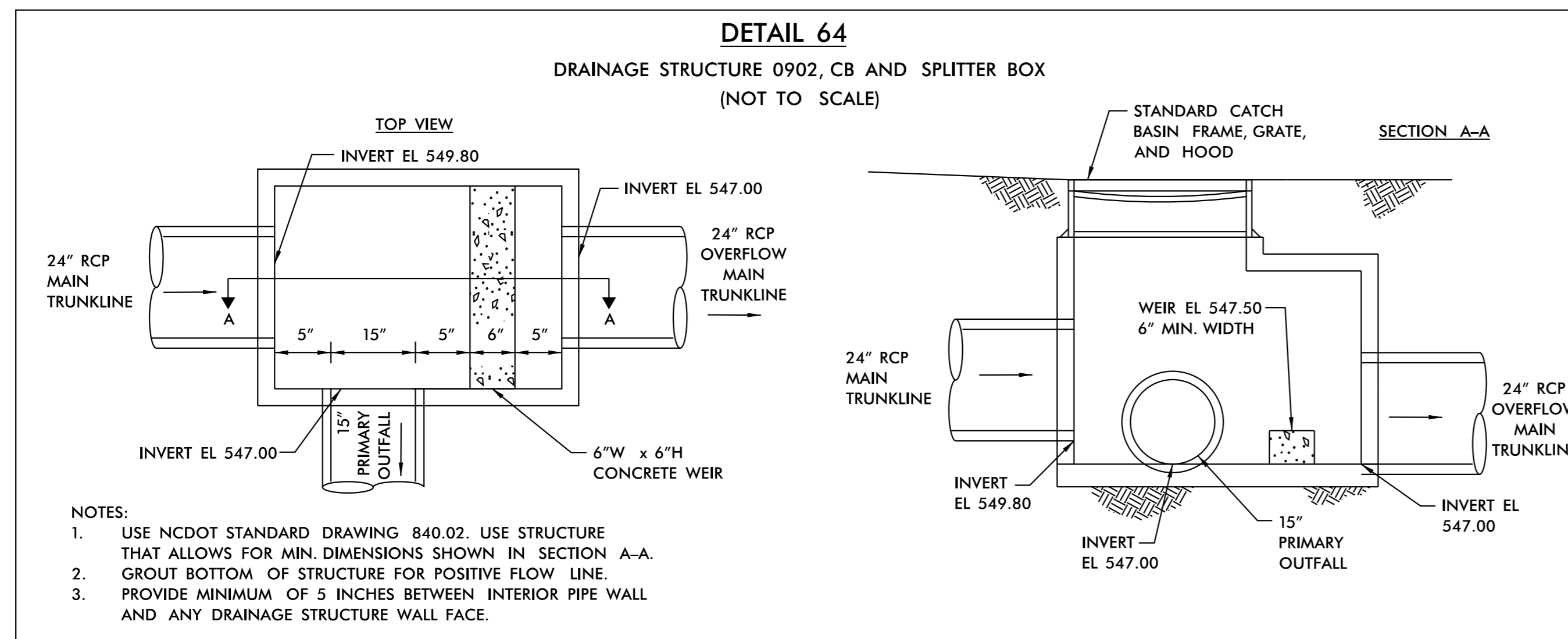
STA. 381+08 -L- (RT)

REVISIONS

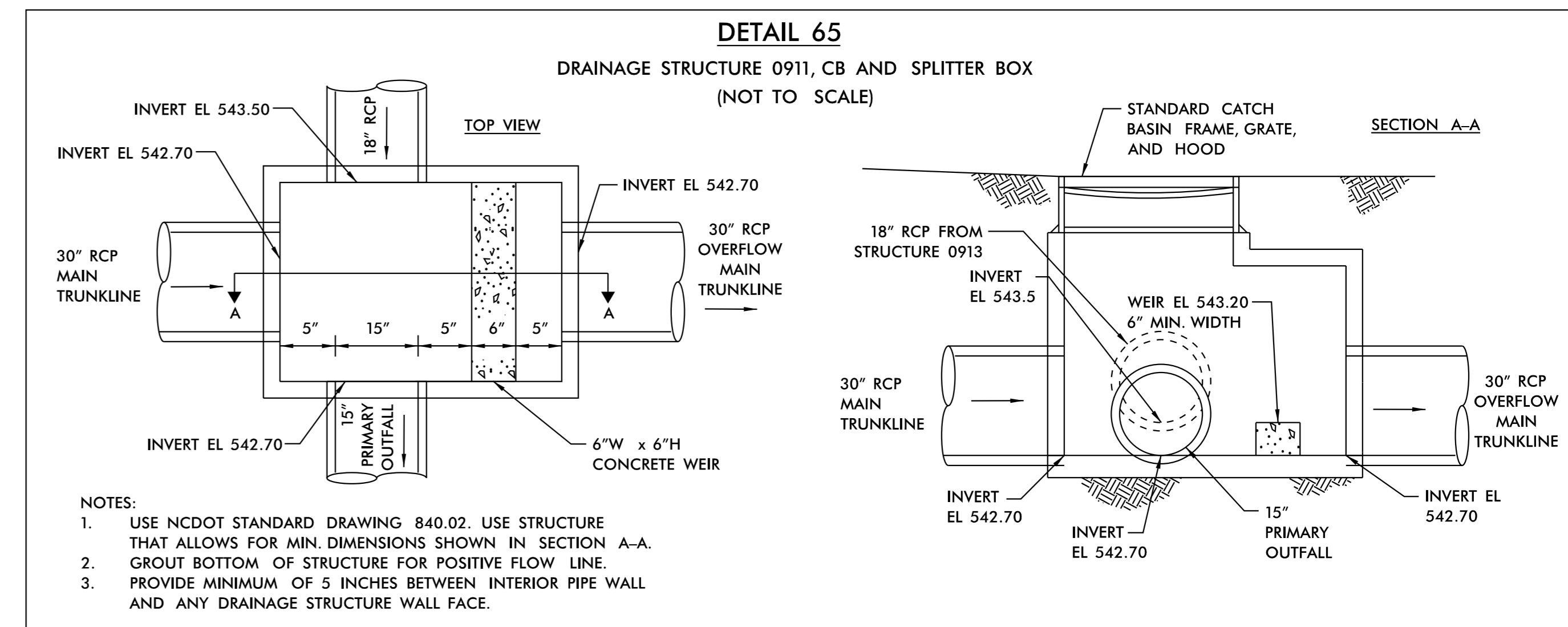
11/1/2018



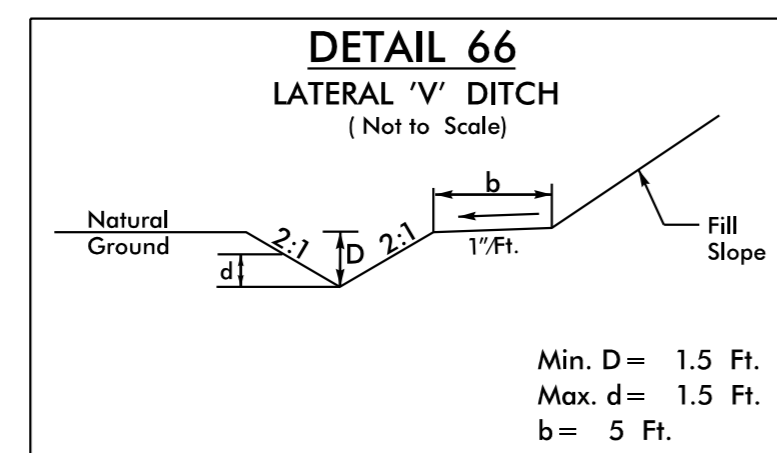
STA. 59+84 -L- (RT)



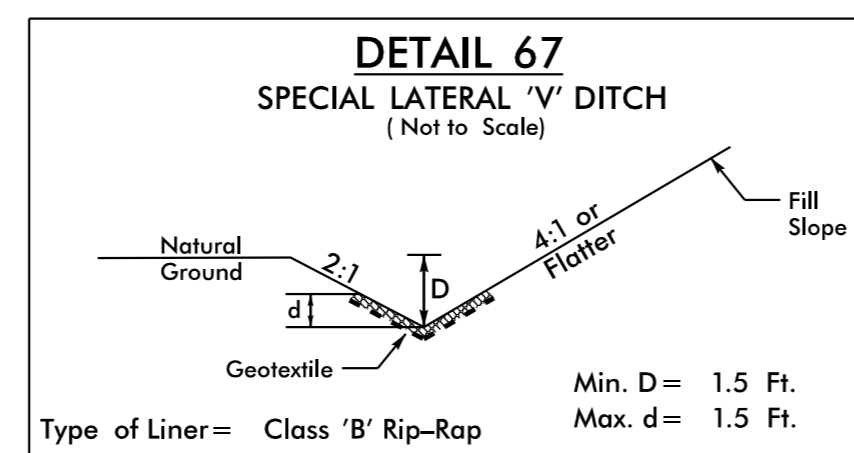
STA. 88+15 -L- (RT)



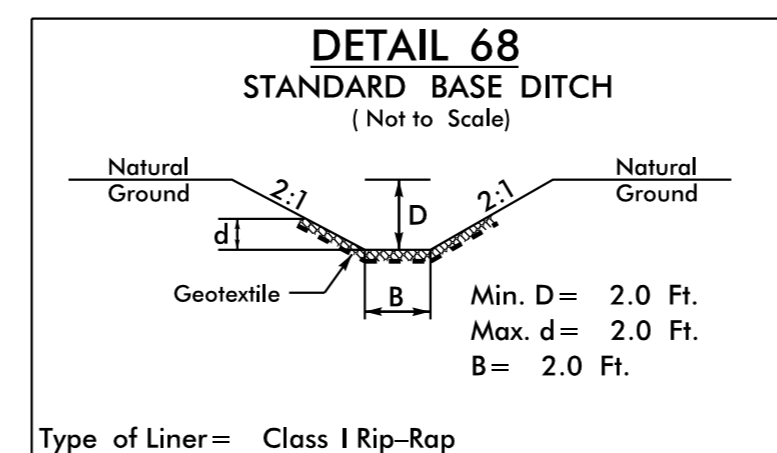
STA. 91+96 -L- (RT)



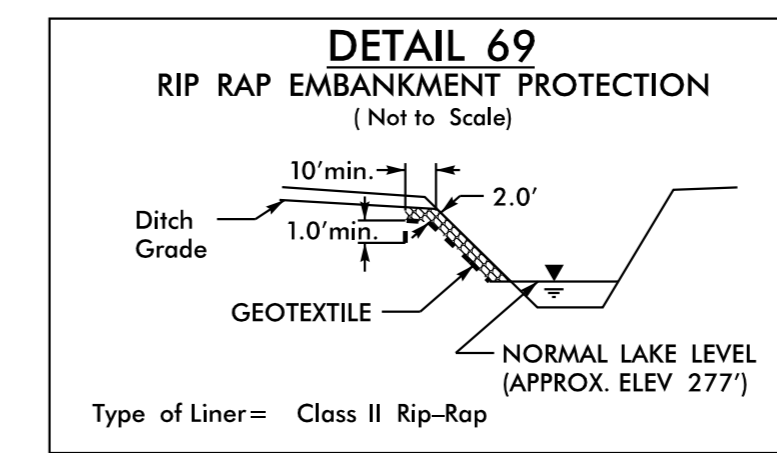
FROM STA. 23+50 TO STA. 24+70 -Y2- (RT)
FROM STA. 93+60 TO STA. 94+00 -L- (RT)



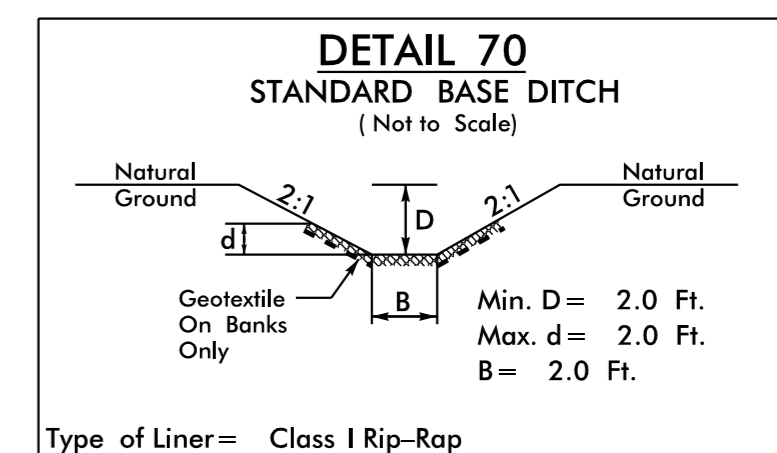
FROM STA. 102+00 TO STA. 102+72 -L- (LT)
FROM STA. 125+50 TO STA. 126+50 -L- (LT)
FROM STA. 23+80 TO STA. 25+00 -Y8- (RT)
FROM STA. 10+80 TO STA. 13+04 -Y10- (RT)
FROM STA. 223+17 TO STA. 225+00 -L- (LT)
FROM STA. 236+91 TO STA. 237+85 -L- (LT)
FROM STA. 16+50 TO STA. 16+75 -Y11- (RT)
FROM STA. 259+54 TO STA. 262+50 -L- (RT)
FROM STA. 355+50 TO STA. 356+75 -L- (LT)
FROM STA. 361+00 TO STA. 362+00 -L- (LT)
FROM STA. 371+75 TO STA. 373+00 -L- (LT)
FROM STA. 373+70 TO STA. 375+00 -L- (LT)
FROM STA. 375+20 TO STA. 377+90 -L- (RT)



FROM STA. 335+30 TO STA. 335+84 -L- (LT)



STA. 335+84 -L- (LT)



FROM STA. 292+12 TO STA. 292+50 -L- (LT)

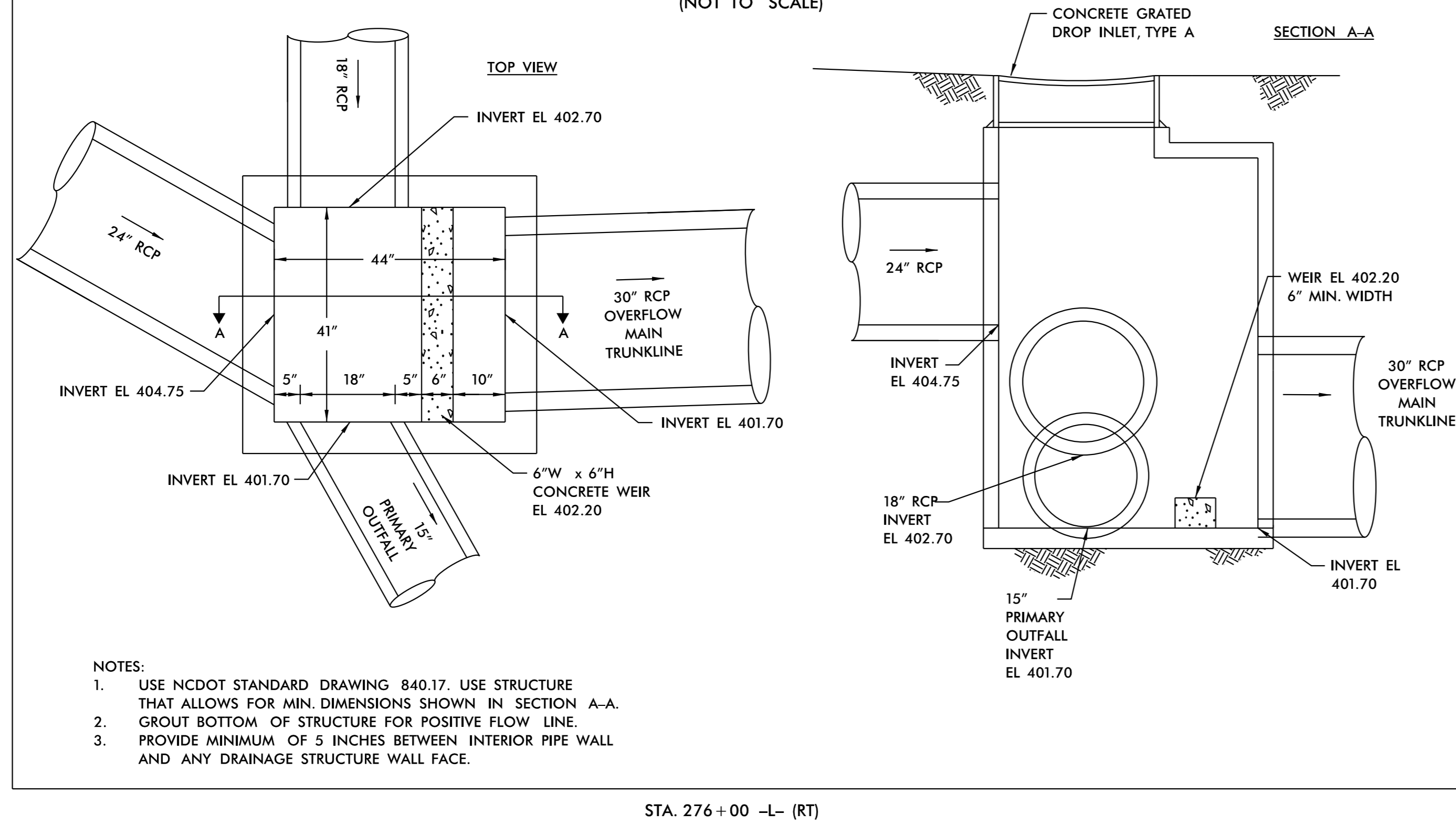
REVISIONS

5/14/99

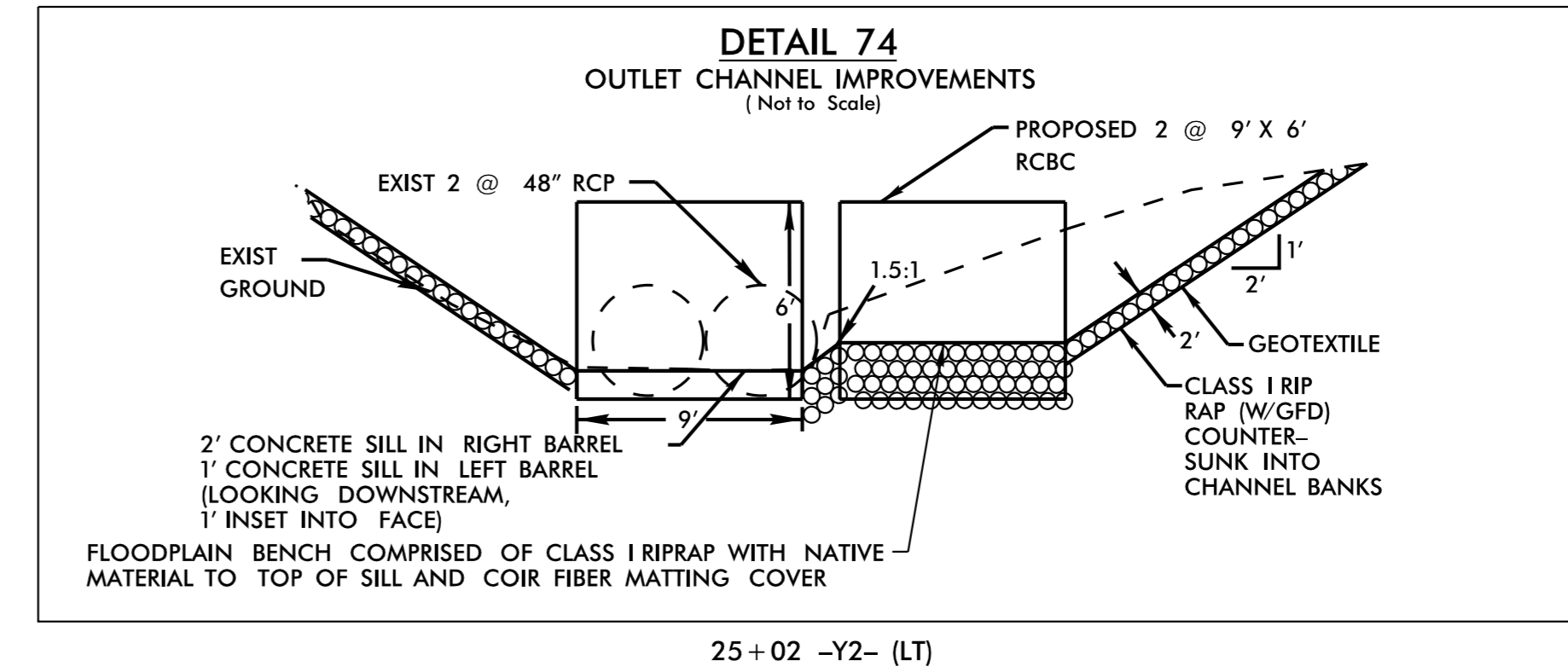
11/1/2018

5/14/99

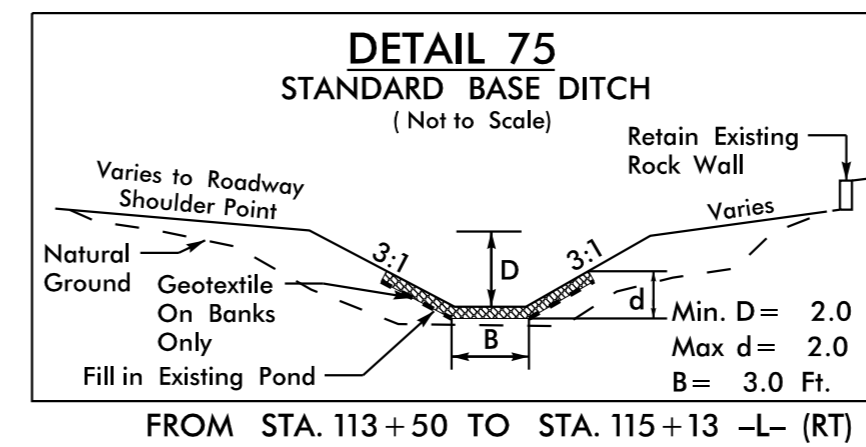
DETAIL 71
DRAINAGE STRUCTURE 2202, 2GI-A AND SPLITTER BOX
(NOT TO SCALE)



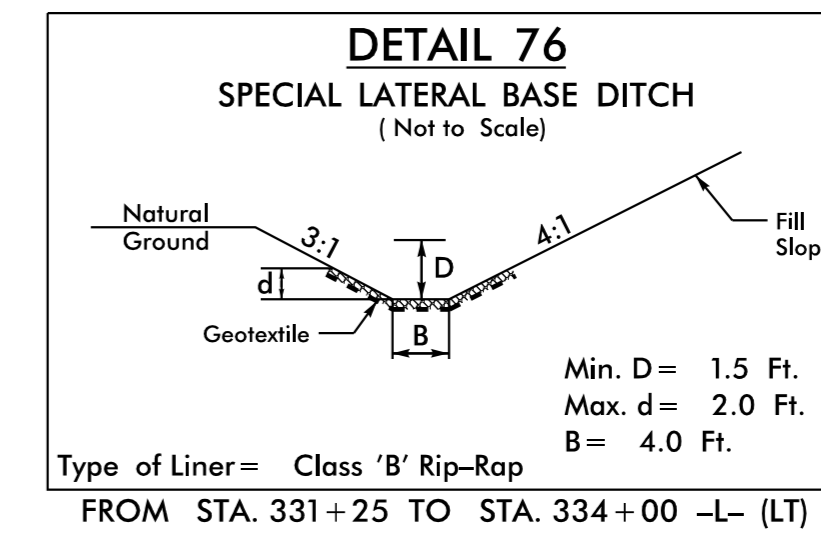
DETAIL 74
OUTLET CHANNEL IMPROVEMENTS
(Not to Scale)



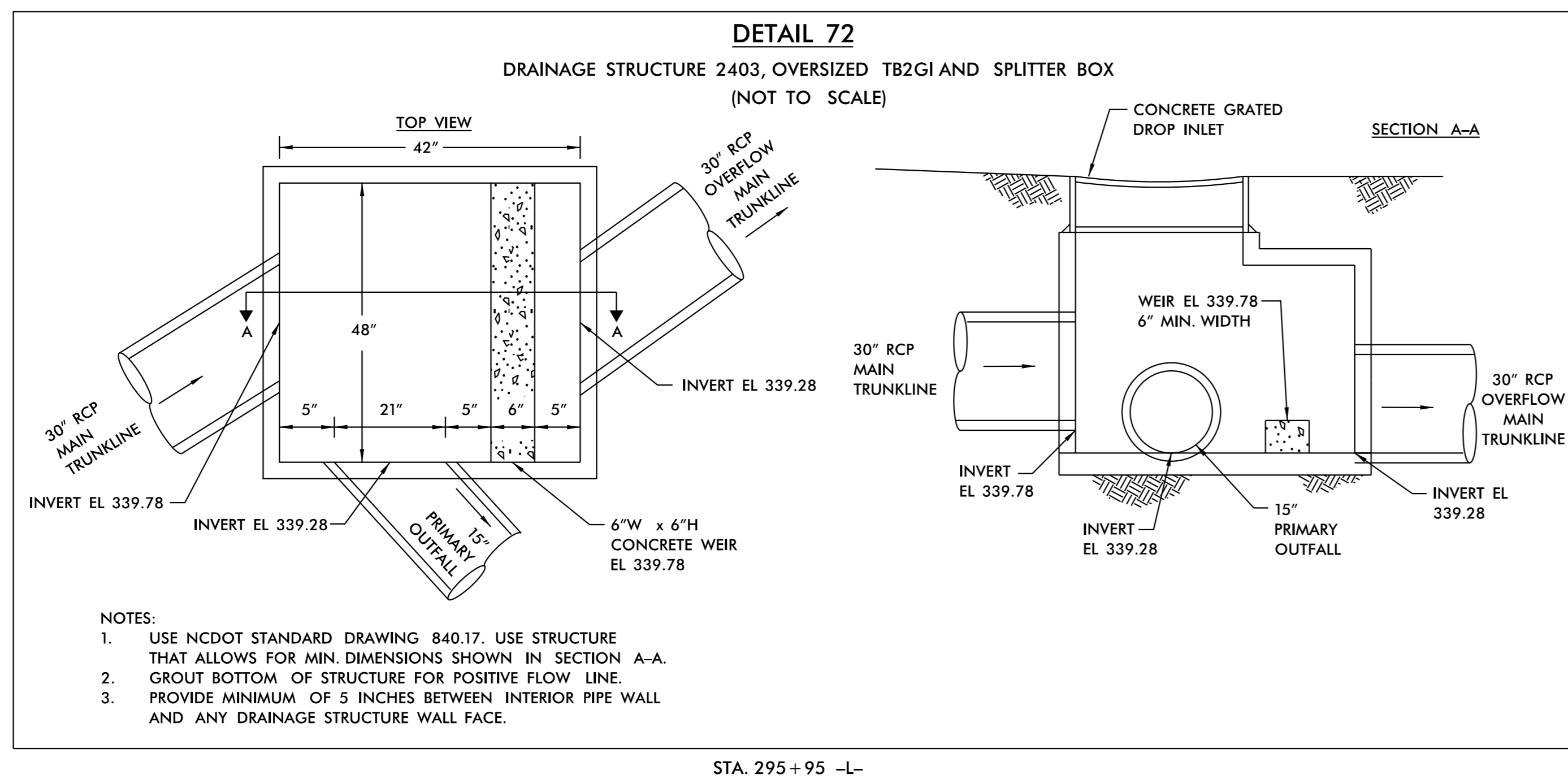
DETAIL 75
STANDARD BASE DITCH
(Not to Scale)



DETAIL 76
SPECIAL LATERAL BASE DITCH
(Not to Scale)

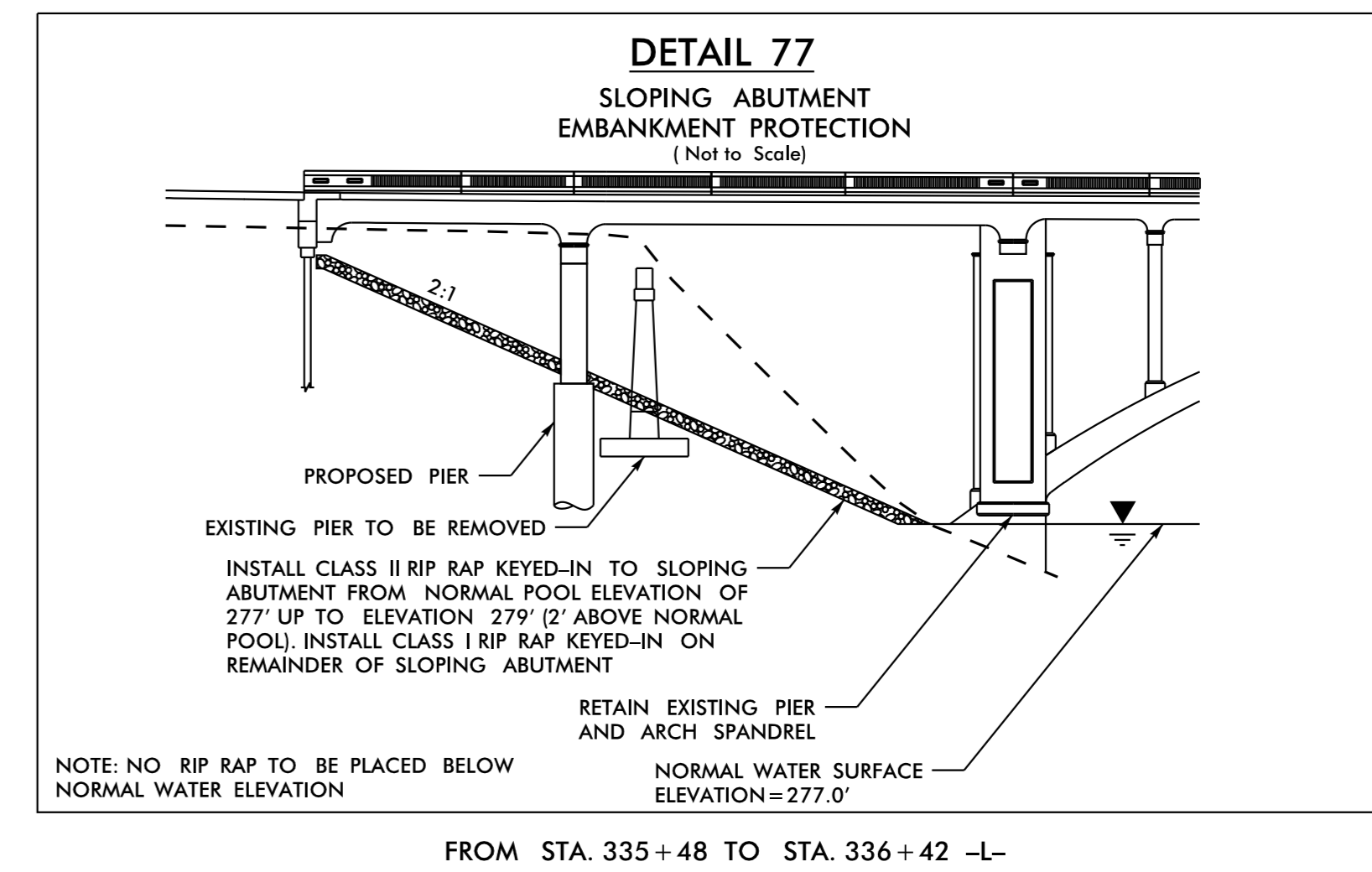


DETAIL 72
DRAINAGE STRUCTURE 2403, OVERSIZED TB2GI AND SPLITTER BOX
(NOT TO SCALE)



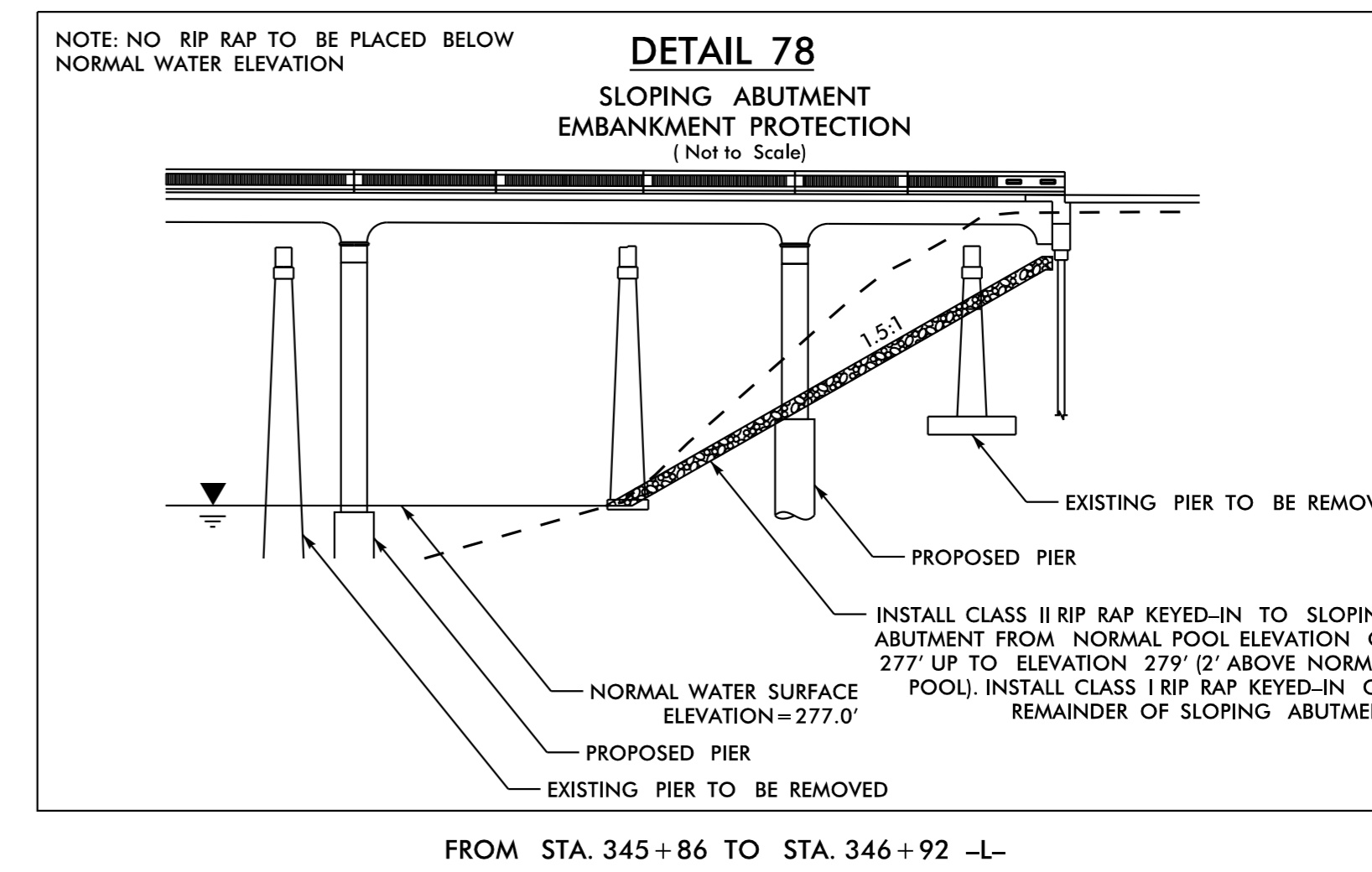
BY OTHERS

DETAIL 77
SLOPING ABUTMENT
EMBANKMENT PROTECTION
(Not to Scale)



BY OTHERS

DETAIL 78
SLOPING ABUTMENT
EMBANKMENT PROTECTION
(Not to Scale)



REVISIONS

REV. - 12/07 - ADDED DETAIL 75. - JWM

11/1/2018

5/14/99

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
SLOPES:				RIGHT	
6	-L-	47+25	47+60	RT	110
6	-L-	47+65	48+90	RT	440
6	-L-	49+00	50+10	RT	410
6	-L-	50+30	54+00	RT	960
8/9	-L-	88+75	89+40	RT	170
9	-L-	89+50	94+50	RT	1500
9	-L-	98+50	101+50	RT	1510
11	-L-	119+00	122+50	RT	1500
11/12	-L-	124+00	131+00	RT	4250
13	-L-	144+25	145+00	RT	240
13	-L-	150+50	152+00	RT	340
14	-L-	156+00	160+00	RT	2160
16	-L-	187+00	189+00	RT	1000
16	-L-	189+25	197+50	RT	4920
17	-L-	198+50	199+50	RT	430
17	-L-	201+50	202+00	RT	3710
17	-L-	208+00	210+00	RT	540
18	-L-	211+00	213+50	RT	1190
18	-L-	213+50	216+50	RT	1530
18	-L-	217+50	220+00	RT	1190
18	-L-	222+00	226+00	RT	1560
19	-L-	226+50	228+00	RT	520
19	-L-	228+00	229+00	RT	490
20	-L-	235+50	237+50	RT	890
20	-L-	236+00	240+00	RT	1470
20	-L-	243+00	244+50	RT	690
20	-L-	247+00	248+50	RT	440
20	-L-	256+50	257+00	RT	180
20	-L-	259+00	260+50	RT	840

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
SLOPES:					
23	-L-	276+50	279+00	RT	1150
23	-L-	280+50	281+25	RT	270
23	-L-	285+00	288+50	RT	1770
24	-L-	293+00	297+50	RT	1840
24	-L-	298+00	302+50	RT	1100
24	-L-	302+50	306+00	RT	1410
25	-L-	306+25	307+50	RT	270
25	-L-	308+00	308+50	RT	160
25	-L-	311+00	323+00	RT	6160
26	-L-	324+00	326+00	RT	660
27	-L-	333+00	335+00	RT	1560
28	-L-	347+00	349+50	RT	1310
28	-L-	350+50	351+00	RT	140
28	-L-	358+00	359+00	RT	1000
28	-L-	359+00	360+50	RT	420
29	-L-	362+50	364+25	RT	710
29	-L-	371+25	372+50	RT	500
29/30	-L-	373+50	377+00	RT	3150
30	-L-	379+50	383+50	RT	1800
30	-L-	386+50	388+25	RT	560
31	-L-	388+50	396+00	RT	4430
				LEFT	
6	-L-	52+25	54+00	LT	450
9	-L-	93+00	95+00	LT	670
10	-L-	100+50	102+50	LT	930
10	-L-	109+50	111+50	LT	870
11	-L-	115+00	116+00	LT	420
11	-L-	117+25	118+50	LT	370
11	-L-	122+00	125+00	LT	1820

11/1/2018



MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
SLOPES:				LEFT	
11	-L-	125+00	126+50	LT	500
12	-L-	126+50	132+50	LT	4160
12	-L-	136+50	141+50	LT	2130
13	-L-	143+00	146+00	LT	1320
1313	-L-	146+50	152+00	LT	2330
14	-L-	156+50	158+00	LT	640
14	-L-	162+00	163+00	LT	400
16	-L-	191+50	192+50	LT	380
16/17	-L-	193+25	198+75	LT	2100
17	-L-	205+75	206+25	LT	140
17	-L-	208+00	212+50	LT	2020
18	-L-	216+00	217+50	LT	530
18	-L-	218+00	220+00	LT	890
19	-L-	226+10	227+00	LT	230
19/20	-L-	236+50	237+25	LT	230
20	-L-	239+00	241+50	LT	840
21	-L-	259+00	260+00	LT	500
21/22	-L-	262+50	269+50	LT	2850
22	-L-	272+50	274+00	LT	380
22	-L-	288+50	290+50	LT	570
23	-L-	292+50	294+00	LT	630
23	-L-	293+00	294+50	LT	390
24	-L-	296+50	304+50	LT	3850
24	-L-	305+00	309+50	LT	2210
25	-L-	311+50	320+50	LT	5470
				SUBTOTAL	106770
	MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER				10000
				TOTAL	116670
				SAY	120000

PERMANENT SOIL REINFORCEMENT MAT

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

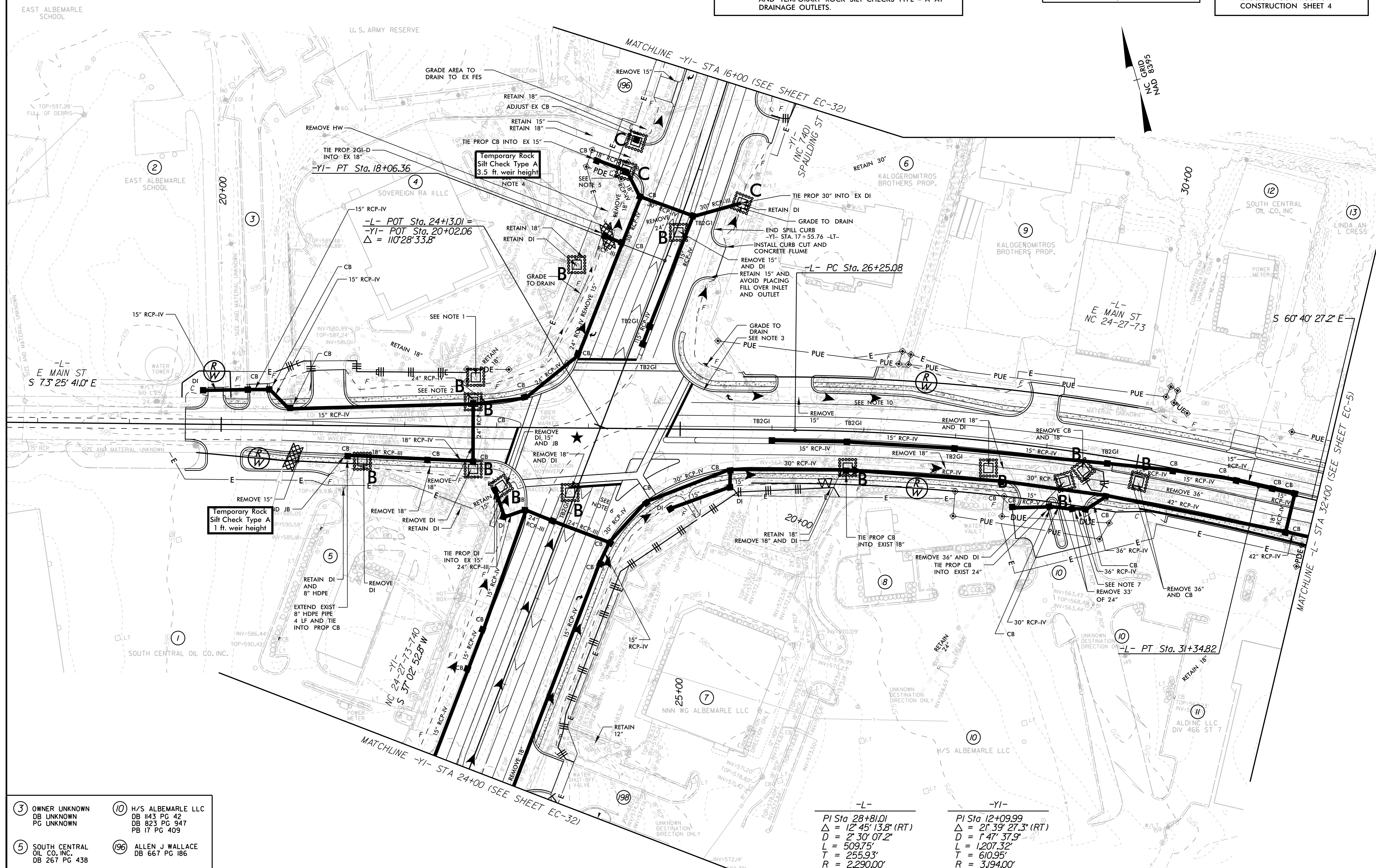
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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.

5/14/99

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



Temporary Rock Silt Check Type A
3.5 ft. weir height
NOTE 4

Temporary Rock Silt Check Type A
1 ft. weir height

-L- POT Sta. 24+13.01 =
-YI- POT Sta. 20+02.06
 $\Delta = 110'28'33.8"$

-L-
PI Sta 28+81.01
 $\Delta = 12'45'13.8" (RT)$
D = 2'30'07.2"
L = 509.75'
T = 255.93'
R = 2,290.00'
SE = 0.03
RO = 150'

-YI-
PI Sta 12+09.99
 $\Delta = 21'39'27.3" (RT)$
D = 1'47'37.9"
L = 1207.32'
T = 610.95'
R = 3,194.00'
SE = 0.03
RO = 138'

- ③ OWNER UNKNOWN
DB UNKNOWN
PG UNKNOWN
- ⑤ SOUTH CENTRAL OIL CO. INC.
DB 267 PG 438
- ⑧ FIRST BANK INC
DB 1143 PG 46
PB 19 PG 218
- ⑩ H/S ALBEMARLE LLC
DB 1143 PG 42
DB 823 PG 947
PB 17 PG 409
- ①⑥ ALLEN J WALLACE
DB 667 PG 186
- ①⑧ H/S ALBEMARLE LLC
DB 1143 PG 42
DB 823 PG 947
PB 17 PG 409

SEE SHEET 2B-1 FOR INTERSECTION DETAILS
SEE SHEET 34 FOR -L- PROFILE
SEE SHEETS 50 & 51 FOR -YI- PROFILE

11/1/2018

5/14/99

- 13 LINDA AN L CRESS
DB 382 PG 676
- 14 CHARLES E. & NANCY T. BURRIS
DB 872 PG 643
PB 02 PG 106
- 15 DIANE AUSTIN
DB 386 PG 507
- 16 STANLEY SQUARE INC.
DB 383 PG 886
PB 13 PG 60
- 17 V F W POST 2908
DB 150 PG 66
- 18 DELLA L HUDSON
DB 248 PG 428
- 19 KEITH & NANCY CARPENTER
DB 1457 PG 249

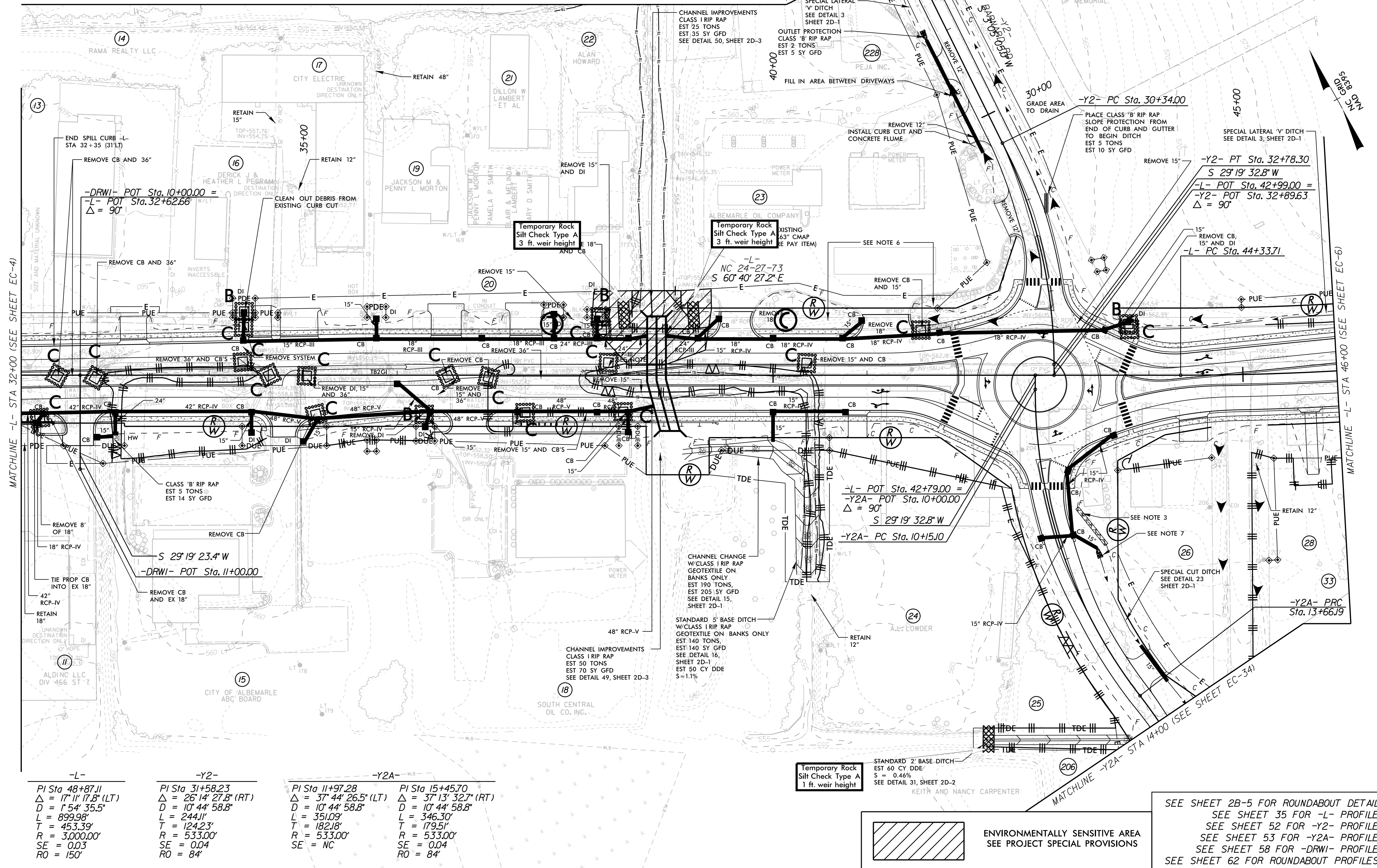
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK
INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON
THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

Kimley Horn
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

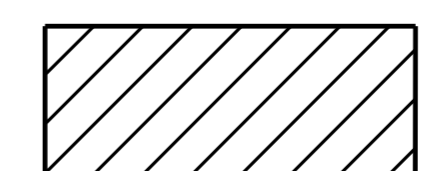
PROJECT REFERENCE NO.	SHEET NO.
R-2530B	EC-5/CONST.5

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5



<p>-L-</p> <p>PI Sta 48+87.11 Δ = 17° 11' 17.8" (LT) D = 1° 54' 35.5" L = 899.98' T = 453.39' R = 3,000.00' SE = 0.03 RO = 150'</p>	<p>-Y2-</p> <p>PI Sta 31+58.23 Δ = 26° 14' 27.8" (RT) D = 10° 44' 58.8" L = 244.11' T = 124.23' R = 533.00' SE = 0.04 RO = 84'</p>	<p>-Y2A-</p> <p>PI Sta 11+97.28 Δ = 37° 44' 26.5" (LT) D = 10° 44' 58.8" L = 351.09' T = 182.18' R = 533.00' SE = NC</p>	<p>PI Sta 15+45.70 Δ = 37° 13' 32.7" (RT) D = 10° 44' 58.8" L = 346.30' T = 179.51' R = 533.00' SE = 0.04 RO = 84'</p>
---	--	--	--

Temporary Rock
Silt Check Type A
1 ft. weir height



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

SEE SHEET 2B-5 FOR ROUNDABOUT DETAIL
SEE SHEET 35 FOR -L- PROFILE
SEE SHEET 52 FOR -Y2- PROFILE
SEE SHEET 53 FOR -Y2A- PROFILE
SEE SHEET 58 FOR -DRWI- PROFILE
SEE SHEET 62 FOR ROUNDABOUT PROFILES

11/1/2018

5/14/99

PROJECT REFERENCE NO. R-2530B	SHEET NO. EC-5A/CONST.5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

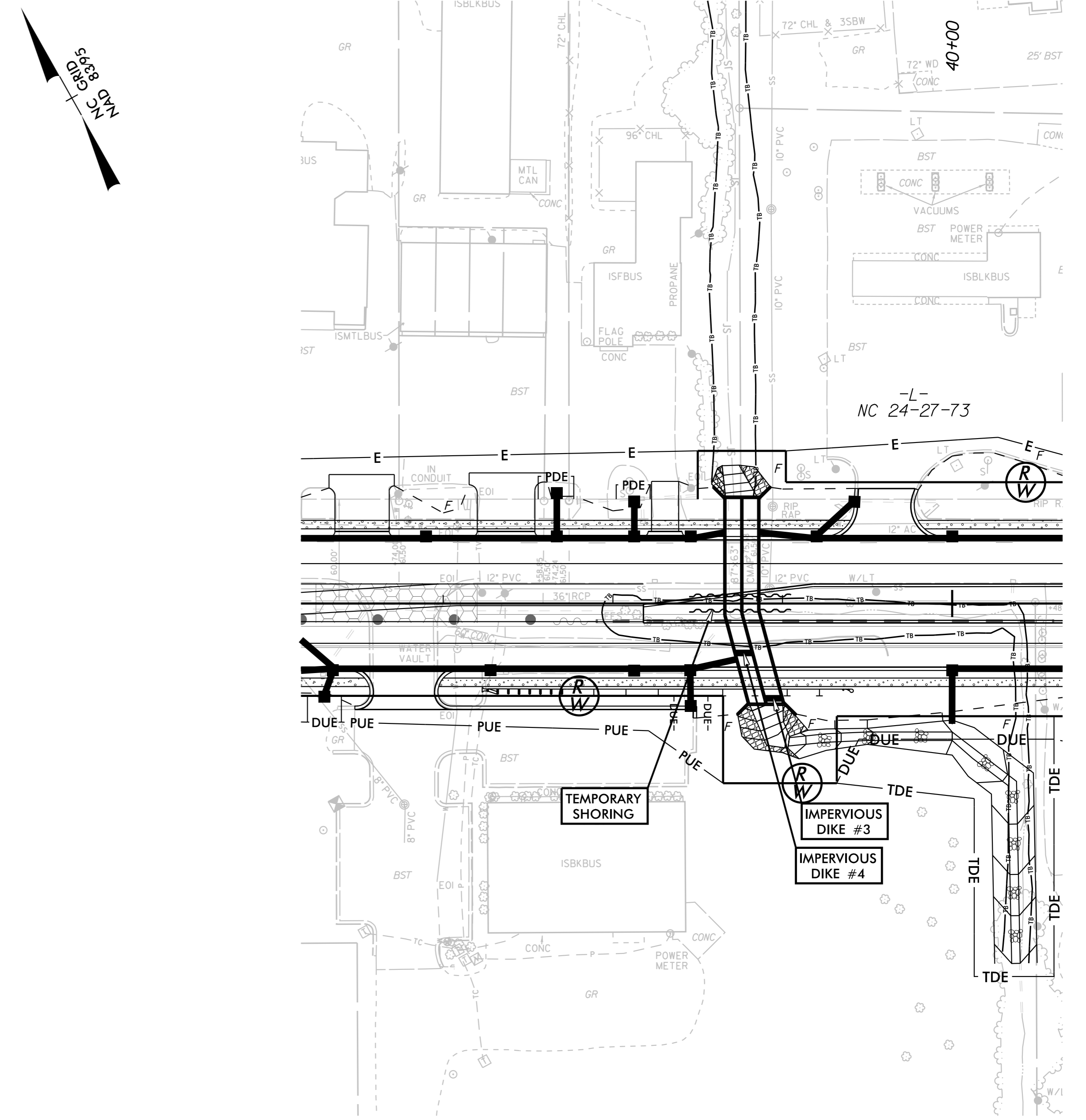
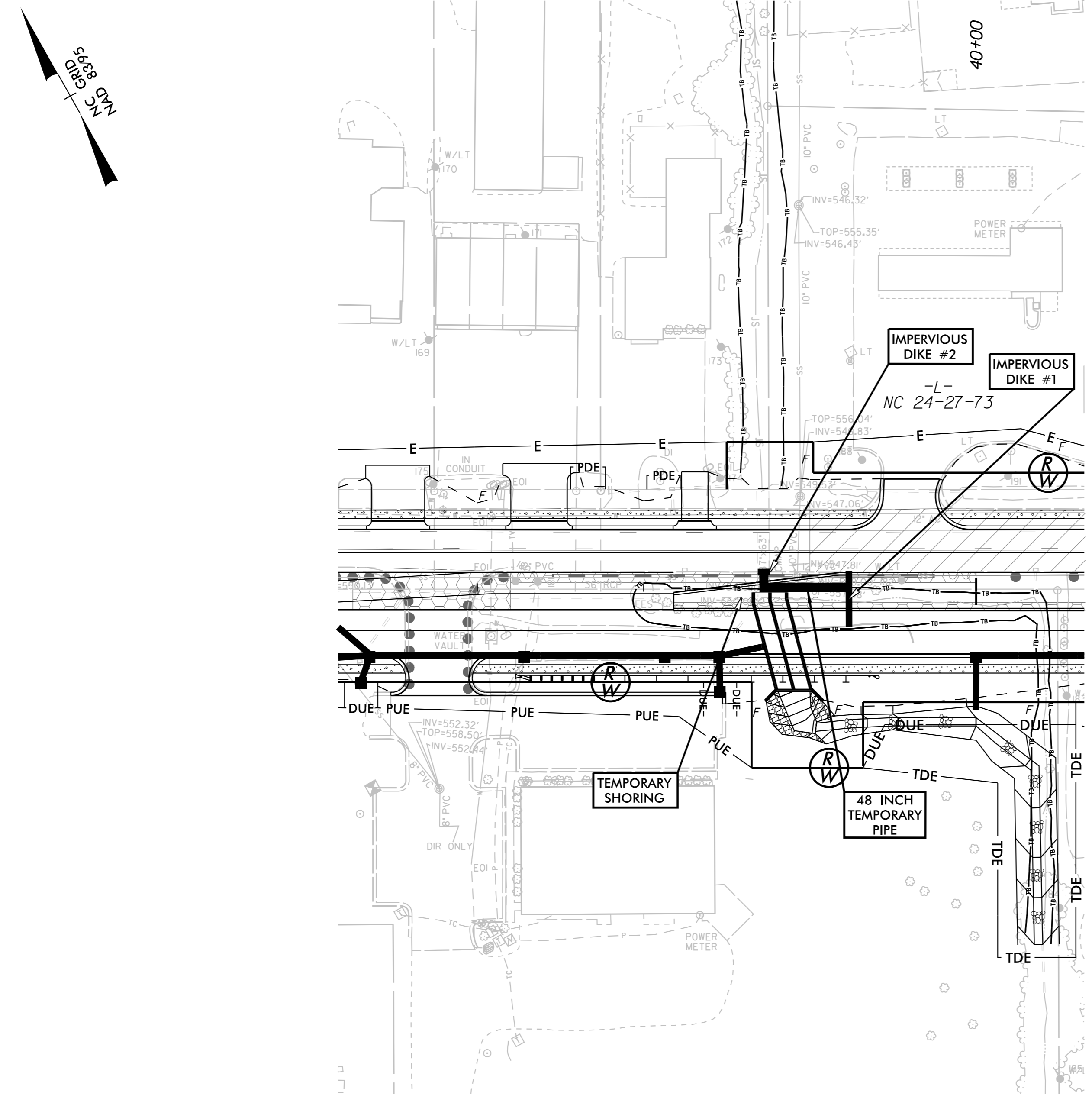
CULVERT CONSTRUCTION SEQUENCE STA. 38+76 -L-

PHASE I

- 1.) UTILIZE SPECIAL STILLING BASINS DURING CONSTRUCTION TO DEWATER WORK SITE. (TYP.)
- 2.) REMOVE APPROX. 10' OF EXIST. CULVERT FROM UPSTREAM END AND PLACE TEMPORARY SHORING PER TMP-5 TO HOLD EXIST. EMBANKMENT FILL AND EXIST. SANITARY SEWER PIPE IN PLACE.
- 3.) PLACE IMPERVIOUS DIKE #1 ON UPSTREAM END OF CHANNEL, OUTSIDE OF CULVERT CONSTRUCTION LIMITS. PLACE IMPERVIOUS DIKE #2 INSIDE EXIST. CULVERT AT SHORING. ROUTE TEMPORARY PIPE THROUGH IMPERVIOUS DIKES.
- 4.) BUILD APPROX. 64 L.F. OF UPSTREAM PROPOSED CULVERT. PLACE ADDITIONAL TEMPORARY SHORING AS NECESSARY TO HOLD NEW EMBANKMENT FILL.
- 5.) CONSTRUCT UPSTREAM CHANNEL IMPROVEMENTS, REMOVE IMPERVIOUS DIKES, COMPLETE EASTBOUND ROADWAY IMPROVEMENTS, AND MOVE TRAFFIC OVER AFTER COMPLETION.
- 6.) REFERENCE SHEET TMP-5 FOR ADDITIONAL DETAIL REGARDING TRAFFIC MANAGEMENT AND SHORING.

PHASE II

- 1.) PLACE IMPERVIOUS DIKE #3 IN EASTERN BARREL AND TEMPORARY DIVERSION CHANNEL FROM WESTERN BARREL OF NEW CULVERT TO EXIST. CULVERT
- 2.) BUILD REMAINING DOWNSTREAM PORTION OF EASTERN BARREL OF PROPOSED CULVERT.
- 3.) REMOVE IMPERVIOUS DIKE #3 AND PLACE IMPERVIOUS DIKE #4 WITHIN WESTERN BARREL OF PROPOSED CULVERT.
- 4.) REMOVE EXIST. CULVERT AND BUILD REMAINING DOWNSTREAM PORTION OF WESTERN BARREL OF PROPOSED CULVERT AND CHANNEL IMPROVEMENTS.
- 5.) REMOVE IMPERVIOUS DIKE #4, COMPLETE WESTBOUND IMPROVEMENTS, AND REMOVE SHORING.
- 6.) REFERENCE SHEET TMP-47 FOR ADDITIONAL DETAIL REGARDING TRAFFIC MANAGEMENT AND SHORING.



11/1/2018

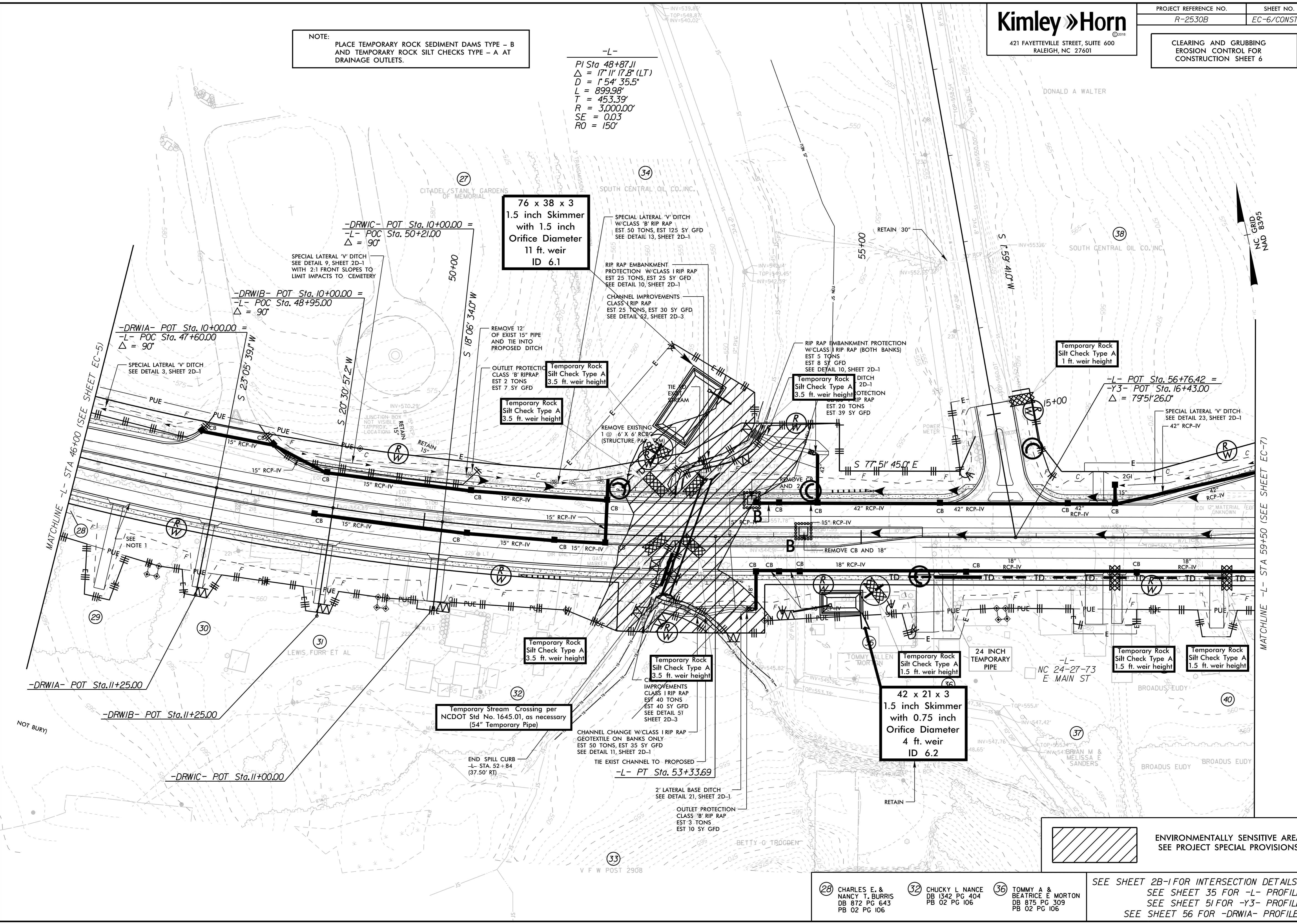
5/14/99

Kimley Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, NC 27601

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.

-L-
 PI Sta 48+87.11
 $\Delta = 17' 11" 17.8" (LT)$
 $D = 1' 54' 35.5"$
 $L = 899.98'$
 $T = 453.39'$
 $R = 3,000.00'$
 $SE = 0.03$
 $RO = 150'$



ENVIRONMENTALLY SENSITIVE AREA
 SEE PROJECT SPECIAL PROVISIONS

- (28) CHARLES E. & NANCY T. BURRIS
DB 872 PG 643
PB 02 PG 106
- (32) CHUCKY L. NANCE
DB 1342 PG 404
PB 02 PG 106
- (36) TOMMY A. & BEATRICE E. MORTON
DB 875 PG 309
PB 02 PG 106

SEE SHEET 2B-1 FOR INTERSECTION DETAILS
 SEE SHEET 35 FOR -L- PROFILE
 SEE SHEET 51 FOR -Y3- PROFILE
 SEE SHEET 56 FOR -DRWIA- PROFILE

11/1/2018

5/14/99

PROJECT REFERENCE NO. R-2530B	SHEET NO. EC-6A/CONST.6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

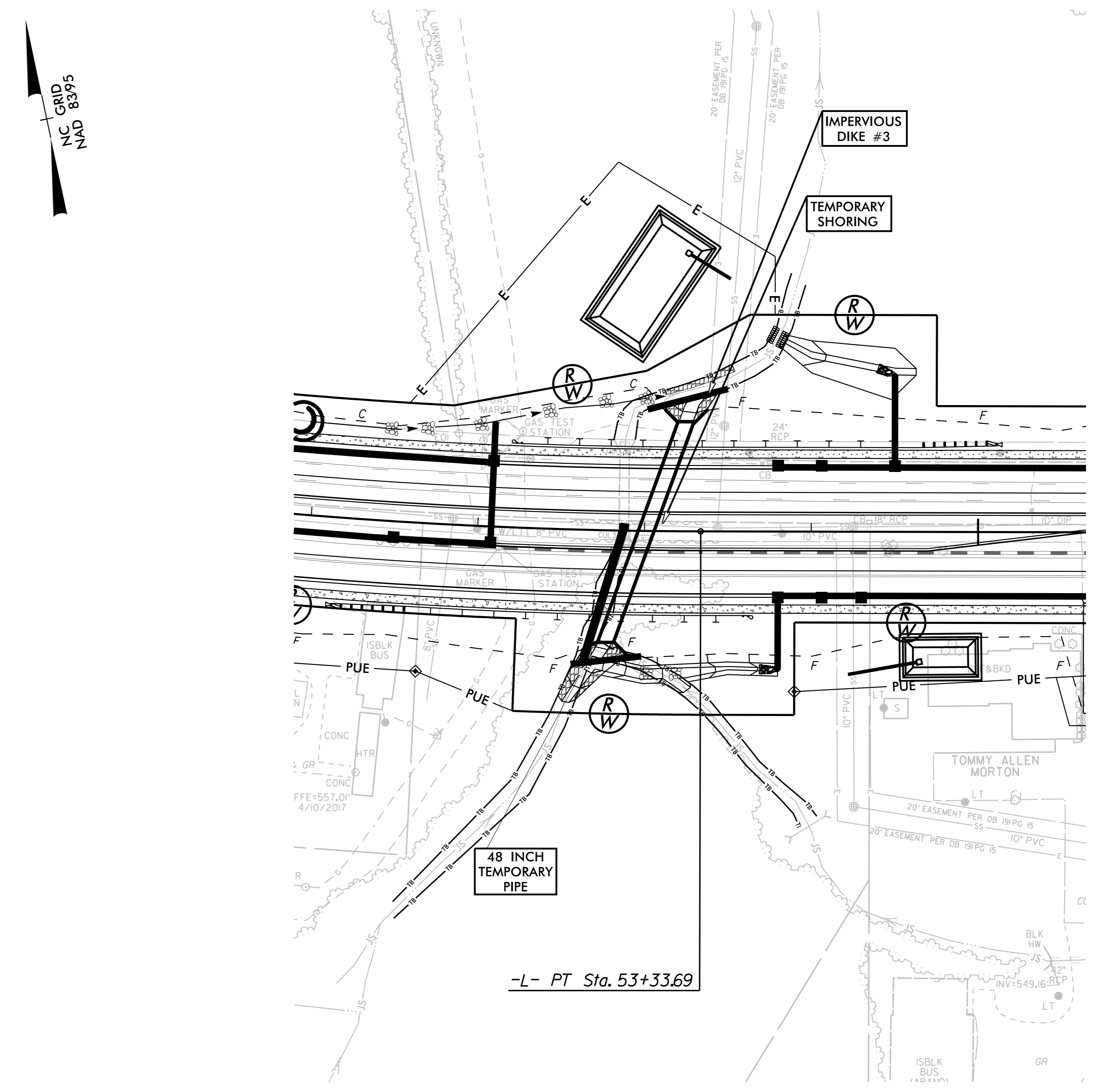
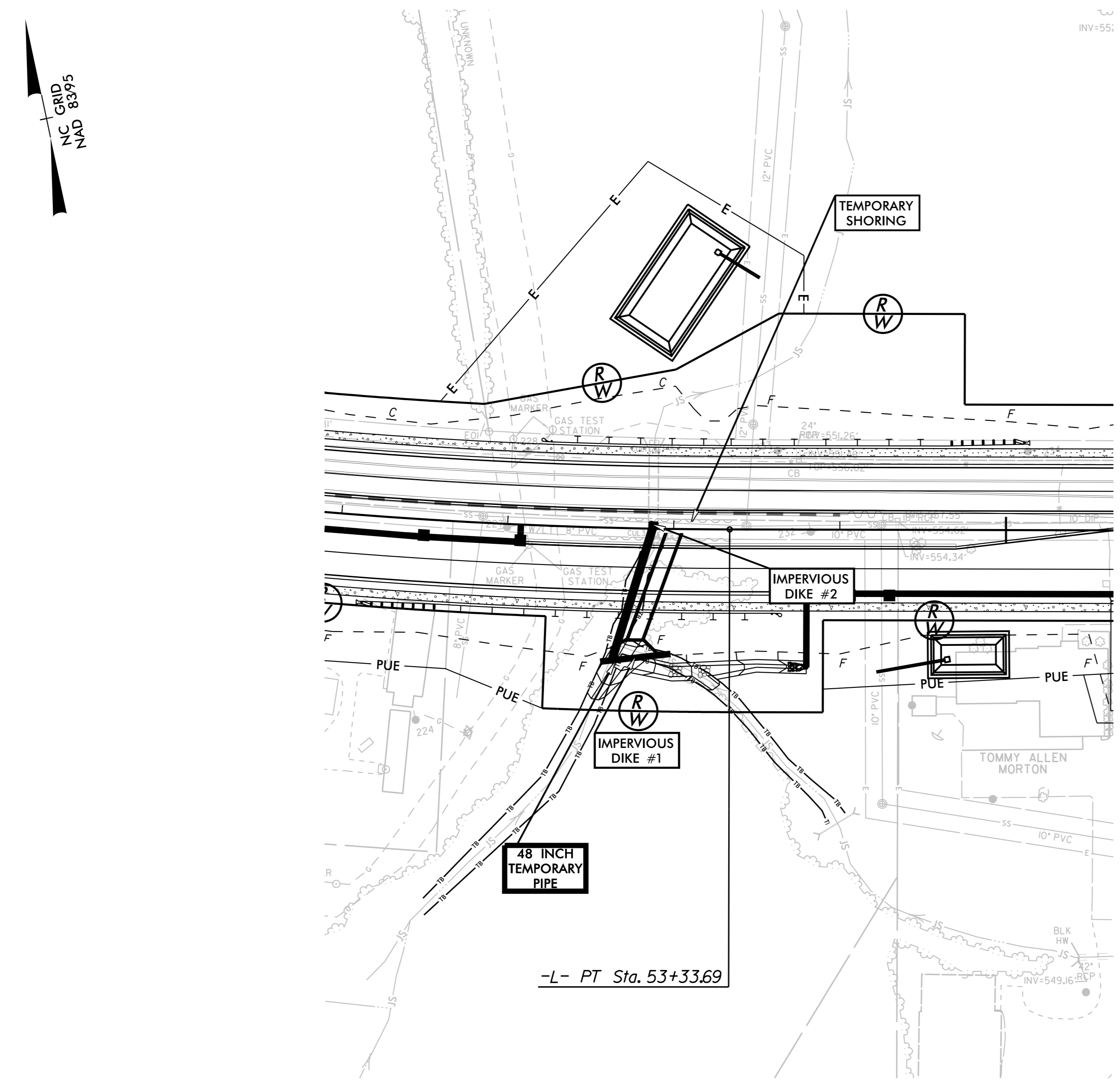
CULVERT CONSTRUCTION SEQUENCE STA. 53+01 -L-

PHASE I

- 1.) UTILIZE SPECIAL STILLING BASINS DURING CONSTRUCTION TO DEWATER WORK SITE. (TYP.)
- 2.) REMOVE APPROX. 6' OF EXIST. CULVERT FROM UPSTREAM END AND INSTALL TEMPORARY SHORING TO HOLD EXIST. EMBANKMENT FILL AND EXIST. SANITARY SEWER PIPE IN PLACE.
- 3.) PLACE IMPERVIOUS DIKE #1 ON UPSTREAM END OF CHANNEL, ABOVE LIMITS OF CONSTRUCTION. PLACE IMPERVIOUS DIKE #2 INSIDE EXIST. CULVERT. ROUTE TEMPORARY PIPE BETWEEN DIKES, ALONG CONSTRUCTION AREA.
- 4.) BUILD APPROX. 68 L.F. OF UPSTREAM PROPOSED CULVERT. PLACE TEMPORARY SHORING AS NECESSARY TO HOLD NEW EMBANKMENT FILL. COMPLETE EASTBOUND ROADWAY IMPROVEMENTS AND MOVE TRAFFIC OVER AFTER COMPLETION.
- 5.) REFERENCE SHEET TMP-6 FOR ADDITIONAL DETAIL REGARDING TRAFFIC MANAGEMENT AND SHORING.

PHASE II

- 1.) PLACE IMPERVIOUS DIKE #3 AT END OF NEW CULVERT LOCATION BELOW LIMITS OF CONSTRUCTION.
- 2.) EXCAVATE FOR PROPOSED CULVERT AND BUILD REMAINING DOWNSTREAM PORTION OF PROPOSED CULVERT.
- 4.) REMOVE TEMPORARY SHORING AND COMPLETE WESTBOUND IMPROVEMENTS.
- 5.) REMOVE IMPERVIOUS DIKES, EX. CULVERT, AND FILL TEMPORARY PIPE WITH FLOWABLE FILL.
- 6.) REFERENCE SHEET TMP-48 FOR ADDITIONAL DETAIL REGARDING TRAFFIC MANAGEMENT AND SHORING.



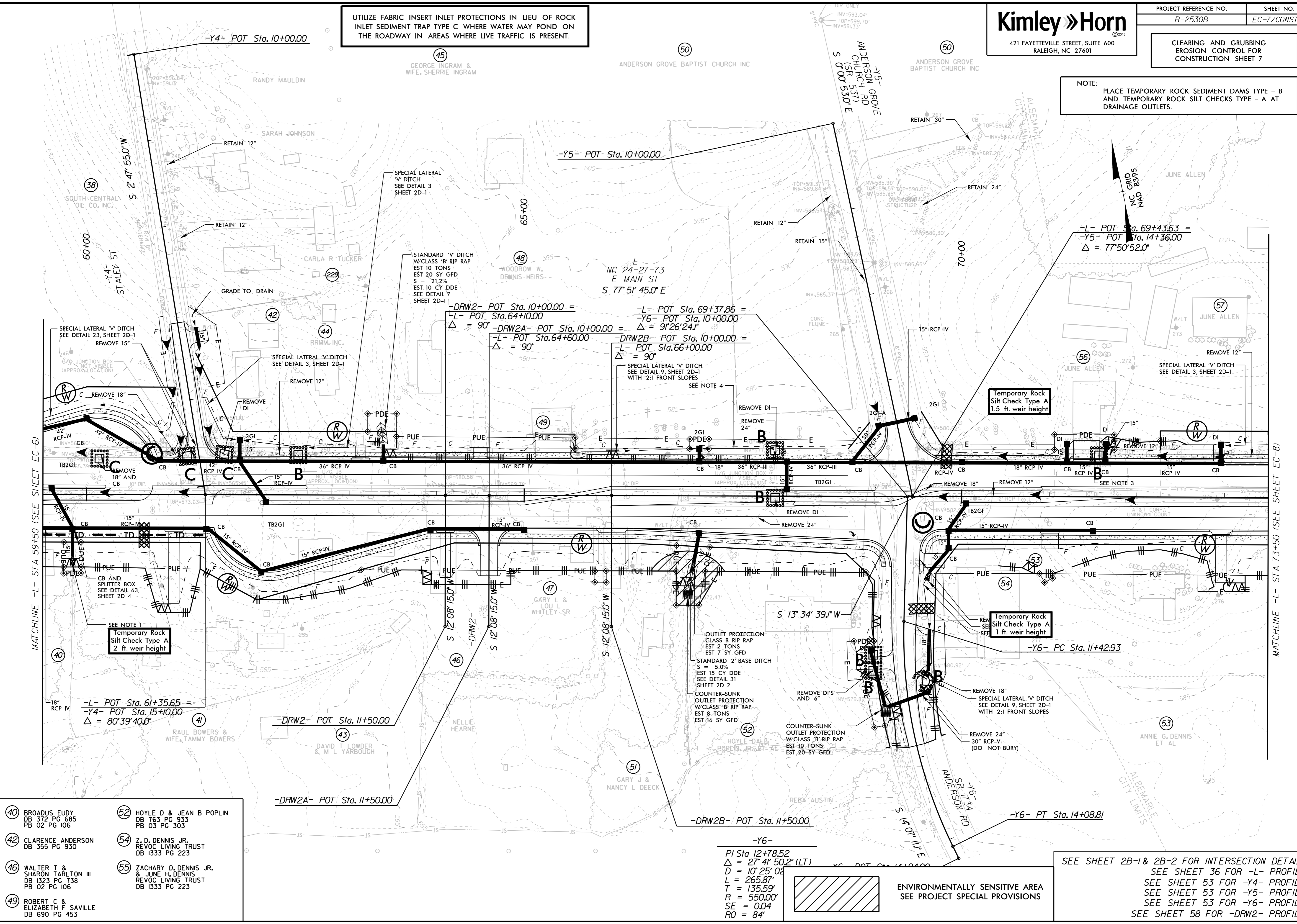
5/14/99

Kimley Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, NC 27601

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 7

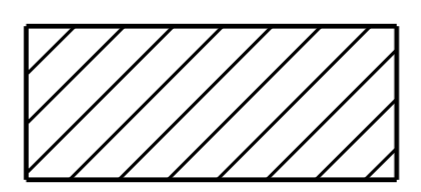
UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

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



- 40 BROADJUS EUDY
DB 372 PG 685
PB 02 PG 106
- 42 CLARENCE ANDERSON
DB 355 PG 930
- 46 WALTER T & SHARON TARTLTON III
DB 1323 PG 738
PB 02 PG 106
- 49 ROBERT C & ELIZABETH F SAVILLE
DB 690 PG 453
- 52 HOYLE D & JEAN B POPLIN
DB 763 PG 933
PB 03 PG 303
- 54 Z. D. DENNIS JR.
REVOC LIVING TRUST
DB 1333 PG 223
- 55 ZACHARY D. DENNIS JR.
& JUNE H. DENNIS
REVOC LIVING TRUST
DB 1333 PG 223

-Y6-
 PI Sta 12+78.52
 $\Delta = 27' 41'' 50.2''$ (LT)
 D = 10' 25' 04"
 L = 265.87'
 T = 135.59'
 R = 550.00'
 SE = 0.04
 RO = 84'

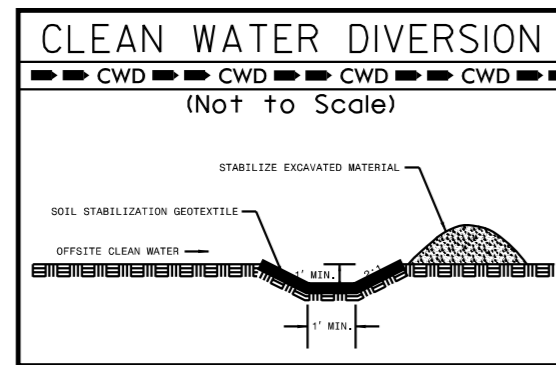


ENVIRONMENTALLY SENSITIVE AREA
 SEE PROJECT SPECIAL PROVISIONS

SEE SHEET 2B-1 & 2B-2 FOR INTERSECTION DETAILS
 SEE SHEET 36 FOR -L- PROFILE
 SEE SHEET 53 FOR -Y4- PROFILE
 SEE SHEET 53 FOR -Y5- PROFILE
 SEE SHEET 53 FOR -Y6- PROFILE
 SEE SHEET 58 FOR -DRW2- PROFILE

11/1/2018

5/14/99

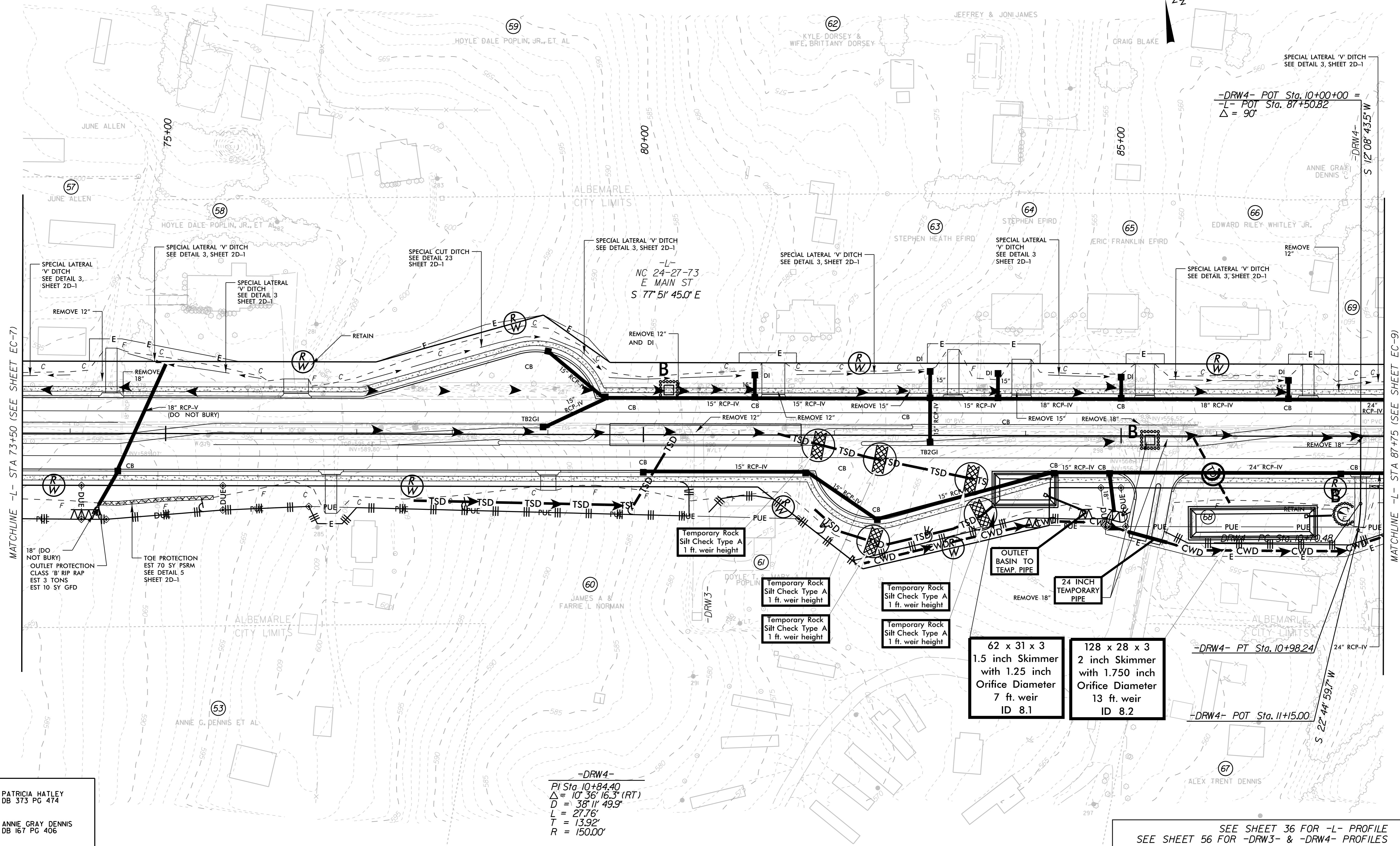


NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

Kimley Horn
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

PROJECT REFERENCE NO. R-2530B	SHEET NO. EC-8/CONST. 8
----------------------------------	----------------------------

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8



-DRW4- POT Sta. 10+00+00 =
-L- POT Sta. 87+50.82
Δ = 90°

-L-
NC 24-27-73
E MAIN ST
S 77° 51' 45.0" E

MATCHLINE -L- STA 73+50 (SEE SHEET EC-7)

MATCHLINE -L- STA 87+75 (SEE SHEET EC-9)

- 68 PATRICIA HATLEY
DB 373 PG 474
- 69 ANNE GRAY DENNIS
DB 167 PG 406

-DRW4-
PI Sta. 10+84.40
Δ = 10° 36' 16.3" (RT)
D = 38' 11" 49.9"
L = 27.76'
T = 13.92'
R = 150.00'

62 x 31 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 8.1

128 x 28 x 3
2 inch Skimmer
with 1.750 inch
Orifice Diameter
13 ft. weir
ID 8.2

SEE SHEET 36 FOR -L- PROFILE
SEE SHEET 56 FOR -DRW3- & -DRW4- PROFILES

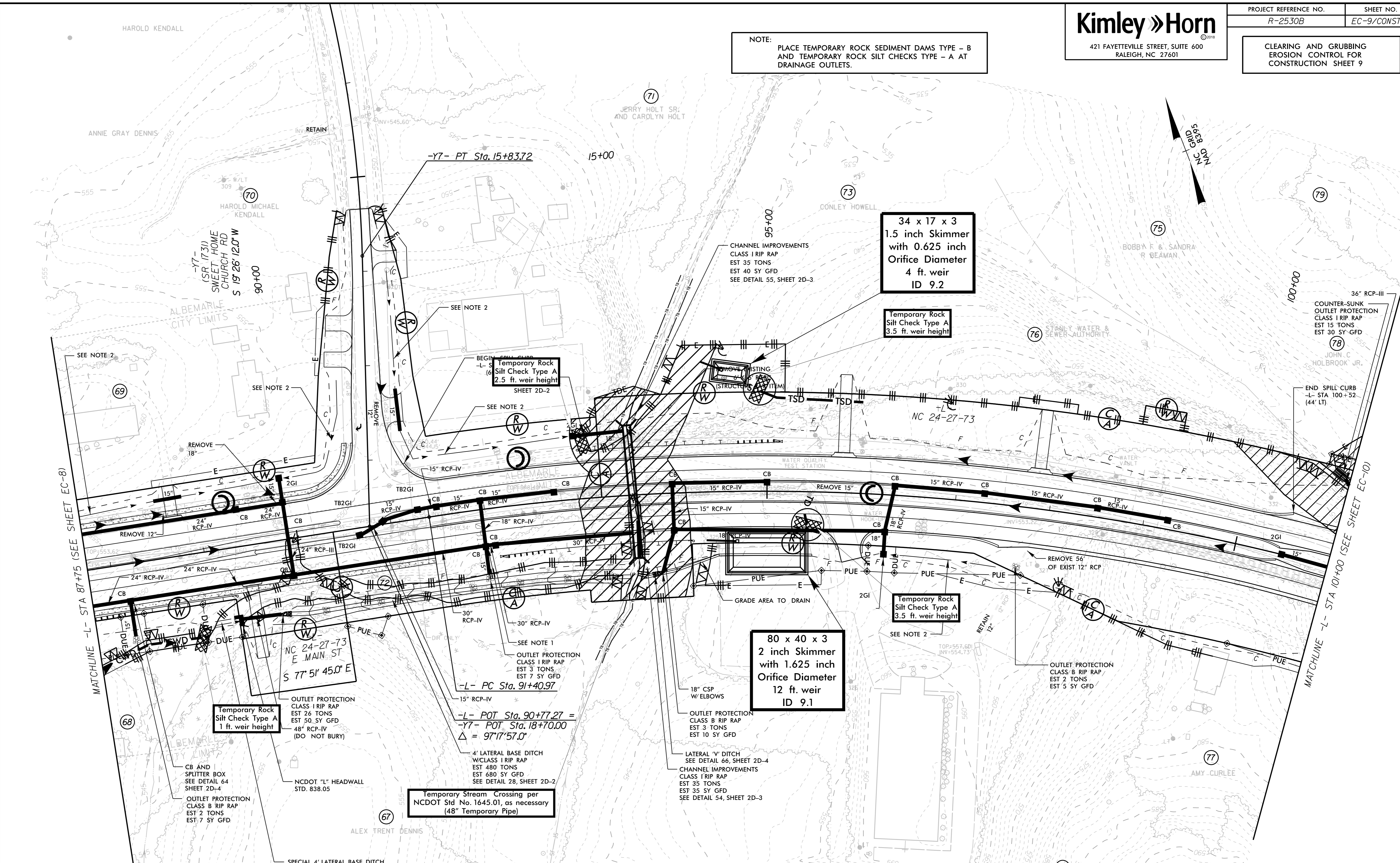
11/1/2018

5/14/99

Kimley Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, NC 27601

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 9

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



34 x 17 x 3
 1.5 inch Skimmer
 with 0.625 inch
 Orifice Diameter
 4 ft. weir
 ID 9.2

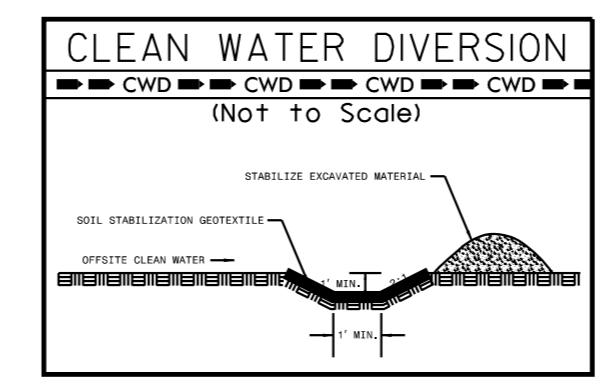
Temporary Rock
 Silt Check Type A
 3.5 ft. weir height

80 x 40 x 3
 2 inch Skimmer
 with 1.625 inch
 Orifice Diameter
 12 ft. weir
 ID 9.1

Temporary Stream Crossing per
 NCDOT Std No. 1645.01, as necessary
 (48" Temporary Pipe)

- (68) PATRICIA HATLEY
DB 373 PG 474
- (69) ANNIE GRAY DENNIS
DB 167 PG 406
- (71) HAROLD M & JOANNE C KENDALL
DB 335 PG 399
PB 15 PG 33
- (72) CITY OF ALBEMARLE
DB 126 PG 113

-Y7-	-L-
PI Sta 14+05.83	PI Sta 99+56.26
$\Delta = 15' 21' 44''$ (RT)	$\Delta = 39' 11' 36''$ (RT)
D = 4' 17' 30.5"	D = 2' 30' 07.2"
L = 357.94'	L = 1,566.49'
T = 180.05'	T = 815.29'
R = 1,335.00'	R = 2,290.00'
SE = EXIST	SE = 0.03
RO = EXIST	RO = 150'



ENVIRONMENTALLY SENSITIVE AREA
 SEE PROJECT SPECIAL PROVISIONS

SEE SHEET 2B-2 FOR INTERSECTION DETAILS
 SEE SHEET 36 FOR -L- PROFILE
 SEE SHEET 52 FOR -Y7- PROFILE

11/1/2018

5/14/99

PROJECT REFERENCE NO. R-2530B	SHEET NO. EC-9A/CONST.9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

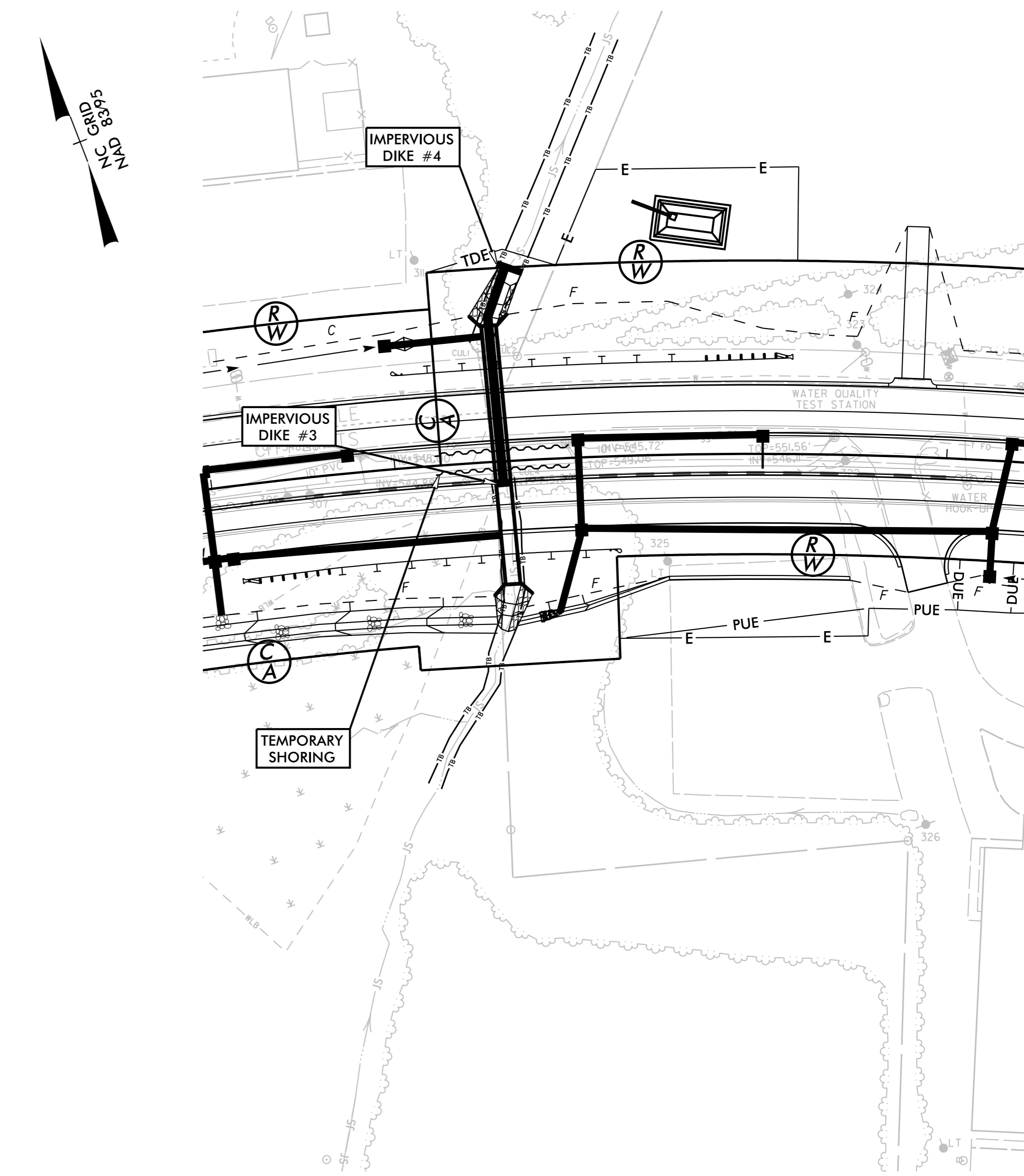
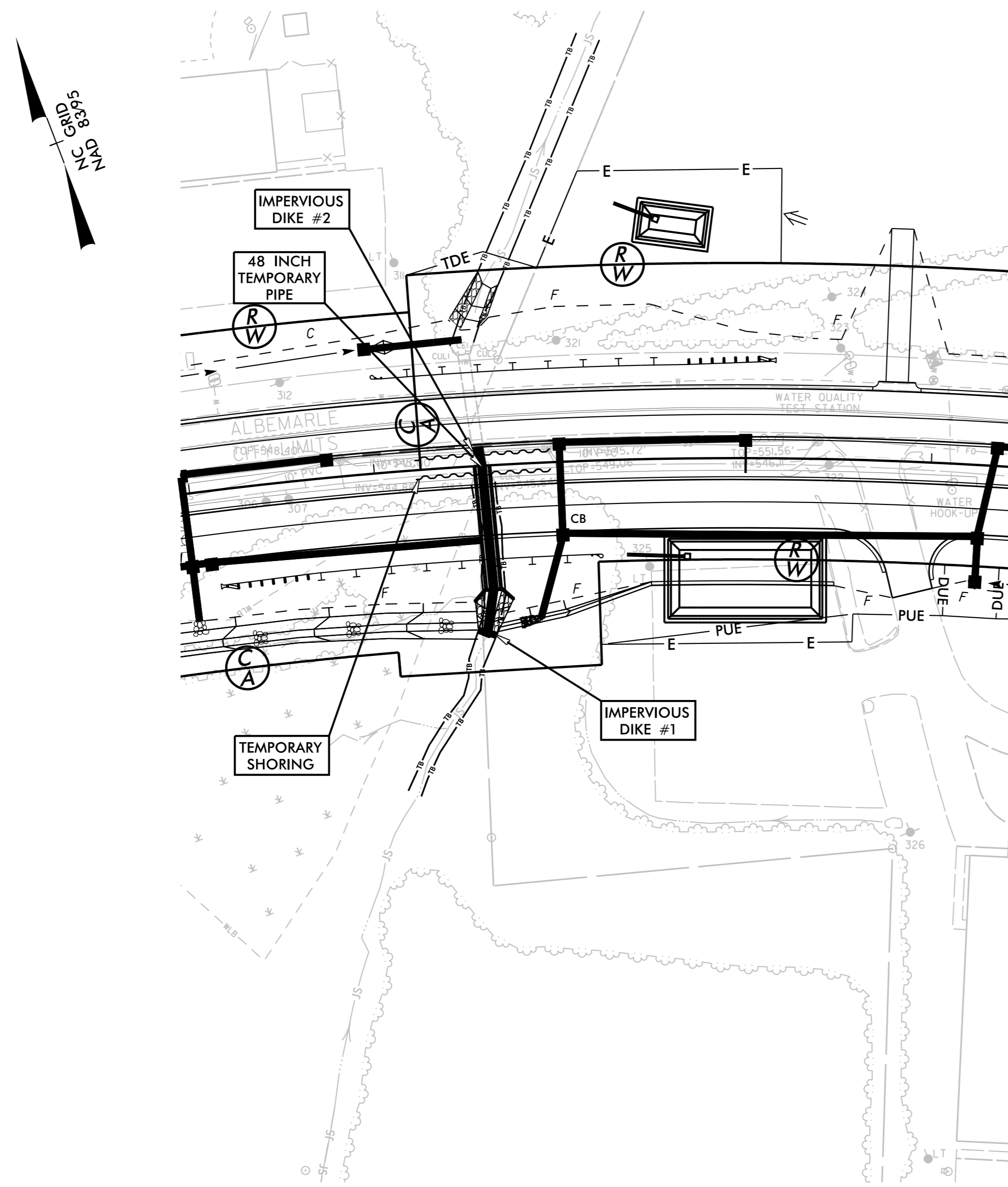
CULVERT CONSTRUCTION SEQUENCE STA. 93+58 -L-

PHASE I

- 1.) UTILIZE SPECIAL STILLING BASINS DURING CONSTRUCTION TO DEWATER WORK SITE. (TYP.)
- 2.) REMOVE ~ 9' OF EX. CULVERT FROM UPSTREAM END AND PLACE TEMPORARY SHORING TO HOLD EX. EMBANKMENT FILL AND EX. SANITARY SEWER PIPE IN PLACE.
- 3.) PLACE IMPERVIOUS DIKE #1 ON UPSTREAM END OF CHANNEL, OUTSIDE OF CONSTRUCTION LIMITS. PLACE IMPERVIOUS DIKE #2 INSIDE EX. CULVERT. ROUTE TEMPORARY PIPE THROUGH IMPERVIOUS DIKES.
- 4.) BUILD ~ 66 L.F. OF UPSTREAM PROPOSED CULVERT. PLACE TEMPORARY SHORING AS NECESSARY TO HOLD NEW EMBANKMENT FILL.
- 5.) CONSTRUCT UPSTREAM CHANNEL IMPROVEMENTS, COMPLETE EASTBOUND ROADWAY IMPROVEMENTS, AND MOVE TRAFFIC OVER AFTER COMPLETION.
- 6.) REFERENCE SHEET TMP-9 FOR ADDITIONAL DETAIL REGARDING TRAFFIC MANAGEMENT AND SHORING.

PHASE II

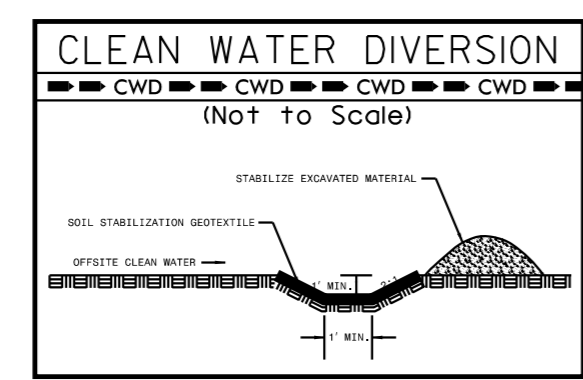
- 1.) EXCAVATE FOR PROPOSED CULVERT.
- 2.) REMOVE EX. CULVERT, PLACE IMPERVIOUS DIKES #3 AND #4, AND MOVE TEMPORARY PIPE BETWEEN IMPERVIOUS DIKES.
- 3.) BUILD REMAINING DOWNSTREAM PORTION OF PROPOSED CULVERT.
- 4.) REMOVE TEMPORARY SHORING AND COMPLETE WESTBOUND IMPROVEMENTS.
- 5.) REMOVE TEMPORARY PIPE AND IMPERVIOUS DIKES.
- 6.) REFERENCE SHEET TMP-51 FOR ADDITIONAL DETAIL REGARDING TRAFFIC MANAGEMENT AND SHORING.



11/1/2018

5/14/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10



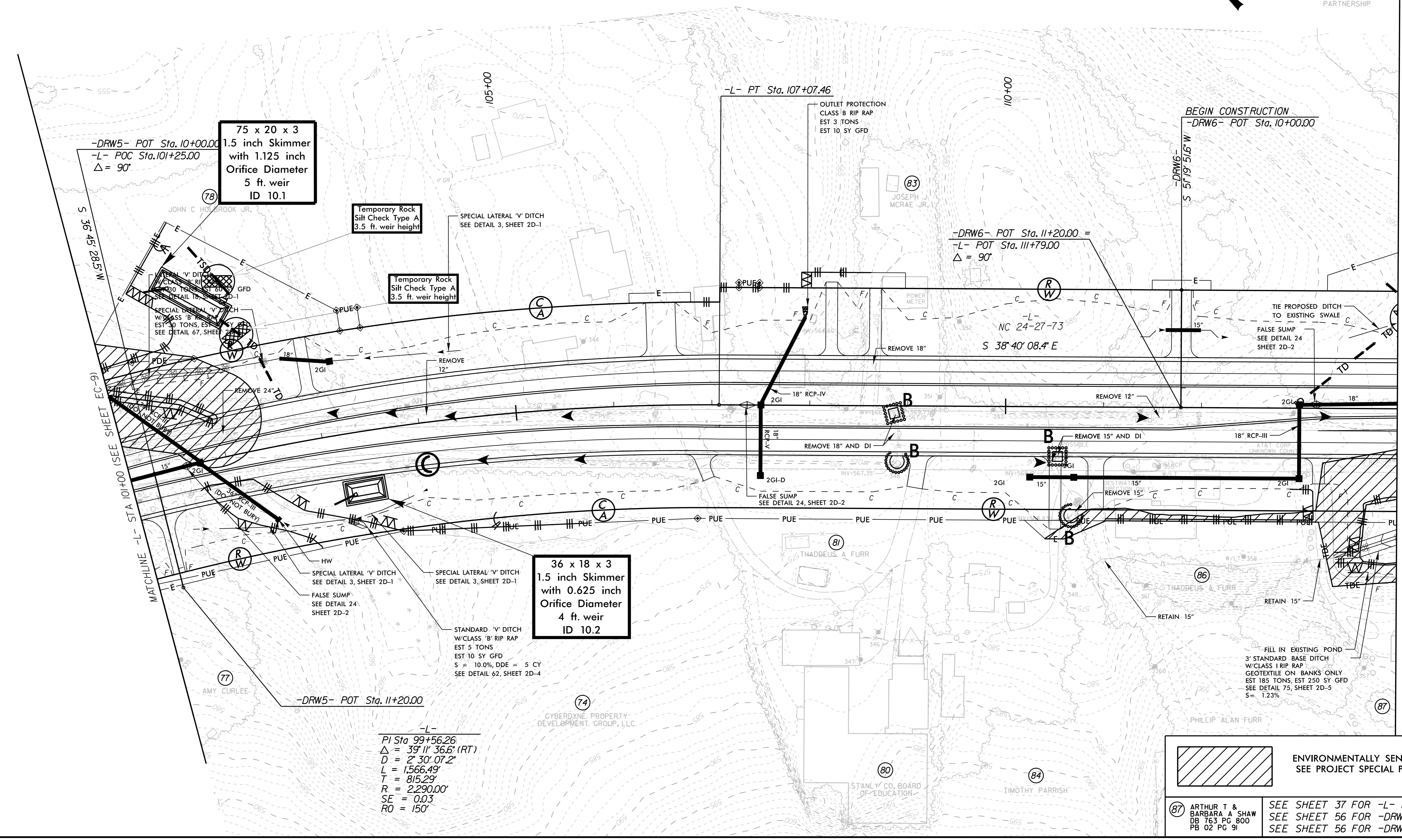
79 BOBBY F & SANDRA R BEAMAN

82 ALICE M. BEAMAN TRUST

85 JAMES J SCHAD

89 WESFELL LIMITED PARTNERSHIP

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



-DRW5- POT Sta. 10+00.00
-L- POC Sta. 101+25.00
 $\Delta = 90^\circ$

-DRW6- POT Sta. 11+20.00 =
-L- POT Sta. 111+79.00
 $\Delta = 90^\circ$

BEGIN CONSTRUCTION
-DRW6- POT Sta. 10+00.00

36 x 18 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 10.2

75 x 20 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
5 ft. weir
ID 10.1

Temporary Rock
Silt Check Type A
3.5 ft. weir height

Temporary Rock
Silt Check Type A
3.5 ft. weir height

STANDARD 'V' DITCH
W/CLASS 'B' RIP RAP
EST 5 TONS
EST 10 SY GFD
S = 10.0%, DDE = 5 CY
SEE DETAIL 62, SHEET 2D-4

FILL IN EXISTING POND
3' STANDARD BASE DITCH
W/CLASS 'B' RIP RAP
GEOTEXTILE ON BANKS ONLY
EST 185 TONS, EST 250 SY GFD
SEE DETAIL 75, SHEET 2D-5
S = 1.23%

-L-
PI Sta 99+56.26
 $\Delta = 39^\circ 11' 36.6''$ (RT)
D = 2' 30' 07.2"
L = 1,566.49'
T = 815.29'
R = 2,290.00'
SE = 0.03
RO = 150'

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

87 ARTHUR T & BARBARA A SHAW
DB 763 PG 800
PB 02 PG 91
SEE SHEET 37 FOR -L- PROFILE
SEE SHEET 56 FOR -DRW5- PROFILE
SEE SHEET 56 FOR -DRW6- PROFILE

11/1/2018