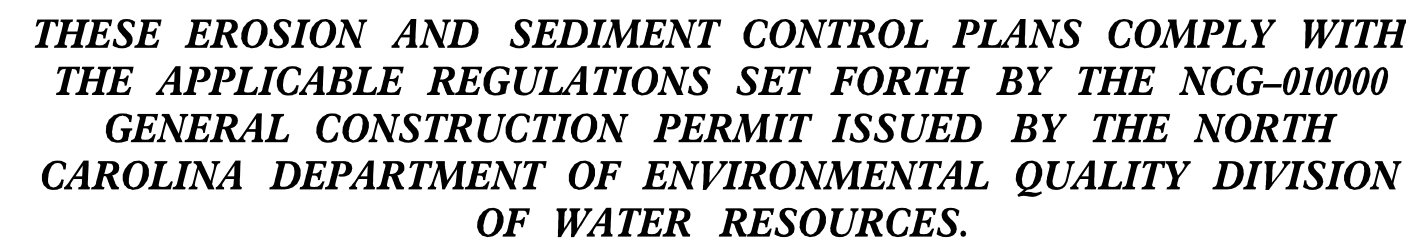
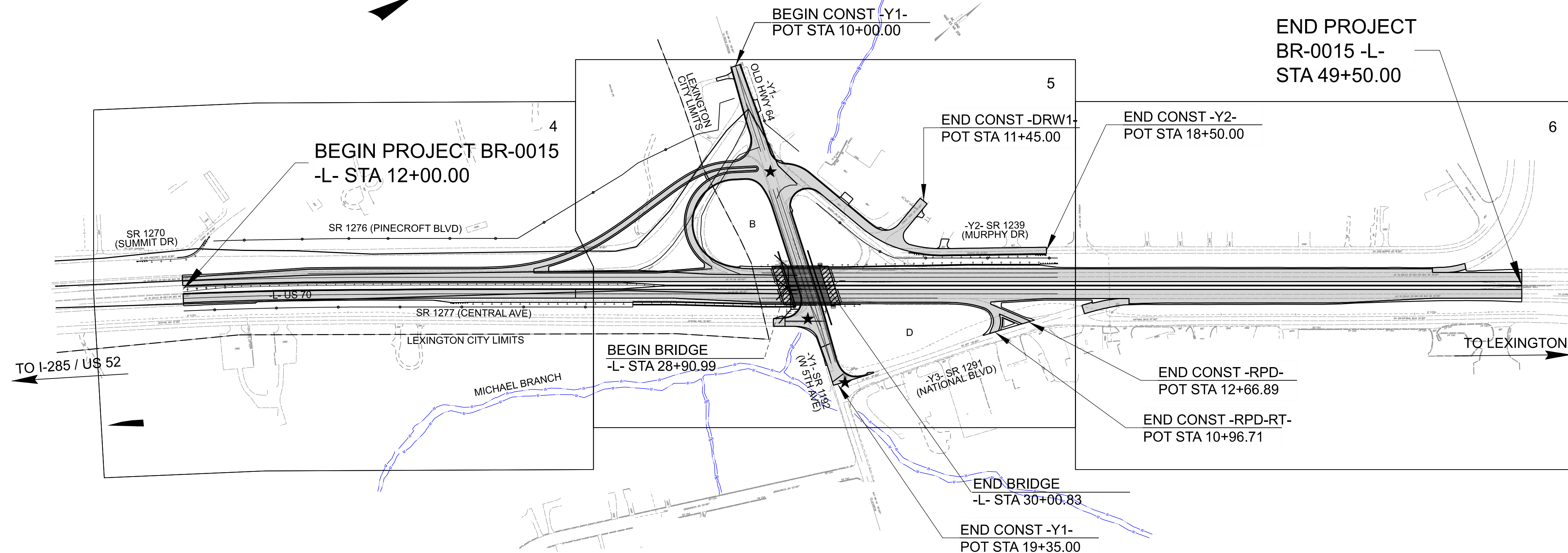


19-FEB-2025 14:28
Projects/North Carolina
42022009_BR0015/BR0015/Roadside Environmental/Erosion Control/EC_TITLE
Charward
01/14/25

"Roadway Standard Drawings"— Roadway Design
N. C., dated January 2024 and the latest
reference hereby are considered a part of

**LOCATION: BRIDGE 280067 AND 280068 REPLACEMTNS ON US 29/US70.
NB & SB OVER SR 1192 (W. 5TH AVE.)**

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



4600
LEVEL III CERTIFICATION NO.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

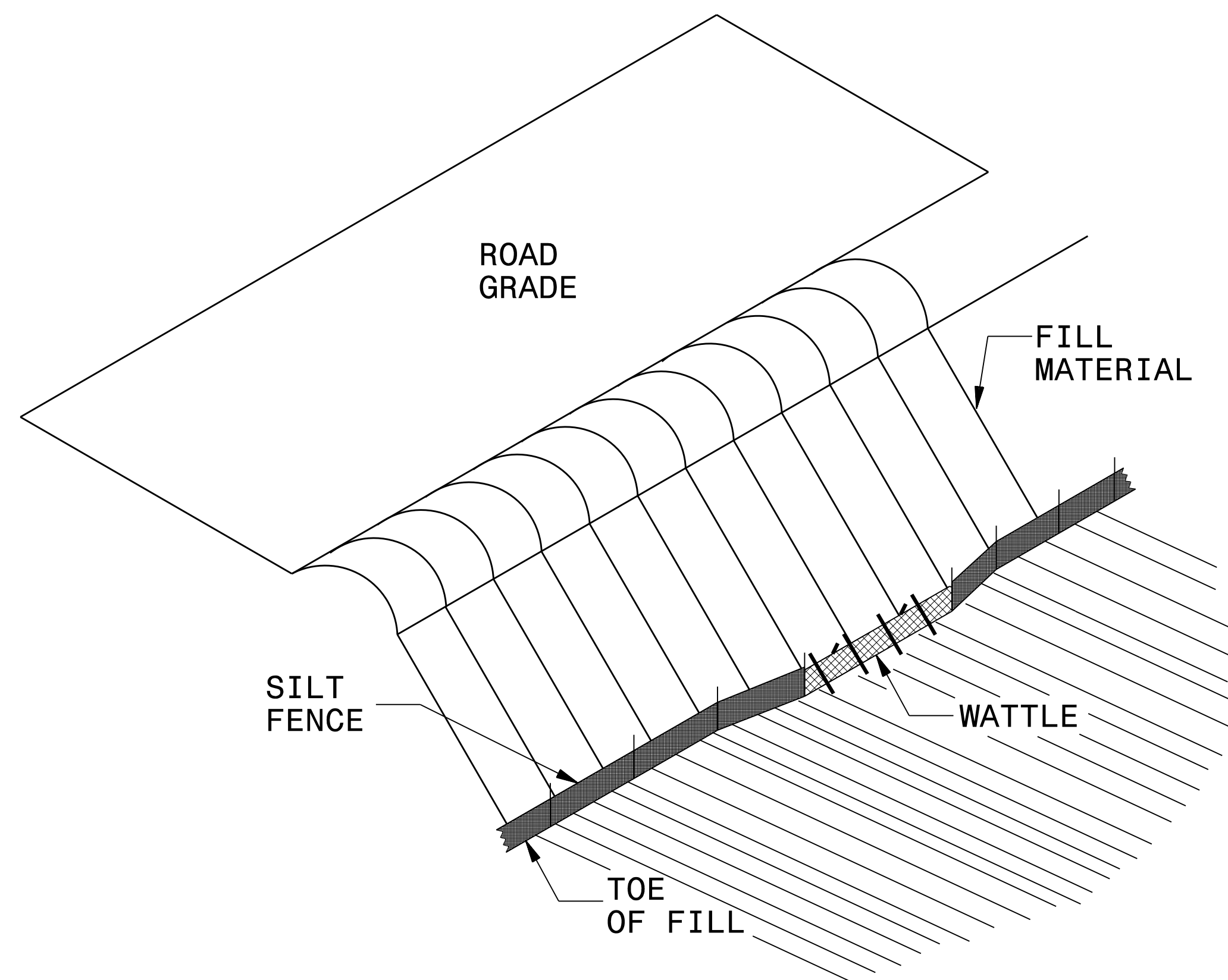
PROJECT REFERENCE NO.	SHEET NO.
BR-0015	EC-2
RW SHEET NO.	

EROSION & SEDIMENT CONTROL LEGEND

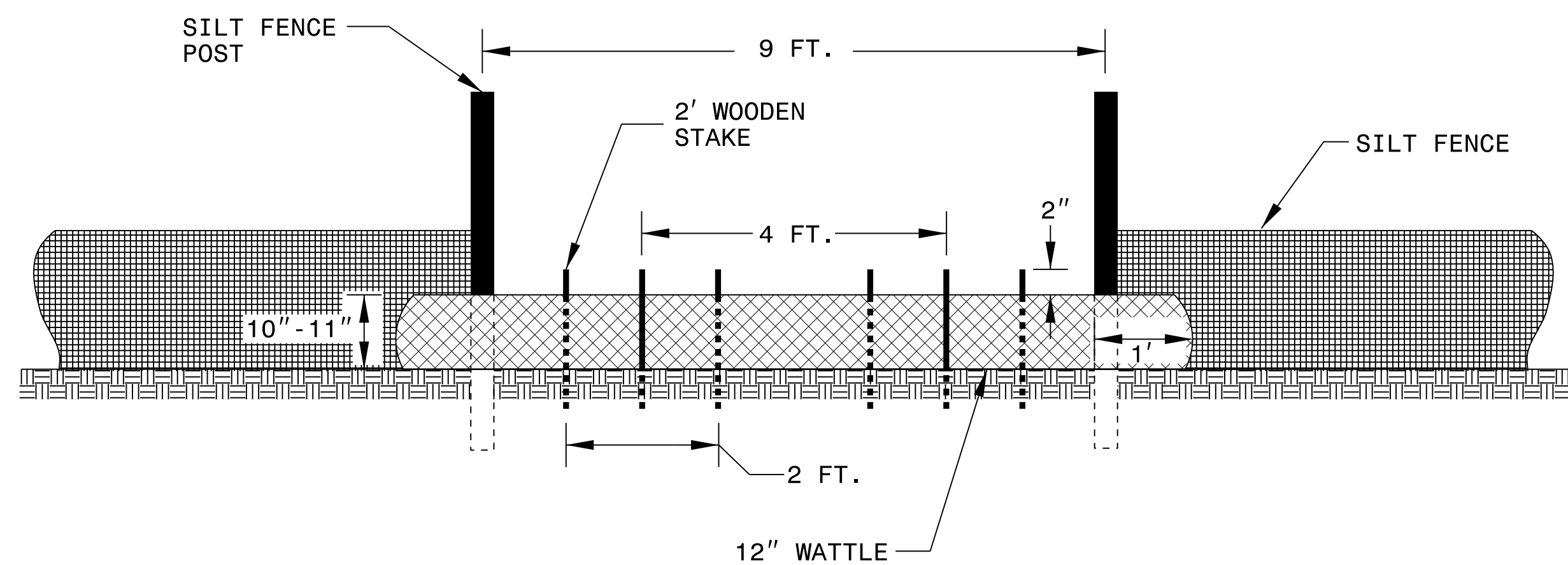
Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior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

SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO.	SHEET NO.
BR-0015	EC-2A
RW SHEET NO.	



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.

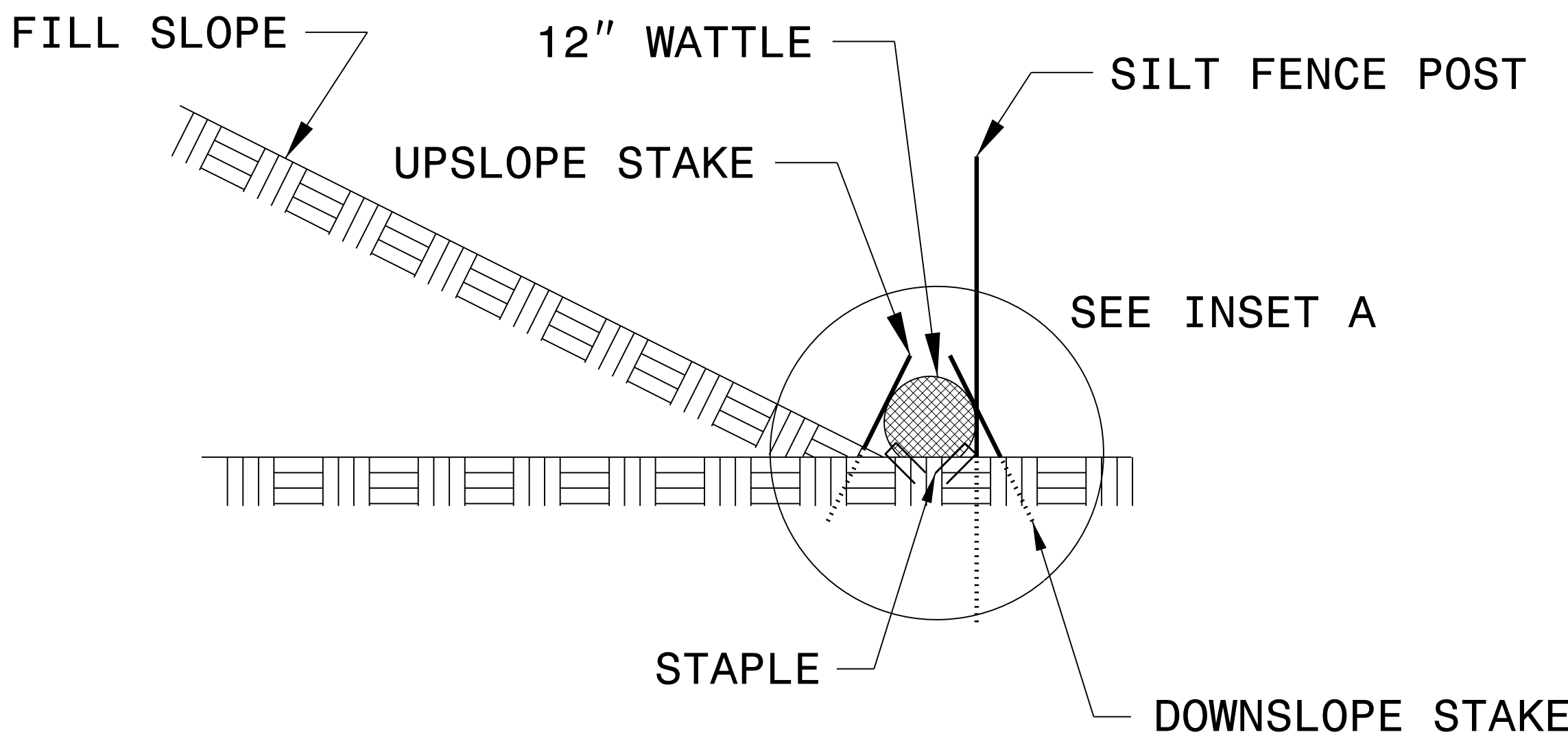
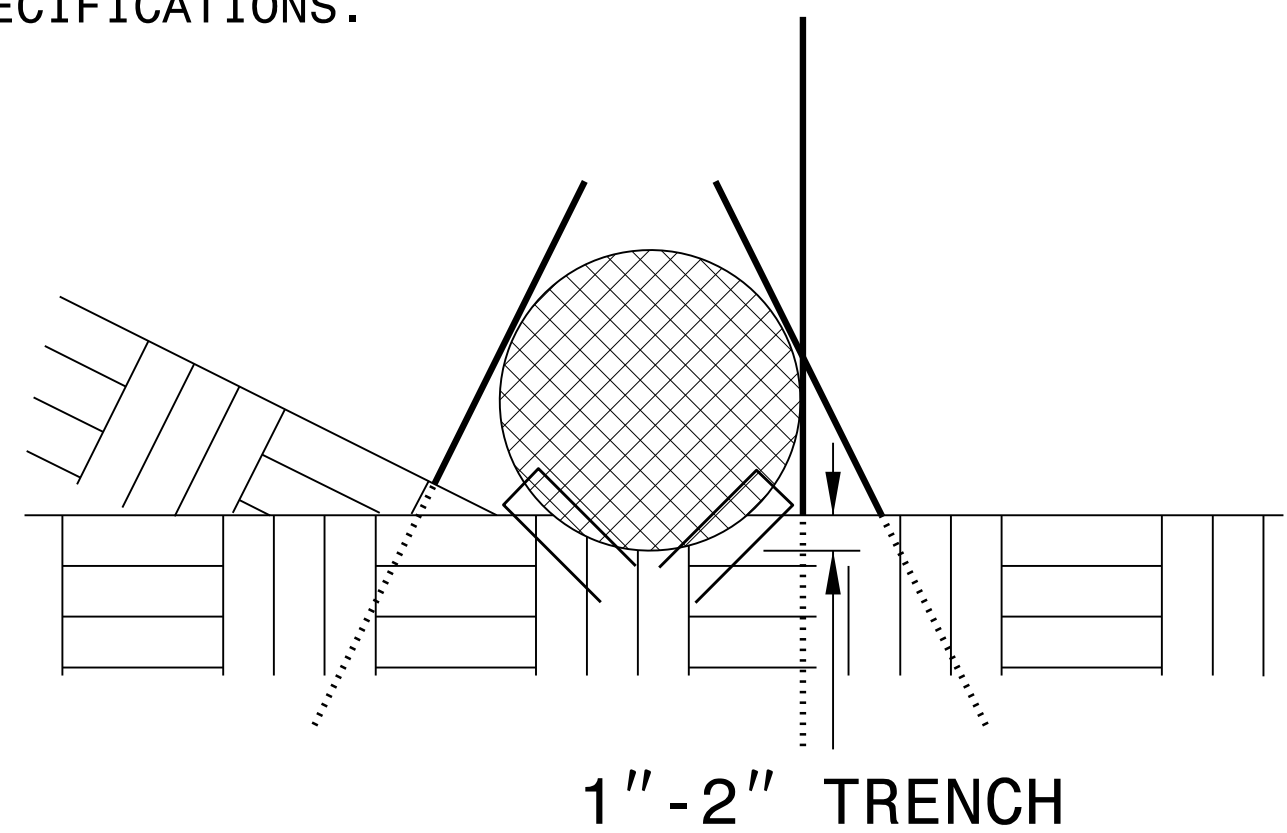
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

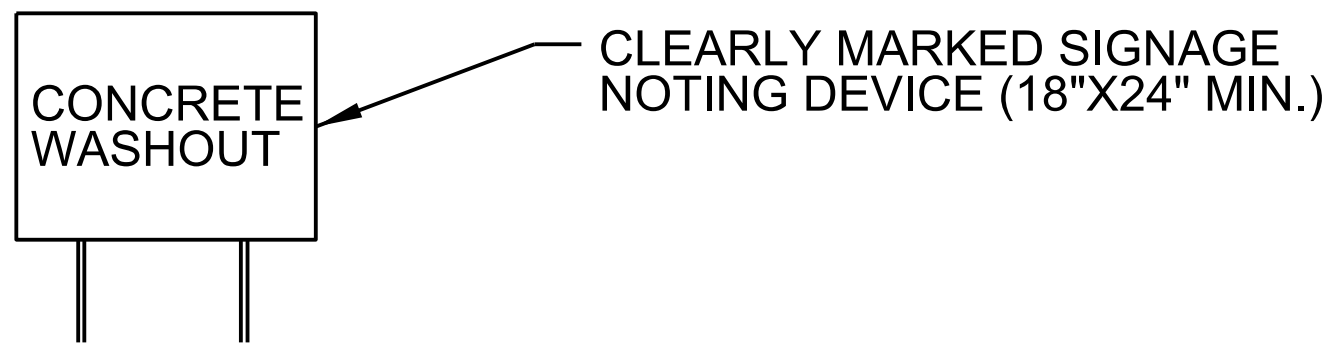
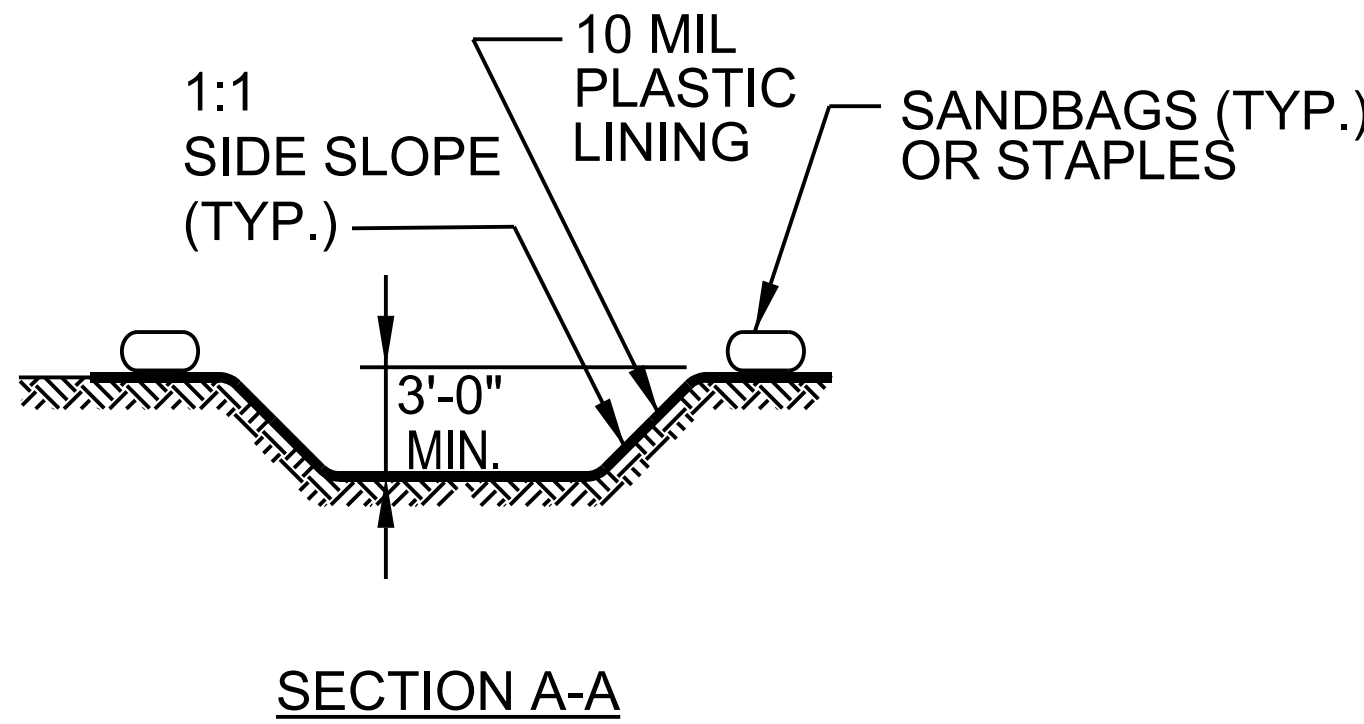
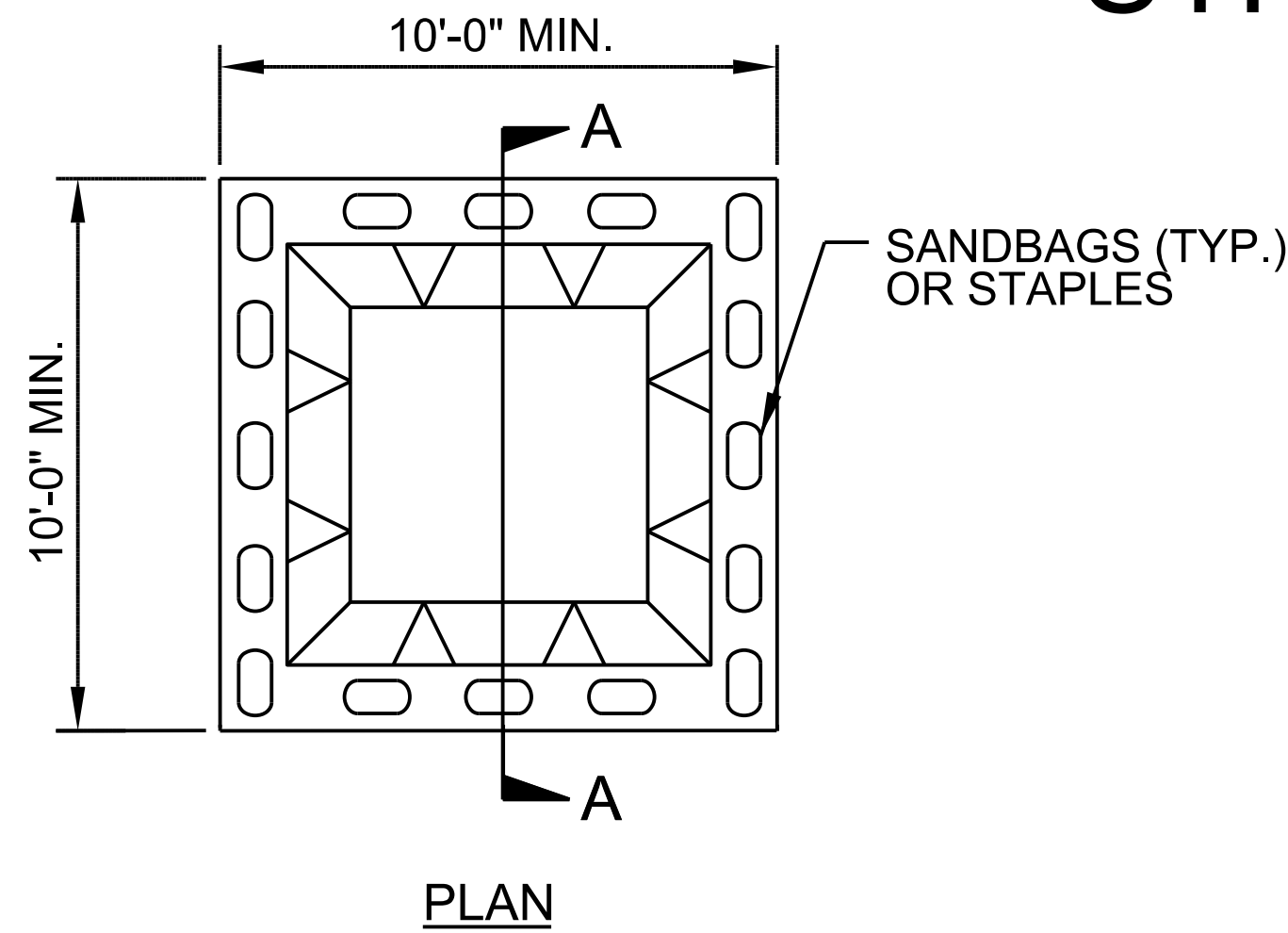
INSET A



SIDE VIEW

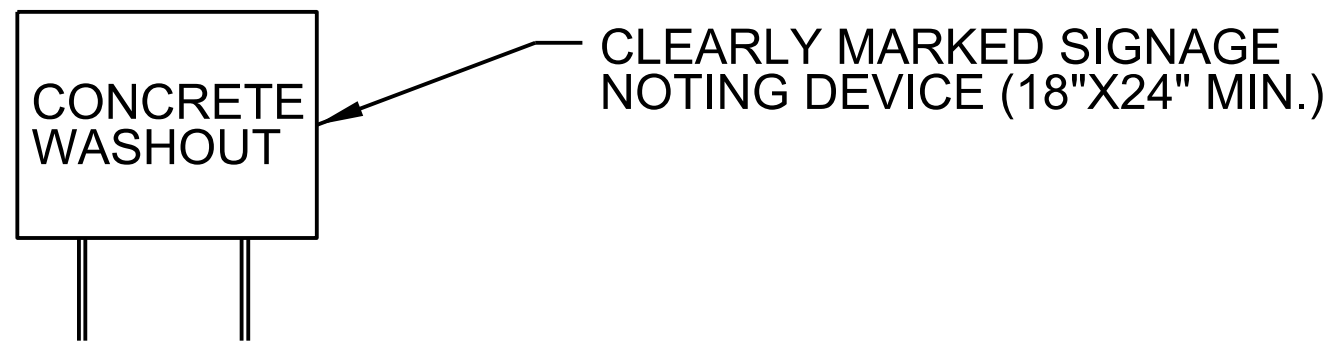
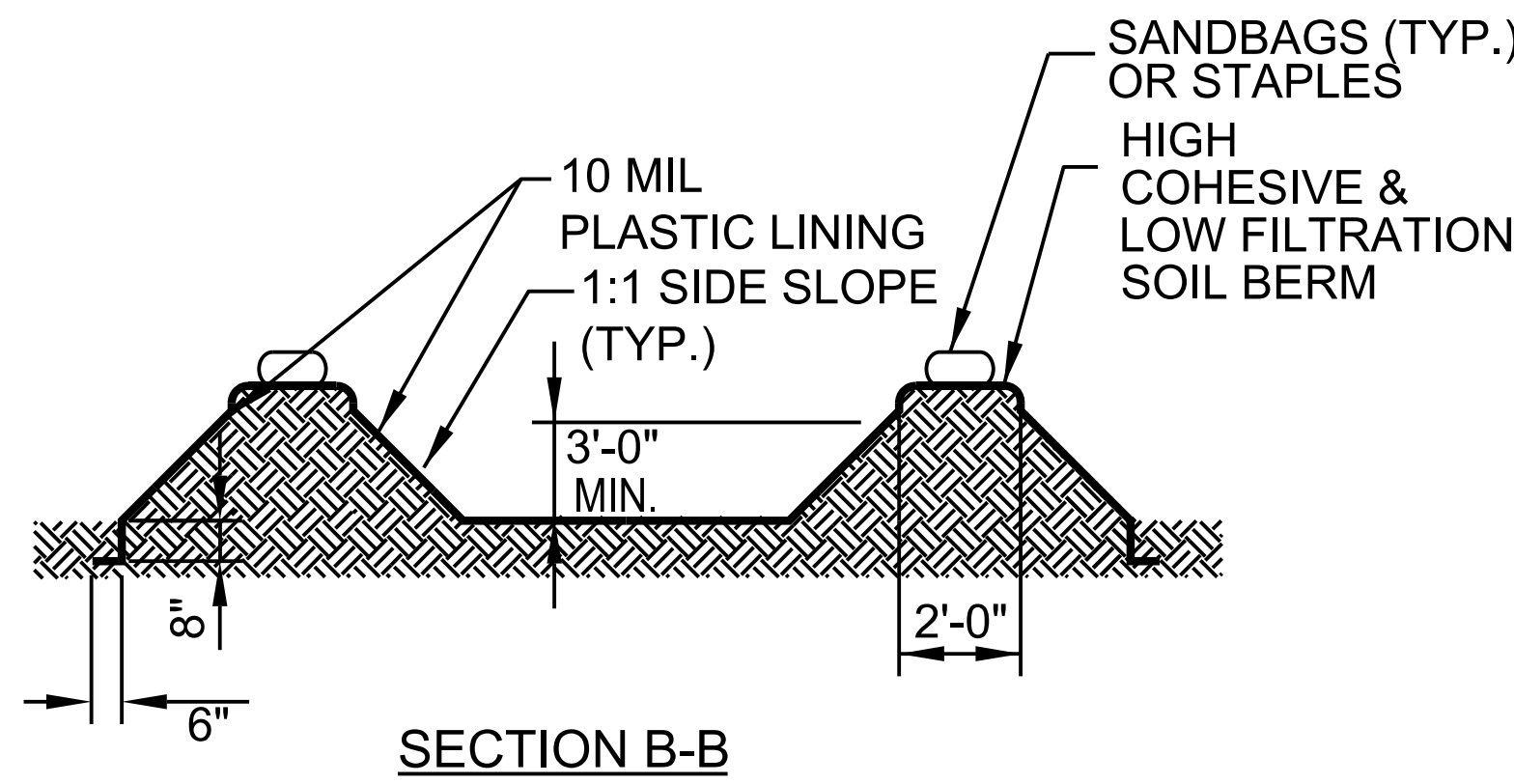
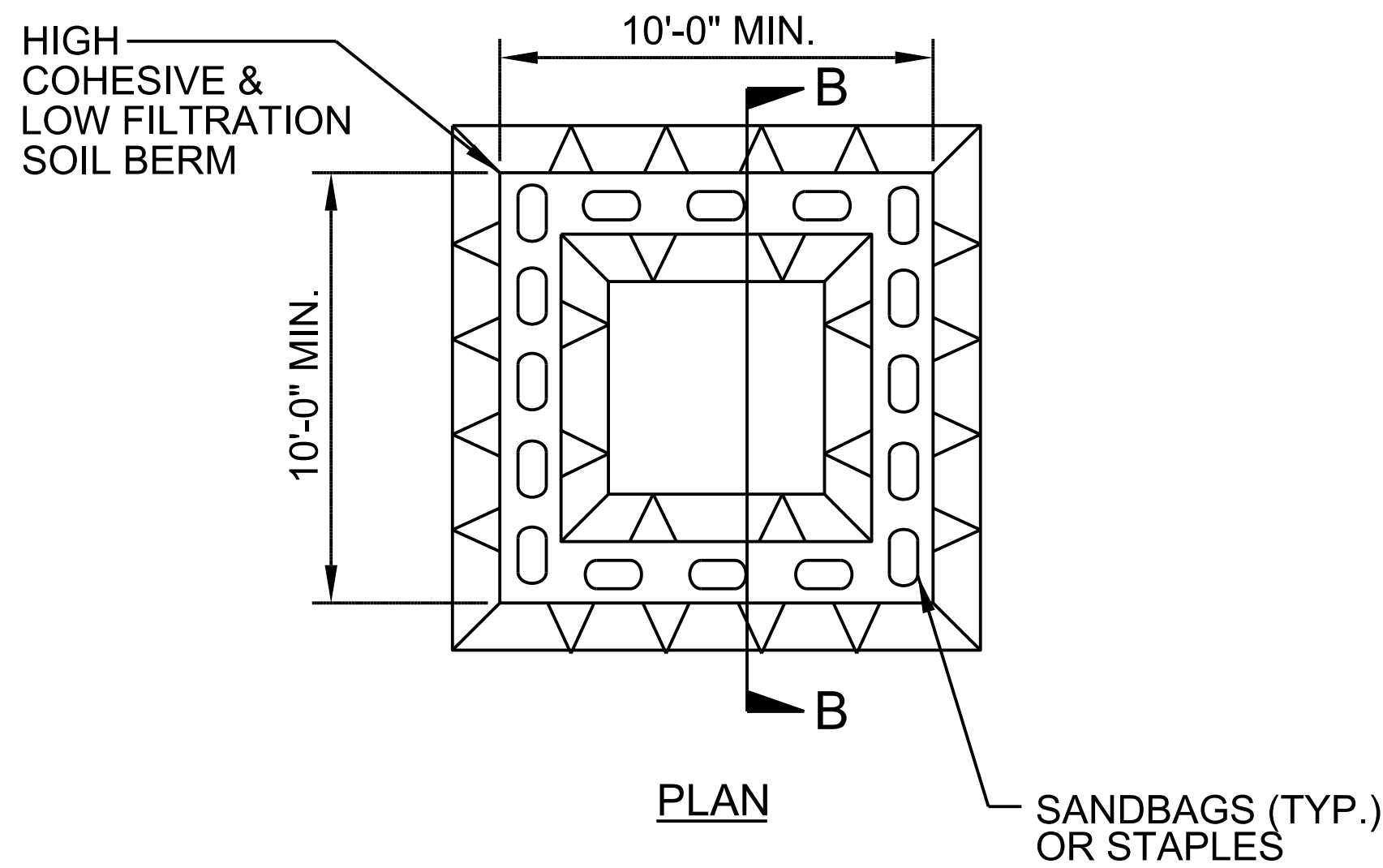
PROJECT REFERENCE NO.	SHEET NO.
BR-0015	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



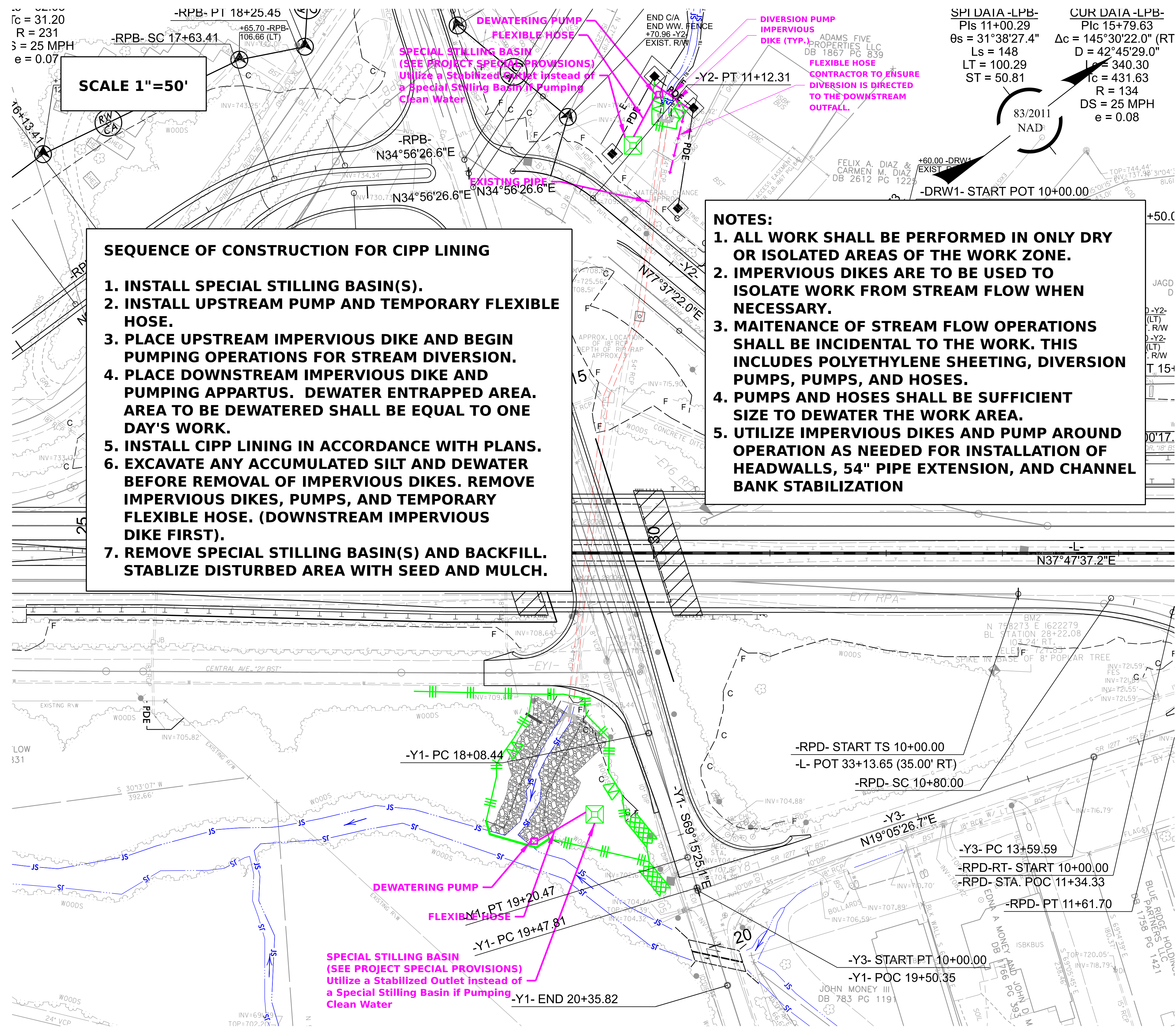
BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

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



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

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



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

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

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL (EXCELSIOR)

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-Y1-	10+00	11+00	RT	90
5	-Y1-	14+50	15+11	RT	95
5	-Y1-	17+69	18+09	LT	40
5	-Y2-	13+60	13+80	LT	20
5	-Y3-	10+47	10+91	LT	45
5	-LPB-	10+14	12+17	RT	620
5	-L-	32+00	36+50	LT	940
	SUBTOTAL EXCELSIOR MATTING				1850

MATTING FOR EROSION CONTROL (STRAW)

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	13+15	15+58	LT	305
4	-L-	18+29	19+87	LT	200
5	-L-	31+00	32+60	LT	240
5	-Y1-	17+71	18+75	LT	95
5	-Y1-	18+53	19+00	LT	50
5	-Y2-	13+05	13+60	LT	55
5	-Y2-	14+66	17+00	LT	235
4	RPB	10+00	11+92	LT	240
4	RPB	12+65	13+54	LT	110
5	RPB	13+54	15+85	LT	290
5	RPB	15+85	18+58	LT	340
5	LPB	12+07	13+35	LT	160
5	DRW1	10+35	11+50	RT	105
5	-L-	23+68	25+70	LT	300
4	-L-	12+00	13+50	MED	225
	SUBTOTAL STRAW MATTING				2950

PERMANENT SOIL REINFORCEMENT MAT (TYPE 4)

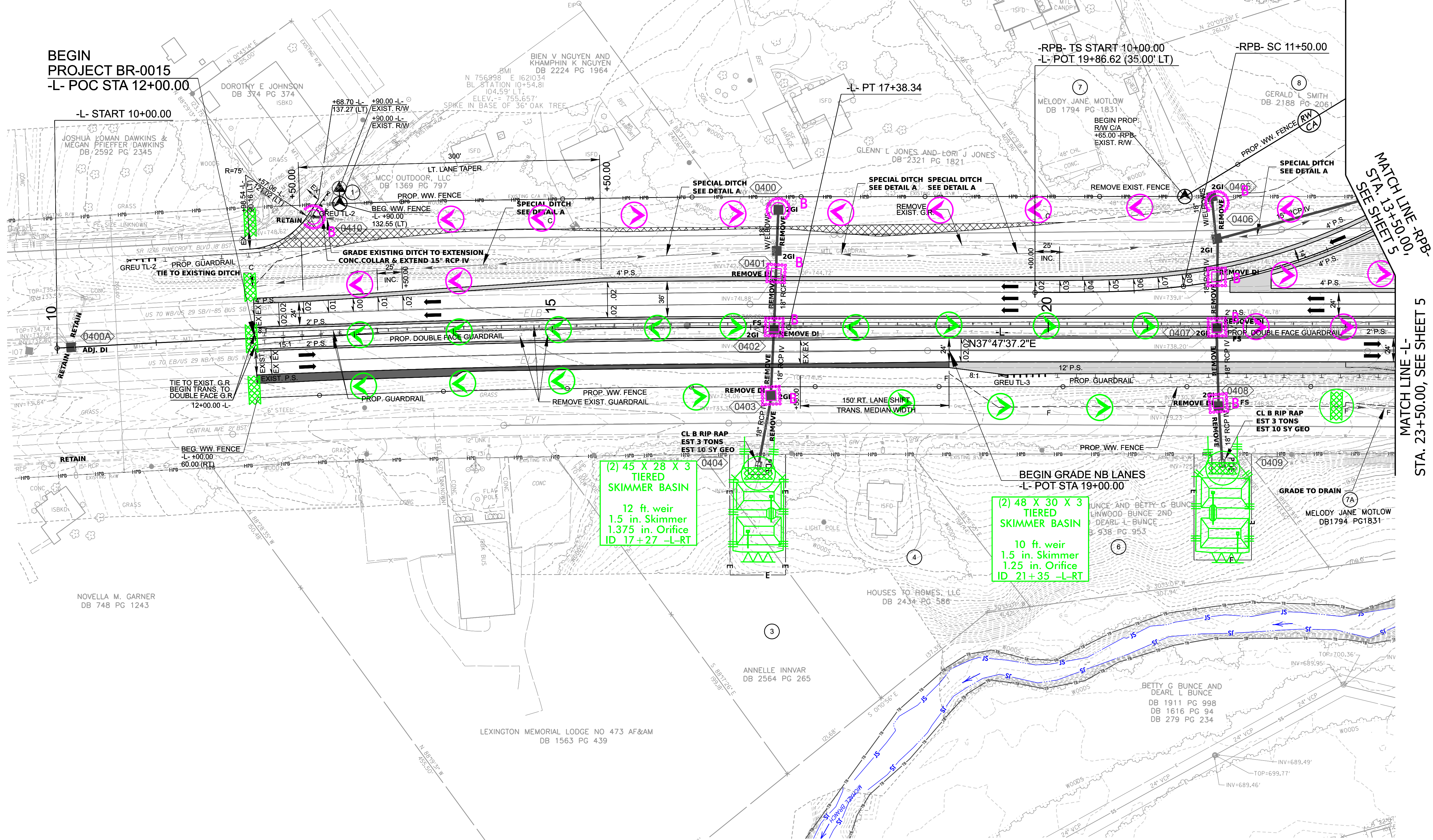
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-Y1-	11+00	12+20	RT	120
5	-Y1-	18+09	18+53	LT	45
			SUBTOTAL		165
		ADDITIONAL PSRM TO BE INSTALLED			0
				TOTAL	165
				SAY	165

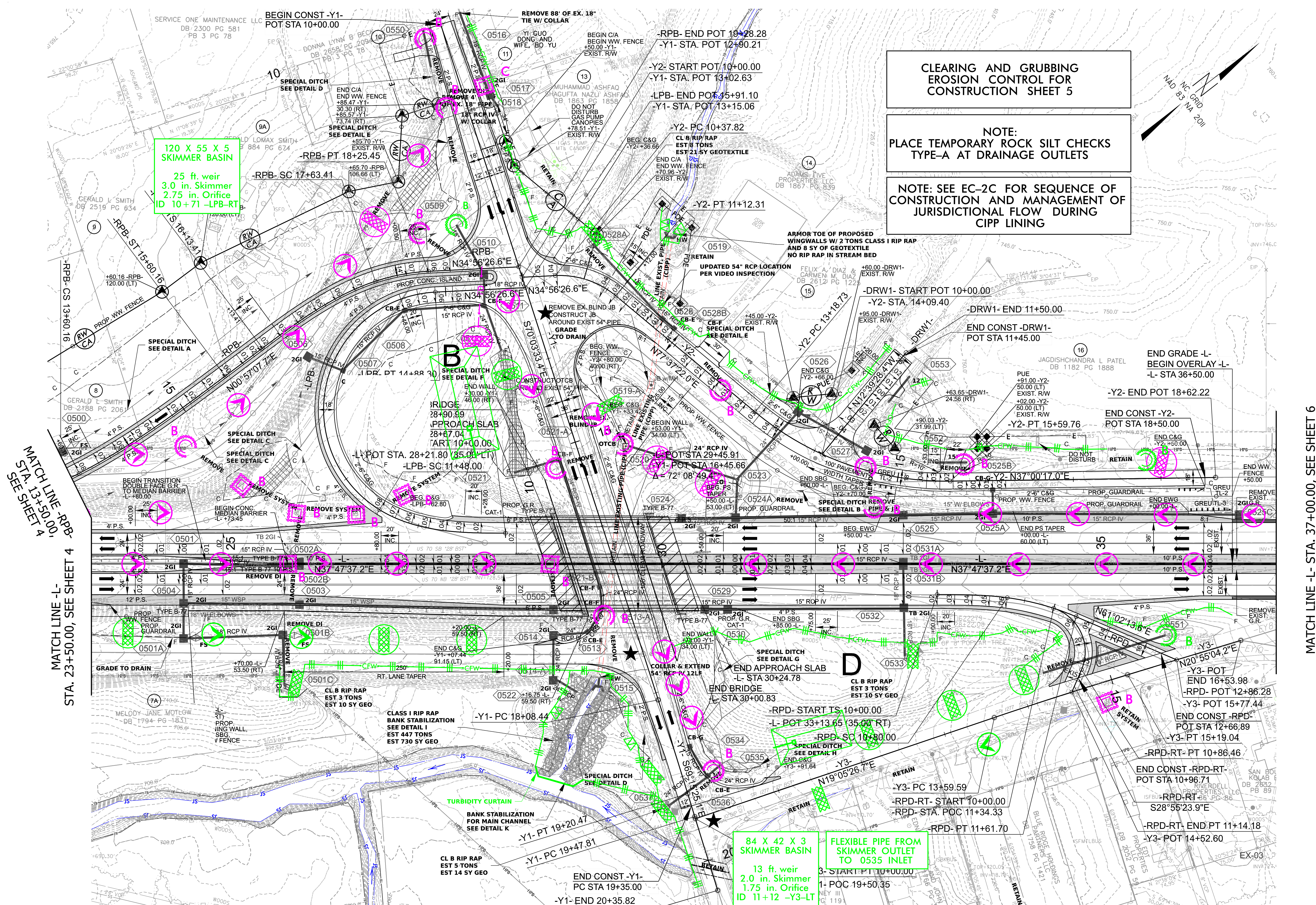
	SUBTOTAL EXCELSIOR MATTING			1850
	SUBTOTAL STRAW MATTING			2950
	MISCELLANEOUS MATTING TO BE INSTALLED			16545
			TOTAL	21345
			SAY	21345

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE:
PLACE TEMPORARY ROCK SILT CHECKS
TYPE-A AT DRAINAGE OUTLETS

-L-	-RPB-	-RPB-
CUR DATA -L- Plc 13+69.27 $\Delta c = 03^{\circ}16'11.9"$ (RT) D = 00°26'34.4" Lc = 738.34 Tc = 369.27 R = 12.937 DS = 60 MPH e = NC	SPI DATA -RPB- Pls 11+00.08 $\theta s = 07^{\circ}10'26.1"$ Ls = 150 LT = 100.08 ST = 50.07	CUR DATA -RPB- Plc 12+56.17 $\Delta c = 20^{\circ}06'08.5"$ (LT) D = 09°33'54.9" Lc = 210.16 Tc = 106.17 R = 599 DS = 45 MPH e = 0.08





MATCH LINE -L- STA. 37+00.00, SEE SHEET 6

REVISIONS

NOTE:
PLACE TEMPORARY ROCK SILT CHECKS
TYPE-A AT DRAINAGE OUTLETS

NAD 83 NC GRID 2011

END TIP PROJECT BR-0015
-L- POT STA 49+50.00

REVISIONS

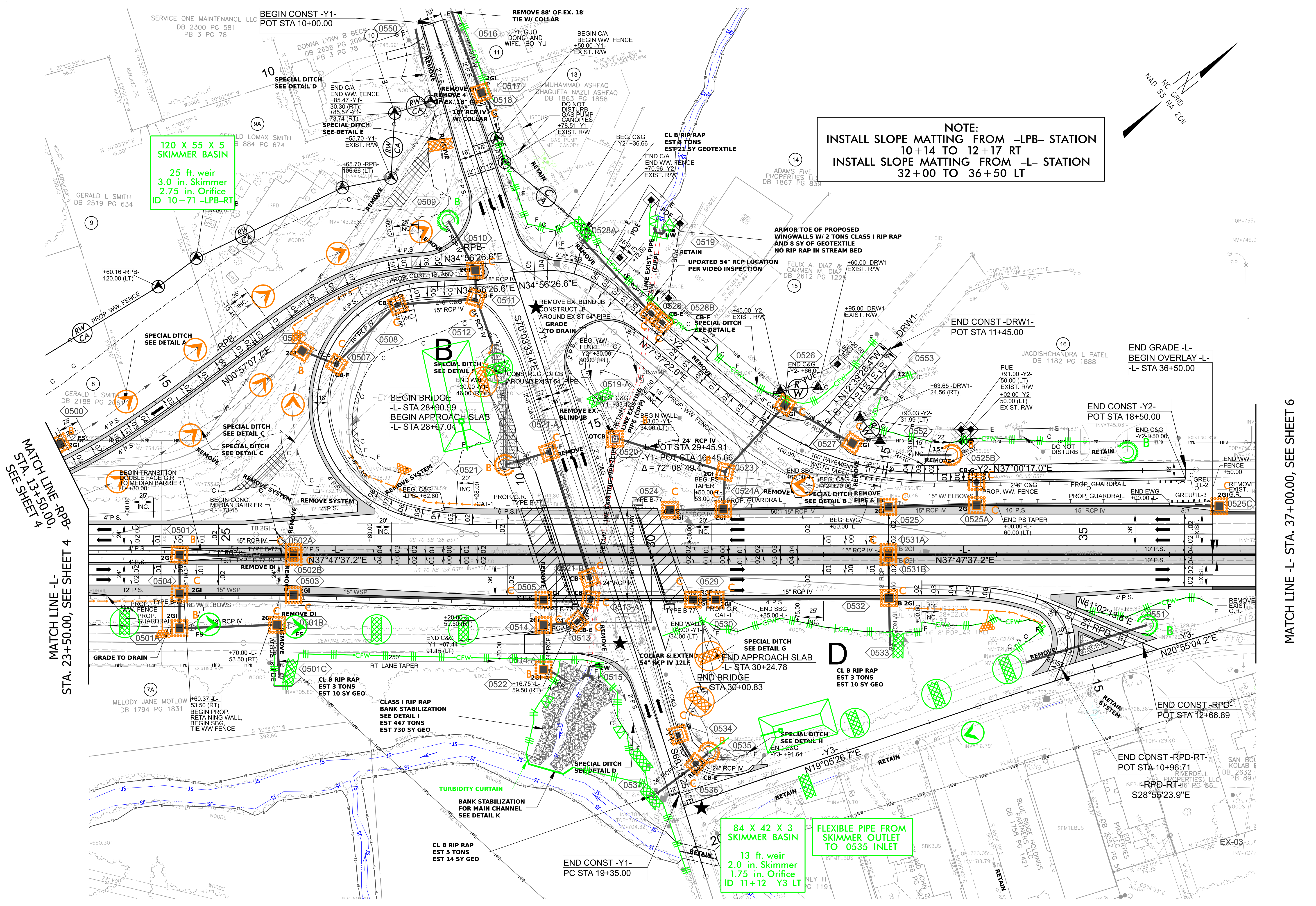
PREPARED BY

KCA
KISINGER CAMPO
& ASSOCIATES

NC FIRM LICENSE No: C-1506
301 Fayetteville Street,
Suite 1500
Raleigh, NC 27601
(919)882-7839



REVISIONS



BR-0015

EC

EC-8/CONST.5

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DAVIDSON COUNTY

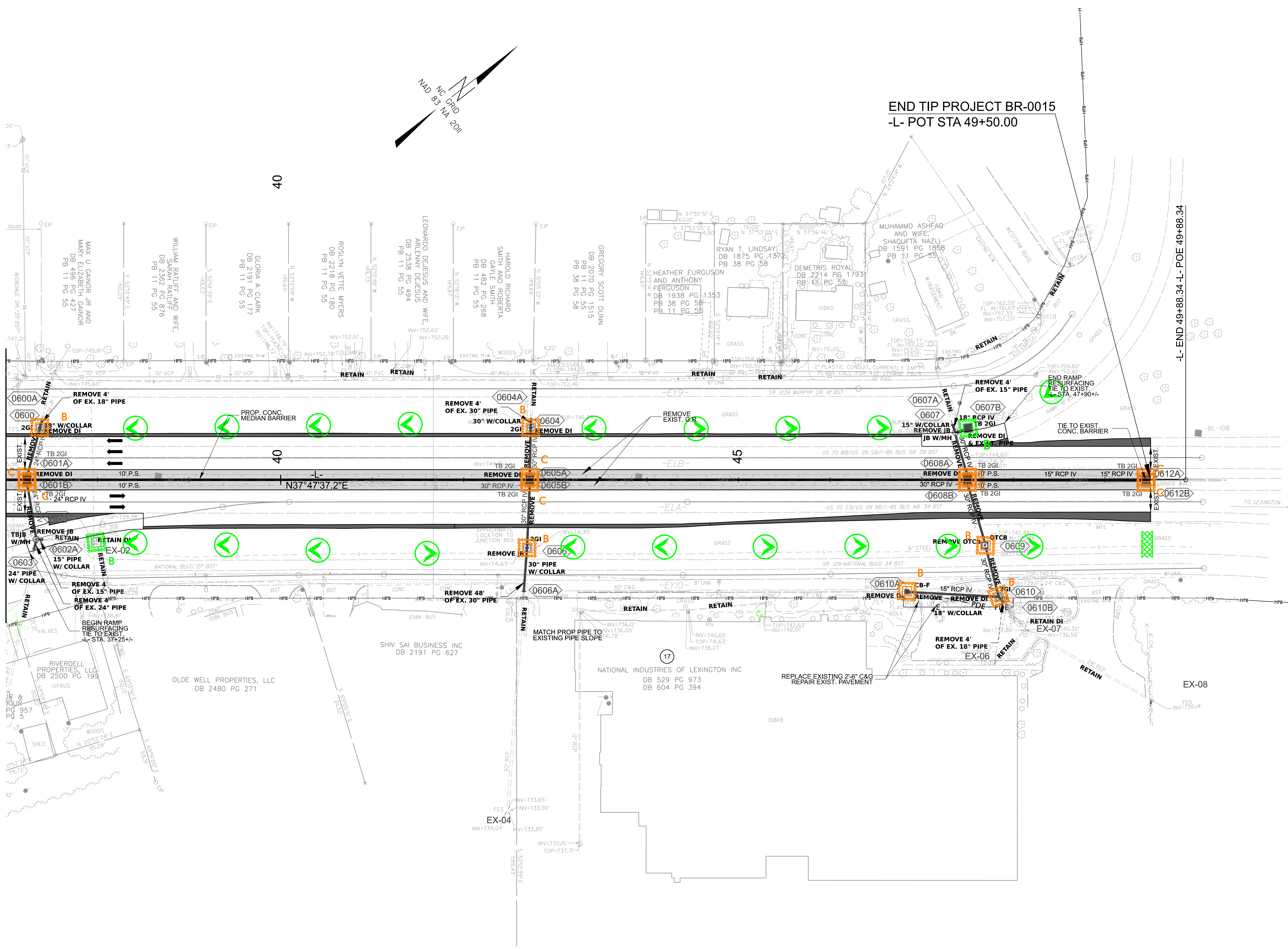
HIGHWAY DIVISION 9

PREPARED BY

KCA
KISINGER CAMPO
& ASSOCIATES
NC FIRM LICENSE No: C-1506
301 Fayetteville Street,
Suite 1500
Raleigh, NC 27601
(919) 882-7839

REVISIONS

MATCH LINE -L- STA. 37+00.00, SEE SHEET 5



BR-0015

EC

EC-9/CONST. G

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DAVIDSON COUNTY

HIGHWAY DIVISION 9

PREPARED BY

KCA
KISINGER CAMPO & ASSOCIATES
NC FIRM LICENSE No: C-1506
301 Fayetteville Street, Suite 1500
Raleigh, NC 27601
(919) 882-7839

REVISIONS