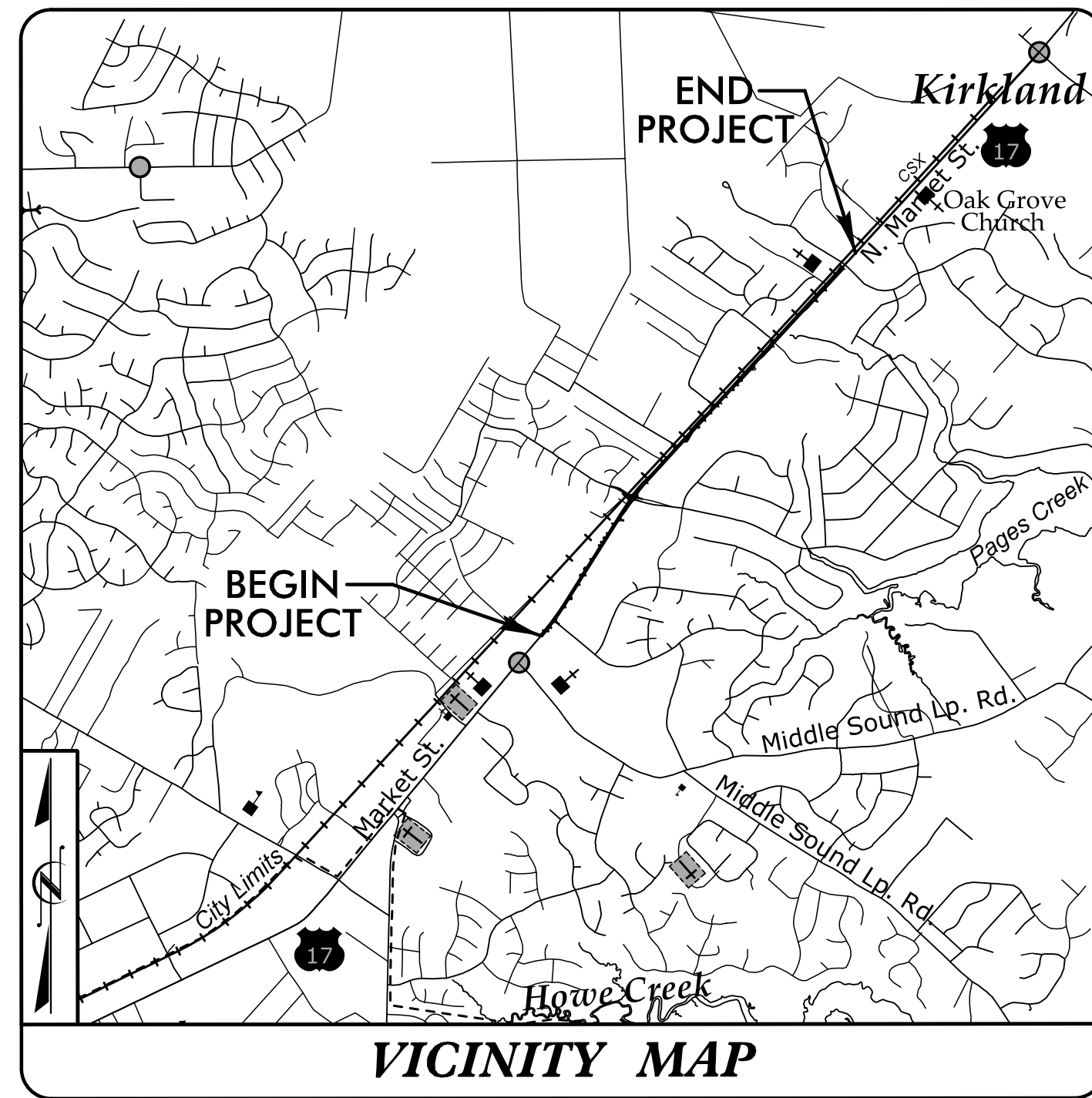


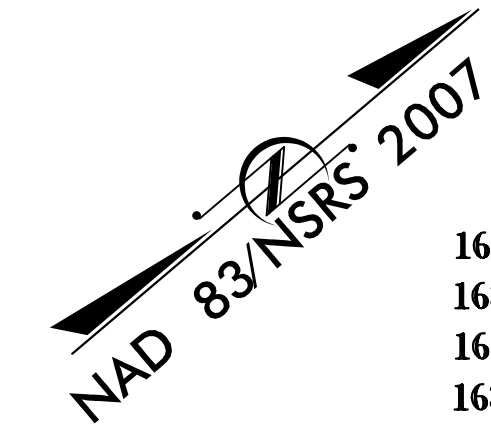
TIP PROJECT: U-4902D



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

**LOCATION: US 17 (MARKET STREET) FROM
SR 1403 (MIDDLE SOUND LOOP ROAD)
TO SR 2290 (MENDENHALL DRIVE)/
SR 2734 (MARSH OAKS DRIVE)**

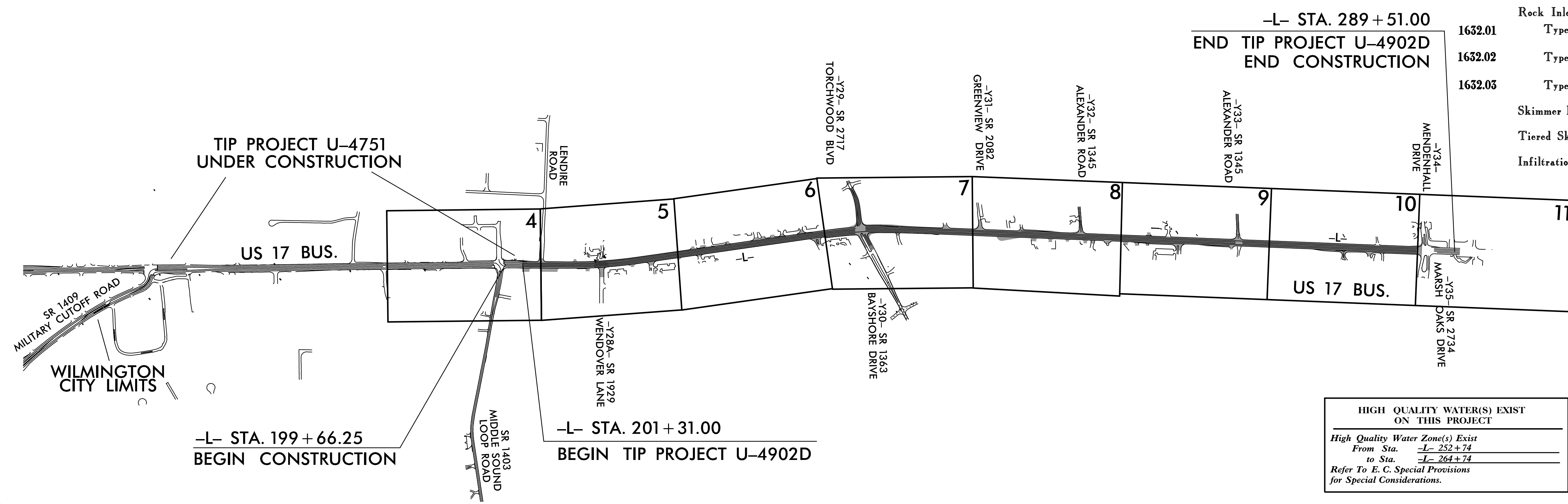
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND SIGNALS



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4902D	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

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

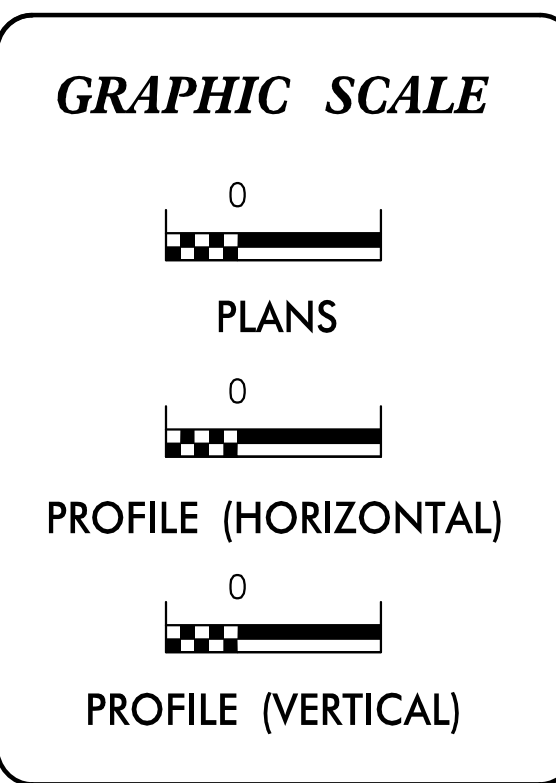


**THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.**

**ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT**
*Refer To E. C. Special Provisions
for Special Considerations.*

**HIGH QUALITY WATER(S) EXIST
ON THIS PROJECT**
*High Quality Water Zone(s) Exist
From Sta. -L- 252+74
to Sta. -L- 264+74
Refer To E. C. Special Provisions
for Special Considerations.*

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



**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 ENVIRONMENTAL QUALITY
DIVISION OF WATER RESOURCES.**

Prepared In the Office of:

HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

2018 STANDARD SPECIFICATIONS

NATALIE CHAN, P.E., CPESC, CPSWQ
EROSION CONTROL
LEVEL III
CERTIFICATION #3444

Reviewed In the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2018 STANDARD SPECIFICATIONS

Reviewed by:
MARK STALEY, CPESC, CPSWQ

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 3	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 Wattle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

PROJECT REFERENCE NO. U-4902D	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.

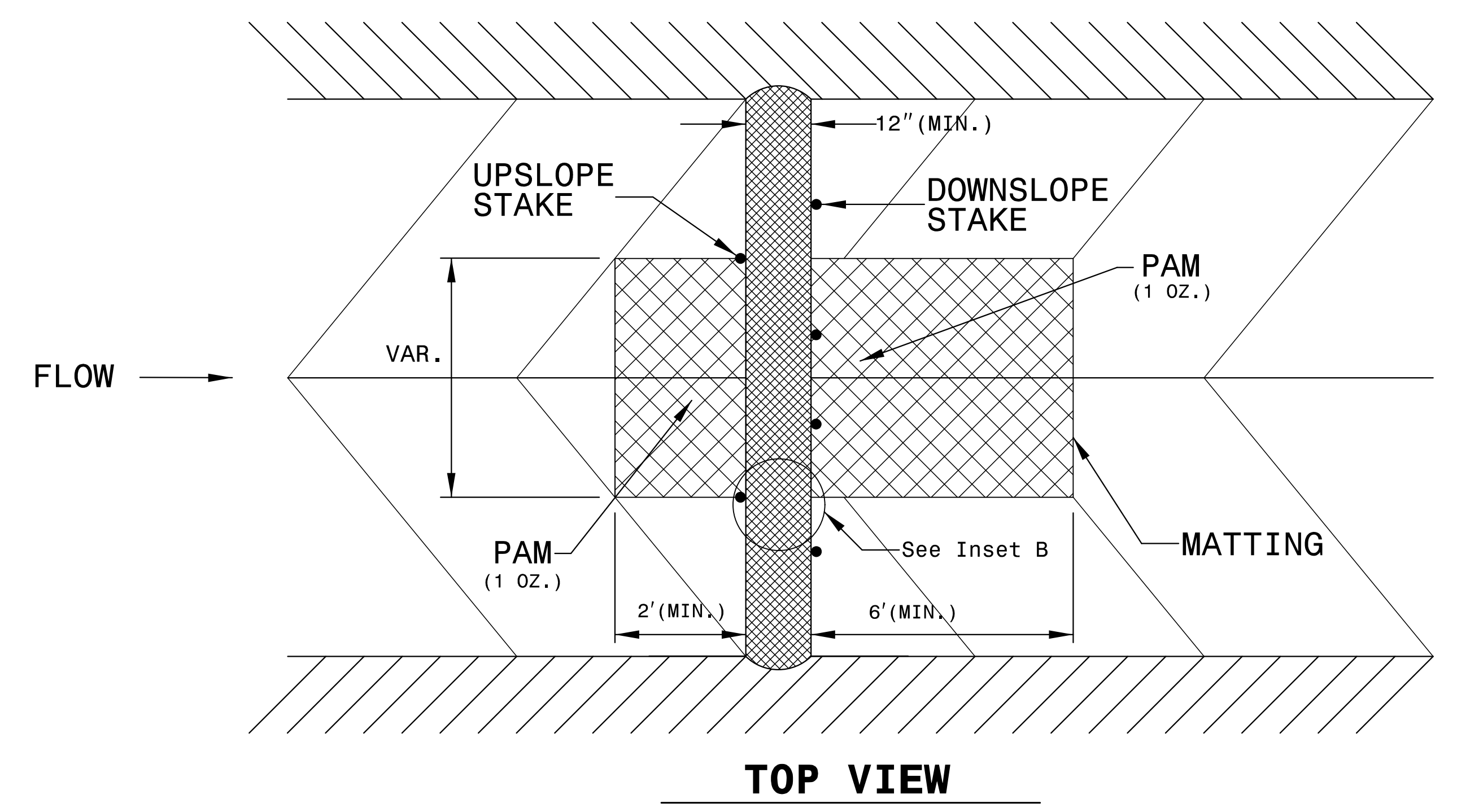
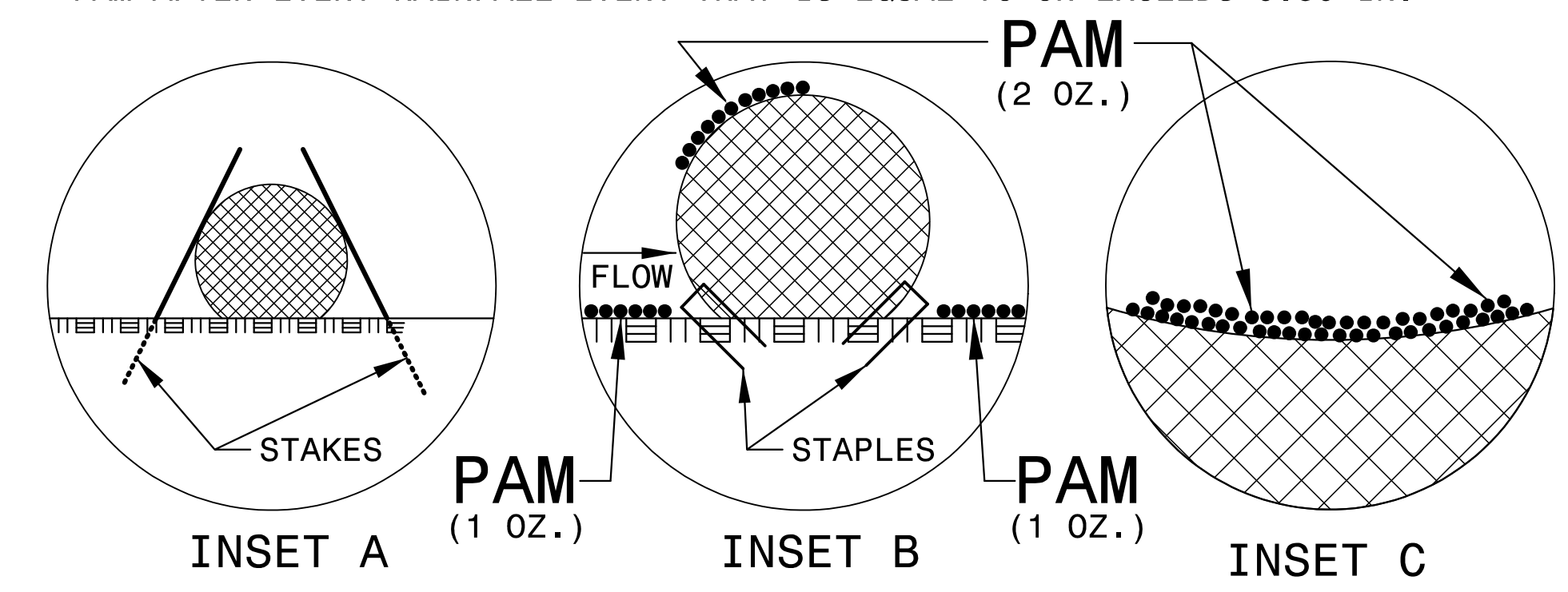
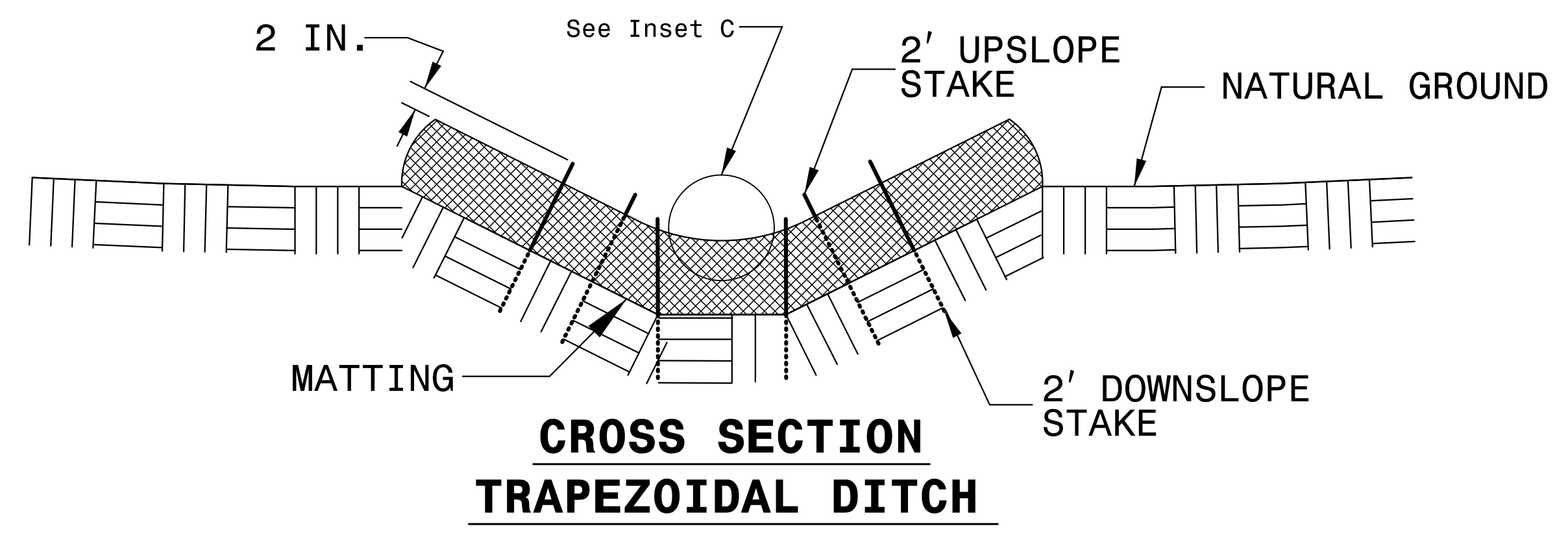
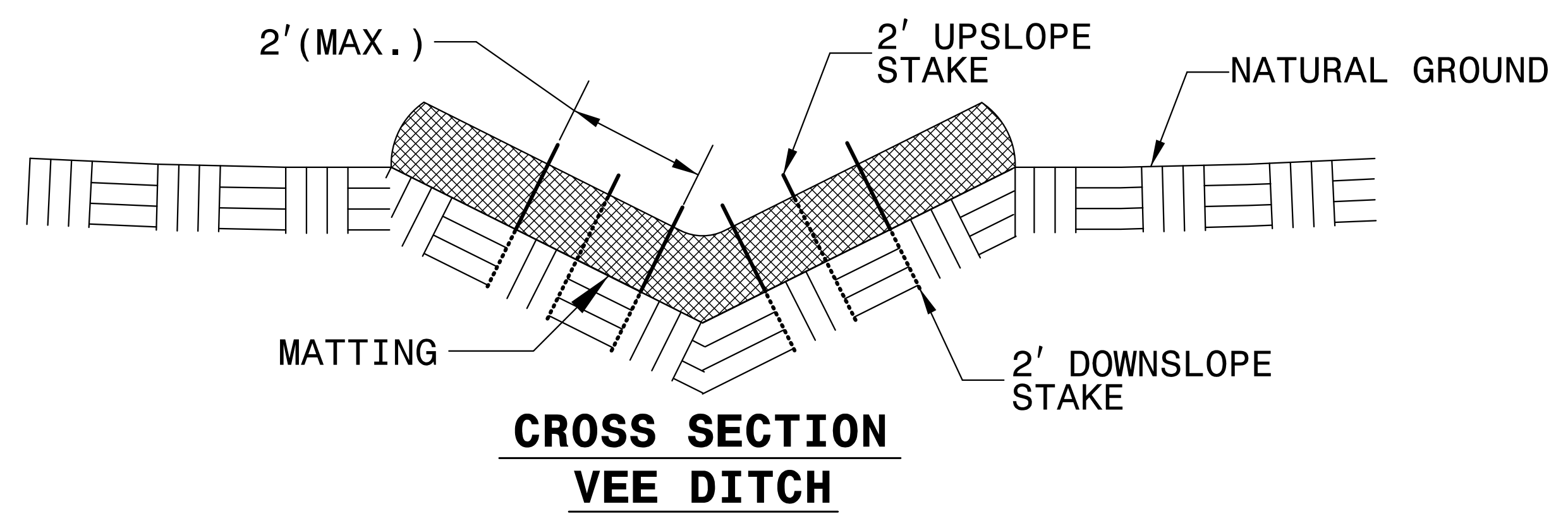
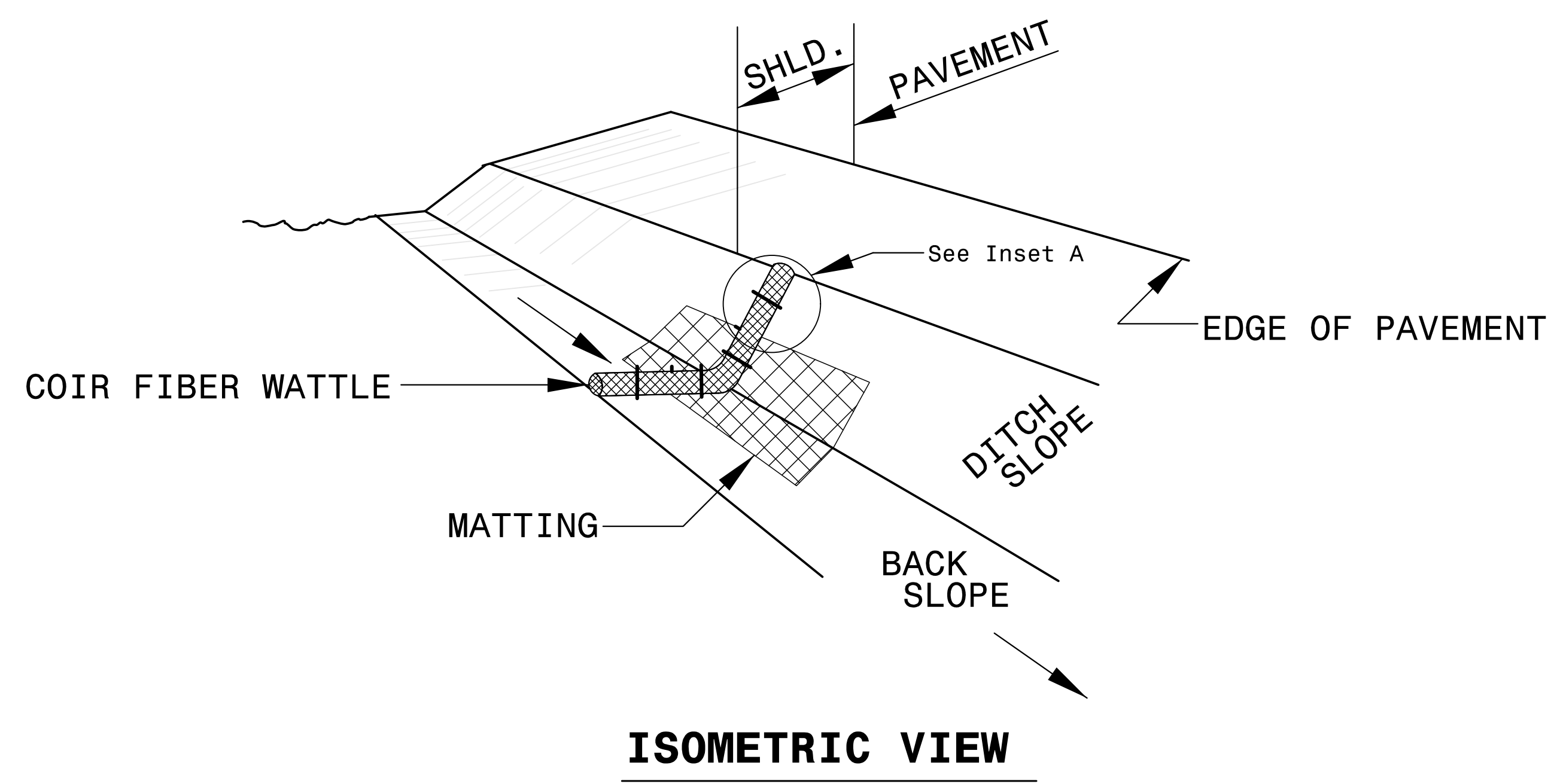
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

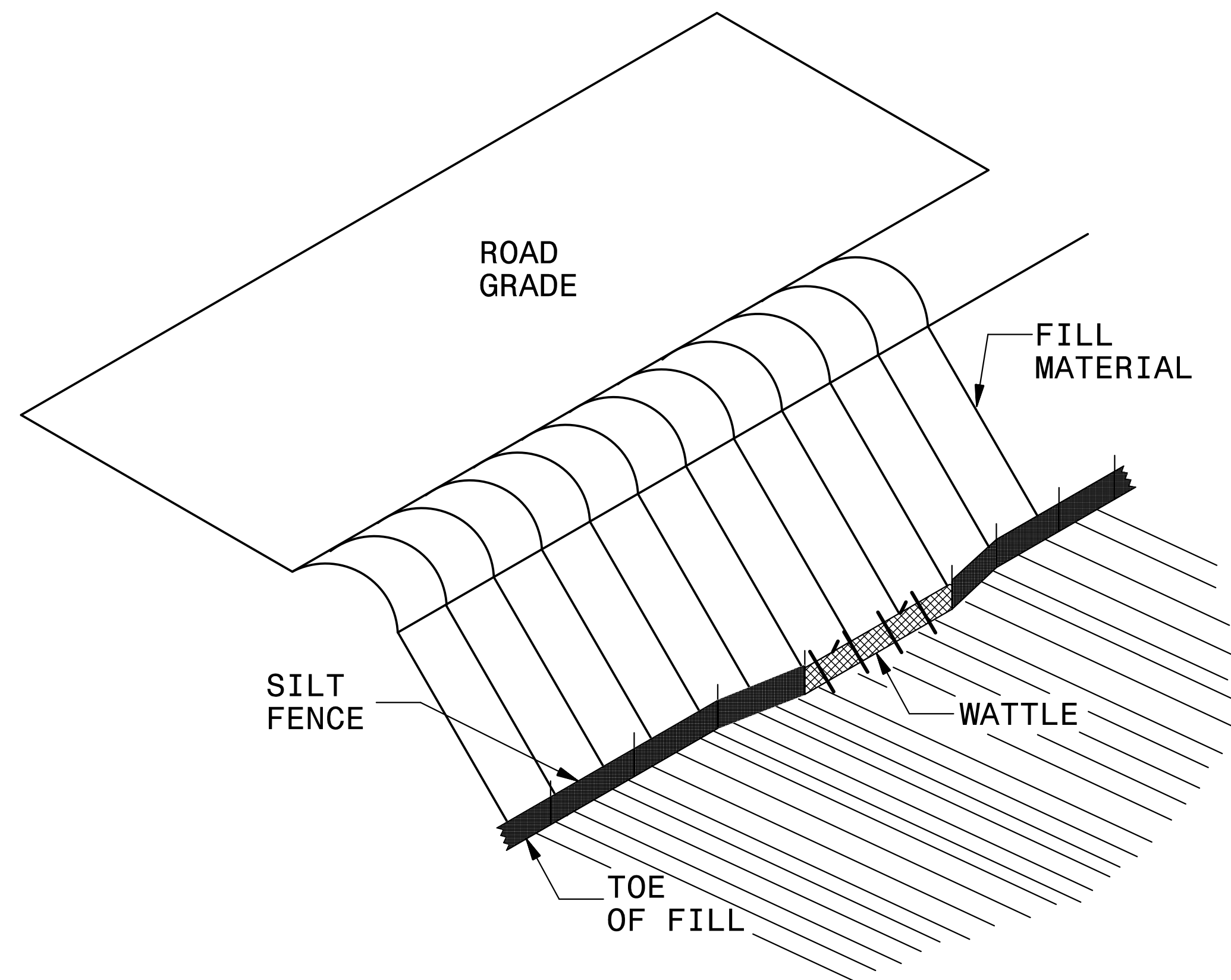
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

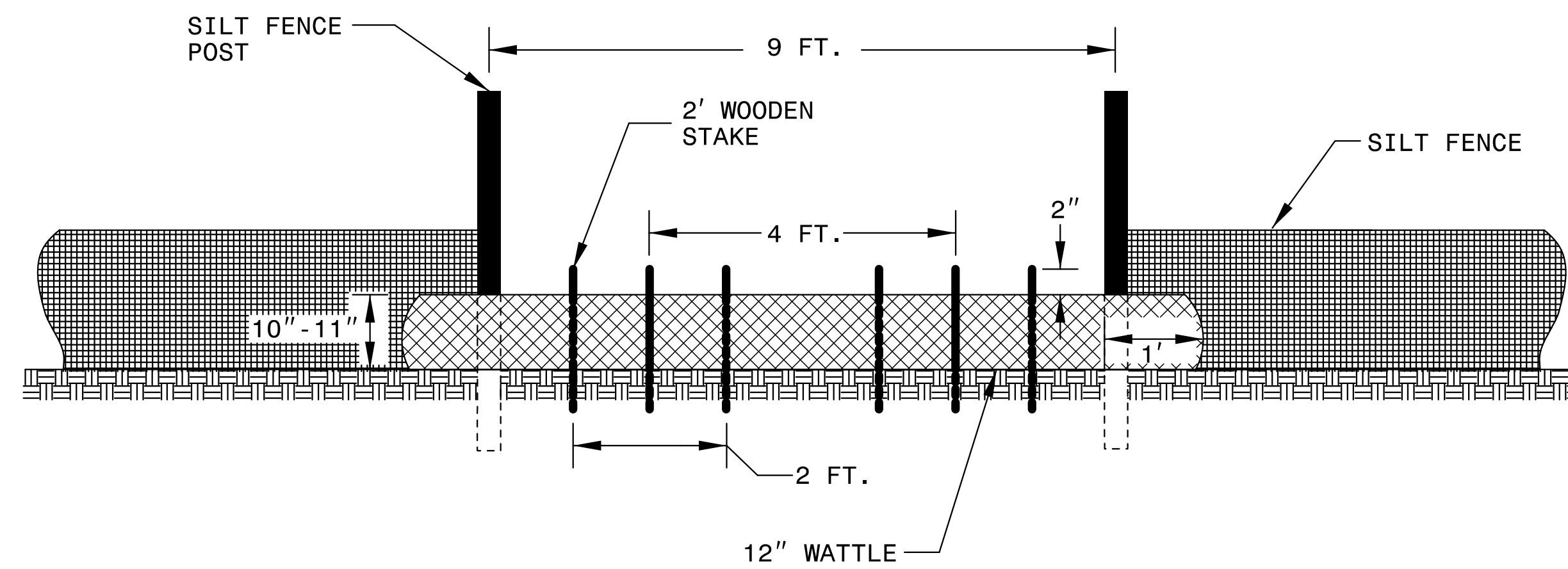


SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO. <i>U-4902D</i>	SHEET NO. <i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



ISOMETRIC VIEW

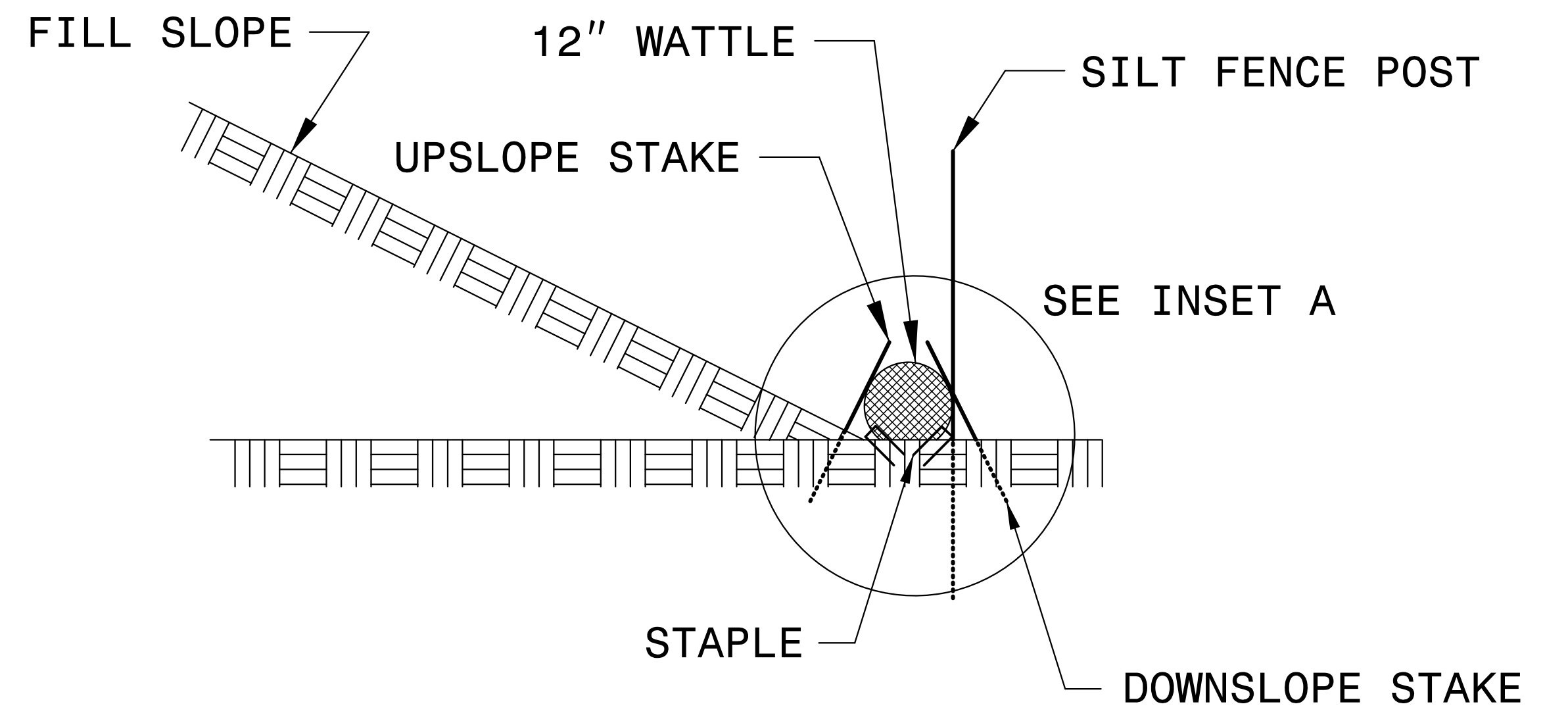
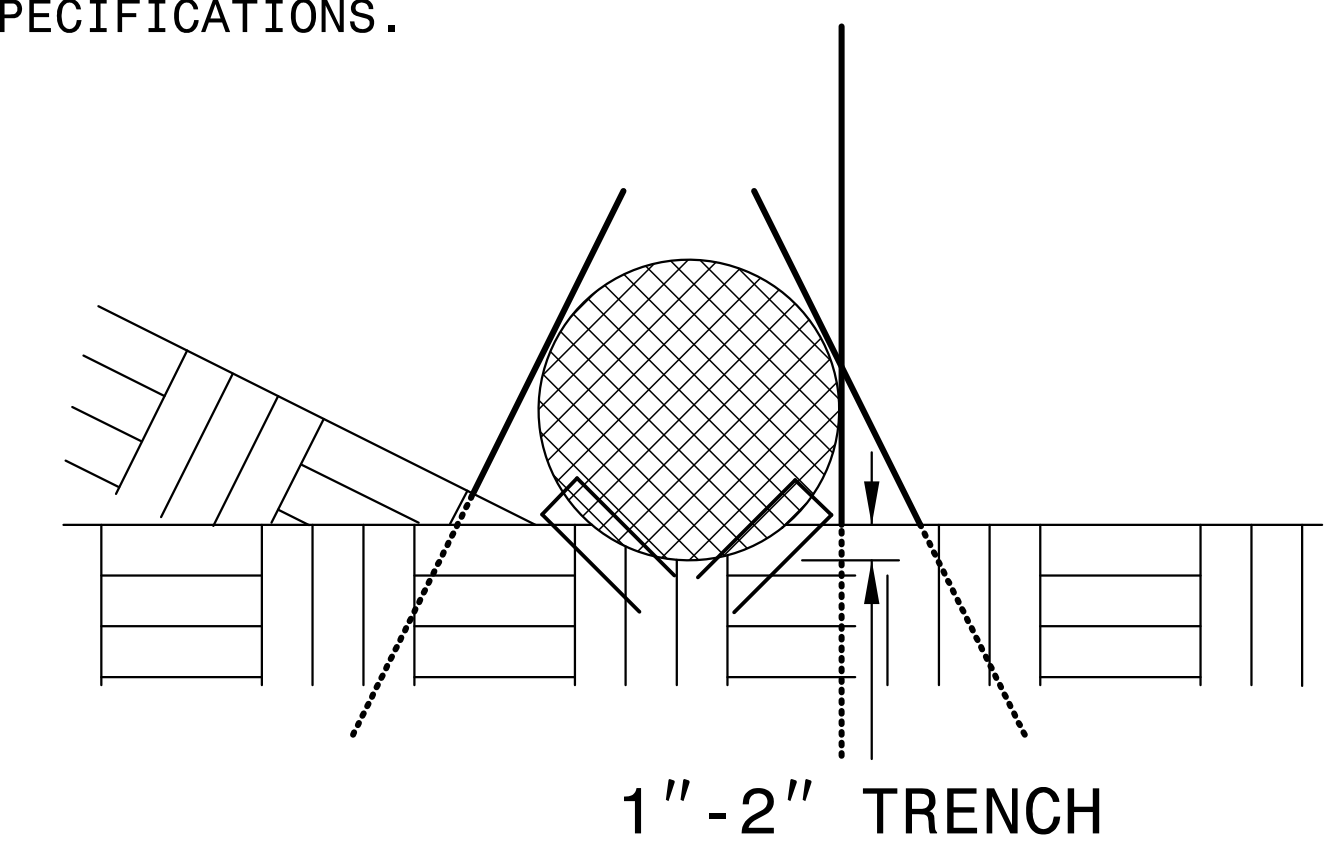


VIEW FROM SLOPE

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.

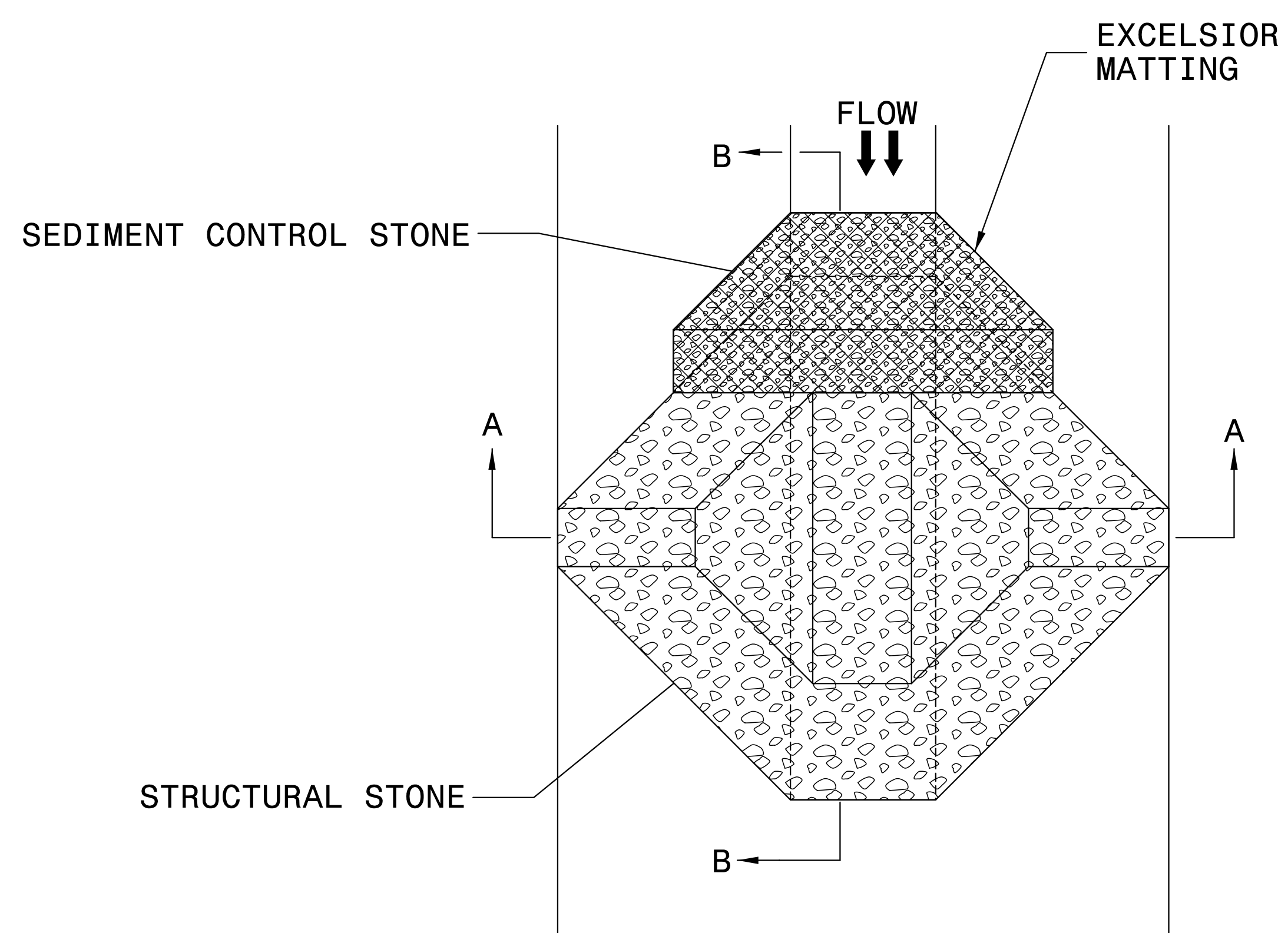
INSET A



SIDE VIEW

PROJECT REFERENCE NO. U-4902D	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN

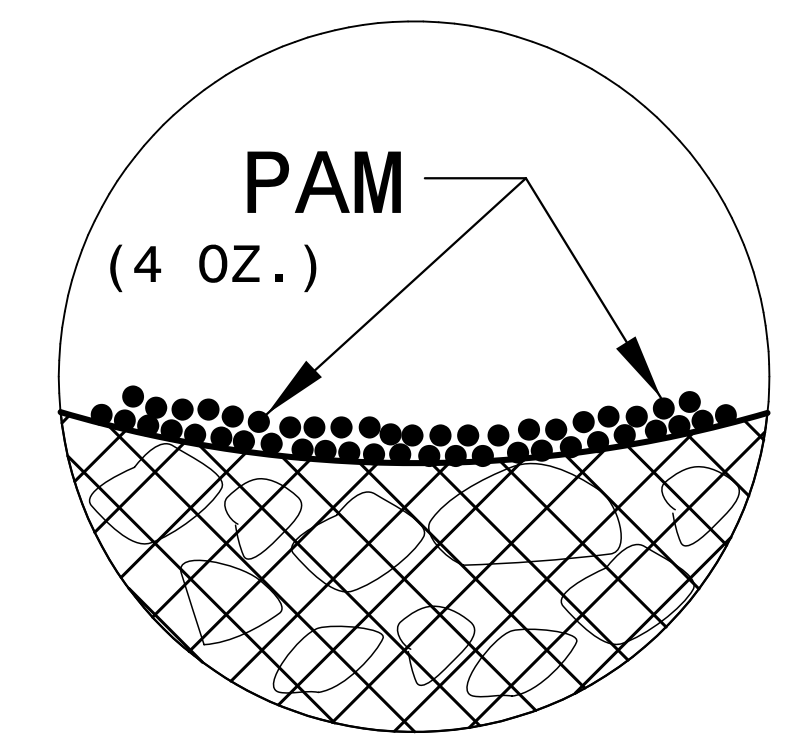
NOTES:

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

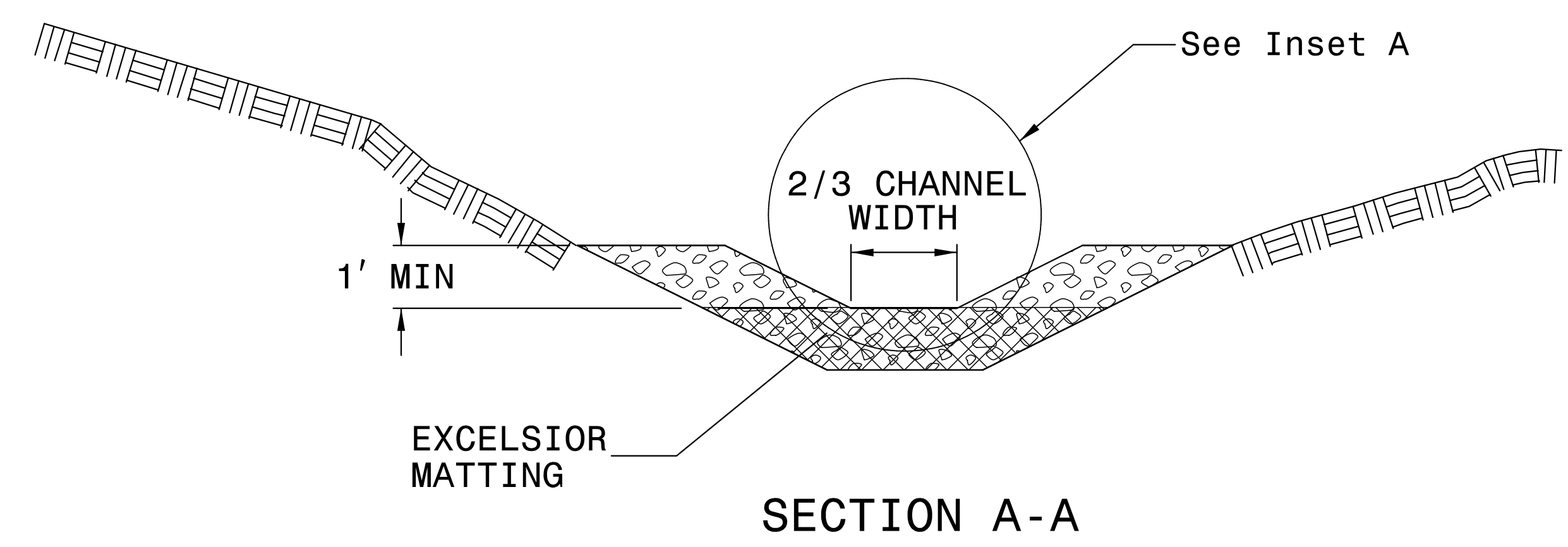
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

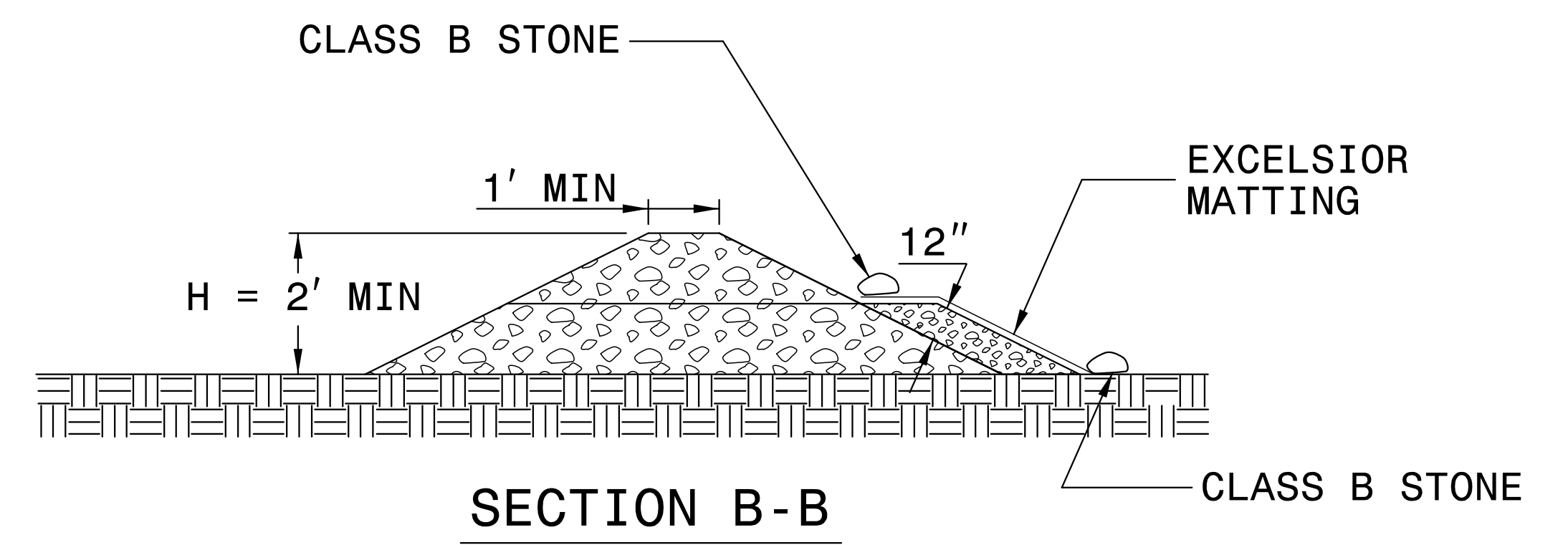
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



SECTION B-B

NOT TO SCALE

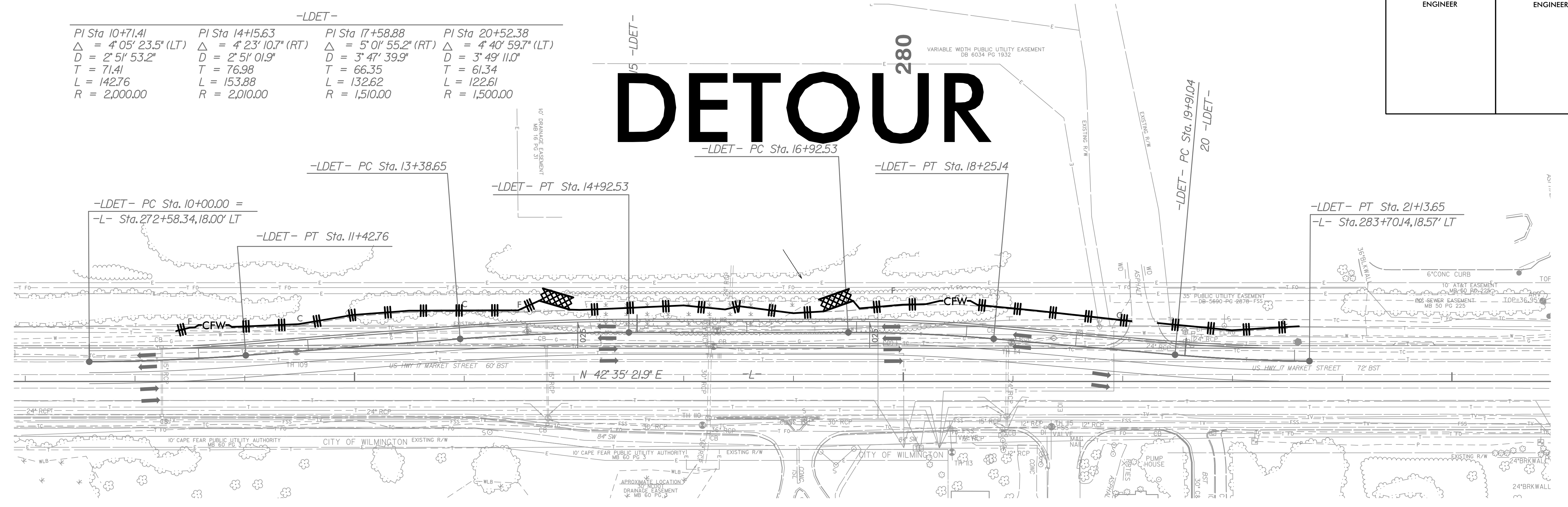
DETAIL OF TEMPORARY WIDENING FROM STA -L- 273+44 TO STA -L- 283+54

HNTB HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-2CCONST.28-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

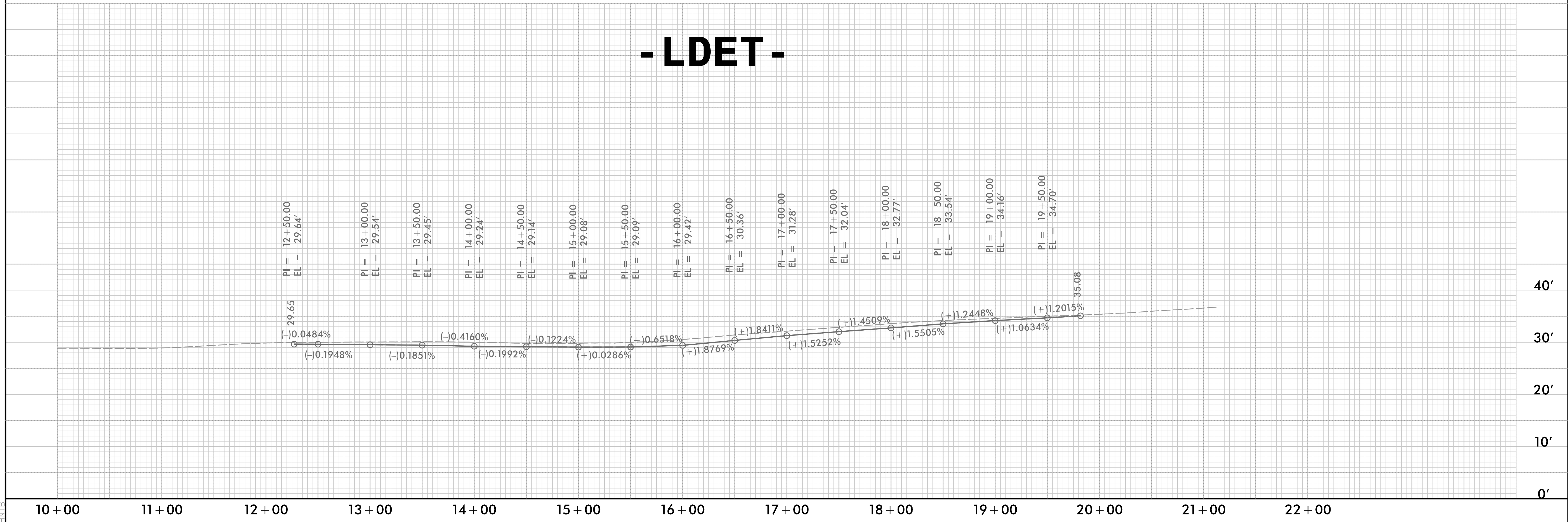
-LDET-			
PI Sta 10+71.41	PI Sta 14+15.63	PI Sta 17+58.88	PI Sta 20+52.38
$\Delta = 4^{\circ}05'23.5" (LT)$	$\Delta = 4^{\circ}23'10.7" (RT)$	$\Delta = 5^{\circ}01'55.2" (RT)$	$\Delta = 4^{\circ}40'59.7" (LT)$
$D = 2^{\circ}51'53.2"$	$D = 2^{\circ}51'01.9"$	$D = 3^{\circ}47'39.9"$	$D = 3^{\circ}49'11.0"$
$T = 71.41$	$T = 76.98$	$T = 66.35$	$T = 61.34$
$L = 142.76$	$L = 153.88$	$L = 132.62$	$L = 122.61$
$R = 2,000.00$	$R = 2,010.00$	$R = 1,510.00$	$R = 1,500.00$

DETOUR



NOTE: FROM STATION -LDET- 15+42 +/- TO STA -LDET- 16+42 +/- USE STD. DETAIL 1803.02 FOR FABRIC STABILIZED 2:1 SLOPES.

- LDET -



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-4902D</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

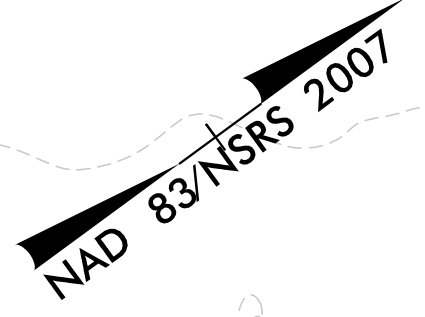
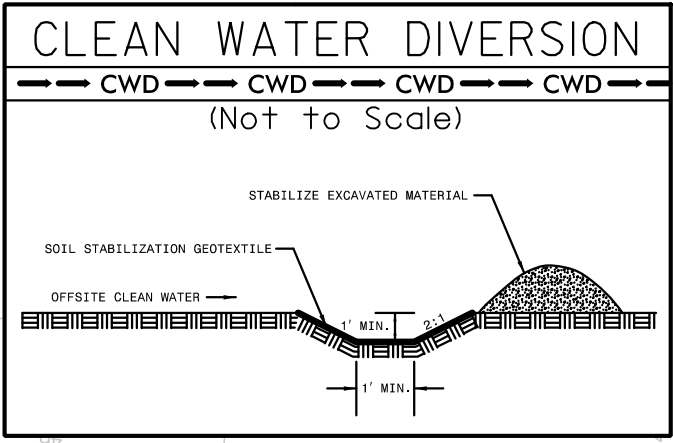
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 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.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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

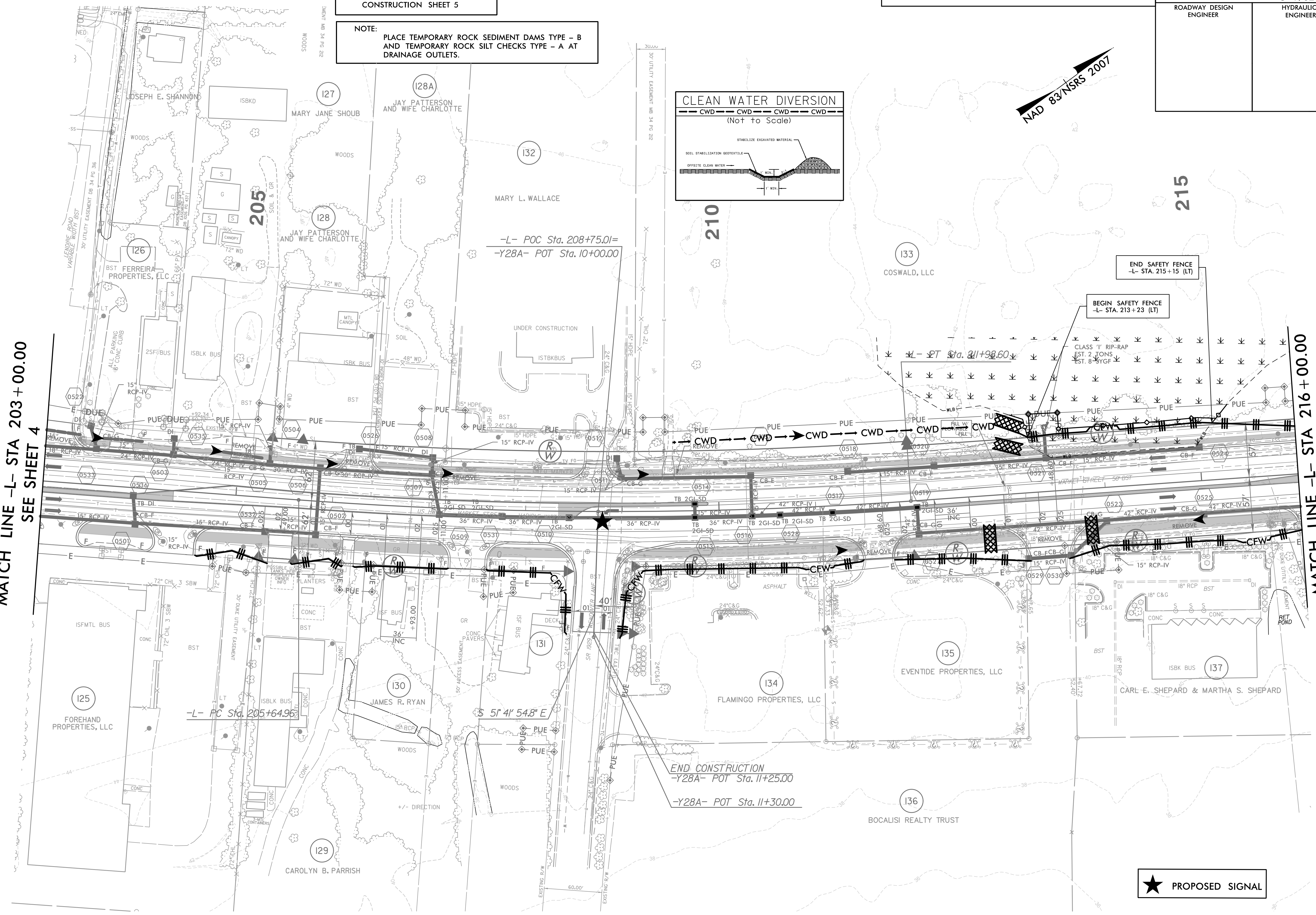
HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-5/CONST.5
RW SHEET NO.	U-4902CD-13
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE -L- STA 203+00.00
SEE SHEET 4

MATCH LINE -L- STA 216+00.00
SEE SHEET 6



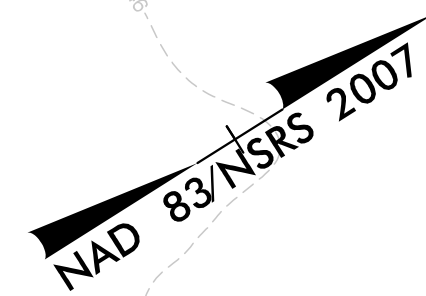
★ PROPOSED SIGNAL

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-6/CONST.6
RW SHEET NO.	U-4902CD-14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

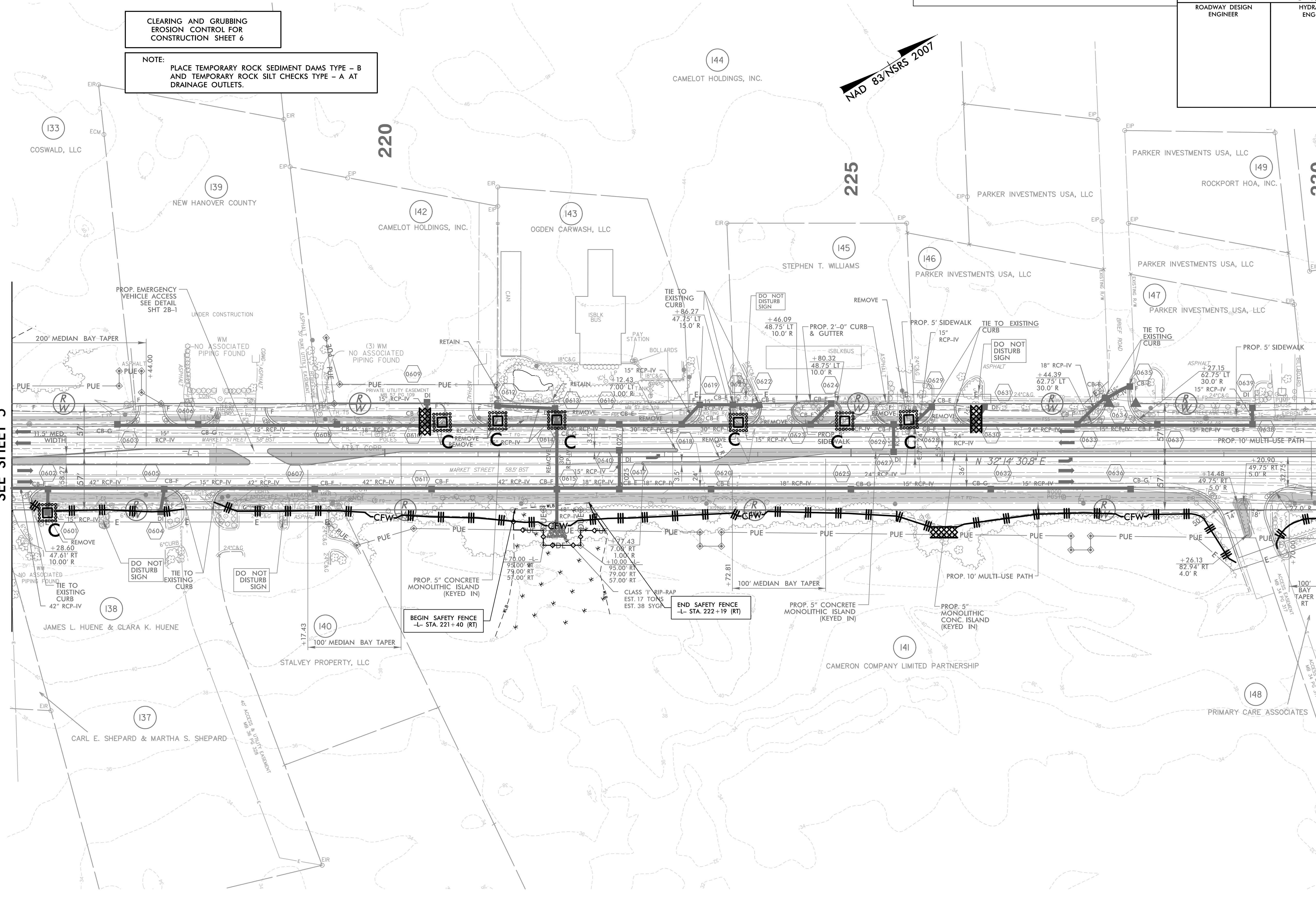
CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 6

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



MATCH LINE -L- STA 216+00.00
 SEE SHEET 5

MATCH LINE -L- STA 230+00.00
 SEE SHEET 7



3/15/2018
 R:\Projects\2018\U-4902\Drawings\CD\U-4902CD-14.dwg
 HNTB

8/17/99
 5/31/2018
 HNTB

BEGIN CONSTRUCTION
 -Y29- POC STA 12+87.00

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 7

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

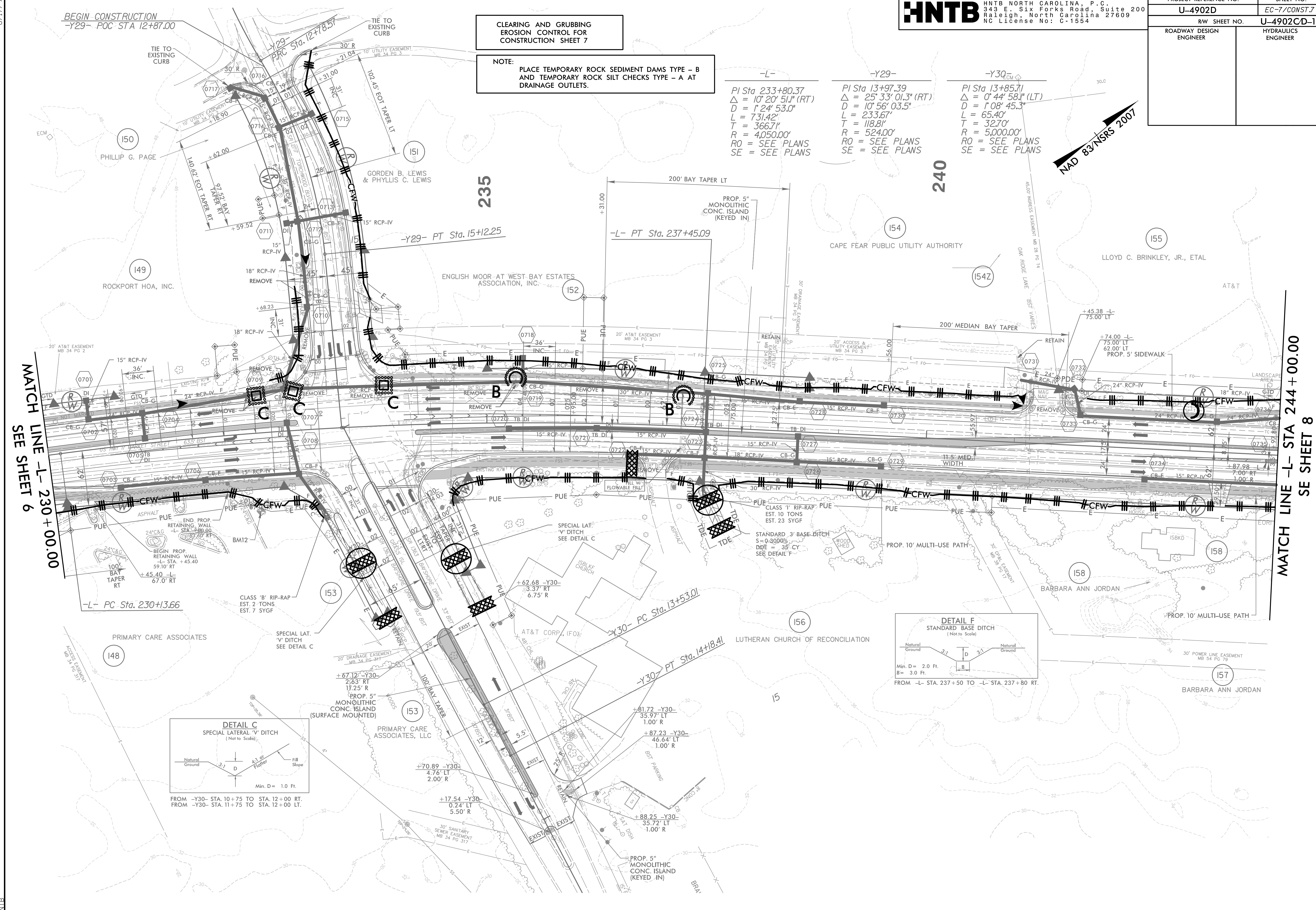
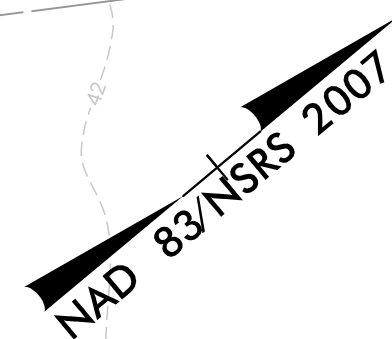
HNTB HNTB NORTH CAROLINA, P.C.
 343 E Six Forks Road, Suite 200
 Raleigh, North Carolina 27609
 NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-7/CONST.7
RW SHEET NO.	U-4902CD-15
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L-
 PI Sta 233+80.37
 $\Delta = 10' 20' 51.1''$ (RT)
 $D = 1' 24' 53.0''$
 $L = 731.42'$
 $T = 366.71'$
 $R = 4,050.00'$
 RO = SEE PLANS
 SE = SEE PLANS

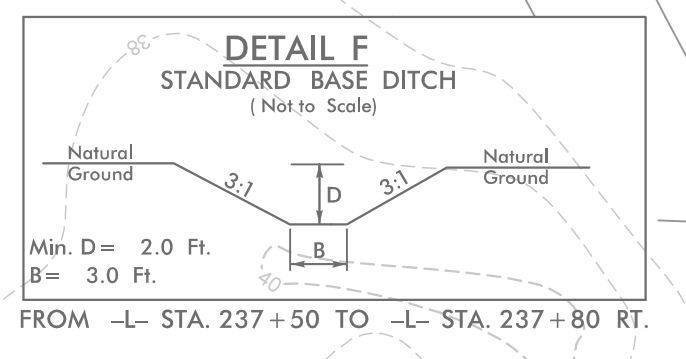
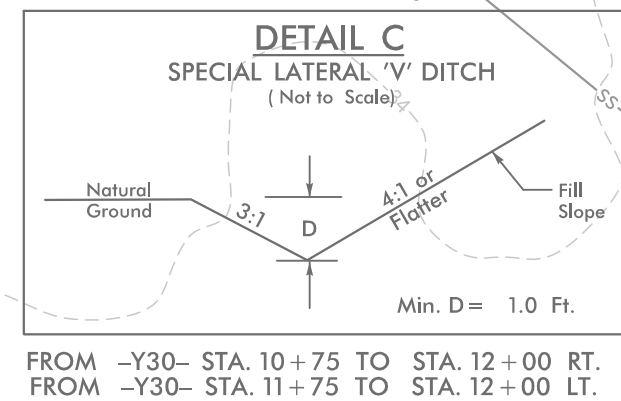
-Y29-
 PI Sta 13+97.39
 $\Delta = 25' 33' 01.3''$ (RT)
 $D = 10' 56' 03.5''$
 $L = 233.67'$
 $T = 118.81'$
 $R = 524.00'$
 RO = SEE PLANS
 SE = SEE PLANS

-Y30-
 PI Sta 13+85.71
 $\Delta = 0' 44' 58.1''$ (LT)
 $D = 1' 08' 45.3''$
 $L = 65.40'$
 $T = 32.70'$
 $R = 5,000.00'$
 RO = SEE PLANS
 SE = SEE PLANS



MATCH LINE -L- STA 230+00.00
 SEE SHEET 6

MATCH LINE -L- STA 244+00.00
 SEE SHEET 8



5/31/2018
 HNTB

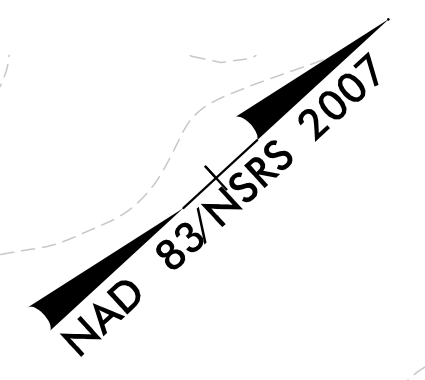
8/17/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8

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

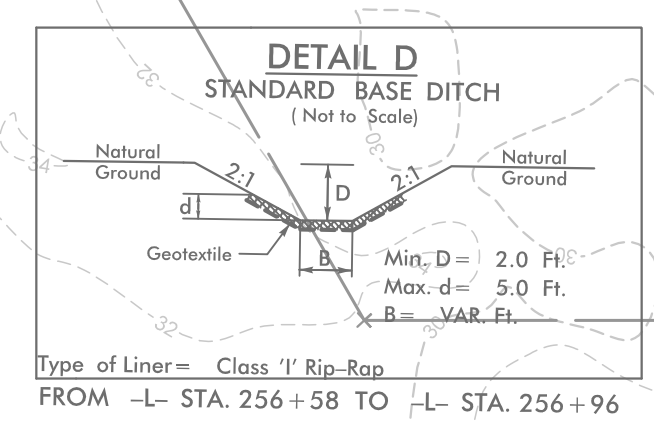
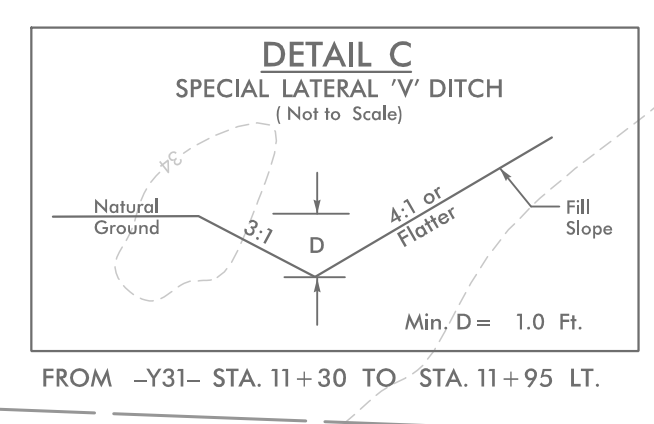
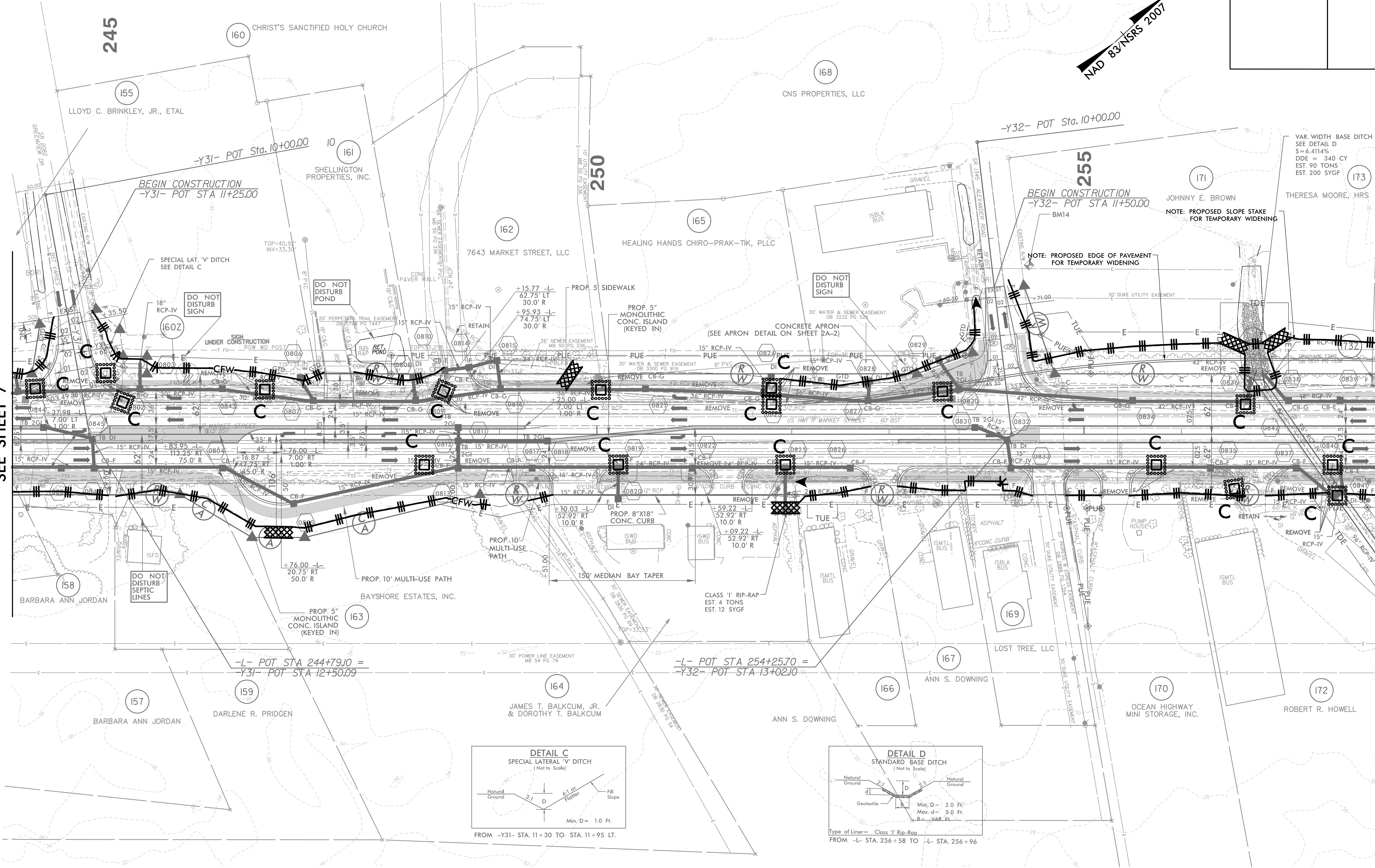
HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-8/CONST.8
RW SHEET NO.	U-4902CD-16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE -L- 244+00.00
SEE SHEET 7

MATCH LINE -L- 258+00.00
SEE SHEET 9



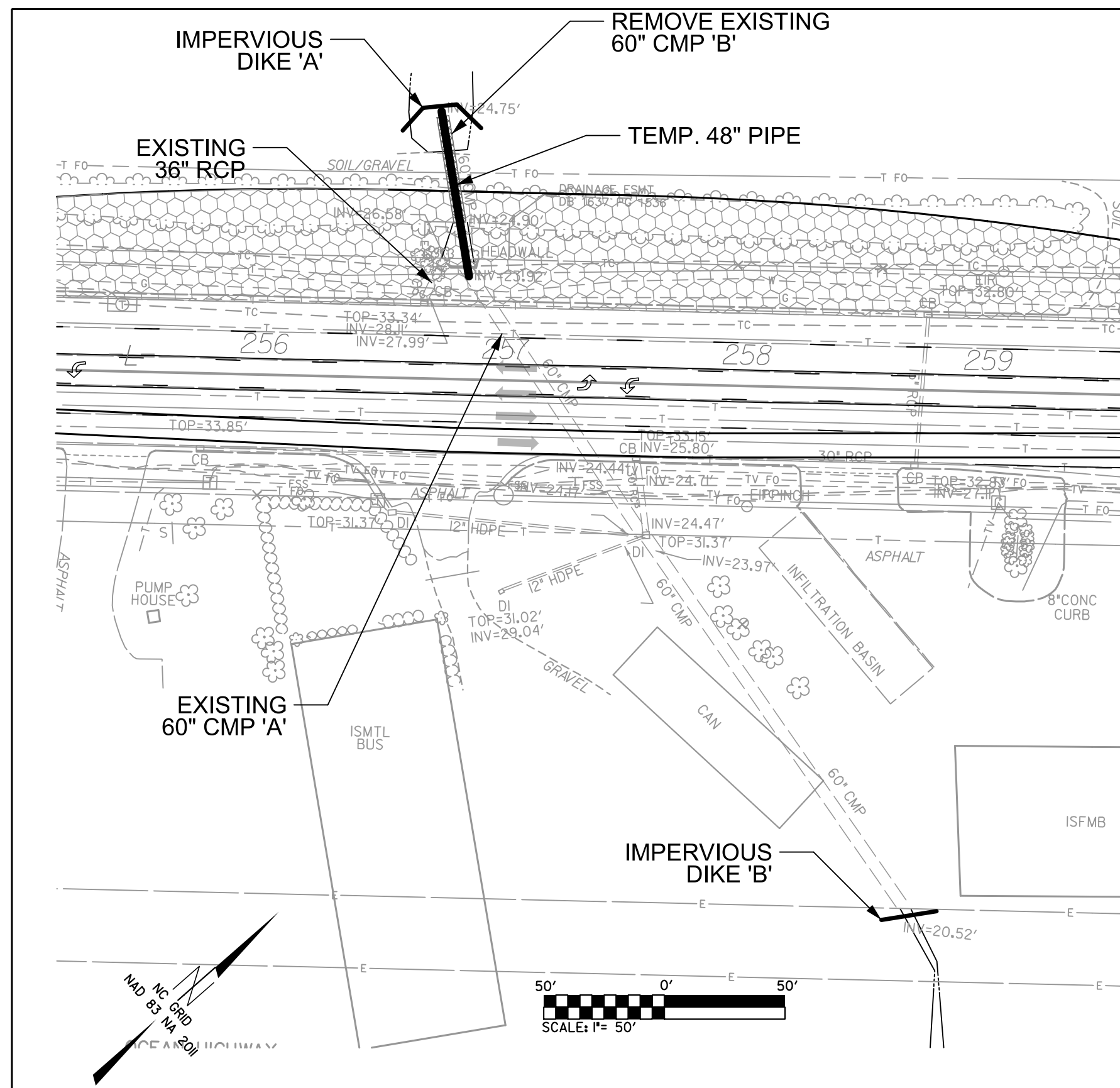
REVISIONS

8/17/2018
R.A. \$\$\$\$\$\$
HNTB

CULVERT CONSTRUCTION SEQUENCE STA. 257+19 -L-

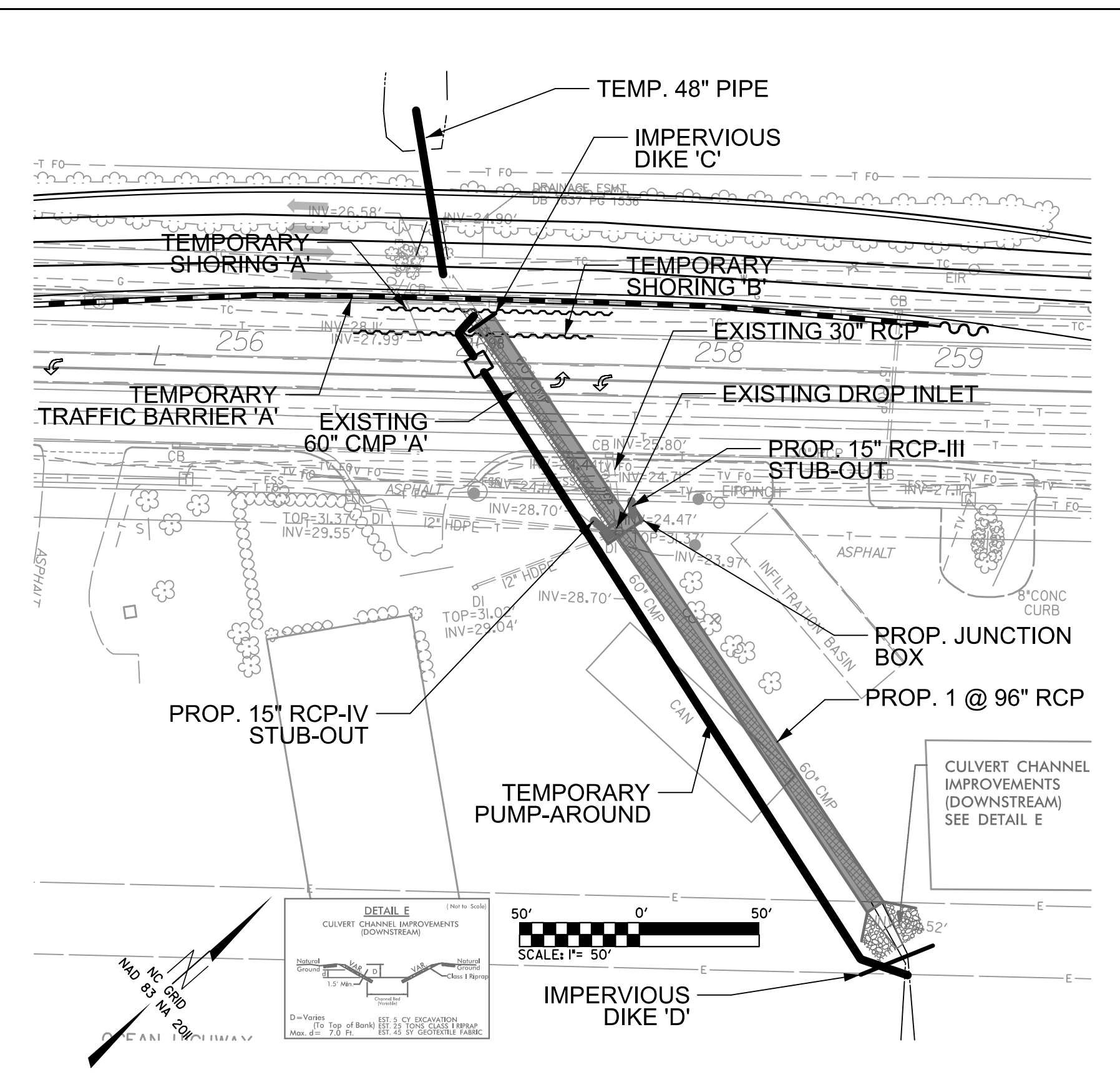
HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-8A/CONST.8&9



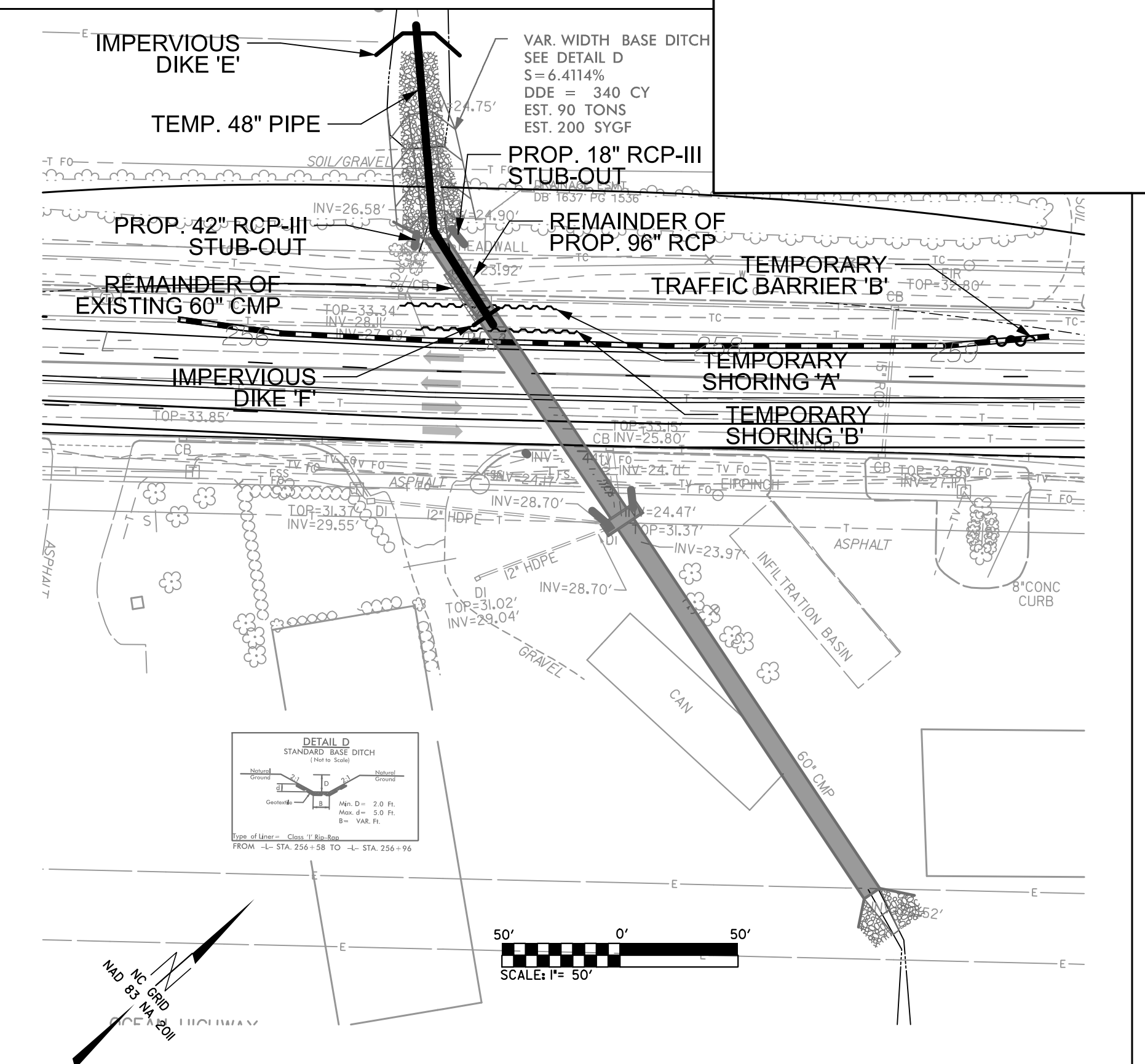
PHASE I

1. INSTALL IMPERVIOUS DIKES 'A' AND 'B'. DEWATER CONSTRUCTION AREAS INTO SPECIAL STILLING BASIN(S).
2. REMOVE EXISTING 60" CMP 'B' AND EXISTING 36" RCP.
3. INSTALL AND INSERT TEMPORARY 48" PIPE WITH TEMPORARY SANDBAG COLLAR INSIDE EXISTING 60" CMP 'A' AS SHOWN.
4. REMOVE IMPERVIOUS DIKE 'A' AND 'B'.
5. CONSTRUCT NORTH SIDE TEMPORARY PAVEMENT.



PHASE II

1. INSTALL TEMPORARY SHORING 'A', TEMPORARY SHORING 'B', AND TEMPORARY TRAFFIC BARRIER 'A'.
2. SHIFT TRAFFIC NORTH TO TEMPORARY PAVEMENT.
3. REMOVE EXISTING 60" CMP BETWEEN SHORING.
4. INSTALL IMPERVIOUS DIKES 'C' AND 'D'. INSTALL TEMPORARY PUMP-AROUND THAT IS CAPABLE OF CONVEYING 1000 GPM. DEWATER CONSTRUCTION AREAS INTO SPECIAL STILLING BASIN(S).
4. REMOVE EXISTING 60" CMP 'A' EAST OF TEMPORARY SHORING 'B'. REMOVE EXISTING DROP INLET AND EXISTING 30" RCP.
5. CONSTRUCT APPROXIMATELY 294 LF OF PROP. 96" RCP, PROP. JUNCTION BOX, PROP. 15" RCP PIPE STUB-OUTS (COVER W/ STEEL PLATES), DOWNSTREAM HEADWALL, AND DOWNSTREAM CHANNEL IMPROVEMENTS.
6. REMOVE IMPERVIOUS DIKE 'C', 'D' AND PUMP-AROUND. REPAIR PAVEMENT OVER PROP. 1 @ 96" RCP.

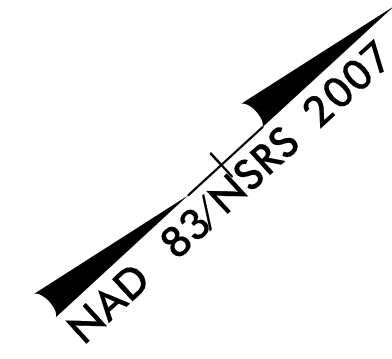


PHASE III

1. INSTALL TEMPORARY BARRIER 'B' AND SHIFT TRAFFIC TO SOUTH SIDE.
2. INSTALL IMPERVIOUS DIKE 'E' AND 'F' AND EXTEND TEMPORARY 48" PIPE AS SHOWN. DEWATER CONSTRUCTION AREAS INTO SPECIAL STILLING BASIN(S).
3. REMOVE TEMPORARY SHORINGS 'A' AND 'B' AND THE REMAINDER OF EXISTING 60" CMP.
4. CONSTRUCT THE REMAINDER OF PROP. 96" RCP, PROPOSED HEADWALL, AND VAR. WIDTH BASE DITCH. CONSTRUCT PROP. 42" & 18" RCP PIPE STUB-OUTS (COVER W/ STEEL PLATES).
5. REMOVE IMPERVIOUS DIKES 'E', 'F', AND TEMPORARY 48" PIPE.
6. COMPLETE ROADWAY.

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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-9/CONST.9
RW SHEET NO.	U-4902CD-17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

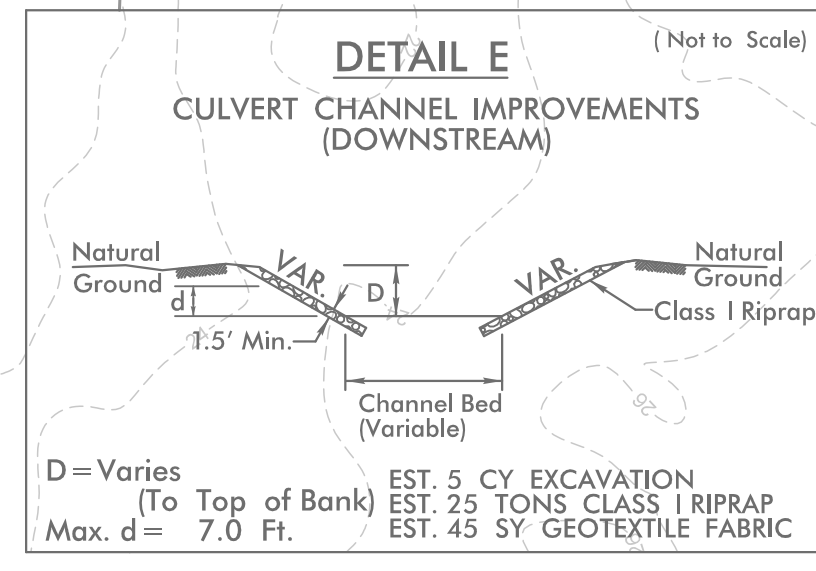
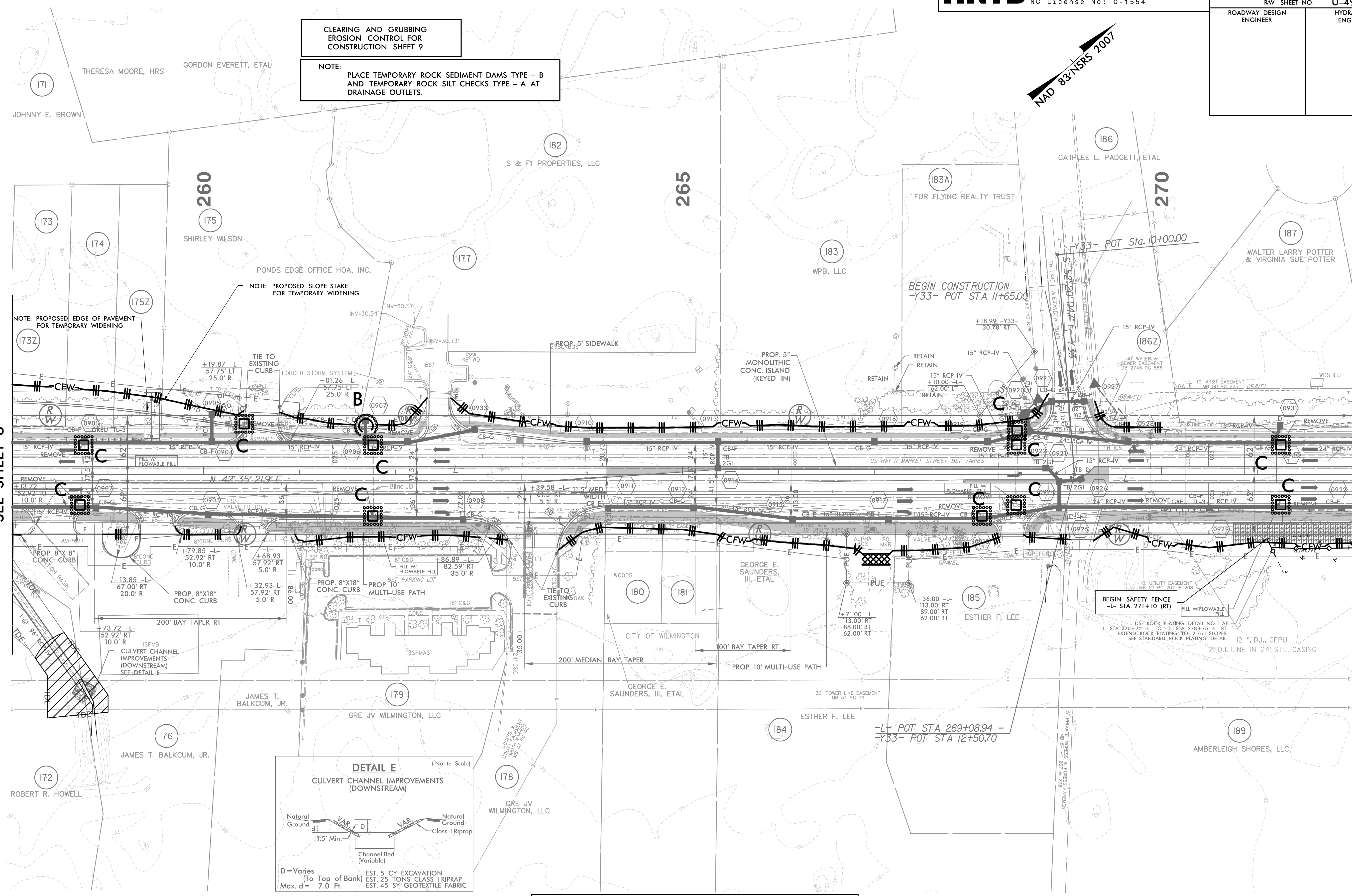


**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9**

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

MATCH LINE -L- STA 258+00.00
SEE SHEET 8

MATCH LINE -L- STA 272+00.00
SEE SHEET 10

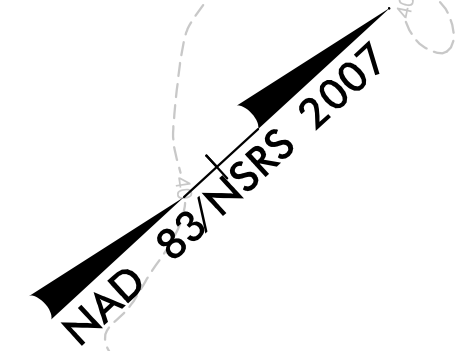


ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-10/CONST.10
RW SHEET NO.	U-4902CD-18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

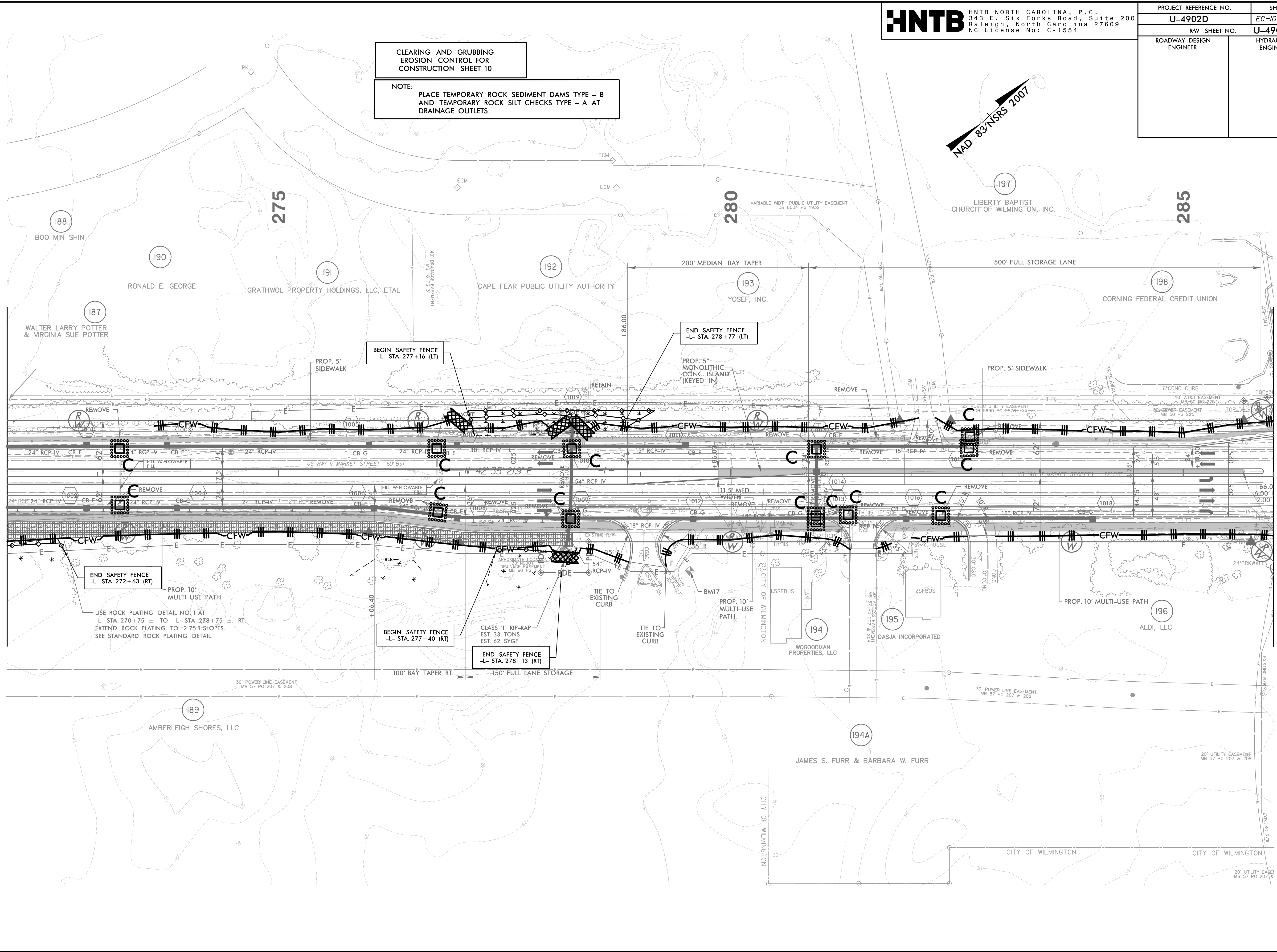
**CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 10**

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



MATCH LINE -L- STA 272 + 00.00
 SEE SHEET 9

MATCH LINE -L- STA 286 + 00.00
 SEE SHEET 11



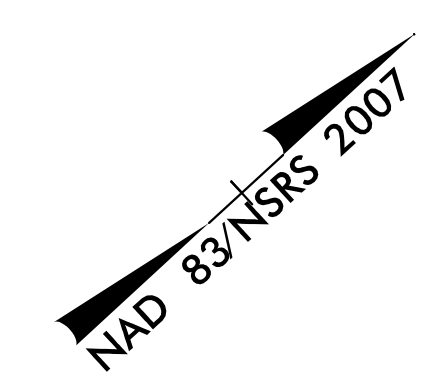
8/17/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

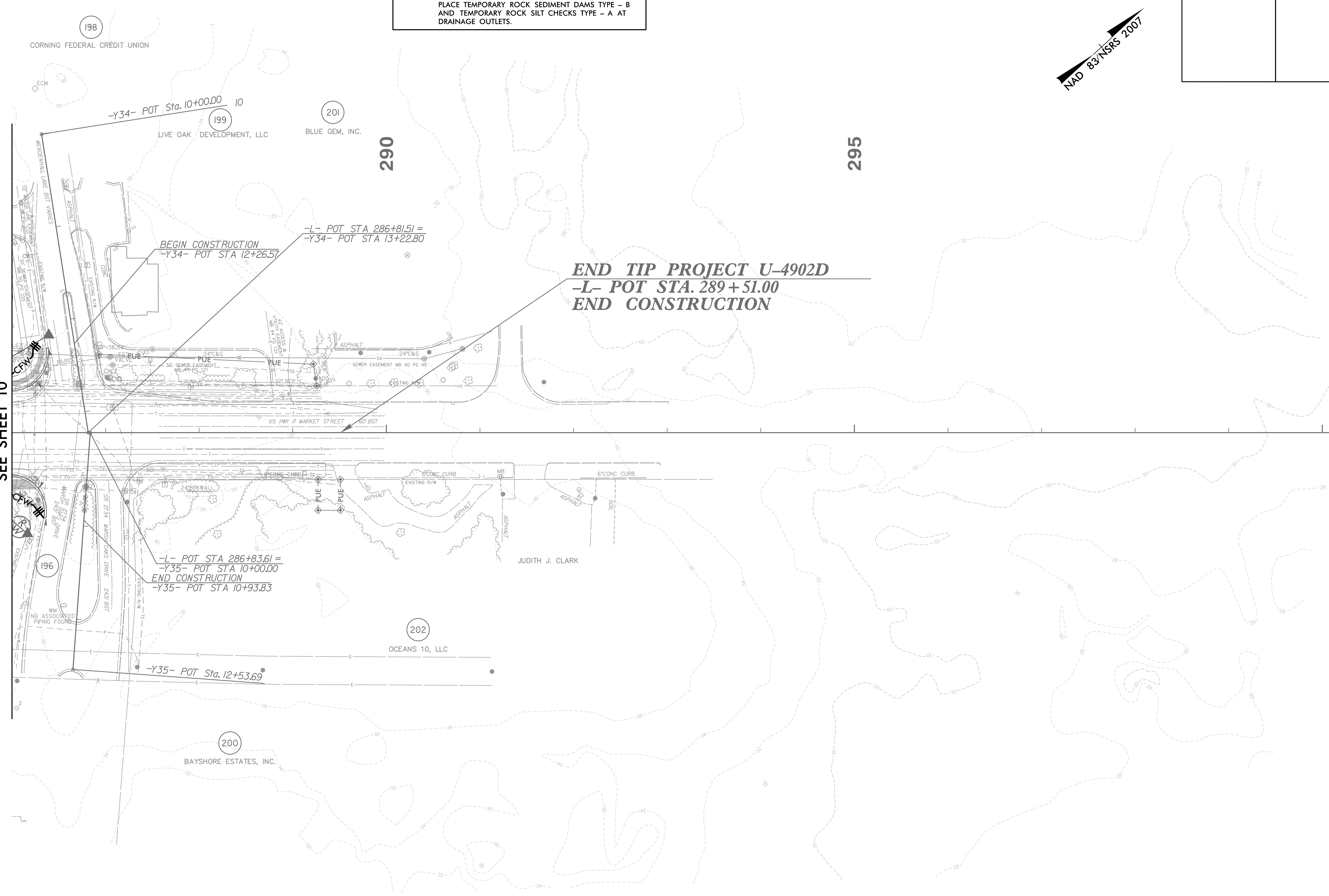
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-II/CONST.II
RW SHEET NO.	U-4902CD-19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE -L- STA 286 + 00.00
SEE SHEET 10



198

199

201

290

295

196

202

200

-Y34- POT Sta. 10+00.00 10

BEGIN CONSTRUCTION
-Y34- POT STA 12+26.57

-L- POT STA 286+81.51 =
-Y34- POT STA 13+22.80

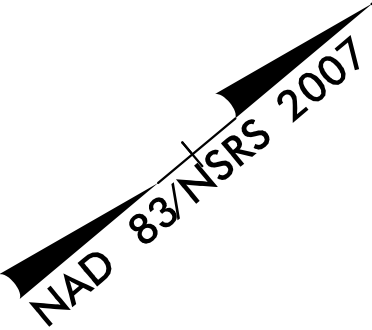
END TIP PROJECT U-4902D
-L- POT STA. 289 + 51.00
END CONSTRUCTION

-L- POT STA 286+83.61 =
-Y35- POT STA 10+00.00
END CONSTRUCTION
-Y35- POT STA 10+93.83

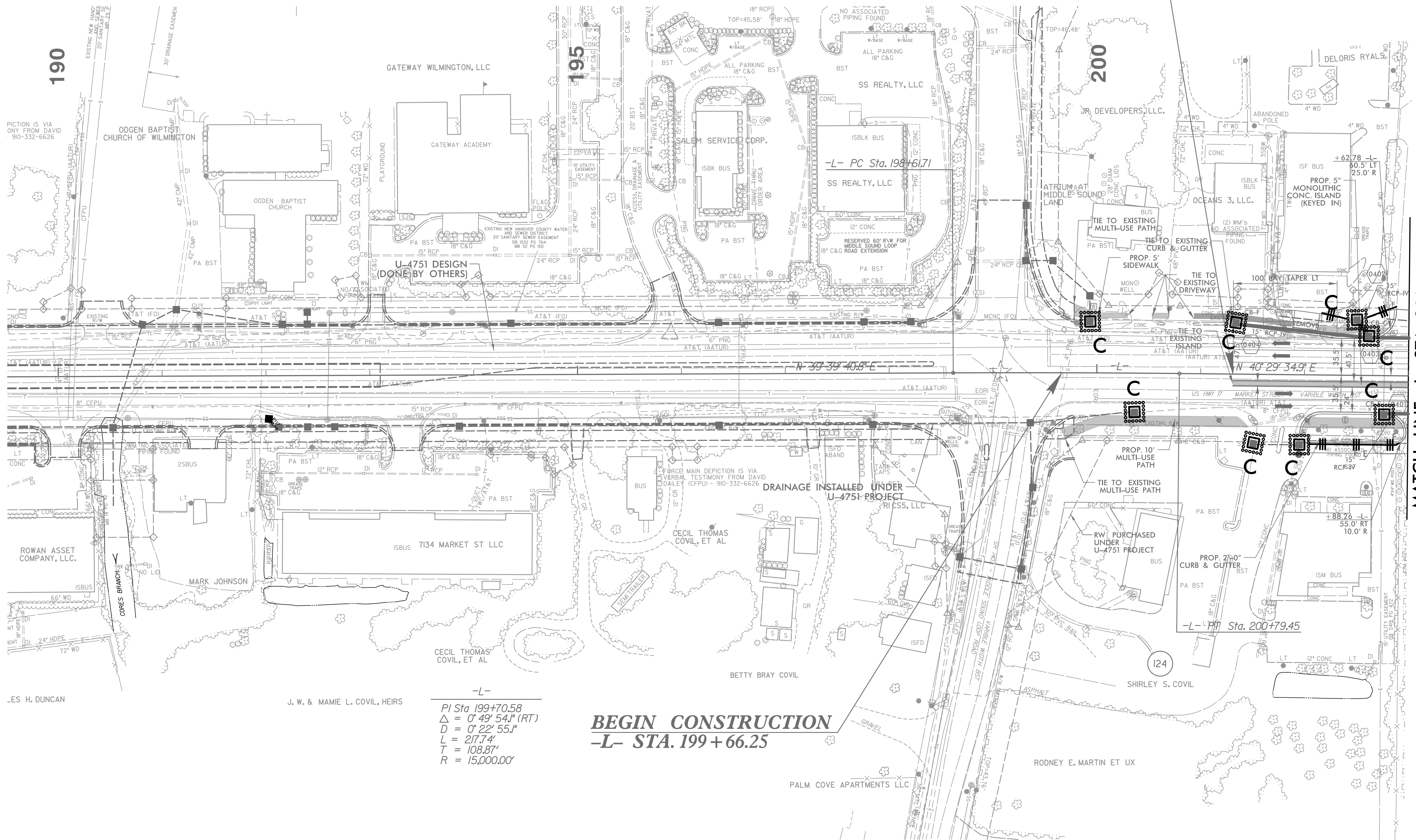
-Y35- POT Sta. 12+53.69

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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-12/CONST.4
RW SHEET NO.	U-4902CD-13
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



BEGIN TIP PROJECT U-4902D
-L- POT STA. 201+31.00
END TIP PROJECT U-4751
-YI- POT STA 80+95.00



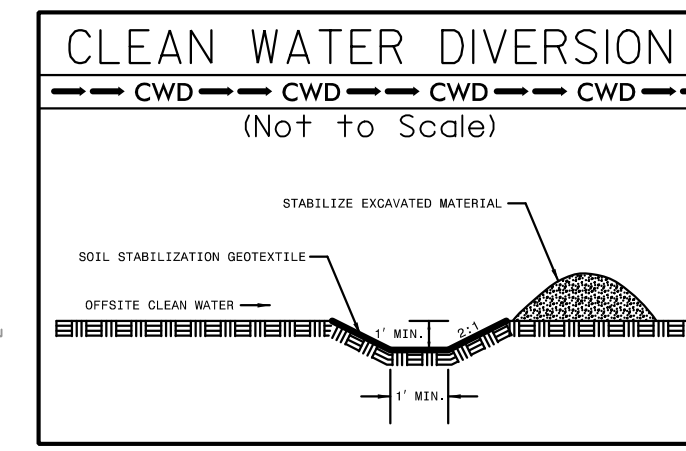
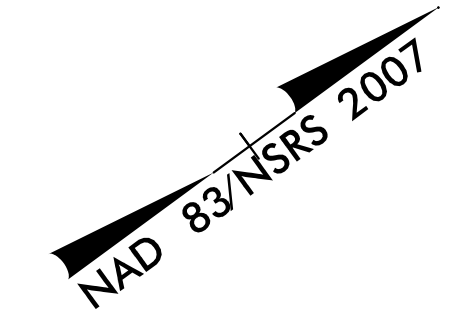
MATCH LINE -L- STA 203+00.00
SEE SHEET 5

-L-
 PI Sta 199+70.58
 $\Delta = 0' 49' 54.1''$ (RT)
 $D = 0' 22' 55.1''$
 $L = 217.74'$
 $T = 108.87'$
 $R = 15,000.00'$

BEGIN CONSTRUCTION
-L- STA. 199+66.25



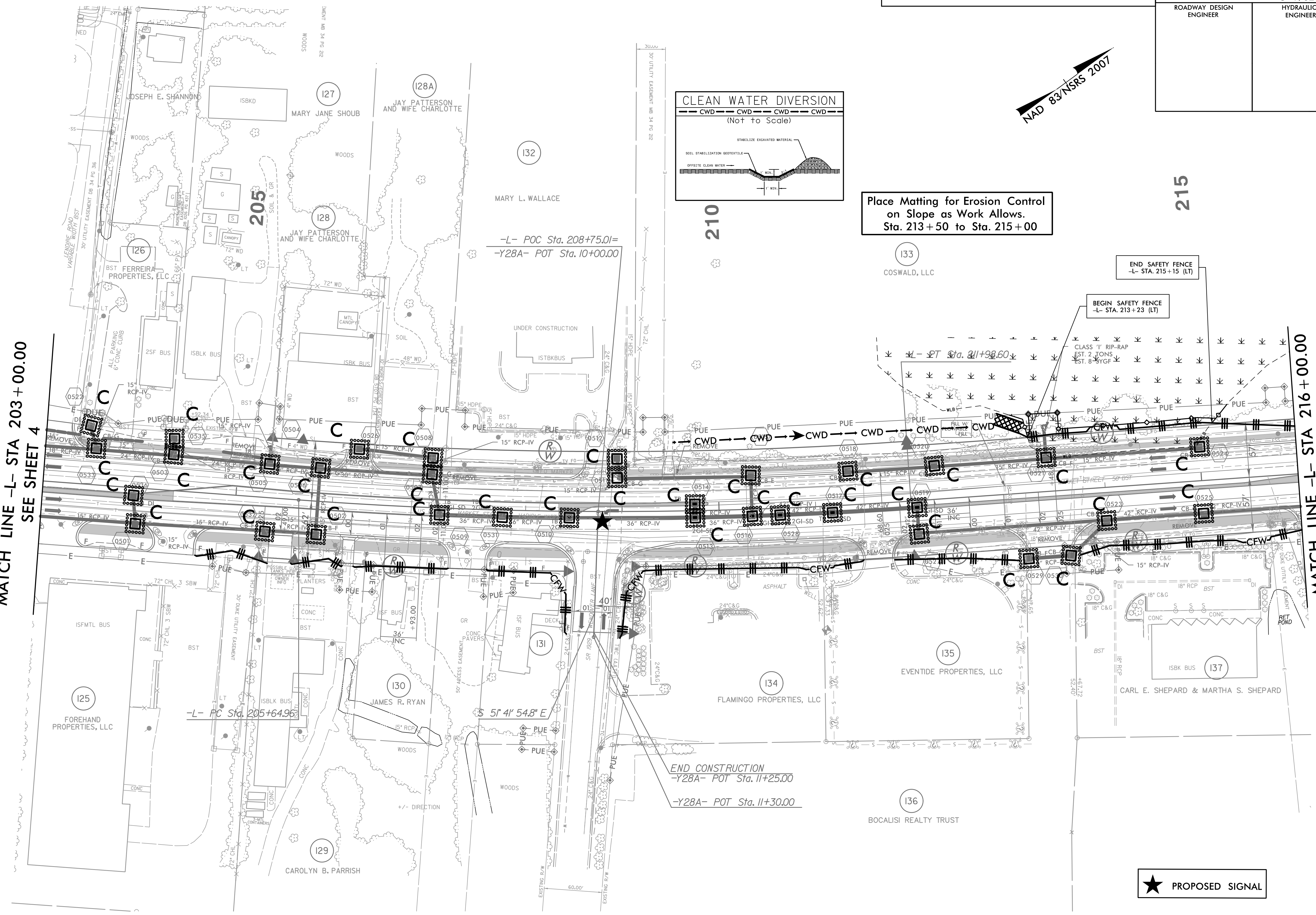
PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-13/CONST.5
RW SHEET NO.	U-4902CD-13
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control on Slope as Work Allows.
 Sta. 213+50 to Sta. 215+00

MATCH LINE -L- STA 203+00.00
 SEE SHEET 4

MATCH LINE -L- STA 216+00.00
 SEE SHEET 6



★ PROPOSED SIGNAL

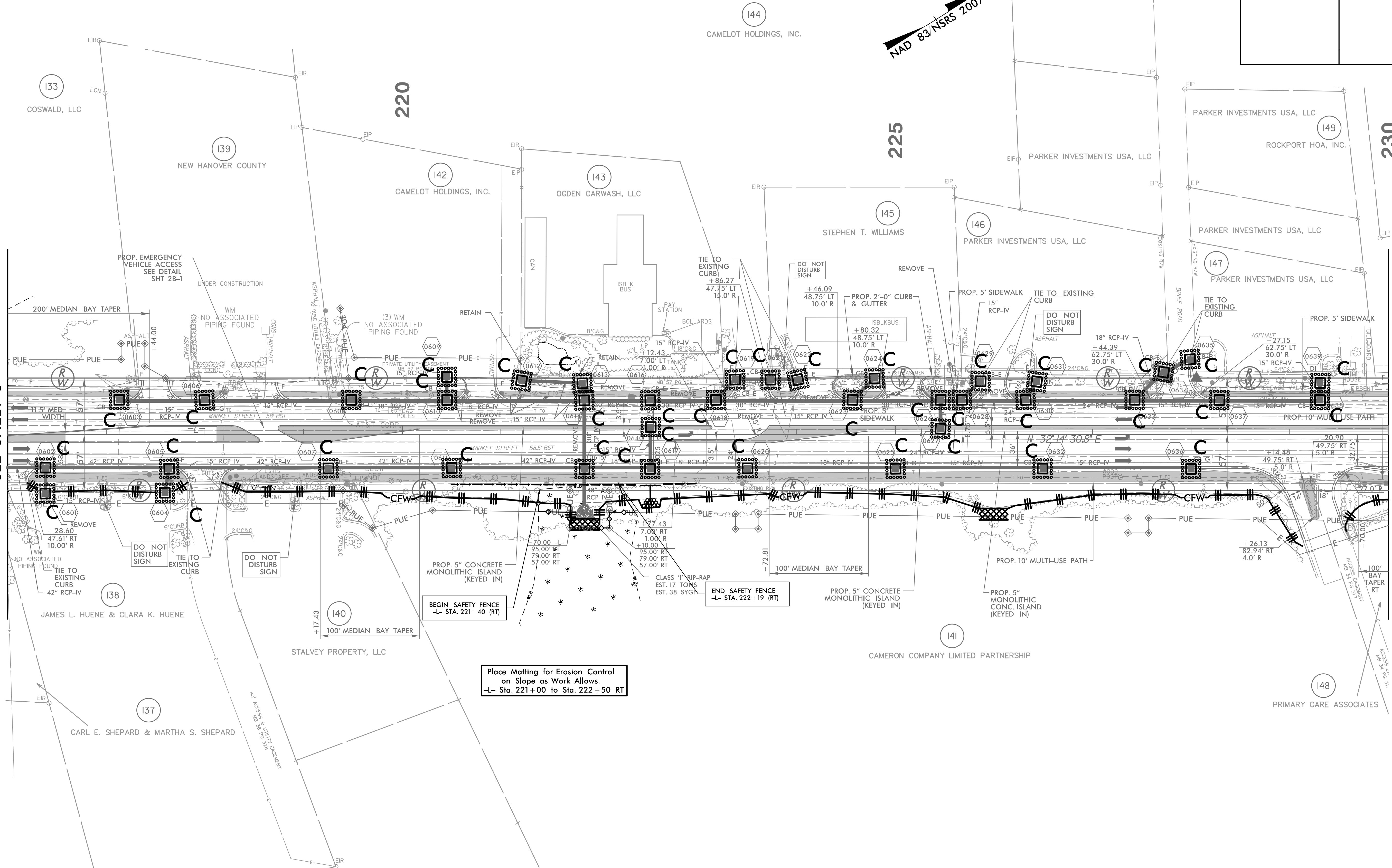
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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-14/CONST.6
RW SHEET NO.	U-4902CD-14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCH LINE -L STA 216+00.00
SEE SHEET 5

MATCH LINE -L STA 230+00.00
SEE SHEET 7



Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 221+00 to Sta. 222+50 RT

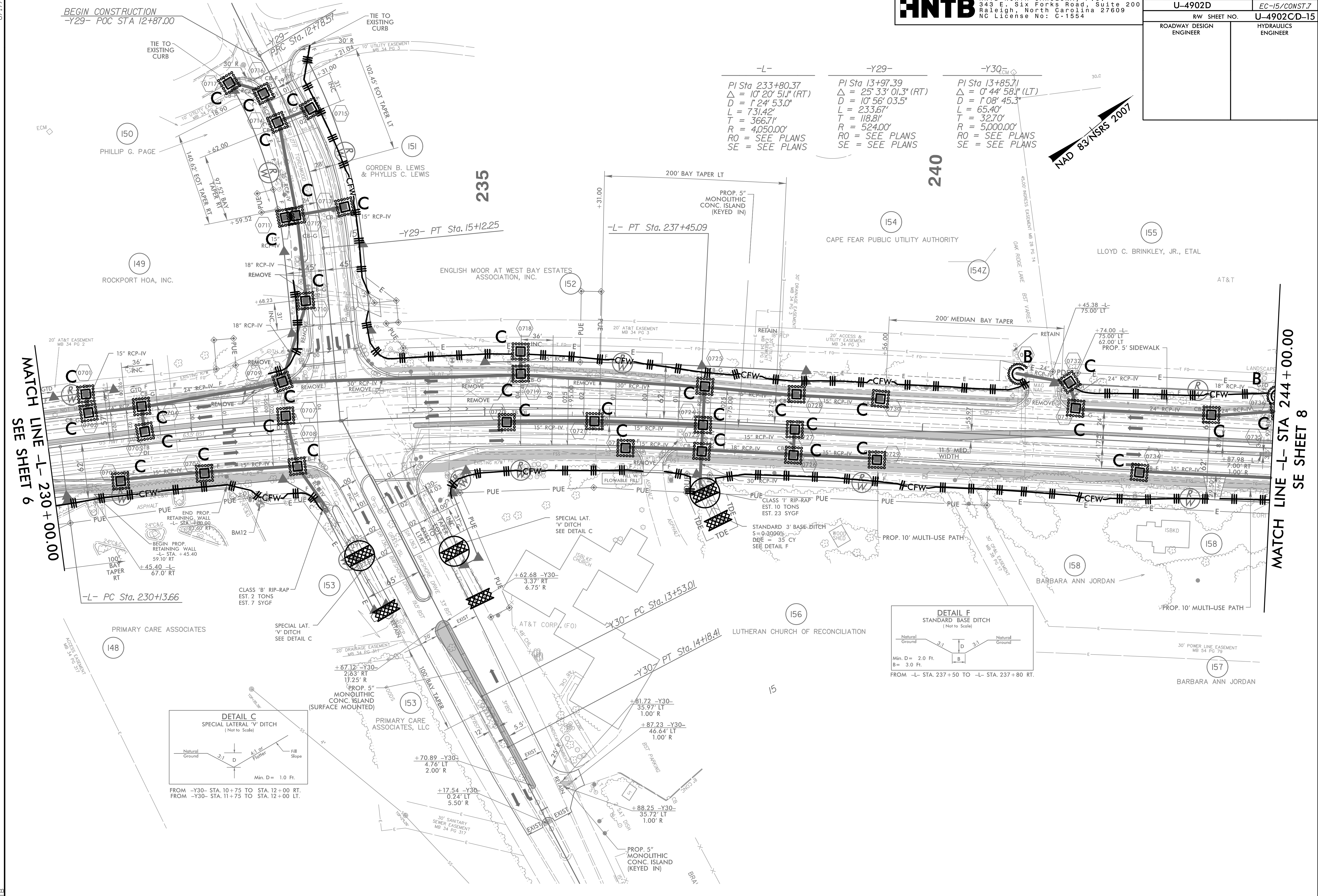
BEGIN SAFETY FENCE
-L- STA. 221+40 (RT)

END SAFETY FENCE
-L- STA. 222+19 (RT)

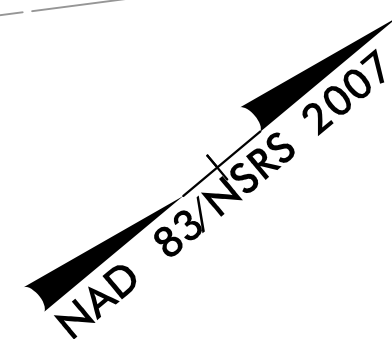
3/15/2018
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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-15/CONST.7
RW SHEET NO.	U-4902CD-15
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

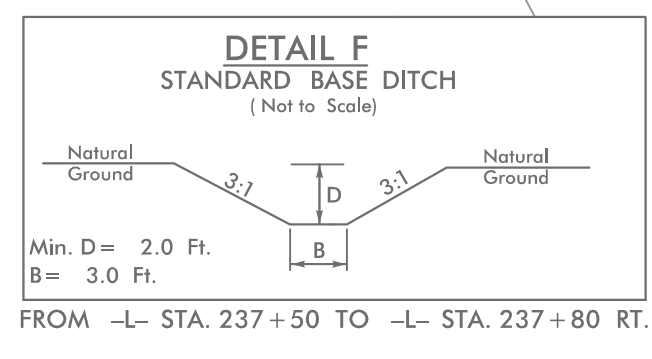
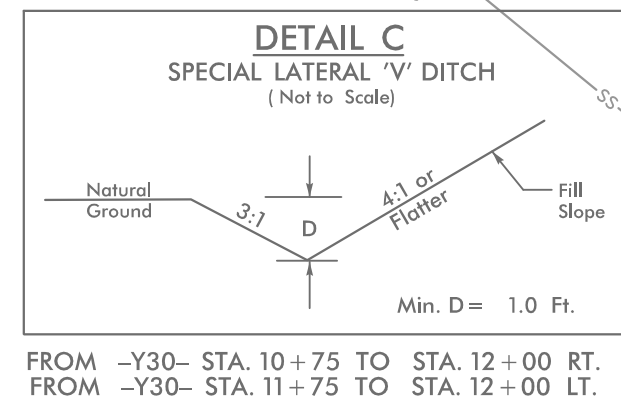


-L-	-Y29-	-Y30-
PI Sta 233+80.37	PI Sta 13+97.39	PI Sta 13+85.71
$\Delta = 10' 20' 51.1''$ (RT)	$\Delta = 25' 33' 01.3''$ (RT)	$\Delta = 0' 44' 58.1''$ (LT)
$D = 1' 24' 53.0''$	$D = 10' 56' 03.5''$	$D = 1' 08' 45.3''$
$L = 731.42'$	$L = 233.67'$	$L = 65.40'$
$T = 366.71'$	$T = 118.81'$	$T = 32.70'$
$R = 4,050.00'$	$R = 524.00'$	$R = 5,000.00'$
RO = SEE PLANS	RO = SEE PLANS	RO = SEE PLANS
SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS



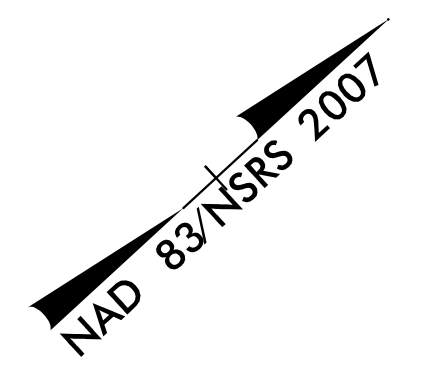
MATCH LINE -L- 230+00.00
 SEE SHEET 6

MATCH LINE -L- STA 244+00.00
 SEE SHEET 8



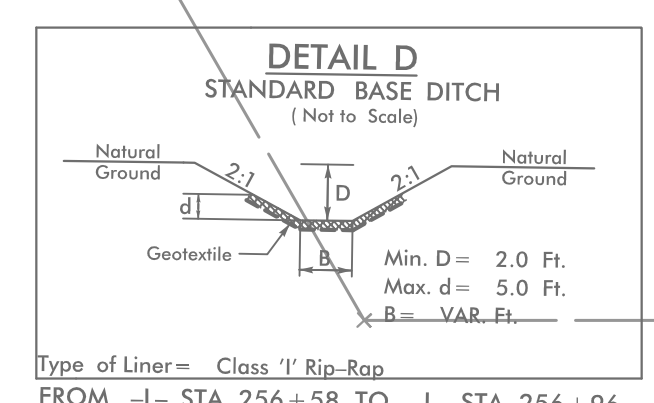
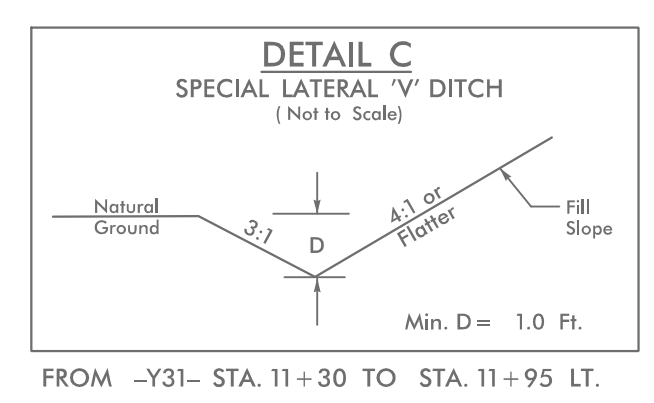
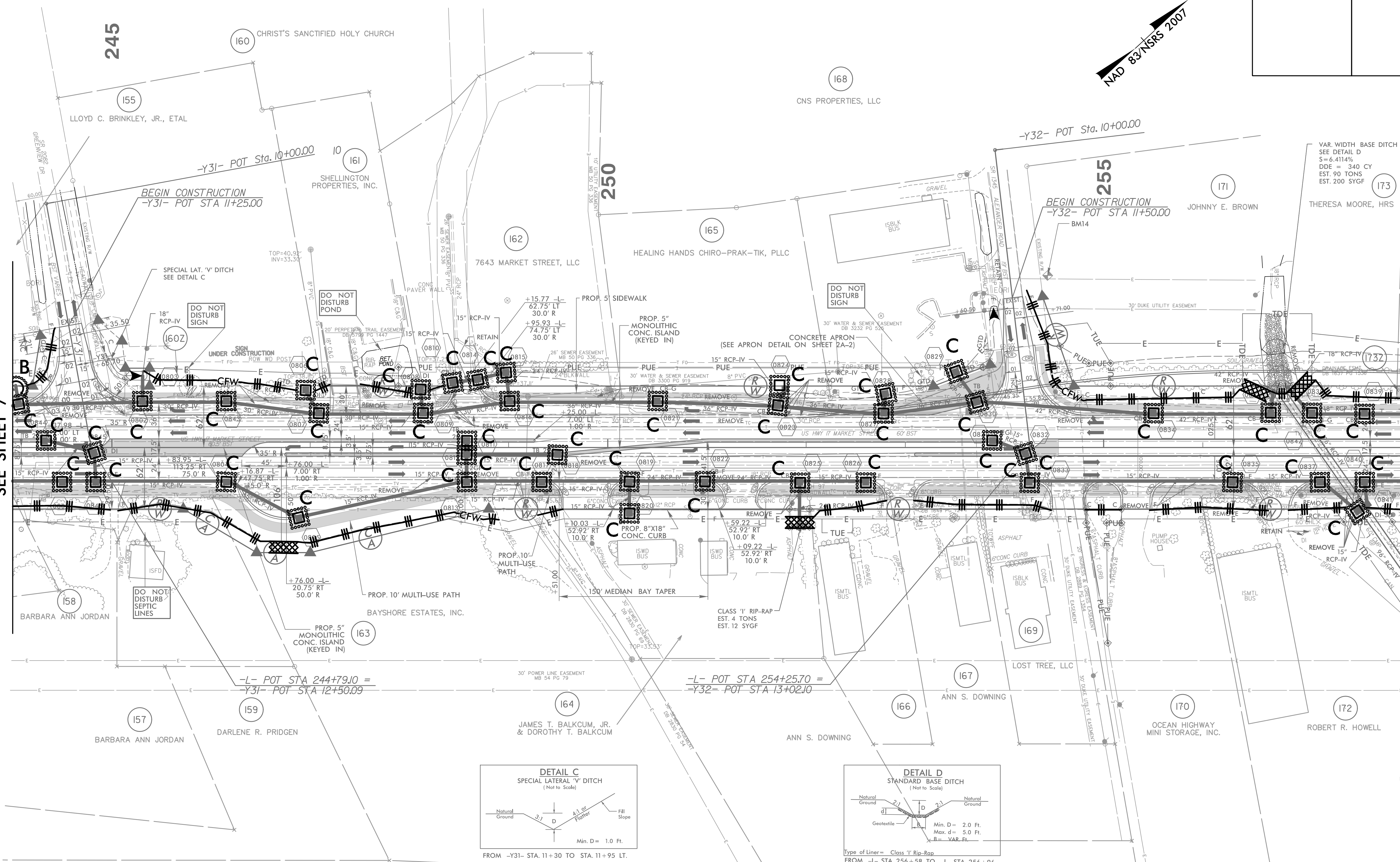
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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-16/CONST.8
RW SHEET NO.	U-4902CD-16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE -L- 244+00.00
SEE SHEET 7

MATCH LINE -L- 258+00.00
SEE SHEET 9



REVISIONS

5/31/2018
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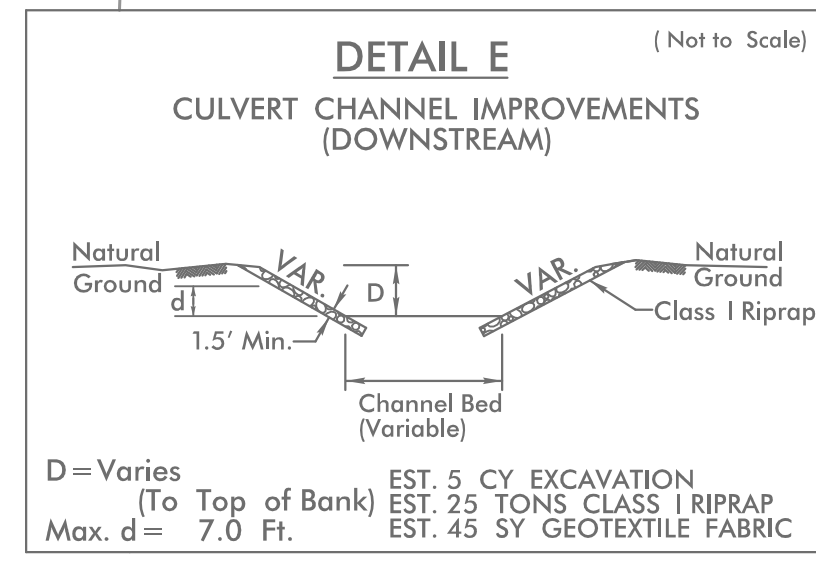
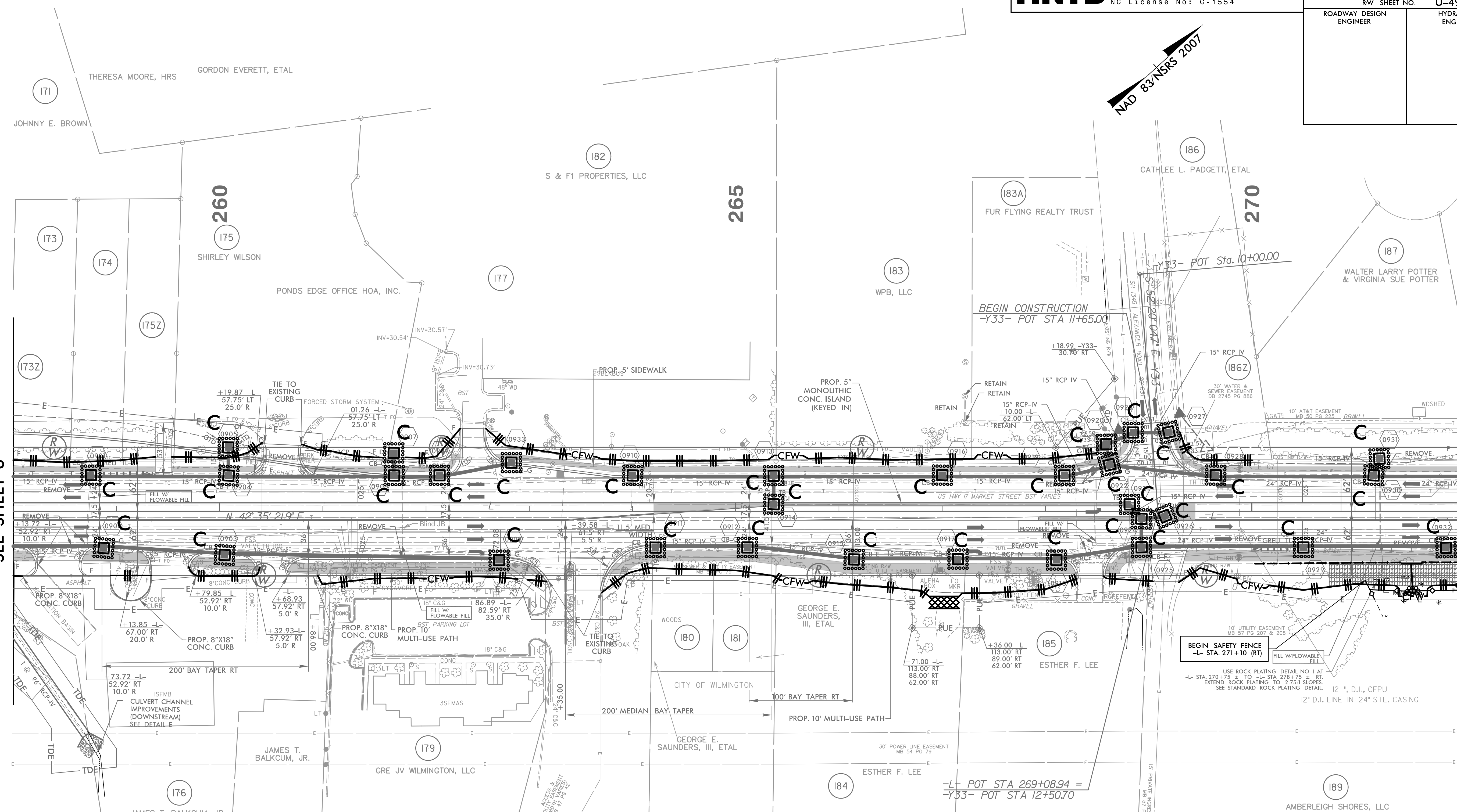
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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-17/CONST.9
RW SHEET NO.	U-4902CD-17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE -L- STA 258+00.00
SEE SHEET 8

MATCH LINE -L- STA 272+00.00
SEE SHEET 10



5/31/2018
R:\Projects\2018\U-4902D\CD\17\17.dwg
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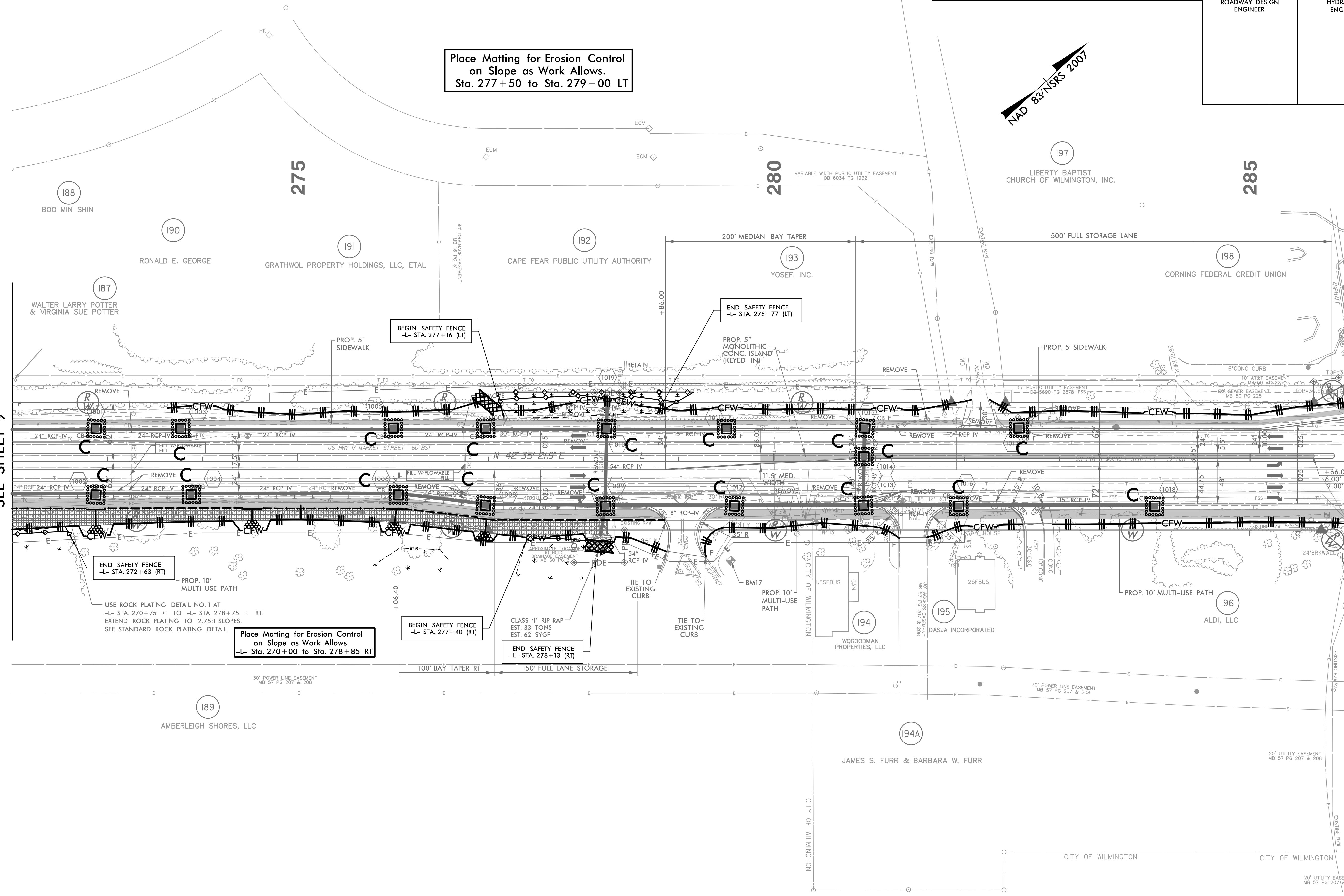
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PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-18/CONST.10
RW SHEET NO.	U-4902CD-18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCH LINE -L- STA 272 + 00.00
SEE SHEET 9

MATCH LINE -L- STA 286 + 00.00
SEE SHEET 11



Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 277+50 to Sta. 279+00 LT

END SAFETY FENCE
-L- STA. 278+77 (LT)

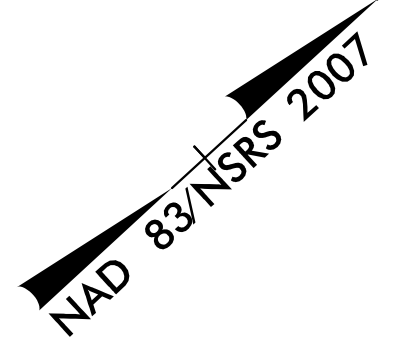
BEGIN SAFETY FENCE
-L- STA. 277+16 (LT)

END SAFETY FENCE
-L- STA. 272+63 (RT)

Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 270+00 to Sta. 278+85 RT

BEGIN SAFETY FENCE
-L- STA. 277+40 (RT)

END SAFETY FENCE
-L- STA. 278+13 (RT)

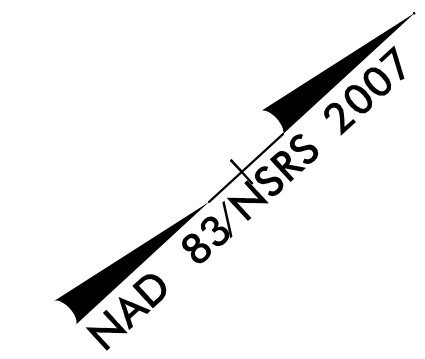


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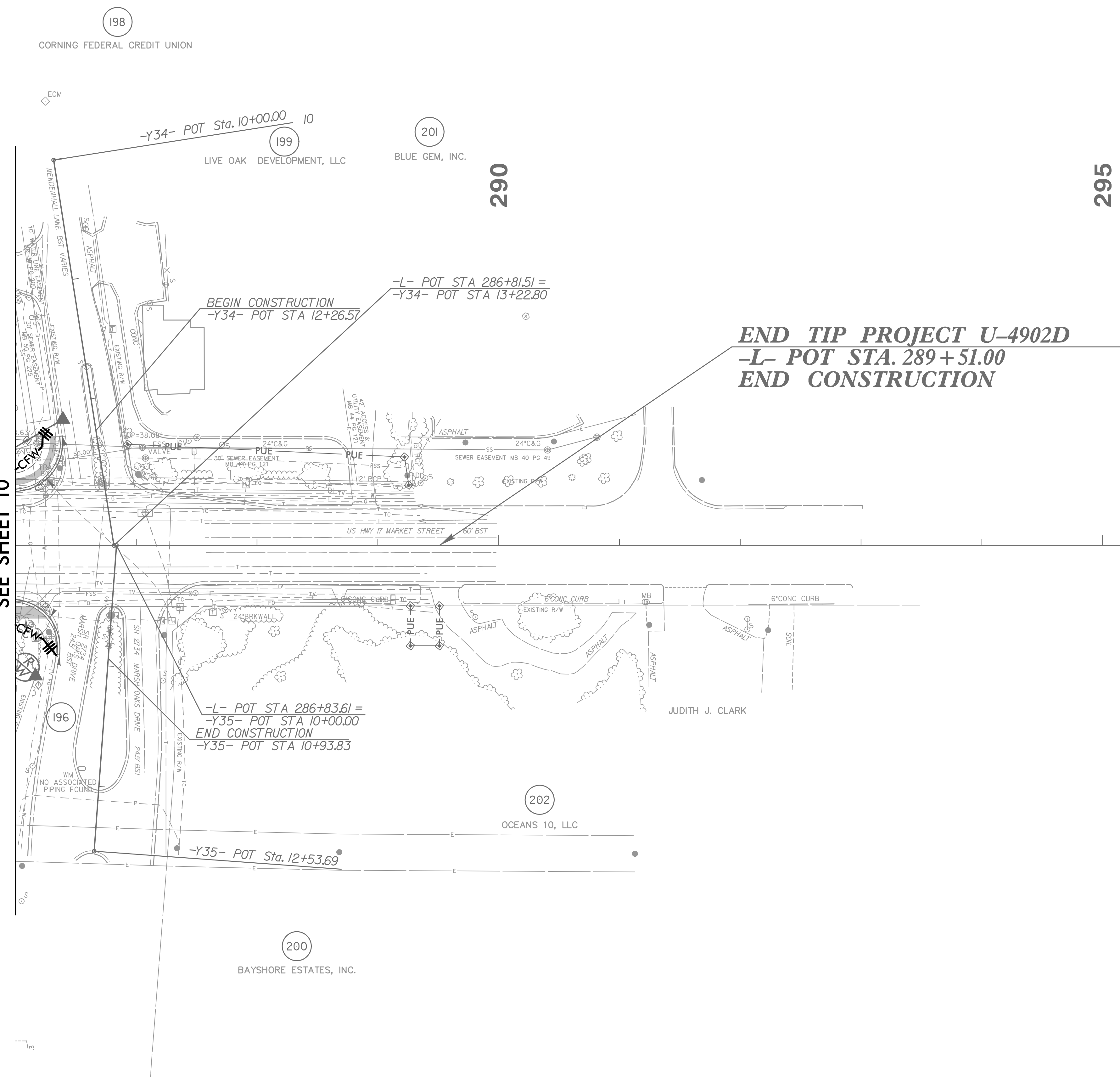
20' UTILITY EASEMENT
MB 57 PG 207 & 208

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-4902D	EC-19/CONST.II
RW SHEET NO.	U-4902CD-19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE -L- STA 286 + 00.00
SEE SHEET 10



END TIP PROJECT U-4902D
-L- POT STA. 289 + 51.00
END CONSTRUCTION

-L- POT STA 286+83.61 =
 -Y35- POT STA 10+00.00
END CONSTRUCTION
 -Y35- POT STA 10+93.83

-L- POT STA 286+81.51 =
 -Y34- POT STA 13+22.80

BEGIN CONSTRUCTION
 -Y34- POT STA 12+26.57

-Y34- POT Sta. 10+00.00 10

-Y35- POT Sta. 12+53.69

3/15/2018
 RAJ
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