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TIP PROJECT: R-5737

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

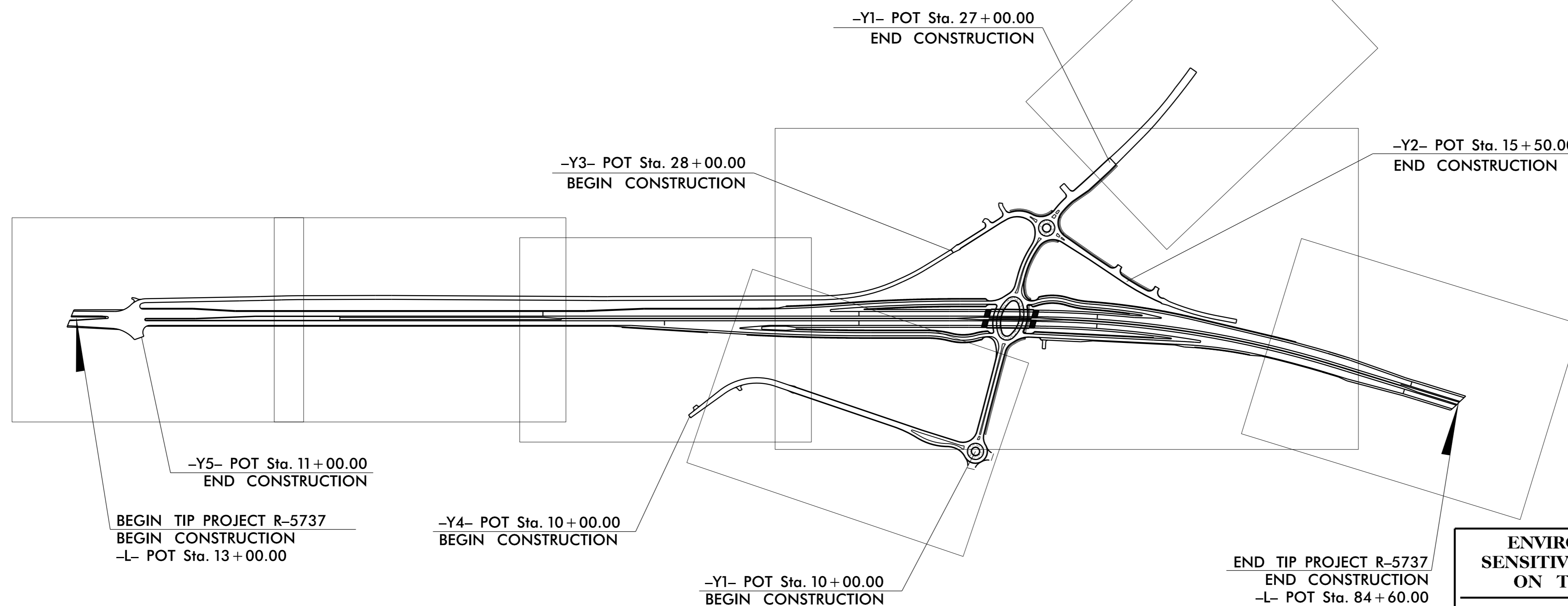
PLAN FOR I-85 BUS/US 29-70 INTERCHANGE
HIGHWAY EROSION CONTROL
DAVIDSON COUNTY

**LOCATION: CONVERT AT-GRADE INTERSECTION OF
OLD GREENSBORO RD (SR 1798) AND
I-85 BUS/US 29-70 TO INTERCHANGE
TYPE OF WORK: GRADING, DRAINAGE, PAVING
AND STRUCTURES**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5737	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	III III III
1606.01	Special Sediment Control Fence	△△△△△△△△
1622.01	Temporary Berms and Slope Drains	T
1630.02	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▩
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	▩
1633.02	Temporary Rock Silt Check Type-B	▩
	Wattle / Coir Fiber Wattle	⤴
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	⤴
1634.01	Temporary Rock Sediment Dam Type-A	▩
1634.02	Temporary Rock Sediment Dam Type-B	▩
1635.01	Rock Pipe Inlet Sediment Trap Type-A	⤴
1635.02	Rock Pipe Inlet Sediment Trap Type-B	⤴
1630.04	Stilling Basin	▩
1630.06	Special Stilling Basin	▩
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	▩
	Tiered Skimmer Basin	▩
	Infiltration Basin	▩

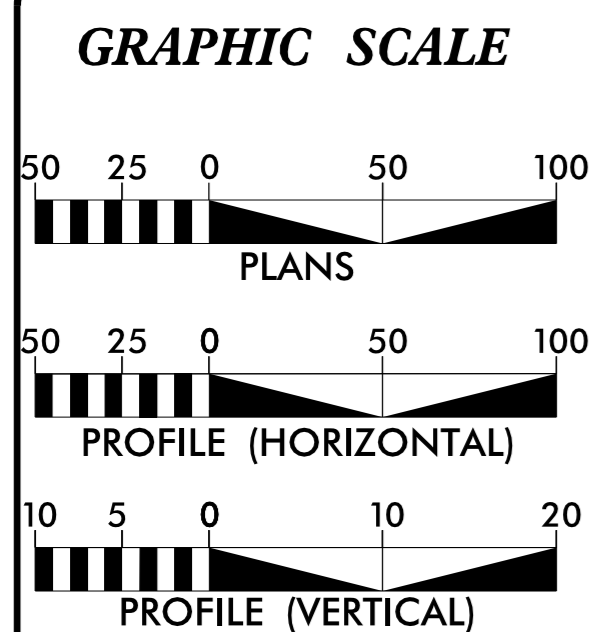


THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

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- 10+00
to Sta. -L- 61+50
Refer To E. C. Special Provisions
for Special Considerations.



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

Prepared in the Office of:
DEWBERRY
2610 WYCLIFF ROAD, SUITE 410
RALEIGH, NC 27607
PHONE: 919.881.9939
NC COA No. F-0929

Designed by:
STEVEN BONDOR, PE 3077
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, PE

Roadway Standard Drawings

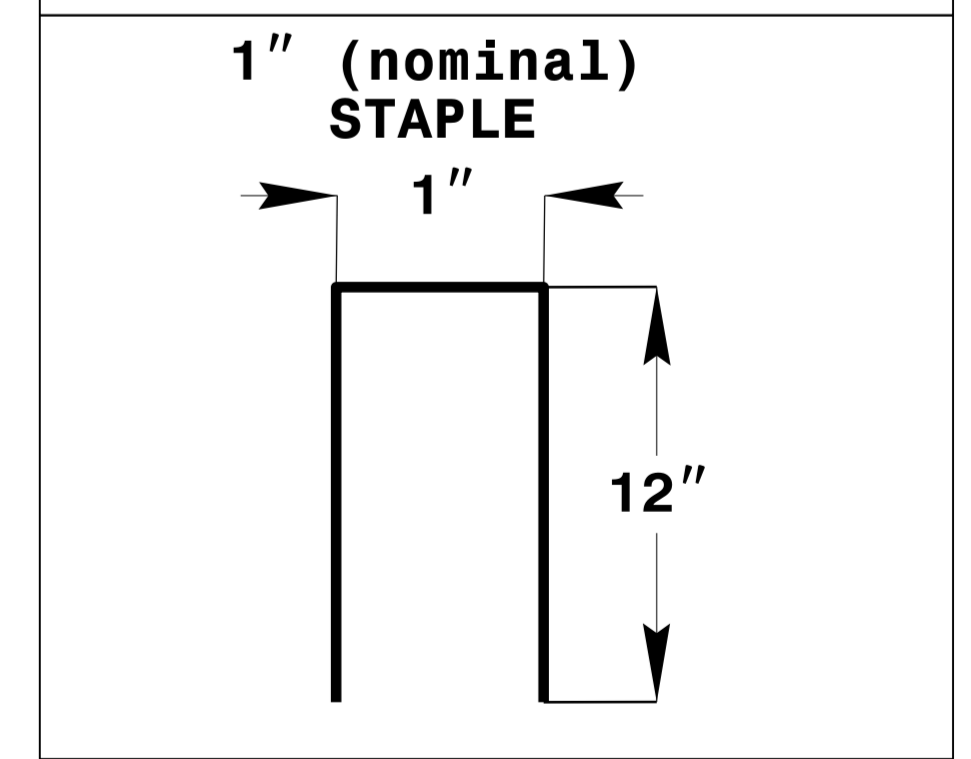
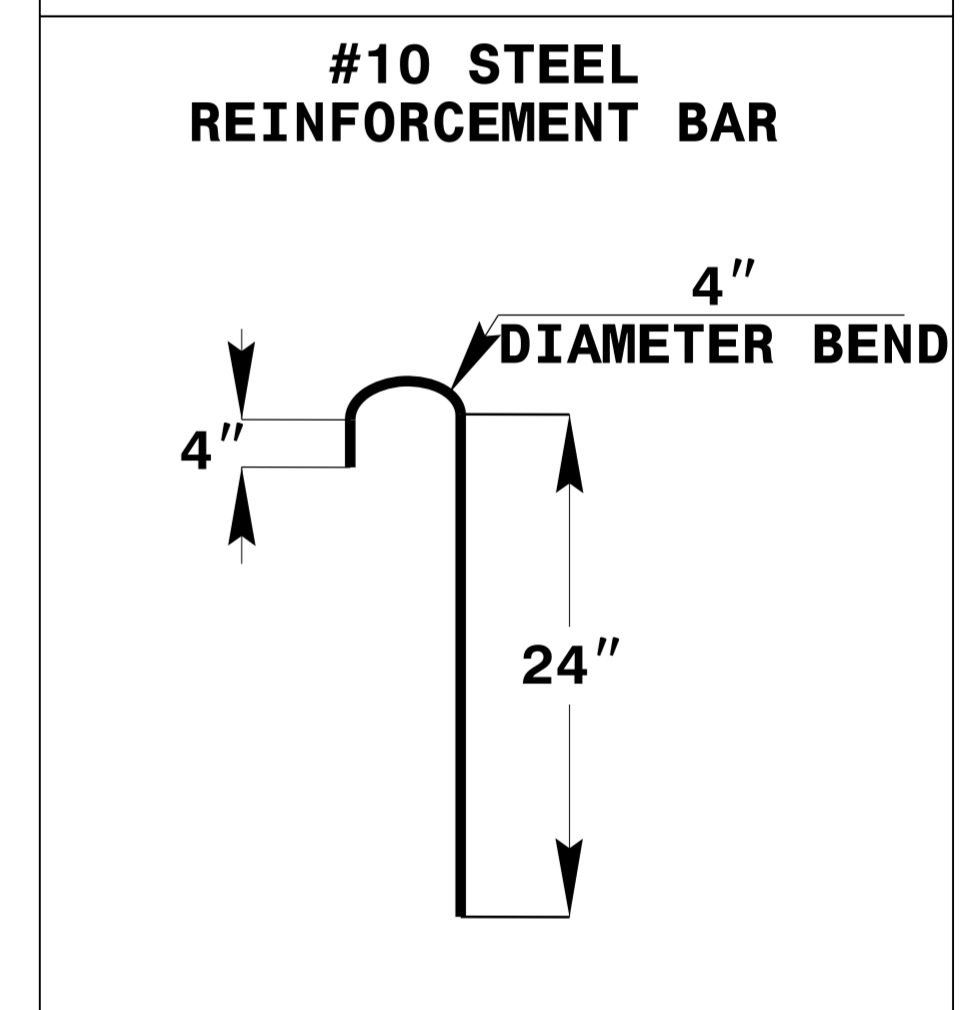
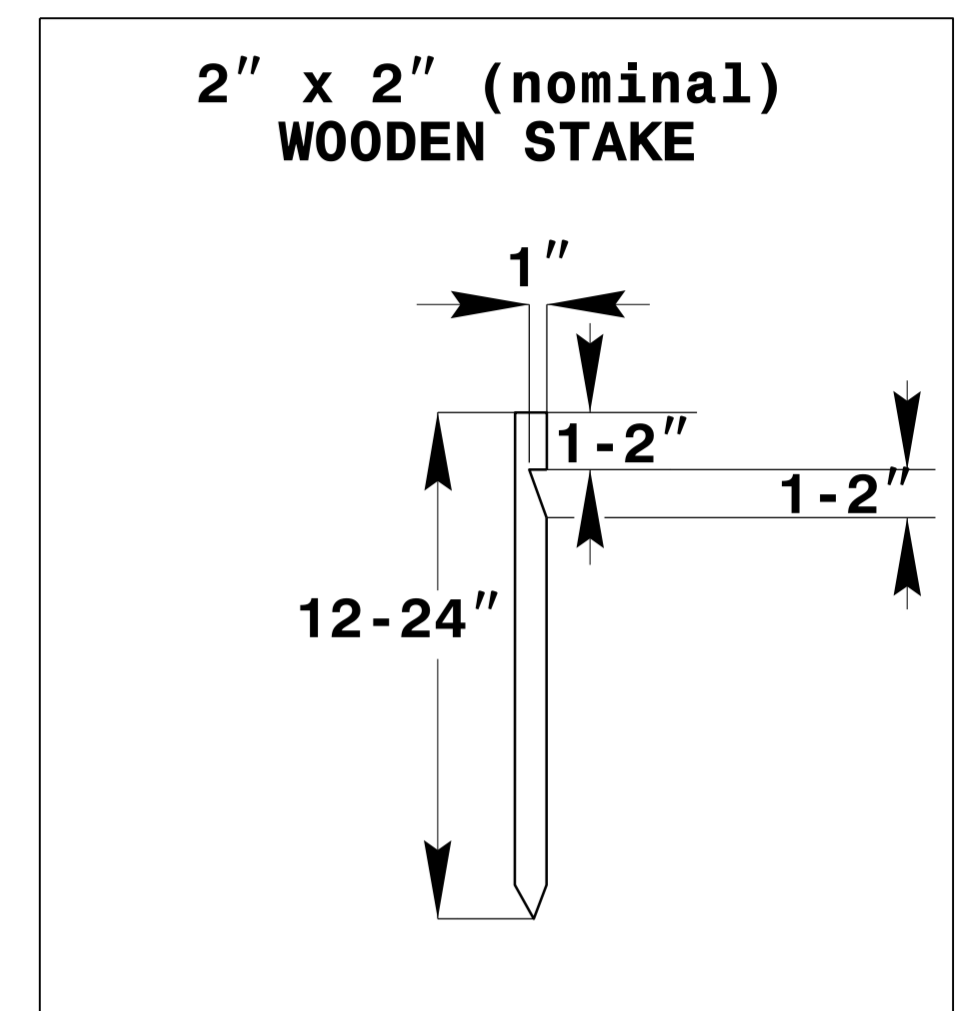
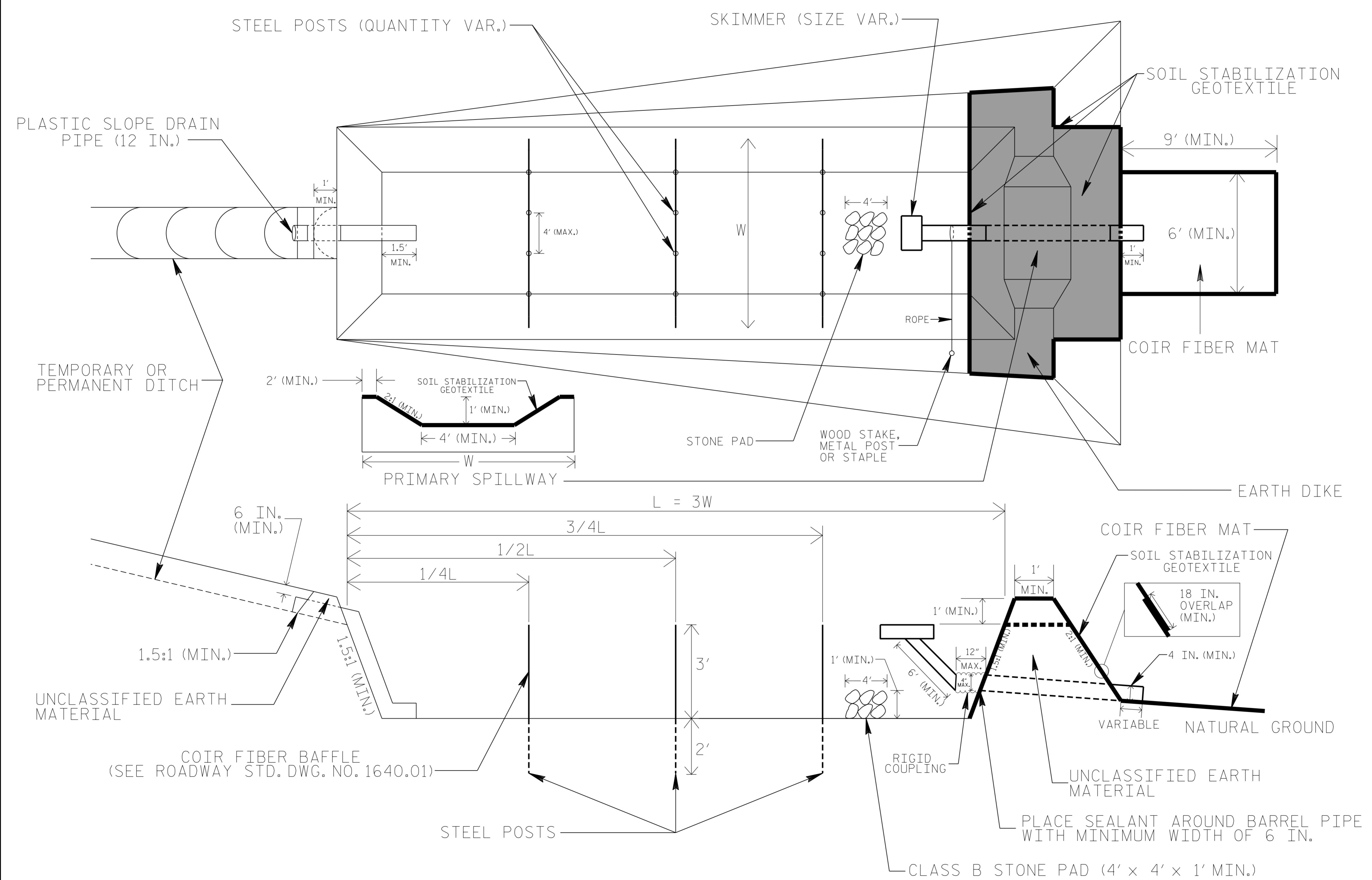
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Jaffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

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PROJECT REFERENCE NO. R-5737	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

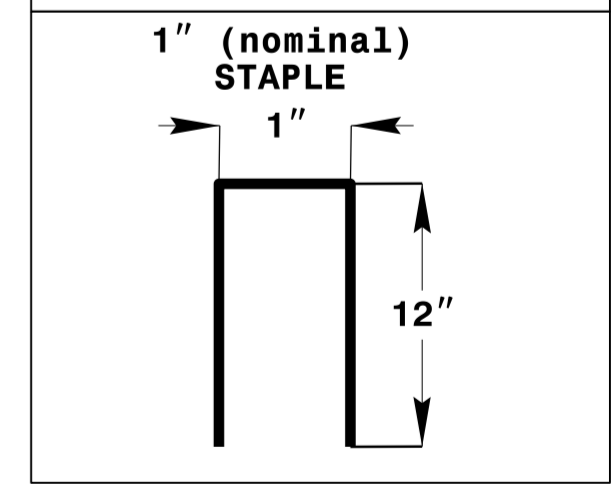
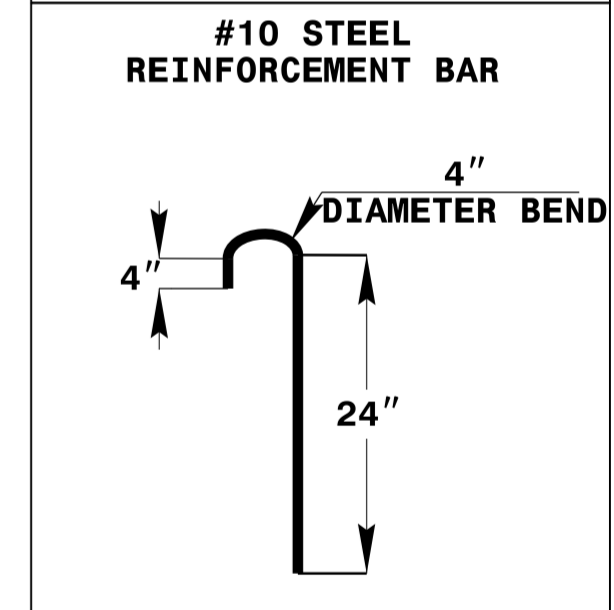
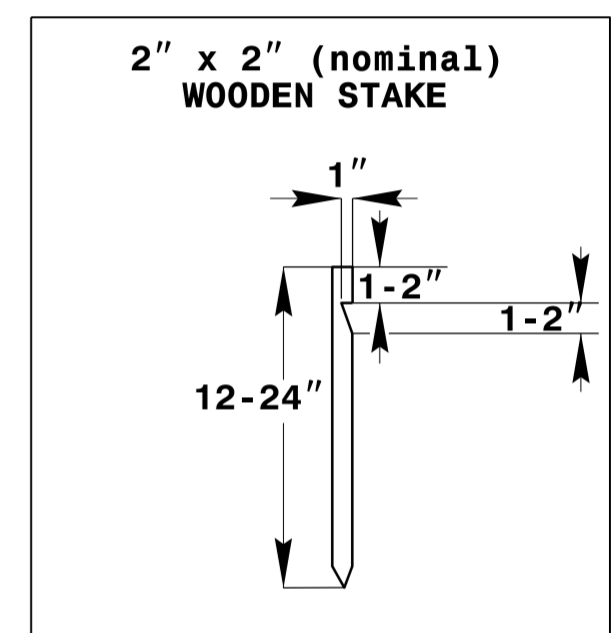
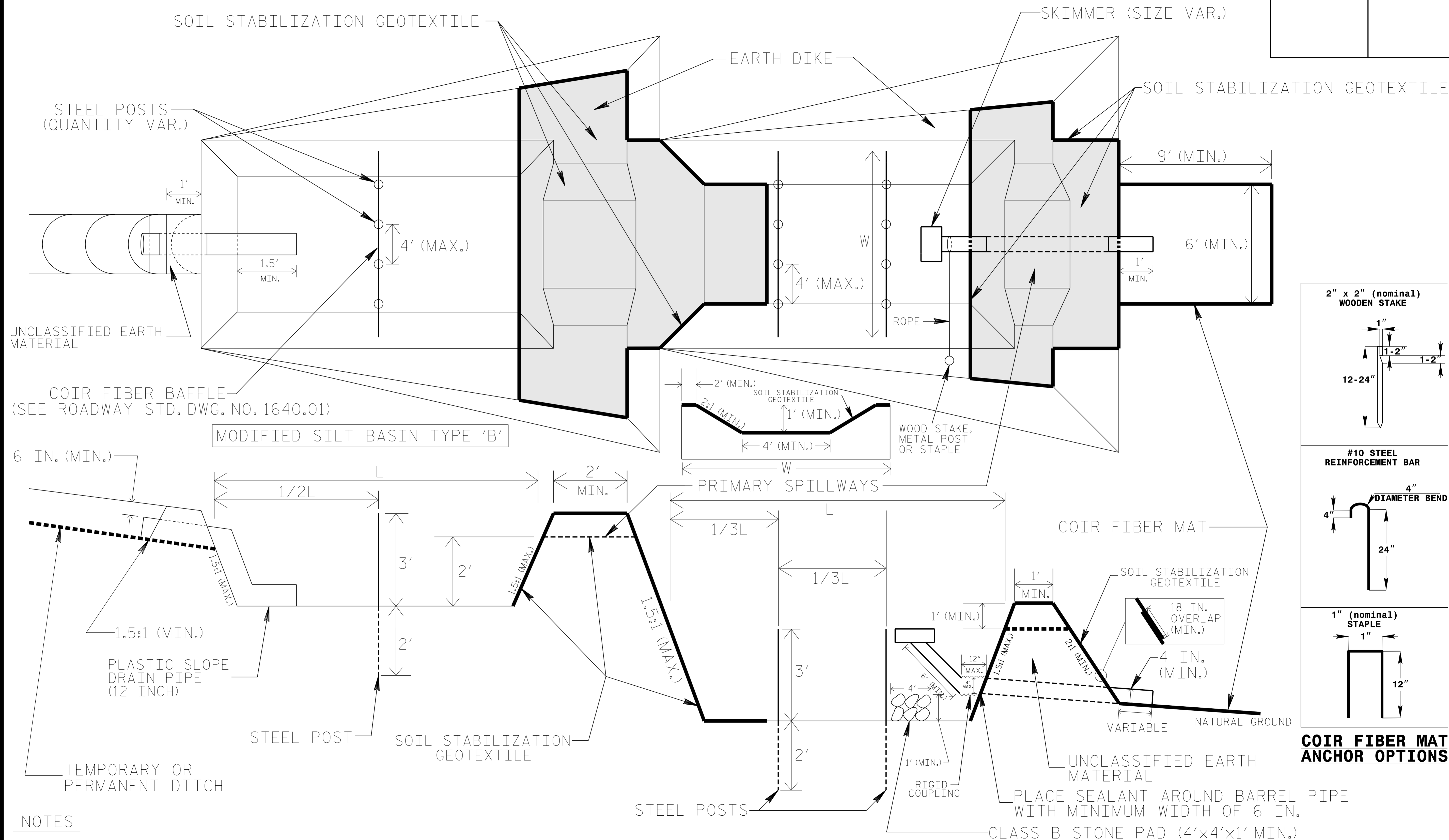
NOTES

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

TIERED SKIMMER BASIN DETAIL

PROJECT REFERENCE NO. R-5737	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

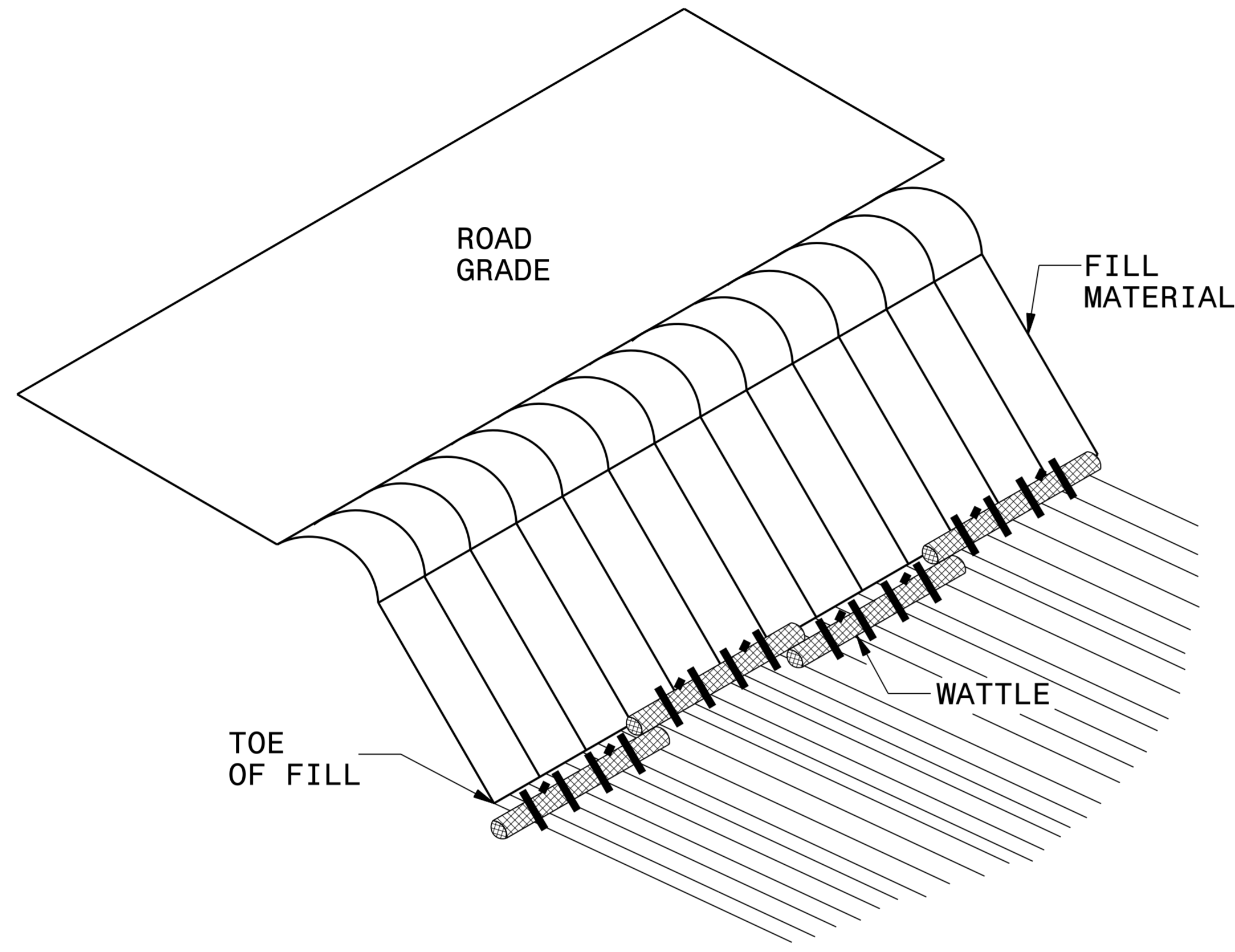
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. FOR BASIN DEPTHS OF 3FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY WEIR LENGTHS (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. <i>R-5737</i>	SHEET NO. <i>EC-2B</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

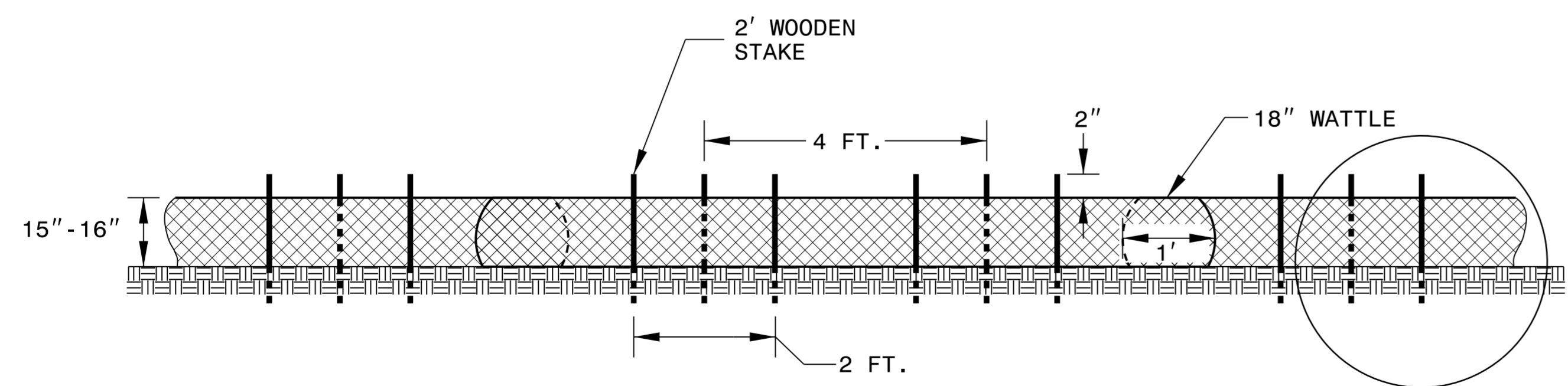
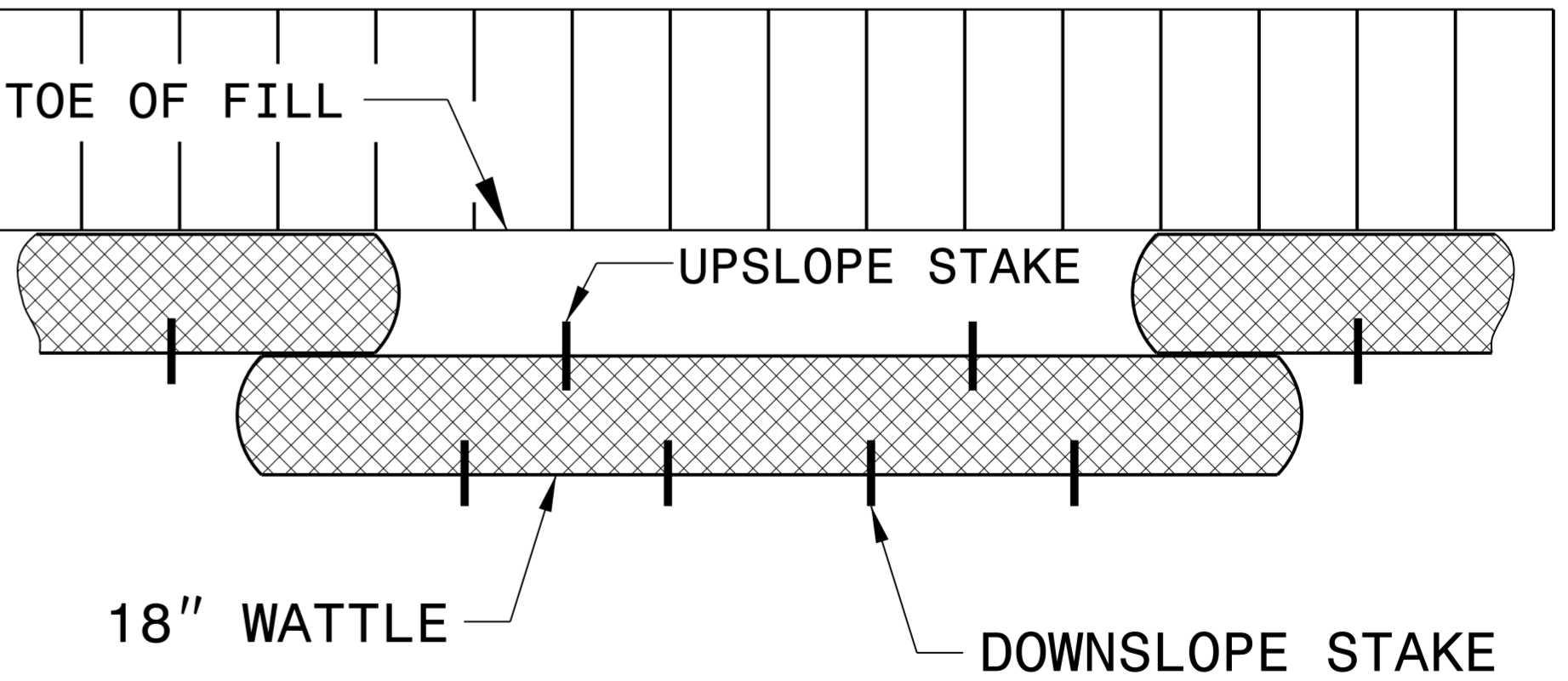
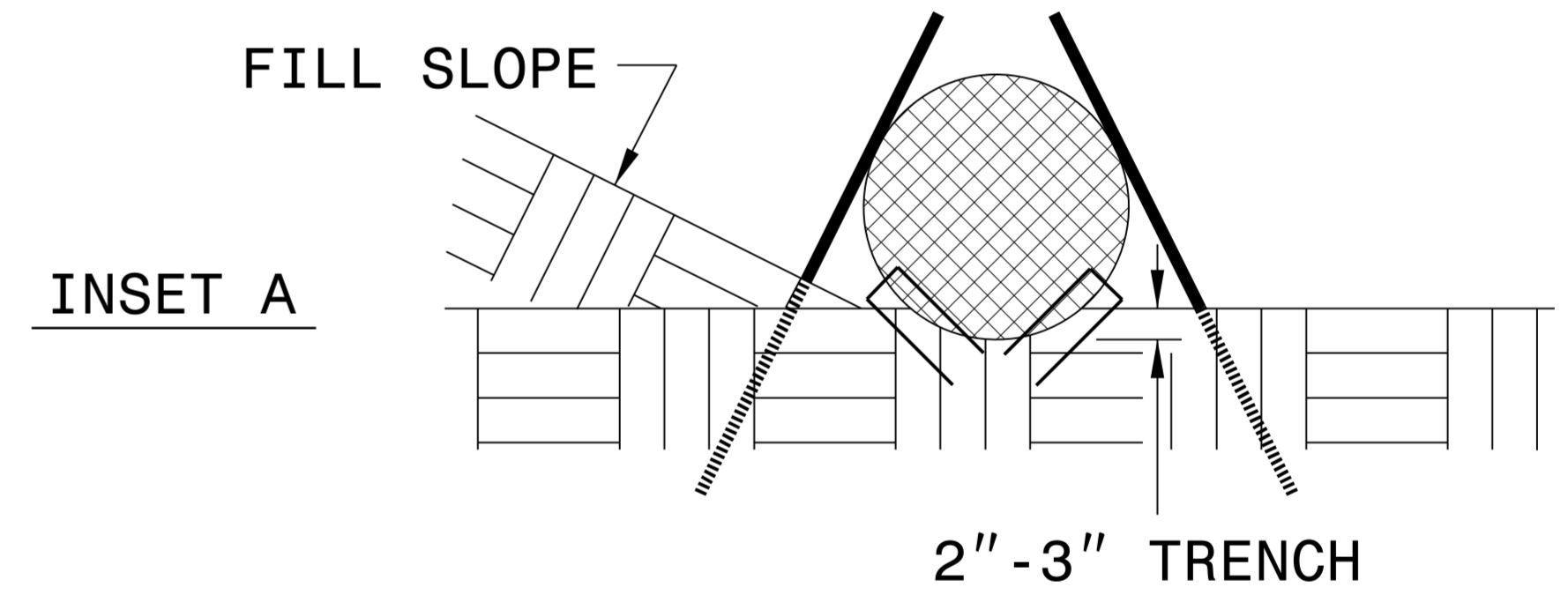
WATTLE BARRIER DETAIL



ISOMETRIC VIEW

NOTES:

- USE MINIMUM 18 IN. NOMINAL DIAMETER EXCELSIOR 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.



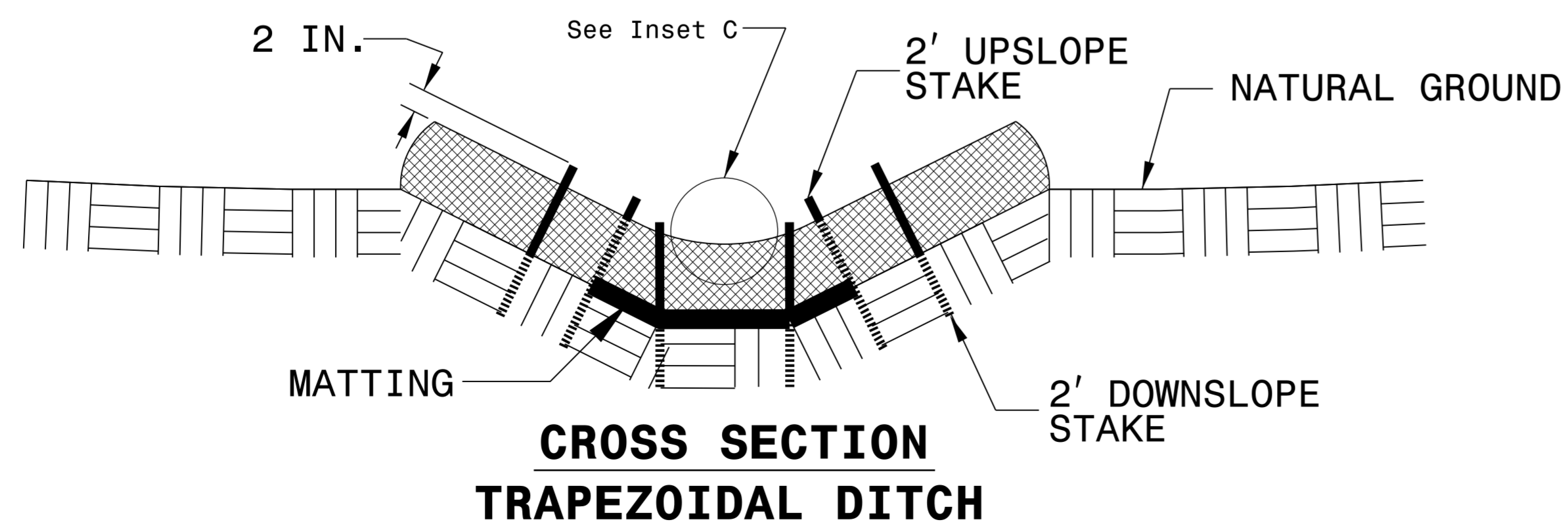
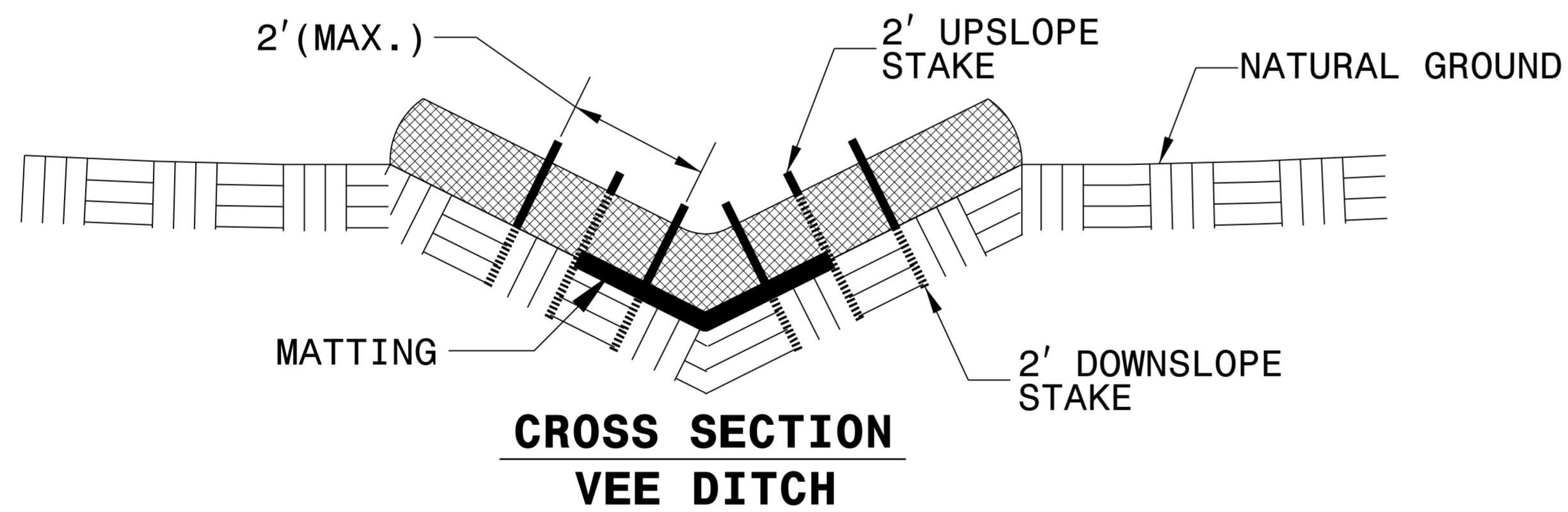
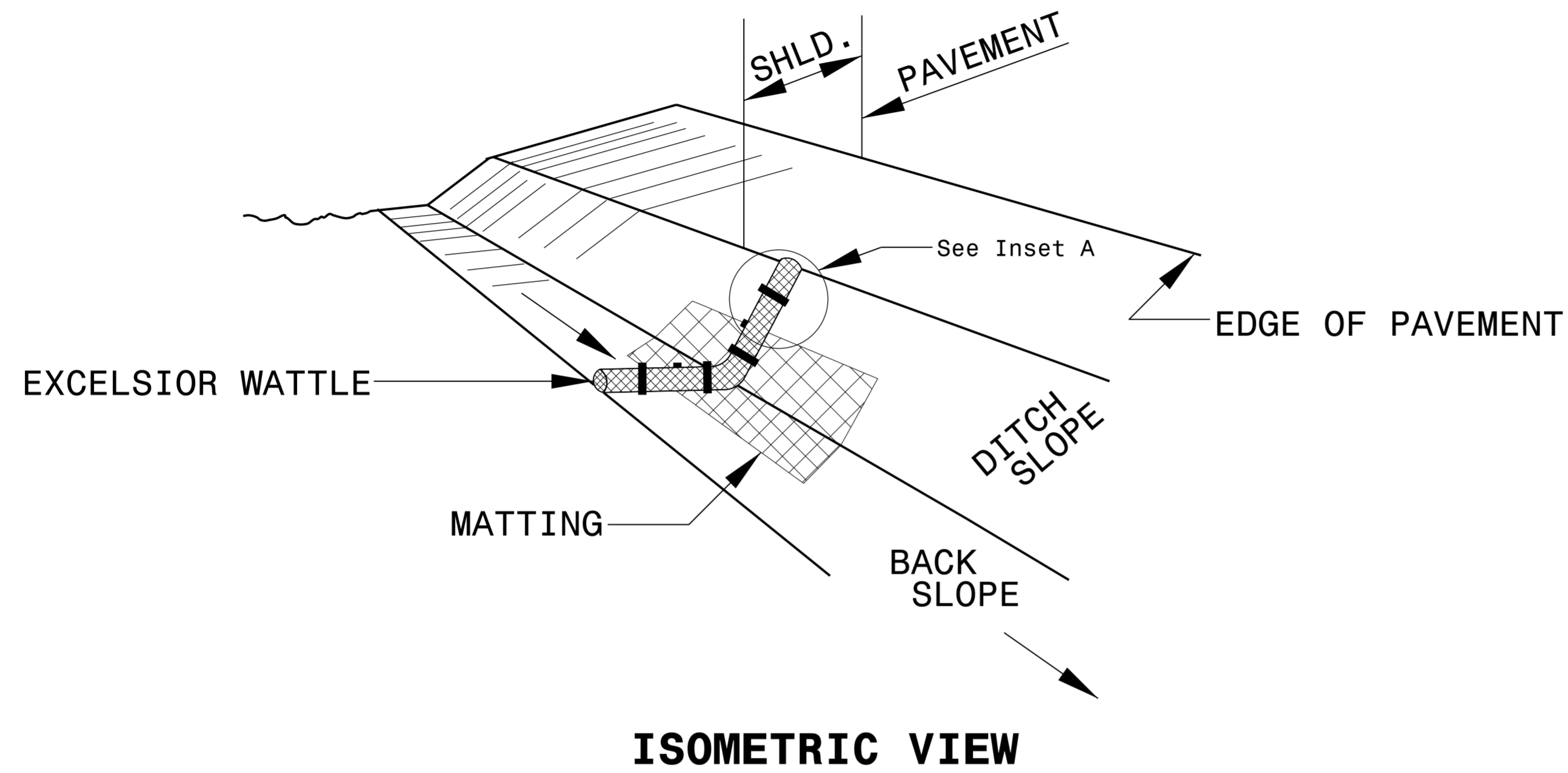
FRONT VIEW

TOP VIEW

SEE INSET A

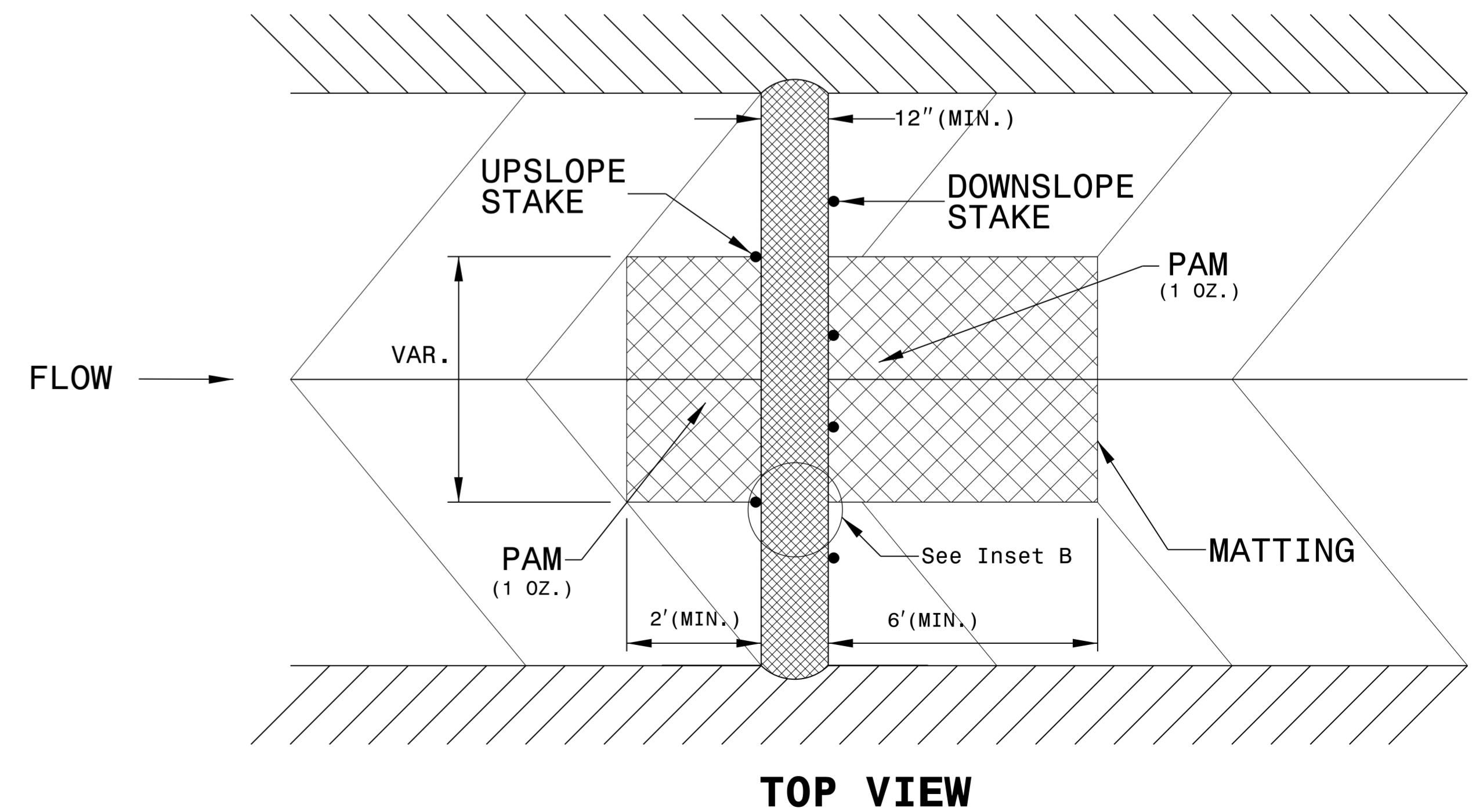
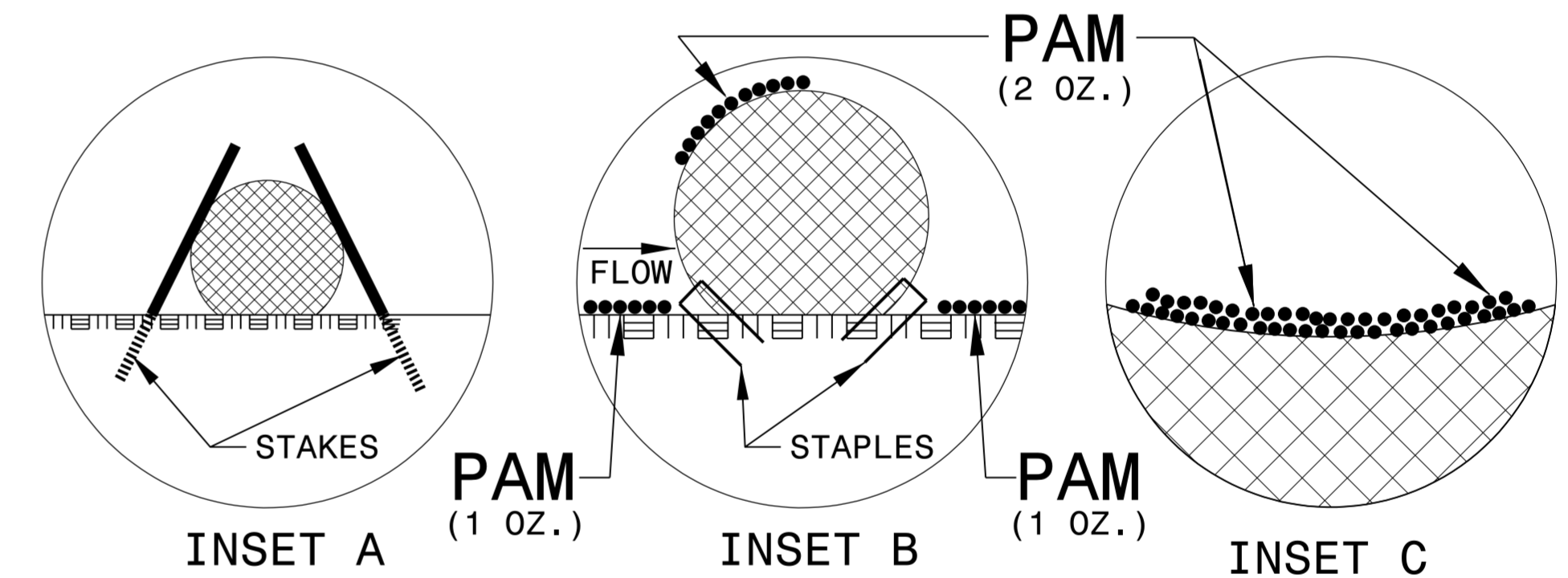
PROJECT REFERENCE NO. <i>R-5737</i>	SHEET NO. <i>EC-2C</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.
- PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.
- INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>R-5737</i>	SHEET NO. <i>EC-3A</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.

CURVE DATA FOR -Y6-

PI Sta 10+92.76	PI Sta 16+65.25
$\Delta = 76^{\circ} 24' 41.8" (RT)$	$\Delta = 0^{\circ} 24' 50.8" (LT)$
D = 81' 51" 04.0"	D = 0' 22' 55.1"
L = 93.35'	L = 108.42'
T = 55.10'	T = 54.21'
R = 70.00'	R = 15,000.00'
Se = EXIST	Se = EXIST

-L- POT Sta. 15+82.53 =
-Y6- POT Sta. 10+00.00

-L- POT Sta. 16+07.90 =
-Y5- POT Sta. 10+00.00

**END CONSTRUCTION
END MILL & OVERLAY
-Y5- POC Sta. 11+00.00**

CURVE DATA FOR -Y5-

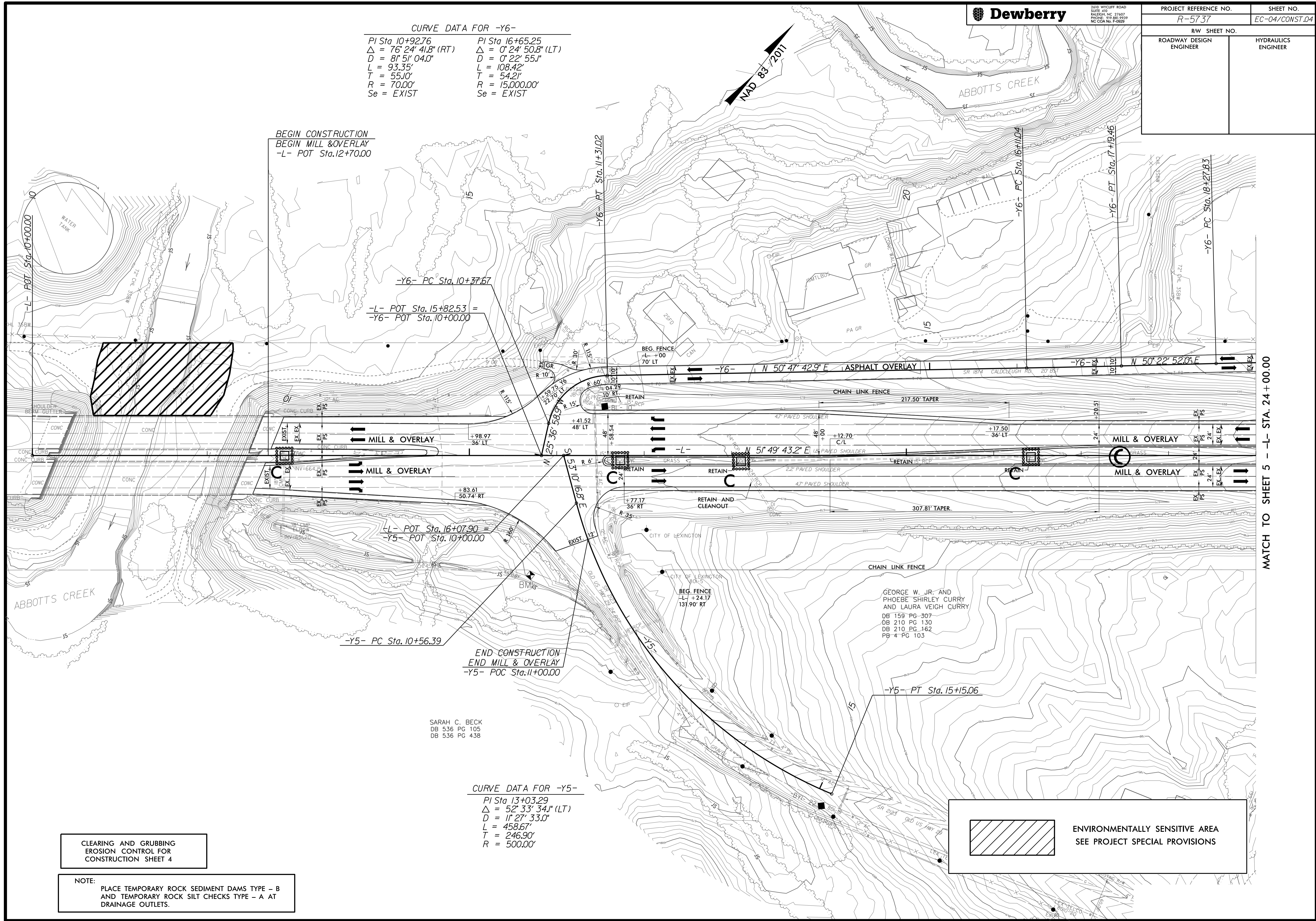
PI Sta 13+03.29
$\Delta = 52^{\circ} 33' 34.1" (LT)$
D = 11' 27' 33.0"
L = 458.67'
T = 246.90'
R = 500.00'

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

MATCH TO SHEET 5 - L- STA. 24+00.00



RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CURVE DATA FOR -Y6-

PI Sta 18+83.93	PI Sta 23+53.38
$\Delta = 117^{\circ} 08.0' (RT)$	$\Delta = 0^{\circ} 28' 28.0" (RT)$
$D = 1,08' 45.3"$	$D = 0' 34' 22.6"$
$L = 112.19'$	$L = 82.81'$
$T = 56.10'$	$T = 41.40'$
$R = 5,000.00'$	$R = 10,000.00'$
$S_e = EXIST$	$S_e = EXIST$



MATCH TO SHEET 4 - L- STA. 24+00.00

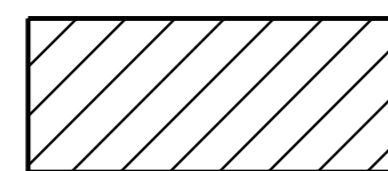
MATCH TO SHEET 6 - L- STA. 37+00.00

SB -L- POT 37+00.00
END MILL & OVERLAY
BEGIN PAVEMENT RESURFACING
BEGIN MEDIAN SHOULDER
& GUARDRAIL TAPER

JASON E. AND
ASHLEY L. SPEARS
DB 1792 PG 1010
PD 4 PG 103

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.



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

DETAIL 6A
LATERAL 'V' DITCH
(Not to Scale)

Type of Liner =	CL B Rip-Rap	DDE	CL B Rip-Rap	GEOTEXTILE FABRIC
LOCATION		CY	TON	SY
	RPC STA. 12+90 TO STA. 13+75 RT	29	30	89

DETAIL 6B
SPECIAL CUT DITCH
(Not to Scale)

LOCATION		TON	SY
	-Y4- STA. 13+22 TO STA. 14+50 RT	35	105

DETAIL 6C
SPECIAL CUT DITCH
(Not to Scale)

LOCATION		TON	SY
	-L- STA. 46+00 TO STA. 47+00 LT	35	105

CURVE DATA FOR -Y6-

PI Sta 34+61.43
 $\Delta = 0^\circ 30' 51.9" (LT)$
 $D = 0^\circ 34' 22.6"$
 $L = 89.78'$
 $T = 44.89'$
 $R = 10,000.00'$
 $Se = EXIST$

CURVE DATA FOR -RPB-

PIs Sta. 10+66.67
 $\Theta_s = 0^\circ 28' 41.7"$
 $L_s = 100.00'$
 $LT = 66.67'$
 $ST = 33.33'$

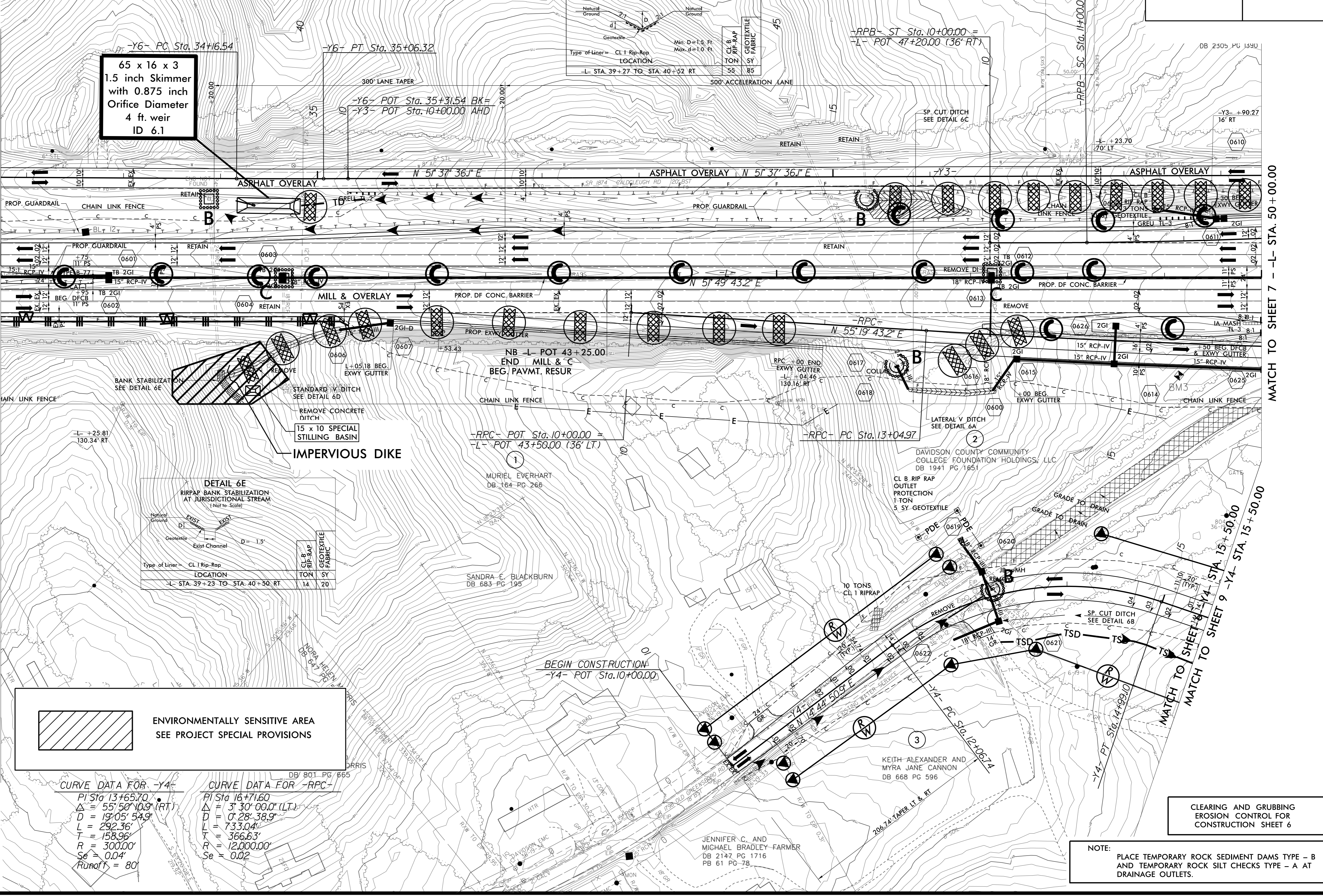
PI Sta 13+03.02
 $\Delta = 3^\circ 52' 56.3" (LT)$
 $D = 0^\circ 57' 23.5"$
 $L = 405.88'$
 $T = 203.02'$
 $R = 5,990.00'$
 $Se = 0.02$

DETAIL 6D
STANDARD 'V' DITCH
(Not to Scale)

LOCATION		TON	SY
	-L- STA. 39+27 TO STA. 40+52 RT	55	85

MATCH TO SHEET 5 --L- STA. 37+00.00

MATCH TO SHEET 7 --L- STA. 50+00.00



65 x 16 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 6.1

DETAIL 6E
RIPRAP BANK STABILIZATION
AT JURISDICTIONAL STREAM
(Not to Scale)

LOCATION		TON	SY
	-L- STA. 39+23 TO STA. 40+50 RT	14	20

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CURVE DATA FOR -Y4-

PI Sta 13+65.70
 $\Delta = 55^\circ 50' 10.9" (RT)$
 $D = 19^\circ 05' 54.9"$
 $L = 292.36'$
 $T = 158.96'$
 $R = 300.00'$
 $Se = 0.04'$
 $Runoff = 80'$

CURVE DATA FOR -RPC-

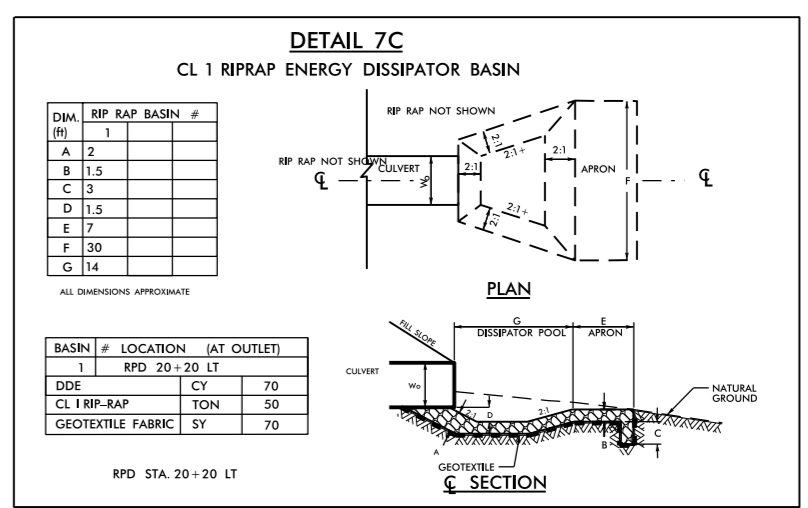
PI Sta 16+71.60
 $\Delta = 3^\circ 30' 00.0" (LT)$
 $D = 0^\circ 28' 38.9"$
 $L = 733.04'$
 $T = 366.63'$
 $R = 12,000.00'$
 $Se = 0.02$

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

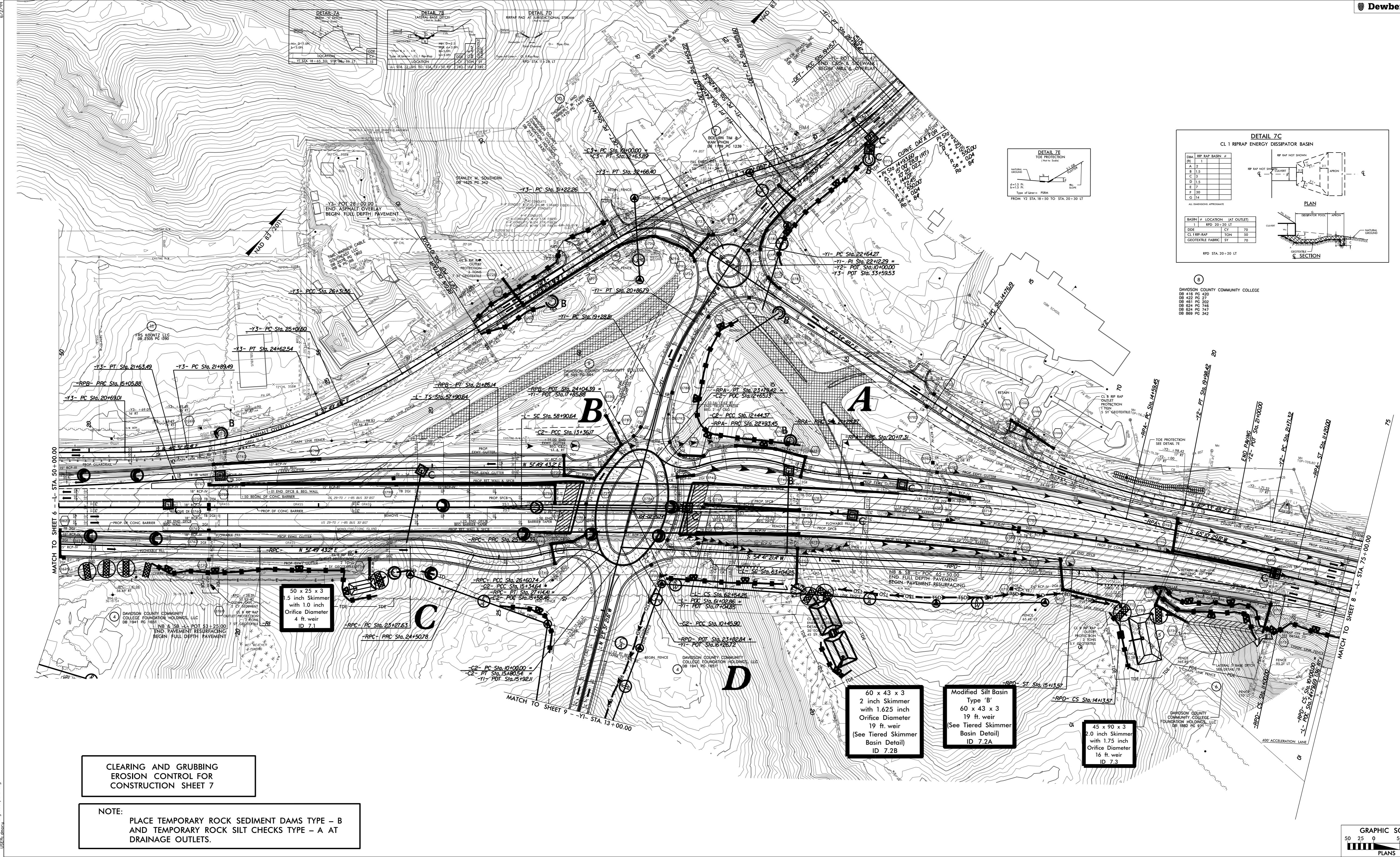
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

TRAFFIC DATA

71 78	71 78
B	A
51 55	163 182
193 214	1-85 BUS
1-2	1-2
C	D
1-2	1-2
1-2	1-2
1-2	1-2



- DAVIDSON COUNTY COMMUNITY COLLEGE
- DB 432 PG 230
 - DB 433 PG 230
 - DB 434 PG 230
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**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.

LEGEND

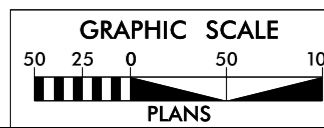
- 5' MONOLITHIC CONCRETE ISLAND
- 7' CONCRETE TRUCK APRON
- 7' CONCRETE TRUCK ISLAND
- 3' CONCRETE ISLAND COVER
- 4' CONCRETE SIDEWALK

LOCATION: CONVERT AT-GRADE INTERSECTION OF
OLD GREENSBORO RD. (SR 1798) AND
I-85 BUS. US 29-70 TO INTERCHANGE

TP NO.: **R-5737** COUNTY: **DAVIDSON**

DESIGNED BY: **WET** DATE: **7/13/2021**

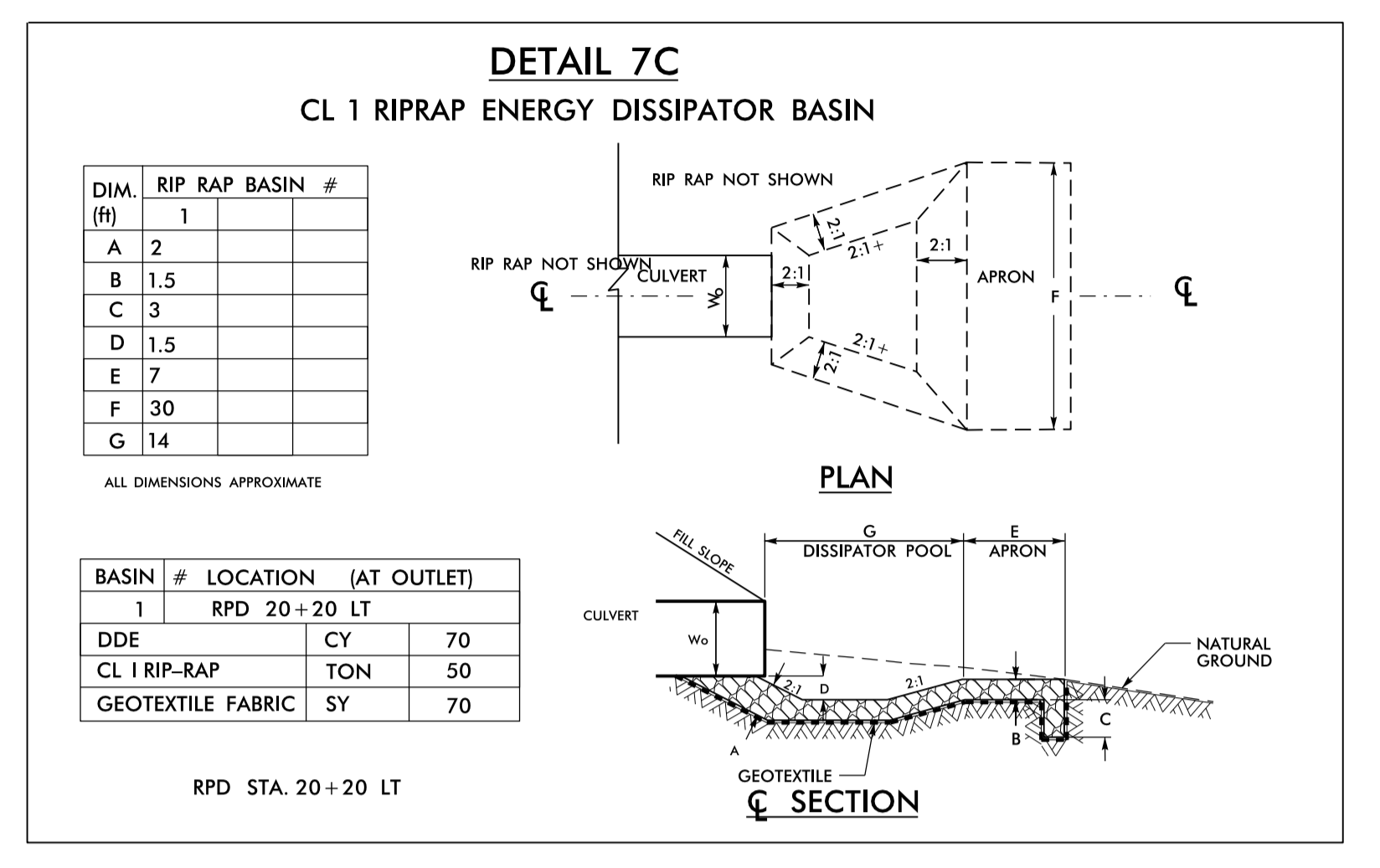
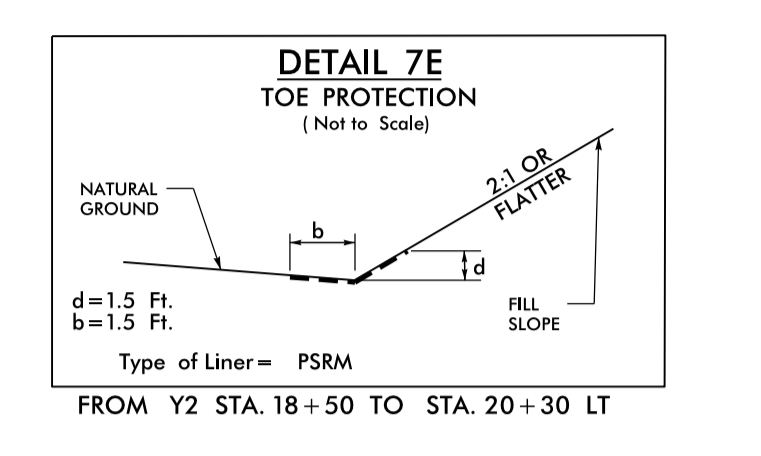
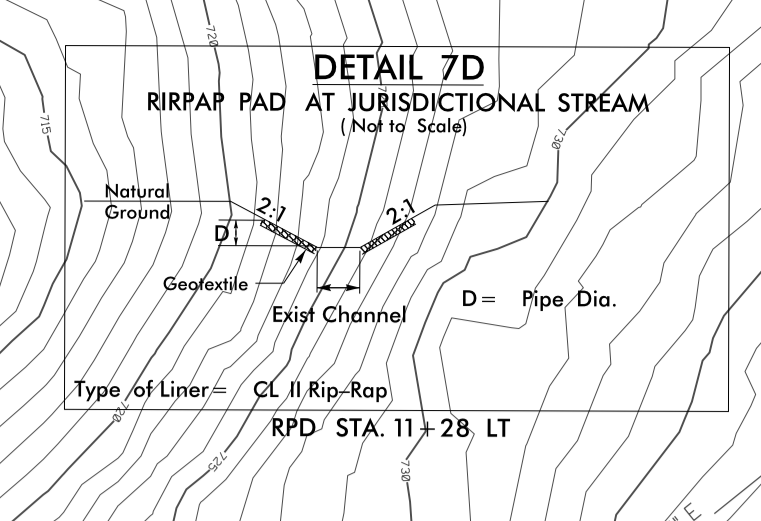
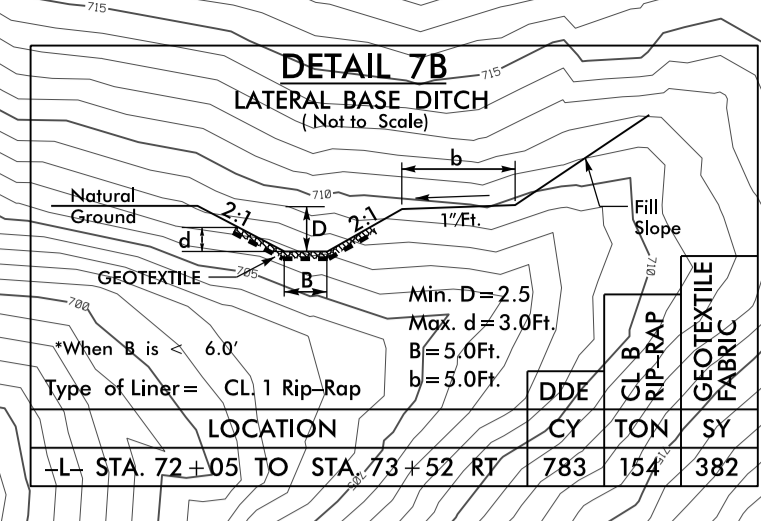
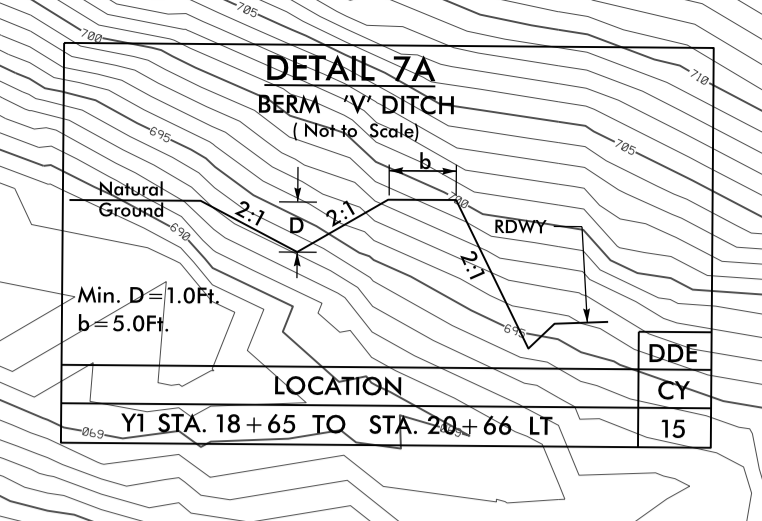
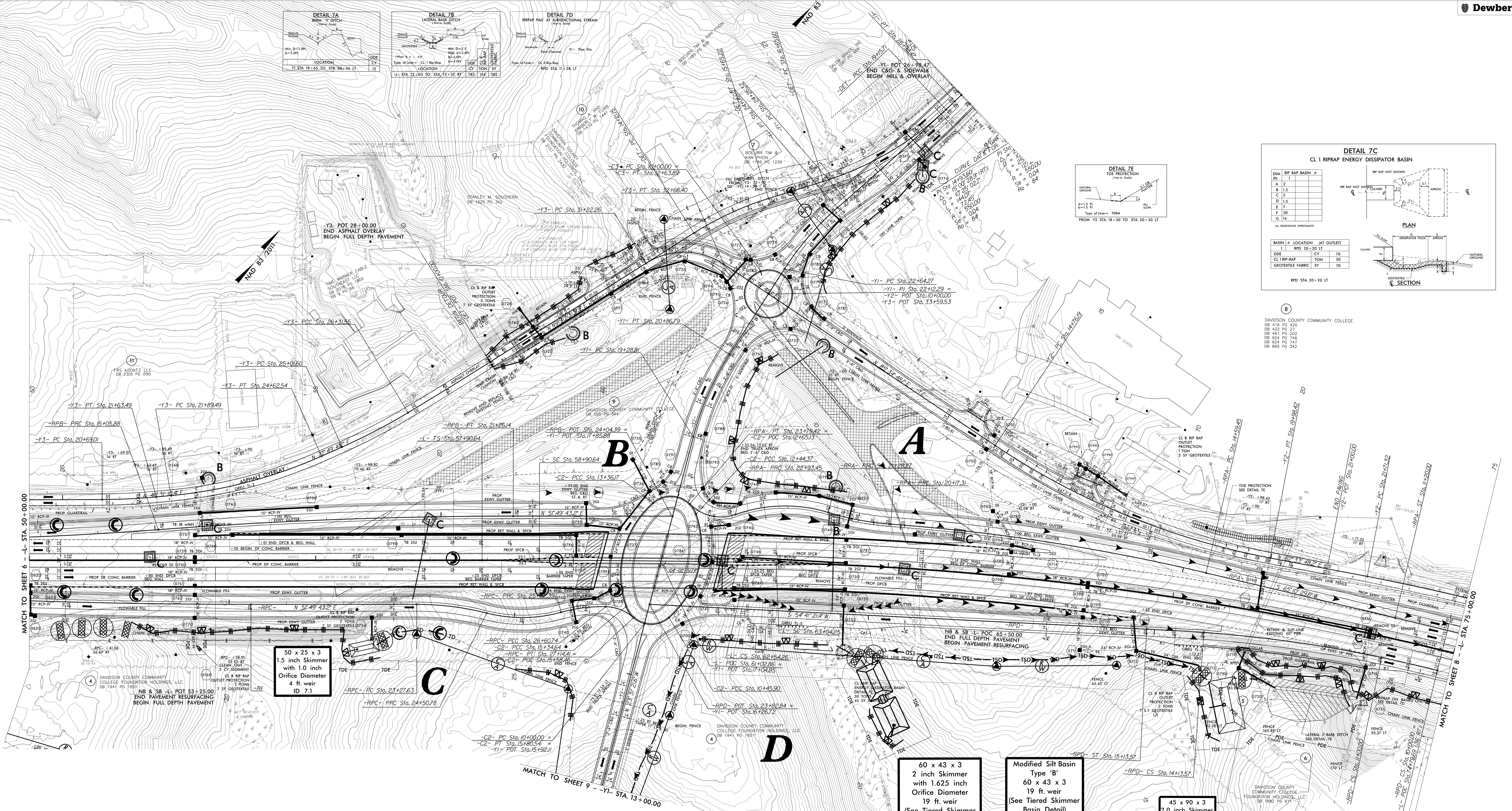
CHECKED BY: **DJM** DATE: **7/13/2021**



7/13/2021 10:54 AM T:\proj\ec-07\const\07.dgn

TRAFFIC DATA

A	16.3	182
B	51	36
C	1	1
D	1	2
E	1	2
F	1	2
G	1	2
H	1	2
I	1	2
J	1	2
K	1	2
L	1	2
M	1	2
N	1	2
O	1	2
P	1	2
Q	1	2
R	1	2
S	1	2
T	1	2
U	1	2
V	1	2
W	1	2
X	1	2
Y	1	2
Z	1	2



**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.

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
4 ft. weir
ID 7.1

60 x 43 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
19 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 7.2B

Modified Silt Basin
Type 'B'
60 x 43 x 3
19 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 7.2A

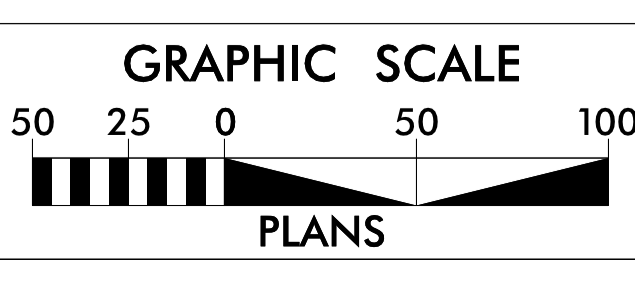
45 x 90 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
16 ft. weir
ID 7.3

LEGEND

- 5" MONOLITHIC CONCRETE ISLAND
- 7" CONCRETE TRUCK APRON
- 7" CONCRETE TRUCK ISLAND
- 3" CONCRETE ISLAND COVER
- 4" CONCRETE SIDEWALK

LOCATION: CONVERT AT-GRADE INTERSECTION OF
OLD GREENSBORO RD. (SR 1798) AND
I-85 BUS.US 29-70 TO INTERCHANGE

TIP NO.: R-5737 COUNTY: DAVIDSON
DESIGNED BY: WET DATE: 7/13/2021
CHECKED BY: DJM DATE: 7/13/2021



7/13/2021 10:54:41 AM c:\p1\h17.dwg

PROJECT REFERENCE NO. R-5737	SHEET NO. EC-08/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

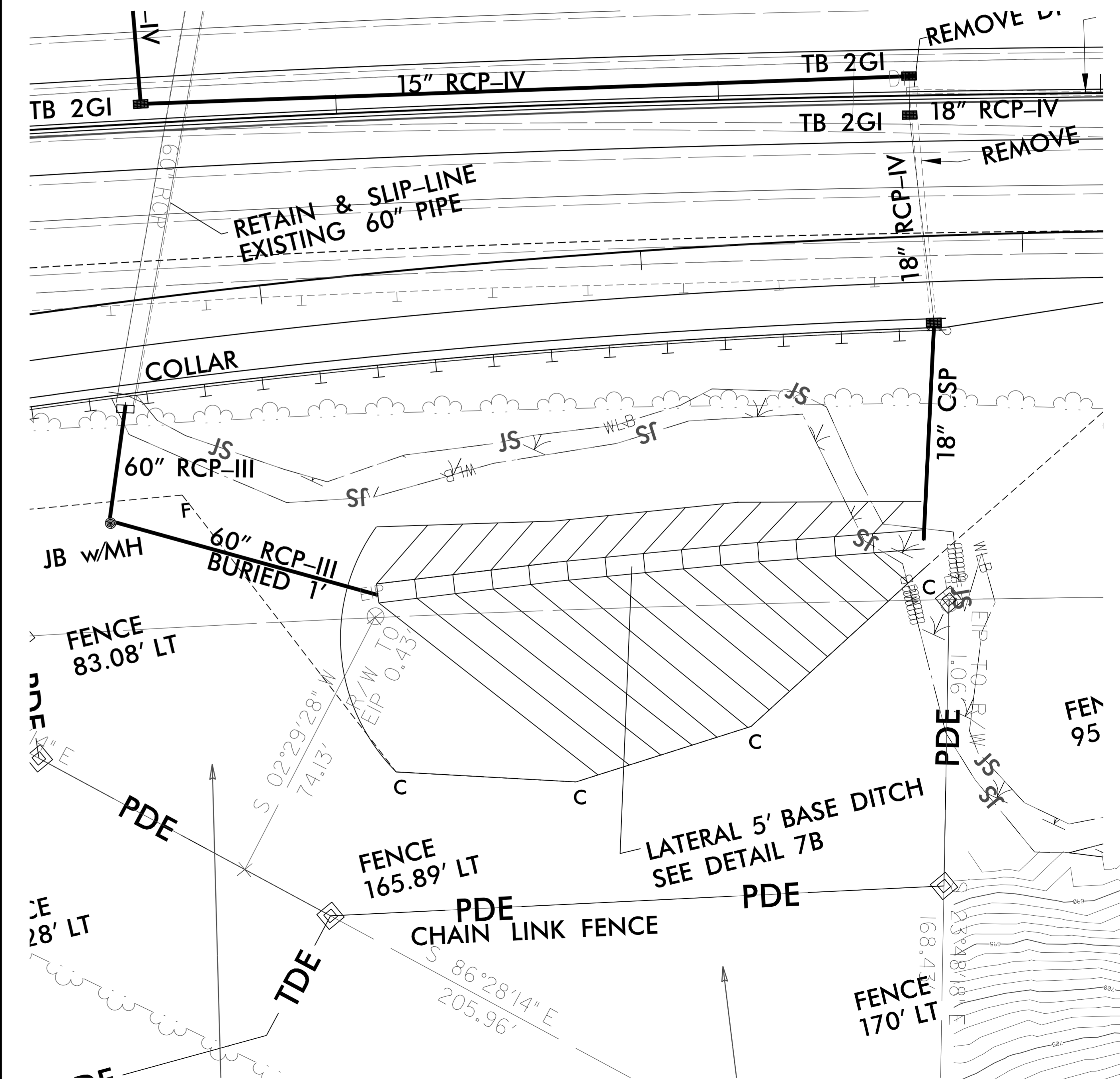
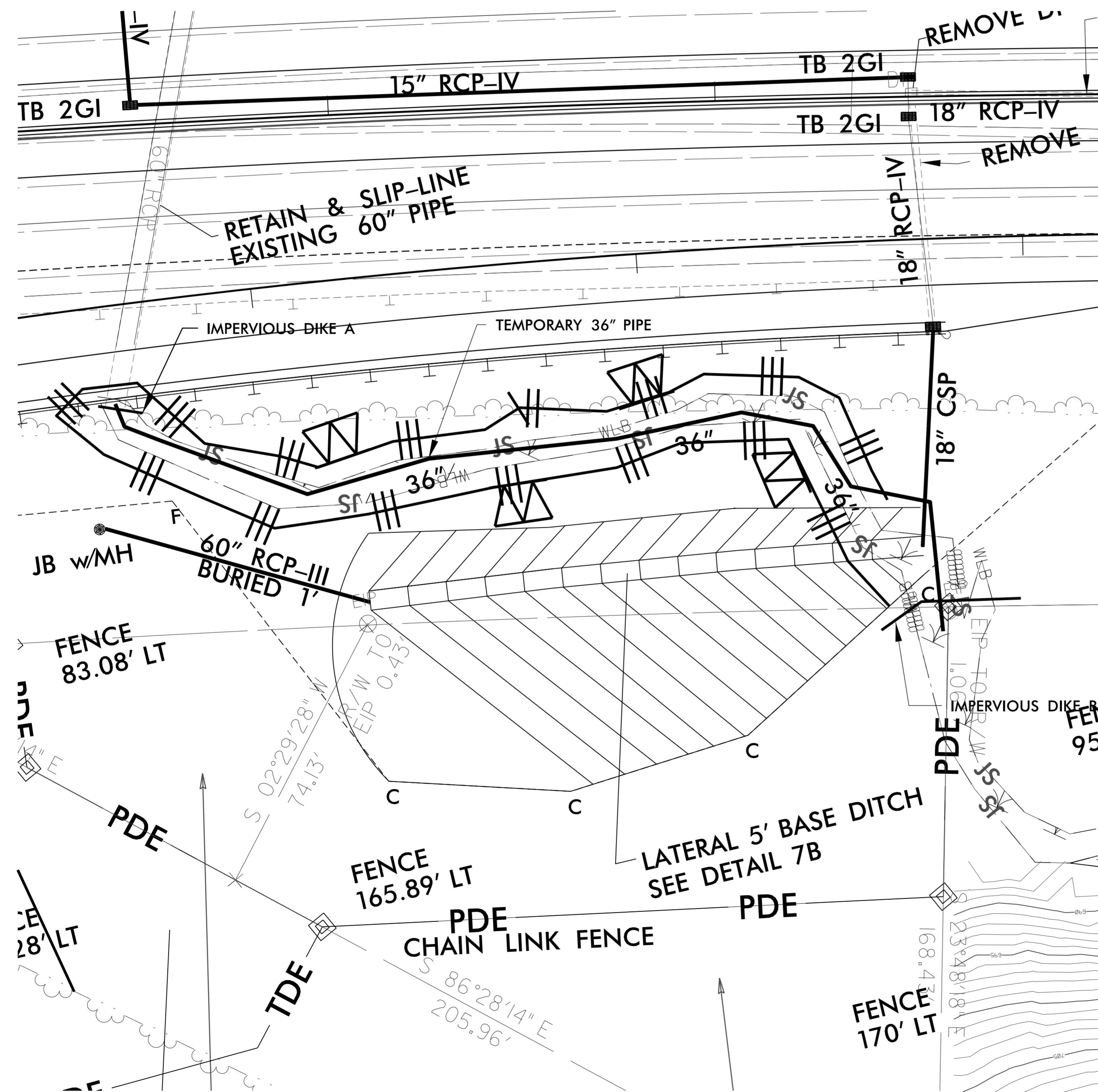
PIPE CONSTRUCTION SEQUENCE RPD STA. 13+50 LT

PHASE I

1. INSTALL SPECIAL STILLING BASIN WHERE APPROPRIATE, PUMP DISCHARGE BETWEEN IMPERVIOUS DIKES TO STILLING BASIN
2. CONSTRUCT IMPERVIOUS DIKES A & B. INSTALL TEMPORARY 36" PIPE
3. EXCAVATE PROPOSED LATERAL DITCH AND INSTALL RIPRAP LINING
4. INSTALL JUNCTION BOX W/MH AND 60" RCP

PHASE II

5. REMOVE IMPERVIOUS DIKES A & B, AND TEMPORARY 36" PIPE
6. INSTALL 60" PIPE COLLAR AND 60" RCP TO JUNCTION BOX IN LOW FLOW CONDITIONS
7. CONSTRUCT EMBANKMENT OVER EXISTING CHANNEL
8. COMPLETE ROADWAY

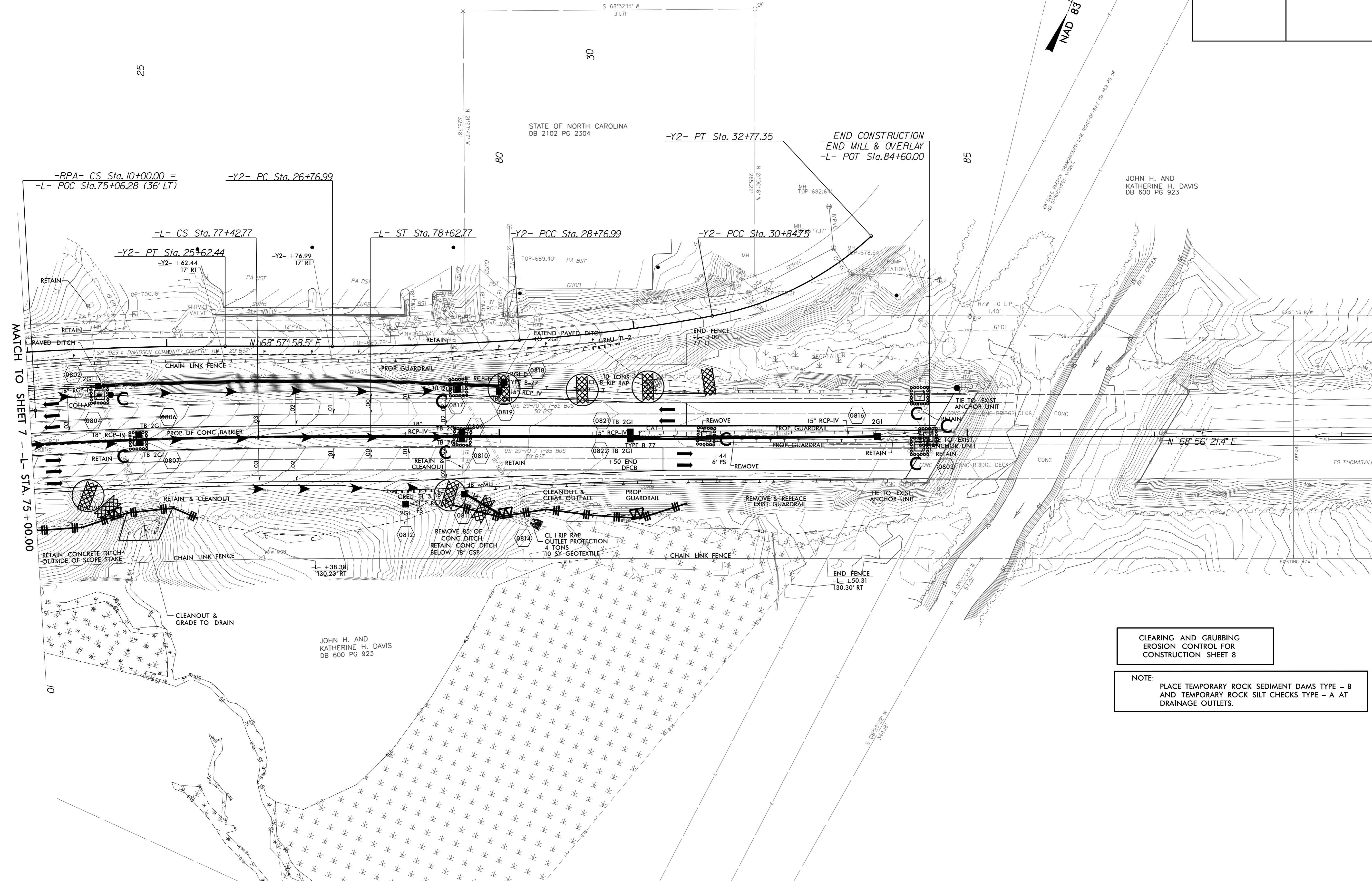


CURVE DATA FOR -Y2-

PI Sta 27+77.03 Δ = 3° 49' 11.0" (LT) D = 1° 54' 35.5" L = 200.00' T = 100.04' R = 3,000.00' Se = EXIST.	PI Sta 29+80.99 Δ = 6° 42' 23.1" (LT) D = 3° 13' 40.6" L = 207.76' T = 104.00' R = 1,775.00' Se = EXIST.	PI Sta 31+83.69 Δ = 32° 20' 34.3" (LT) D = 16° 47' 33.9" L = 192.60' T = 98.94' R = 341.19' Se = EXIST.
--	--	---

CURVE DATA FOR -L-

PI Sta 70+27.77 Δ = 15° 12' 24.7" (RT) D = 1° 03' 25.6" L = 1,438.52' T = 723.51' R = 5,420.00' Se = 0.03 Runoff = 150'	PIs Sta 77+82.77 Θs = 0° 38' 03.4" Ls = 120.00' LT = 80.00' ST = 40.00'
--	---



MATCH TO SHEET 7 - L- STA. 75 + 00.00

**CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 8**

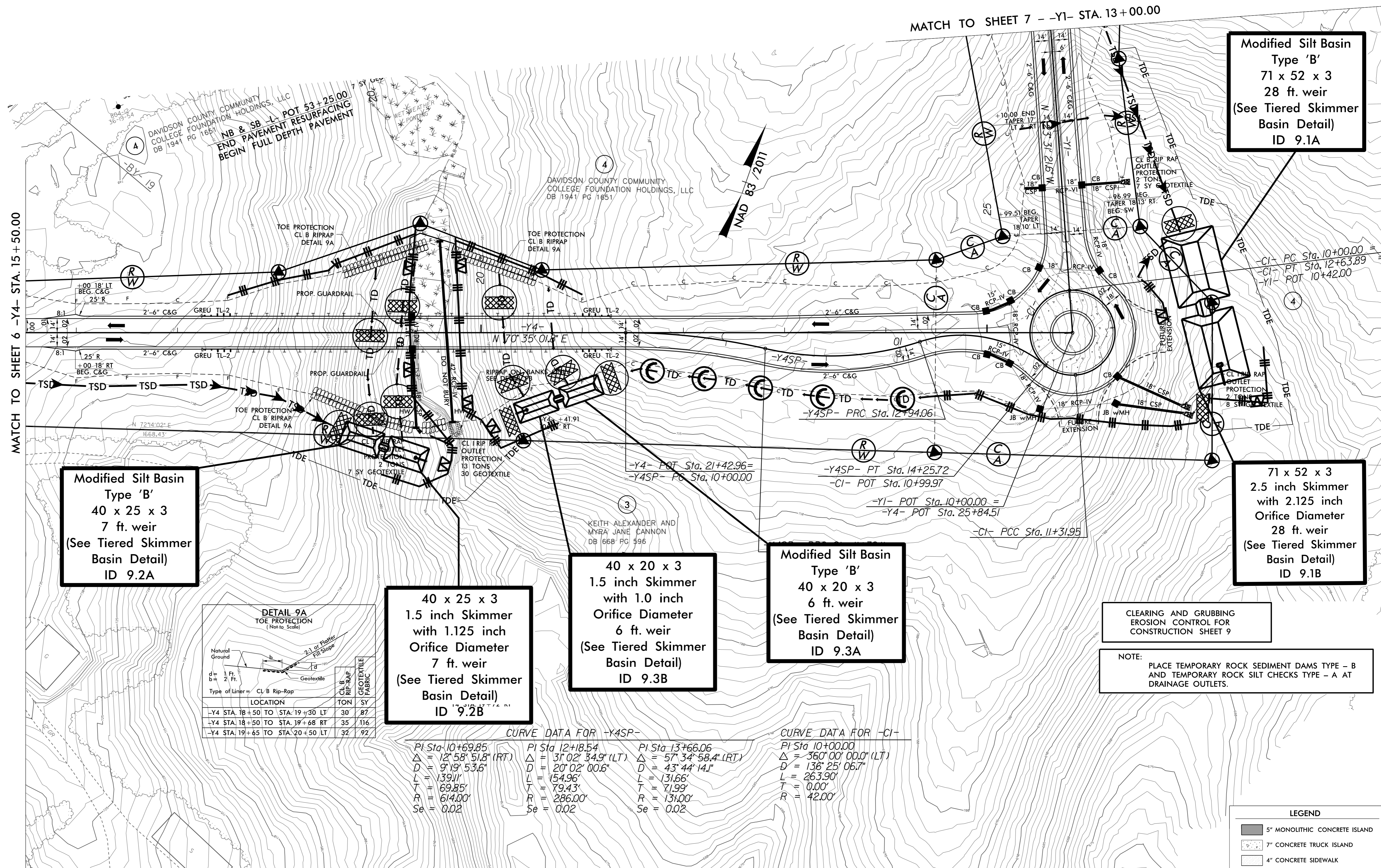
NOTE:
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
 DRAINAGE OUTLETS.

JOHN H. AND
 KATHERINE H. DAVIS
 DB 600 PG 923

JOHN H. AND
 KATHERINE H. DAVIS
 DB 600 PG 923

STATE OF NORTH CAROLINA
 DB 2102 PG 2304

RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DETAIL 9A
TOE PROTECTION
(Not to Scale)

LOCATION	TON	SY
-Y4 STA. 18+50 TO STA. 19+30 LT	30	87
-Y4 STA. 18+50 TO STA. 19+68 RT	35	116
-Y4 STA. 19+65 TO STA. 20+50 LT	32	92

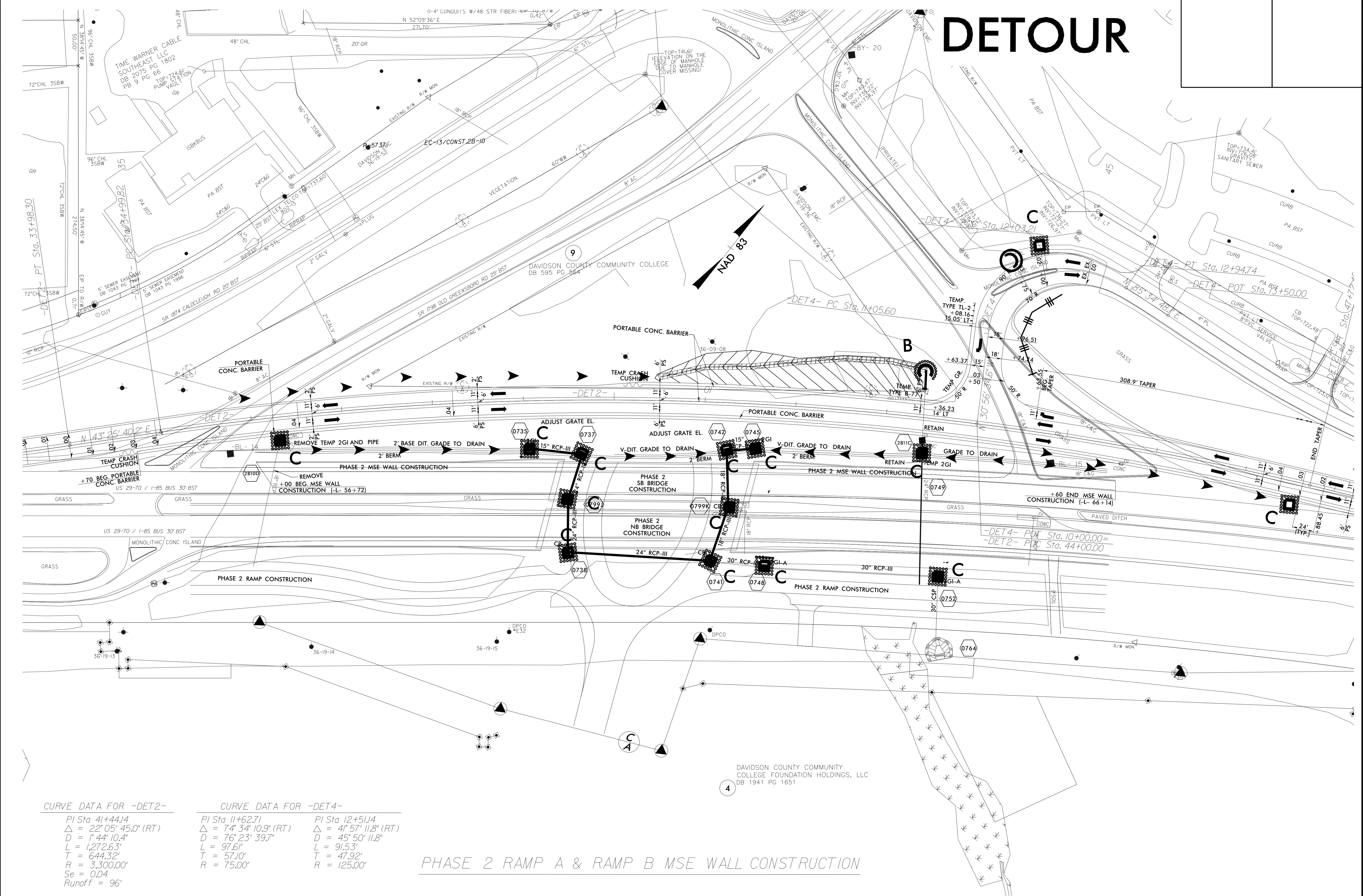
Type of Liner = CL B Rip-Rap
 d = 1 Ft.
 b = 2 Ft.
 Geotextile
 7 SY GEOTEXTILE

LEGEND

- 5' MONOLITHIC CONCRETE ISLAND
- 7' CONCRETE TRUCK ISLAND
- 4' CONCRETE SIDEWALK

PROJECT REFERENCE NO. R-5737	SHEET NO. EC-13A/CONST.2B-15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DETOUR



CURVE DATA FOR -DET2-

PI Sta 41+44.14
$\Delta = 22^\circ 05' 45.0"$ (RT)
$D = 144' 10.4"$
$L = 1,272.63'$
$T = 644.32'$
$R = 3,300.00'$
$Se = 0.04$
Runoff = 96'

CURVE DATA FOR -DET4-

PI Sta 11+62.71	PI Sta 12+51.14
$\Delta = 74^\circ 34' 10.9"$ (RT)	$\Delta = 4^\circ 57' 11.8"$ (RT)
$D = 76' 23' 39.7"$	$D = 45' 50' 11.8"$
$L = 97.6'$	$L = 91.53'$
$T = 57.10'$	$T = 47.92'$
$R = 75.00'$	$R = 125.00'$

PHASE 2 RAMP A & RAMP B MSE WALL CONSTRUCTION

7/13/2024 11:23:59 AM
 H:\24\2411\123459_AW
 H:\24\2411\123459_AW
 H:\24\2411\123459_AW

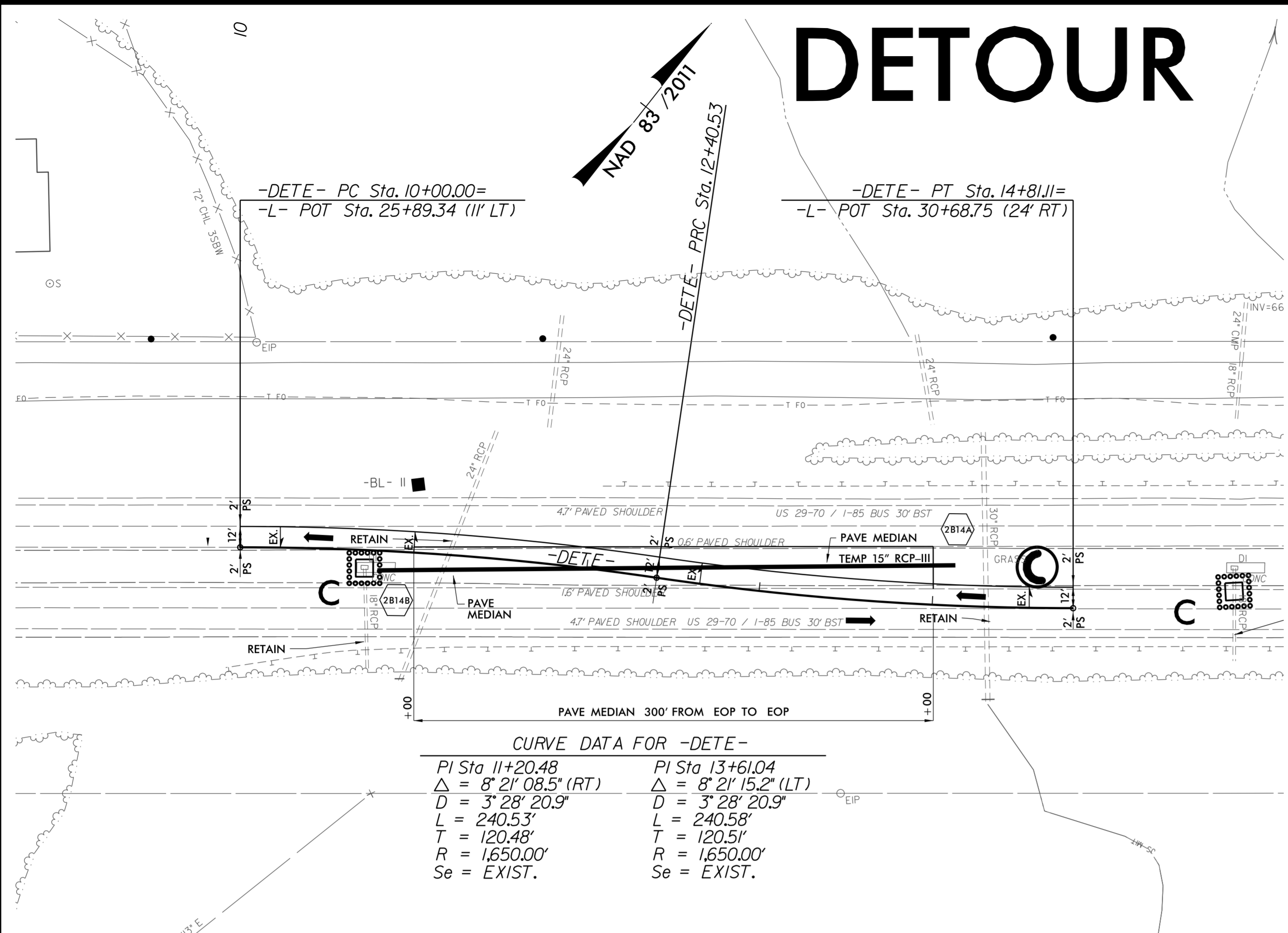
DETOUR

-DETE- PC Sta. 10+00.00=
-L- POT Sta. 25+89.34 (11' LT)

-DETE- PT Sta. 14+81.11=
-L- POT Sta. 30+68.75 (24' RT)

NAD 83 / 2011

-DETE- PRC Sta. 12+40.53



CURVE DATA FOR -DETE-

PI Sta 11+20.48	PI Sta 13+61.04
$\Delta = 8^{\circ} 21' 08.5''$ (RT)	$\Delta = 8^{\circ} 21' 15.2''$ (LT)
$D = 3^{\circ} 28' 20.9''$	$D = 3^{\circ} 28' 20.9''$
$L = 240.53'$	$L = 240.58'$
$T = 120.48'$	$T = 120.51'$
$R = 1,650.00'$	$R = 1,650.00'$
$Se = EXIST.$	$Se = EXIST.$

715	715
705	705
695	695
685	685
675	675
665	665
655	655

10 11 12 13 14

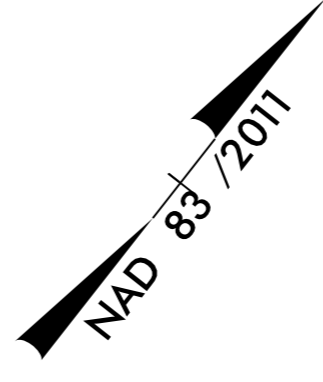
8/17/09

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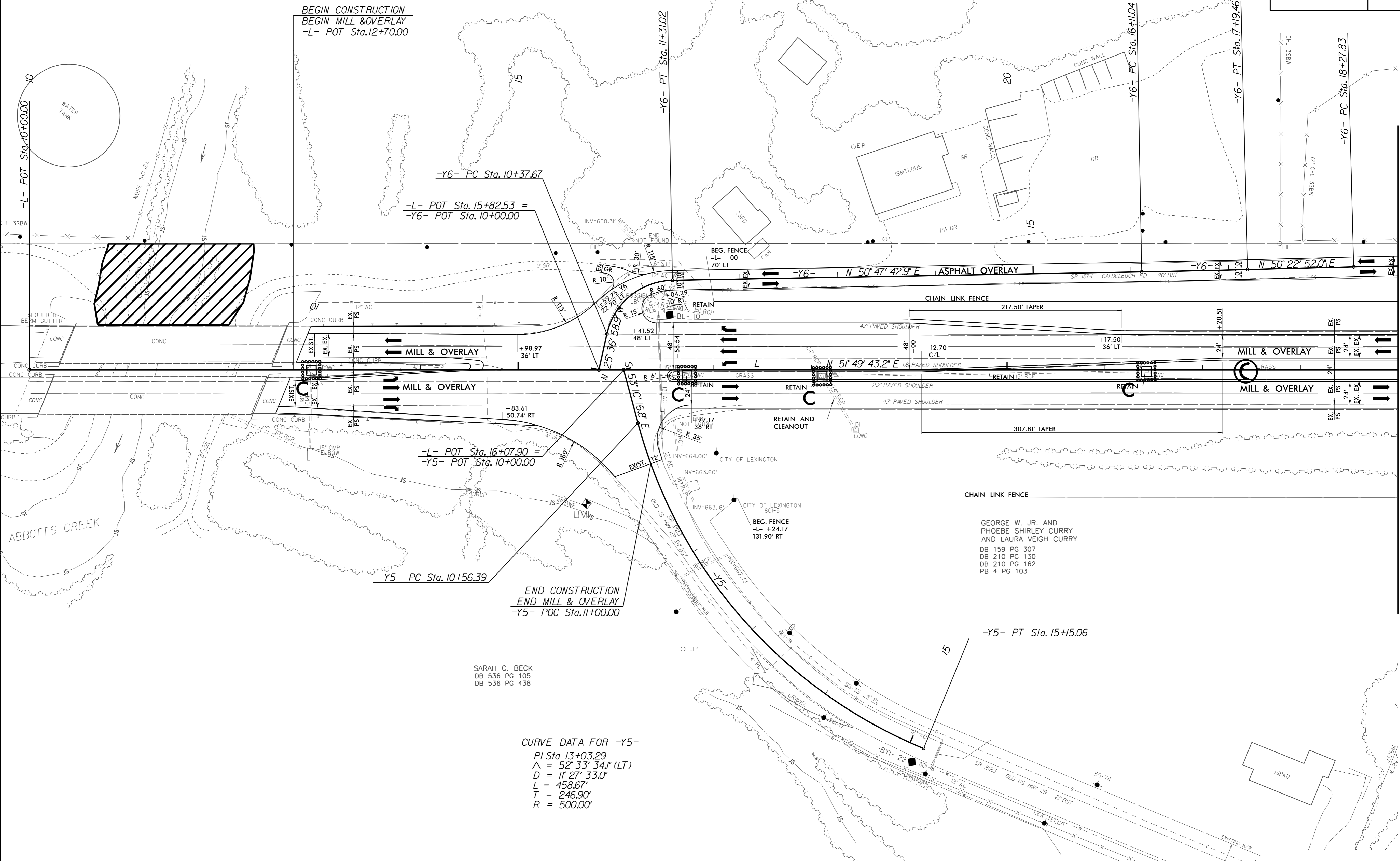
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CURVE DATA FOR -Y6-

PI Sta 10+92.76	PI Sta 16+65.25
$\Delta = 76^{\circ} 24' 41.8''$ (RT)	$\Delta = 0^{\circ} 24' 50.8''$ (LT)
$D = 81^{\circ} 51' 04.0''$	$D = 0^{\circ} 22' 55.1''$
$L = 93.35'$	$L = 108.42'$
$T = 55.10'$	$T = 54.21'$
$R = 70.00'$	$R = 15,000.00'$
Se = EXIST	Se = EXIST



BEGIN CONSTRUCTION
BEGIN MILL & OVERLAY
-L- POT Sta. 12+70.00



END CONSTRUCTION
END MILL & OVERLAY
-Y5- POC Sta. 11+00.00

SARAH C. BECK
DB 536 PG 105
DB 536 PG 438

CURVE DATA FOR -Y5-

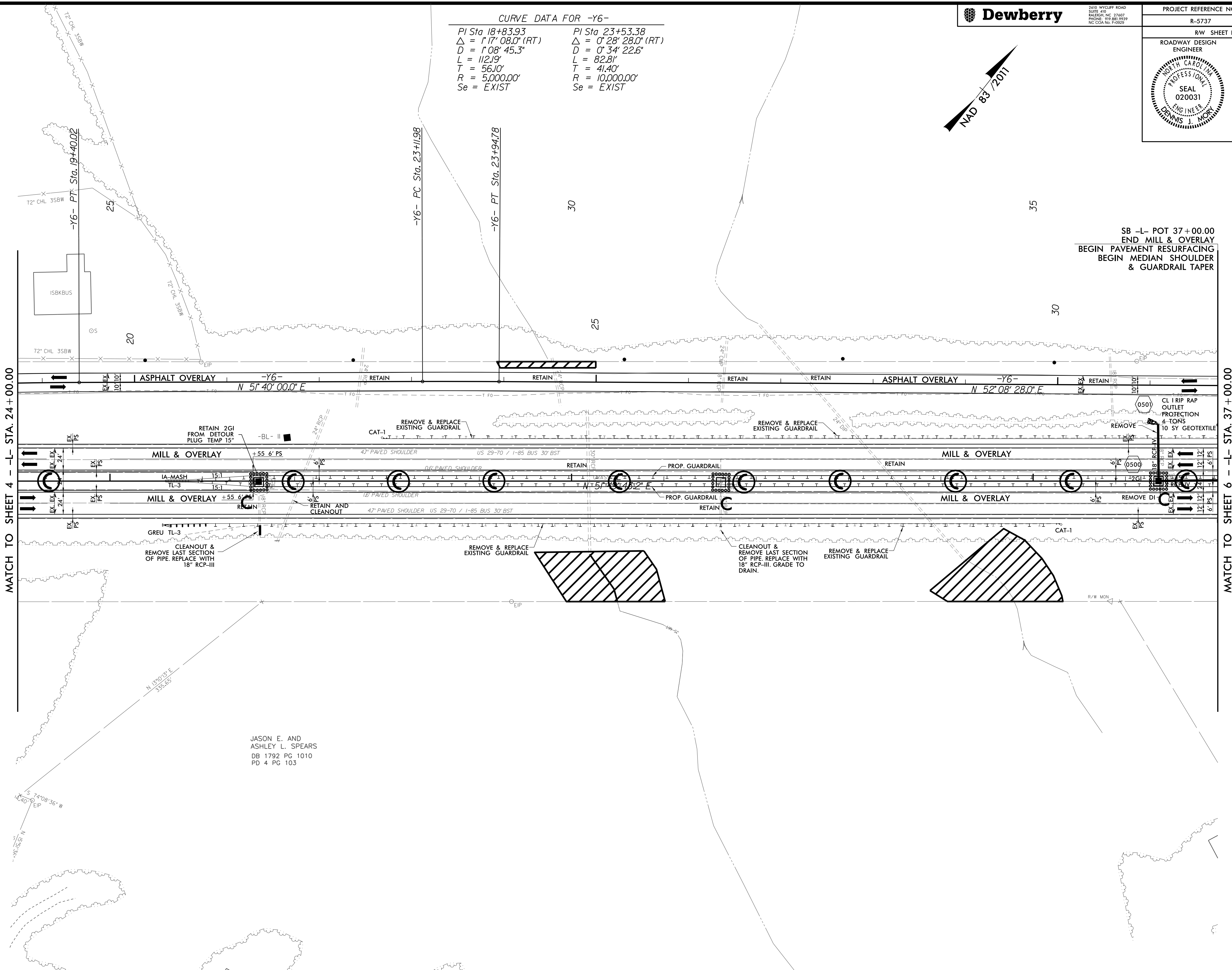
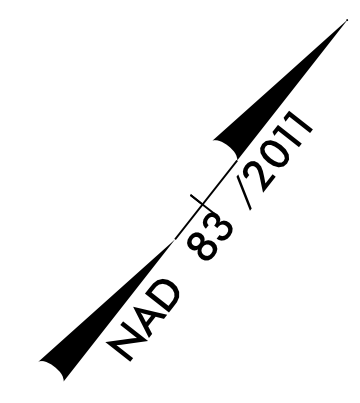
PI Sta 13+03.29
$\Delta = 52^{\circ} 33' 34.1''$ (LT)
$D = 11^{\circ} 27' 33.0''$
$L = 458.67'$
$T = 246.90'$
$R = 500.00'$

MATCH TO SHEET 5 - L- STA. 24+00.00

RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CURVE DATA FOR -Y6-

PI Sta 18+83.93	PI Sta 23+53.38
$\Delta = 1^{\circ}17'08.0''$ (RT)	$\Delta = 0^{\circ}28'28.0''$ (RT)
D = 1'08'45.3"	D = 0'34'22.6"
L = 112.19'	L = 82.81'
T = 56.10'	T = 41.40'
R = 5,000.00'	R = 10,000.00'
Se = EXIST	Se = EXIST



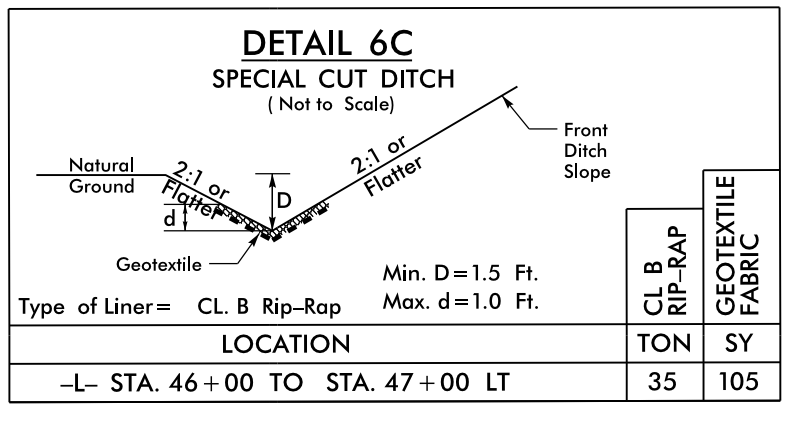
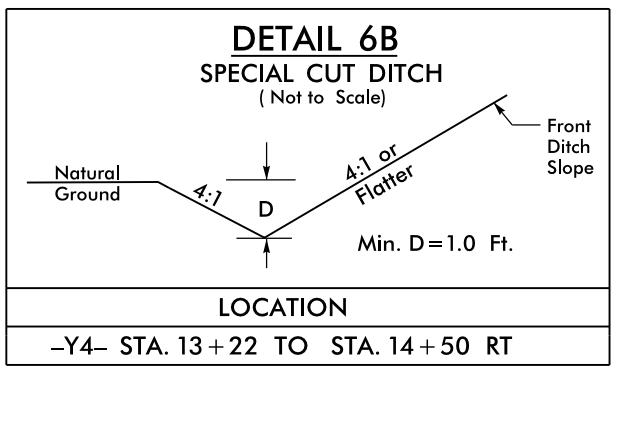
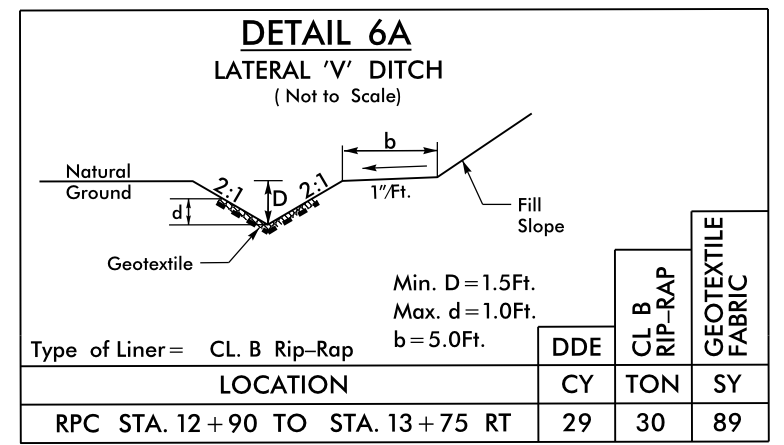
SB -L- POT 37+00.00
END MILL & OVERLAY
BEGIN PAVEMENT RESURFACING
BEGIN MEDIAN SHOULDER
& GUARDRAIL TAPER

MATCH TO SHEET 4 - L- STA. 24+00.00

MATCH TO SHEET 6 - L- STA. 37+00.00

JASON E. AND
ASHLEY L. SPEARS
DB 1792 PG 1010
PD 4 PG 103

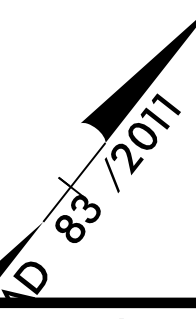
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CURVE DATA FOR -Y6-
 PI Sta 34+61.43
 $\Delta = 0^\circ 30' 51.9" (LT)$
 $D = 0^\circ 34' 22.6"$
 $L = 89.78'$
 $T = 44.89'$
 $R = 10,000.00'$
 $Se = EXIST$

CURVE DATA FOR -RPB-
 PIs Sta 10+66.67
 $\Delta = 0^\circ 28' 41.7"$
 $Ls = 100.00'$
 $LT = 66.67'$
 $ST = 33.33'$

CURVE DATA FOR -RPC-
 PI Sta 13+03.02
 $\Delta = 3^\circ 52' 56.3" (LT)$
 $D = 0^\circ 57' 23.5"$
 $L = 405.88'$
 $T = 203.02'$
 $R = 5,990.00'$
 $Se = 0.02$



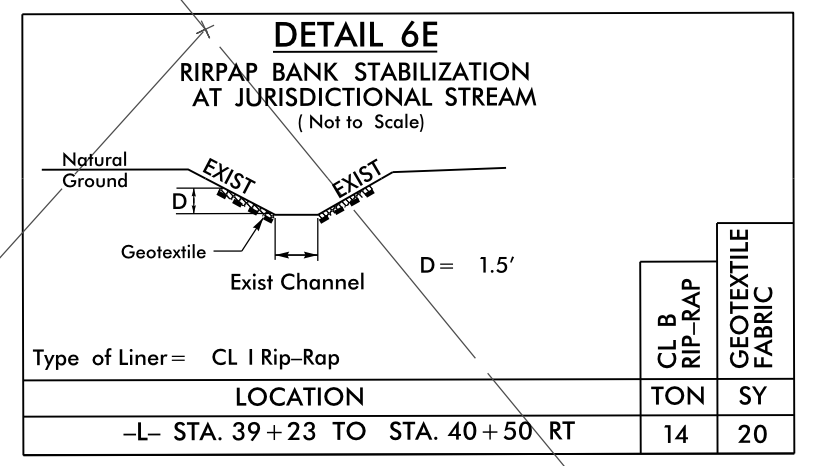
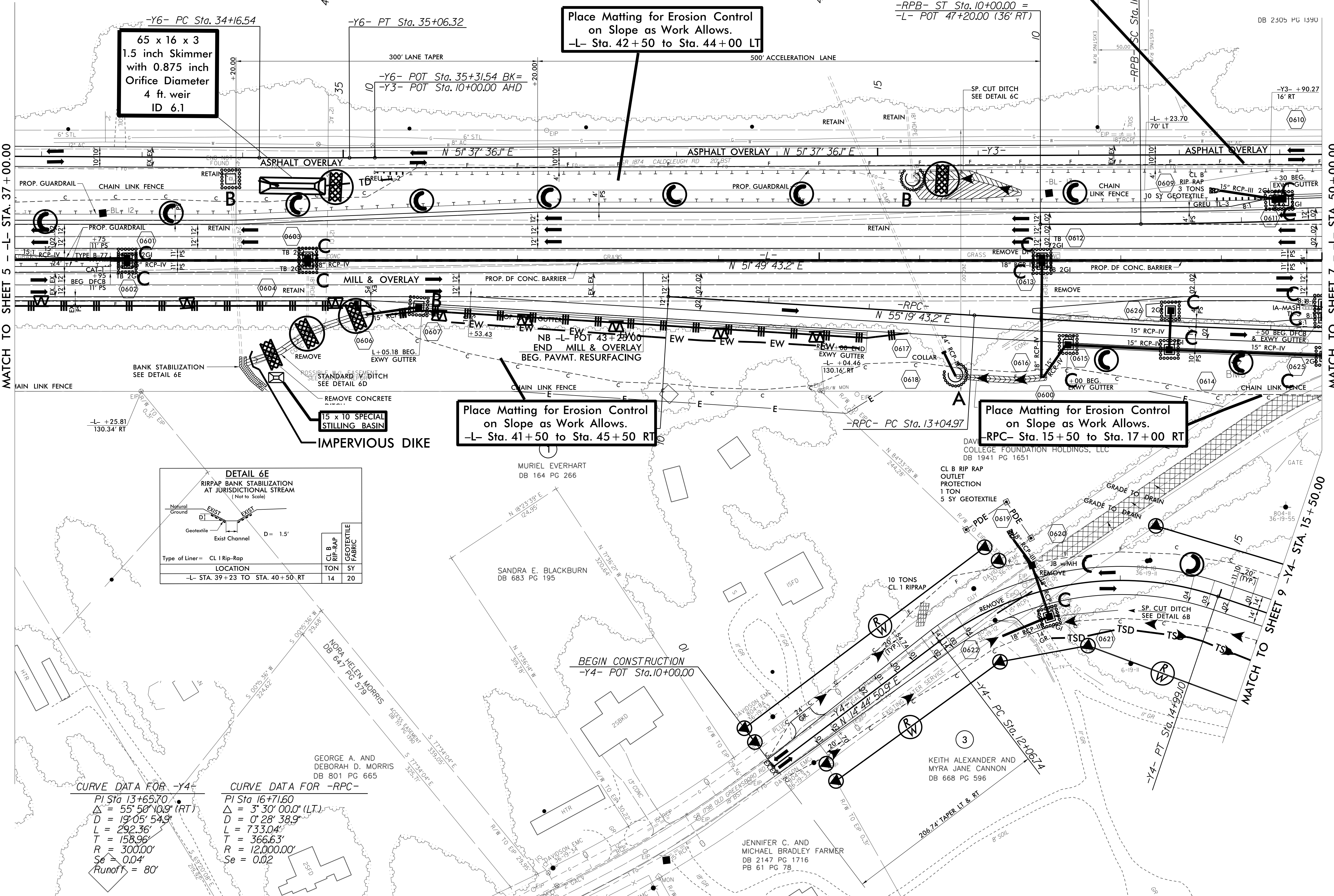
Place Zoysia Sod on Finished Slope as Work Allows.
 -RPB- Sta. 11+50 to Sta. 16+50 LT
 -RPB- ST Sta. 10+00.00 =
 -L- POT 47+20.00 (36' RT)

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 42+50 to Sta. 44+00 LT

65 x 16 x 3
 1.5 inch Skimmer
 with 0.875 inch
 Orifice Diameter
 4 ft. weir
 ID 6.1

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 41+50 to Sta. 45+50 RT

Place Matting for Erosion Control on Slope as Work Allows.
 -RPC- Sta. 15+50 to Sta. 17+00 RT



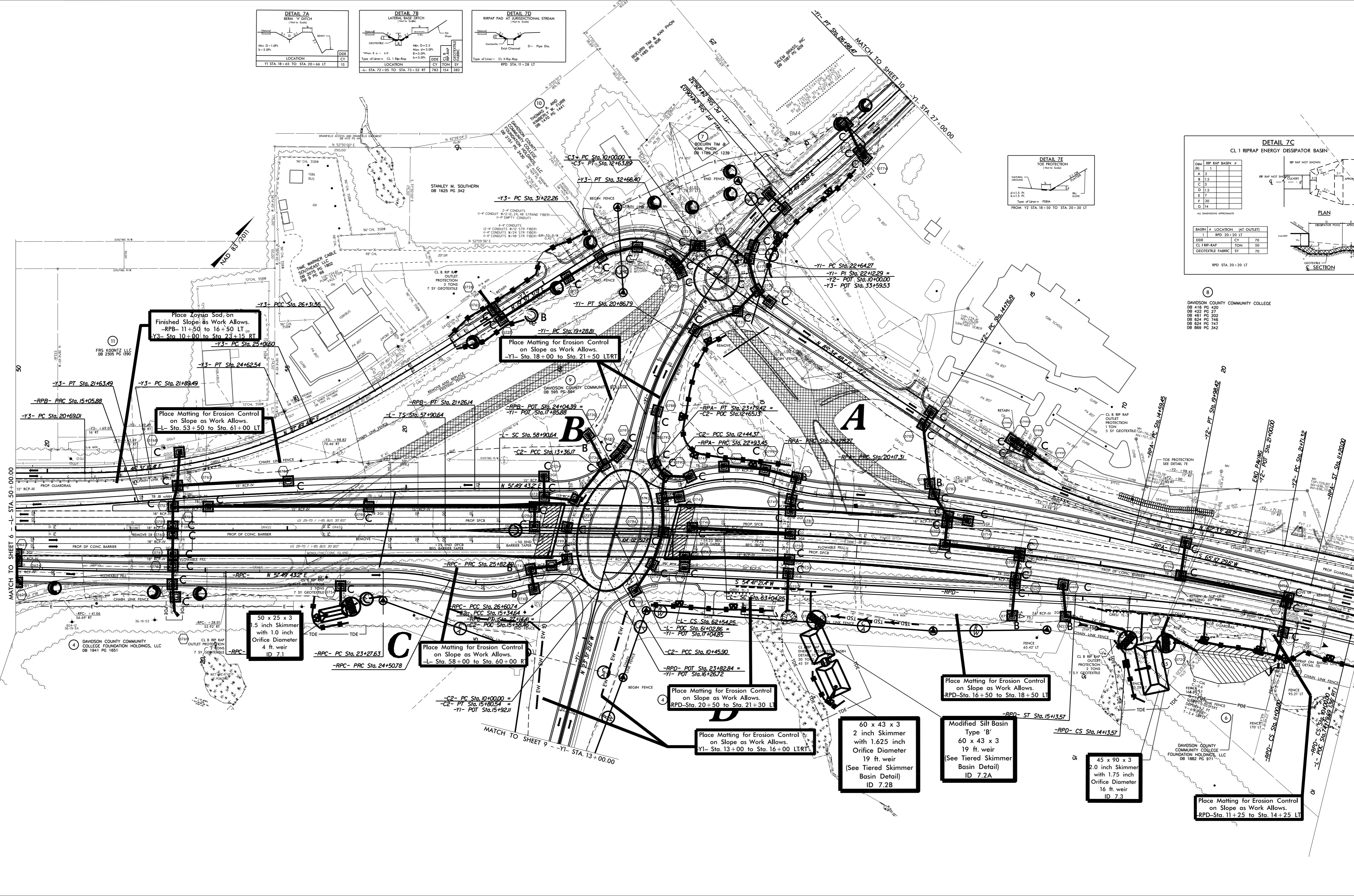
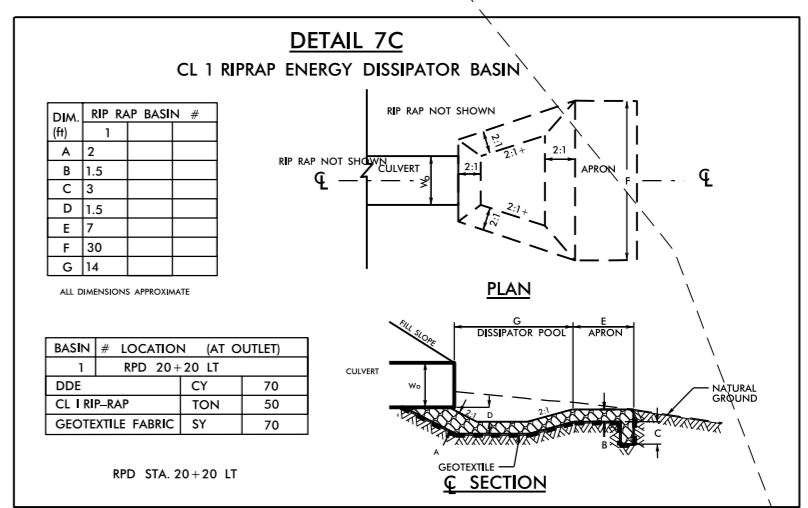
CURVE DATA FOR -Y4-
 PI Sta 13+65.70
 $\Delta = 55^\circ 50' 10.9" (RT)$
 $D = 19^\circ 05' 54.9"$
 $L = 292.36'$
 $T = 158.96'$
 $R = 300.00'$
 $Se = 0.04'$
 $Runoff = 80'$

CURVE DATA FOR -RPC-
 PI Sta 16+71.60
 $\Delta = 3^\circ 30' 00.0" (LT)$
 $D = 0^\circ 28' 38.9"$
 $L = 733.04'$
 $T = 366.63'$
 $R = 12,000.00'$
 $Se = 0.02$

7/13/2021 11:33:33 AM USER: jbradley.dwg.ec.psh20.dgn

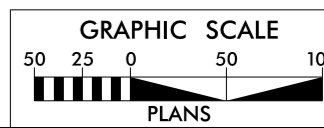
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1/85	1/85
1/85	1/85
1/85	1/85
1/85	1/85
1/85	1/85
1/85	1/85



LEGEND

- 5' MONOLITHIC CONCRETE ISLAND
- 7' CONCRETE TRUCK APRON
- 7' CONCRETE TRUCK ISLAND
- 3' CONCRETE ISLAND COVER
- 4' CONCRETE SIDEWALK



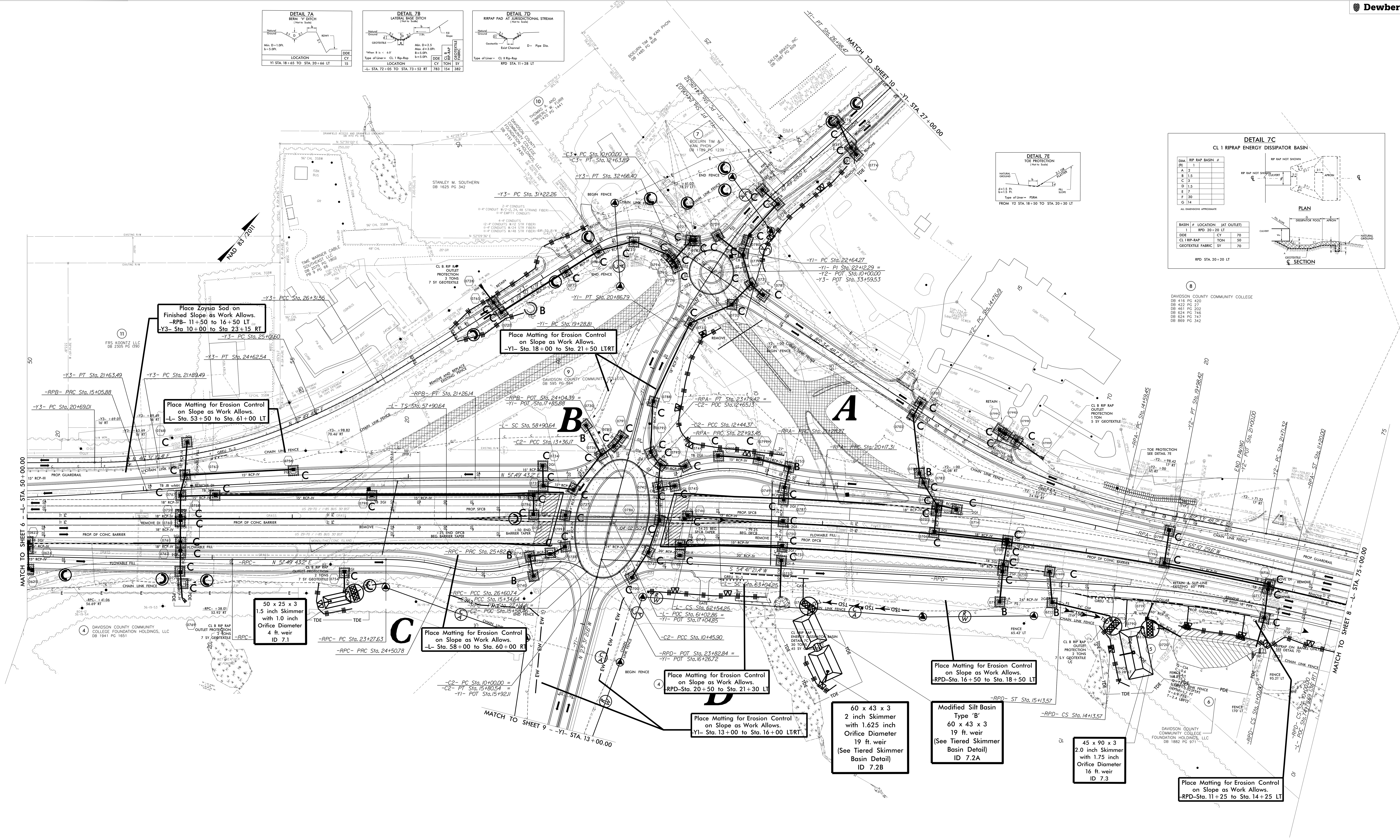
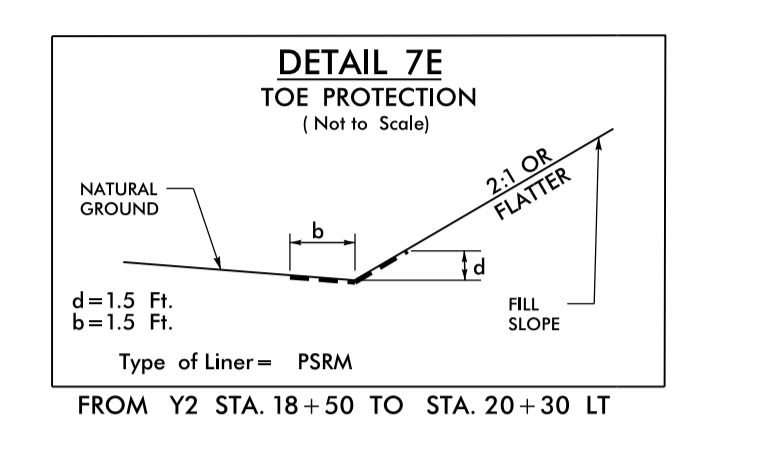
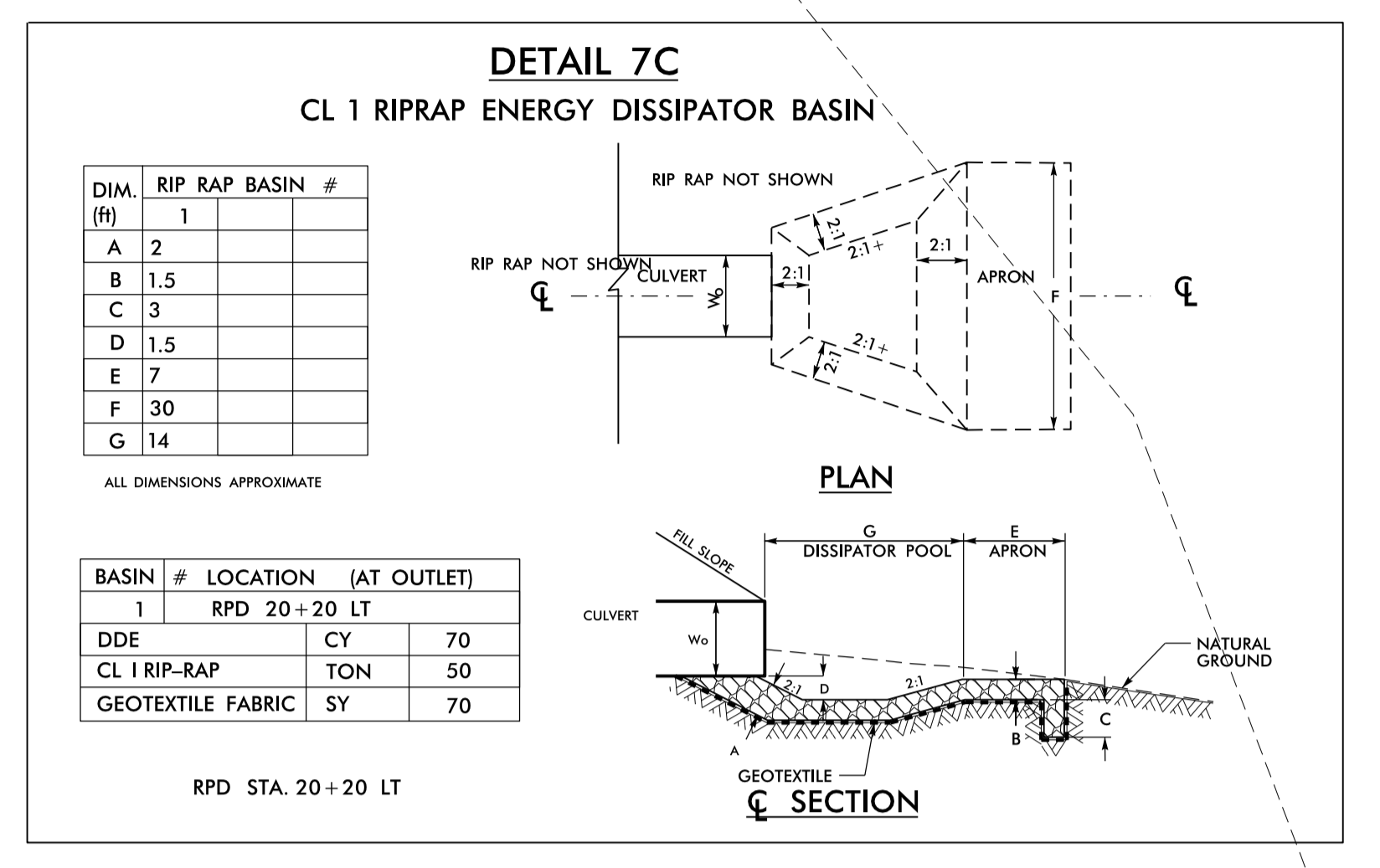
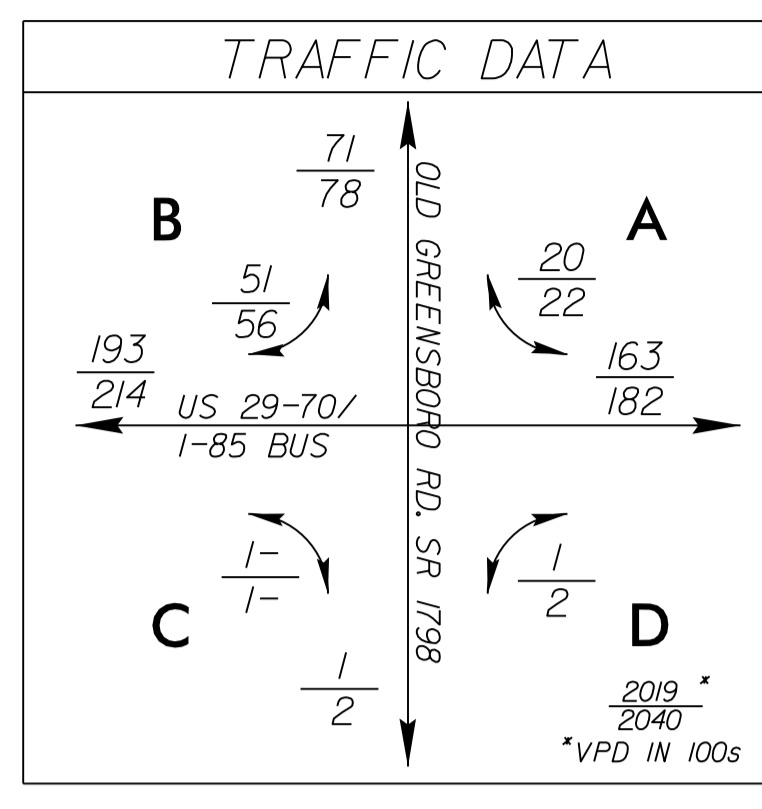
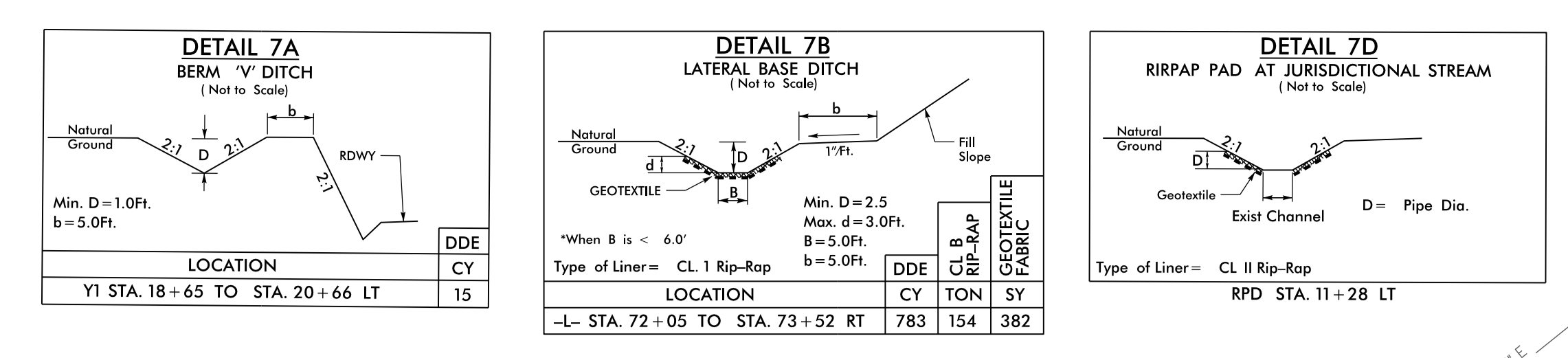
LOCATION: CONVERT AT-GRADE INTERSECTION OF OLD GREENSBORO RD. (SR 1798) AND I-85 BUS. US 29-70 TO INTERCHANGE

TP NO.: R-5737 COUNTY: DAVIDSON

DESIGNED BY: WET DATE: 7/13/2021

CHECKED BY: DJM DATE: 7/13/2021

7/13/2021 10:56:07 AM Plot.ecs.ecs31.dgn



Place Zoysia Sod on Finished Slope as Work Allows.
-RPB- 11+50 to 16+50 LT
-Y3- Sta. 10+00 to Sta. 23+15 RT

Place Matting for Erosion Control on Slope as Work Allows.
-Y1- Sta. 18+00 to Sta. 21+50 LT/RT

Place Matting for Erosion Control on Slope as Work Allows.
-L- Sta. 53+50 to Sta. 61+00 LT

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
4 ft. weir
ID 7.1

Place Matting for Erosion Control on Slope as Work Allows.
-L- Sta. 58+00 to Sta. 60+00 RT

Place Matting for Erosion Control on Slope as Work Allows.
-RPD- Sta. 20+50 to Sta. 21+30 LT

Place Matting for Erosion Control on Slope as Work Allows.
-Y1- Sta. 13+00 to Sta. 16+00 LT/RT

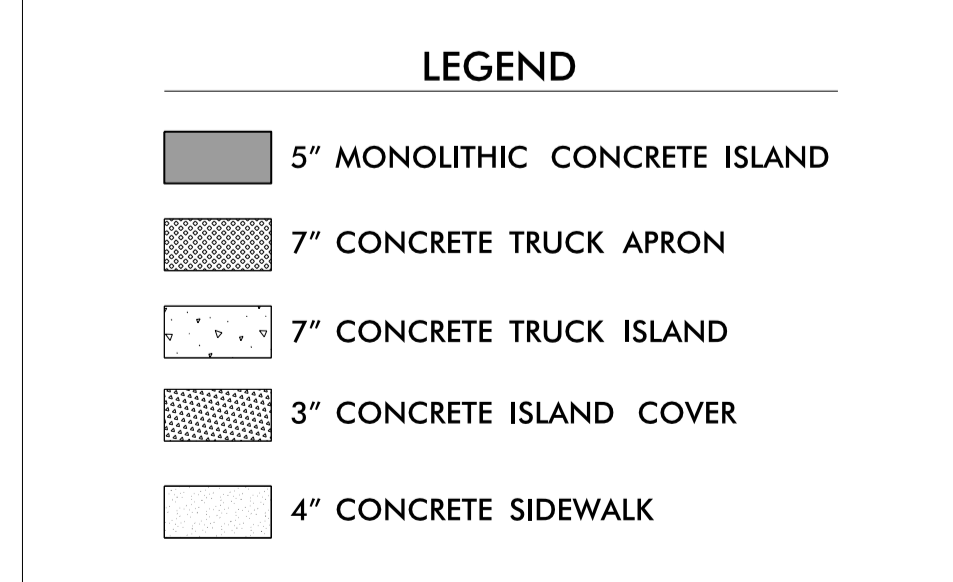
60 x 43 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
19 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 7.2B

Place Matting for Erosion Control on Slope as Work Allows.
-RPD- Sta. 16+50 to Sta. 18+50 LT

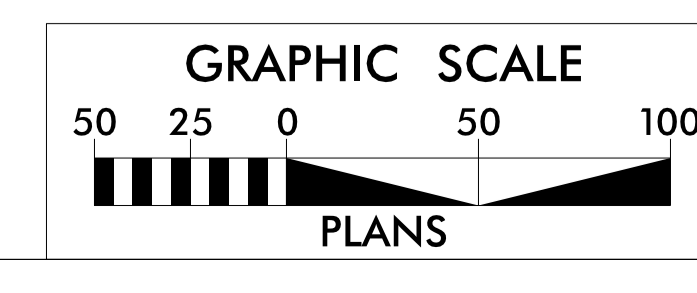
Modified Silt Basin
Type 'B'
60 x 43 x 3
19 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 7.2A

45 x 90 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
16 ft. weir
ID 7.3

Place Matting for Erosion Control on Slope as Work Allows.
-RPD- Sta. 11+25 to Sta. 14+25 LT



LOCATION: CONVERT AT-GRADE INTERSECTION OF OLD GREENSBORO RD. (SR 1798) AND I-85 BUS.US 29-70 TO INTERCHANGE
TIP NO.: R-5737 COUNTY: DAVIDSON
DESIGNED BY: WET DATE: 7/13/2021
CHECKED BY: DJM DATE: 7/13/2021



7/13/2021 10:00 AM H:\ec-21\ec-21.dwg

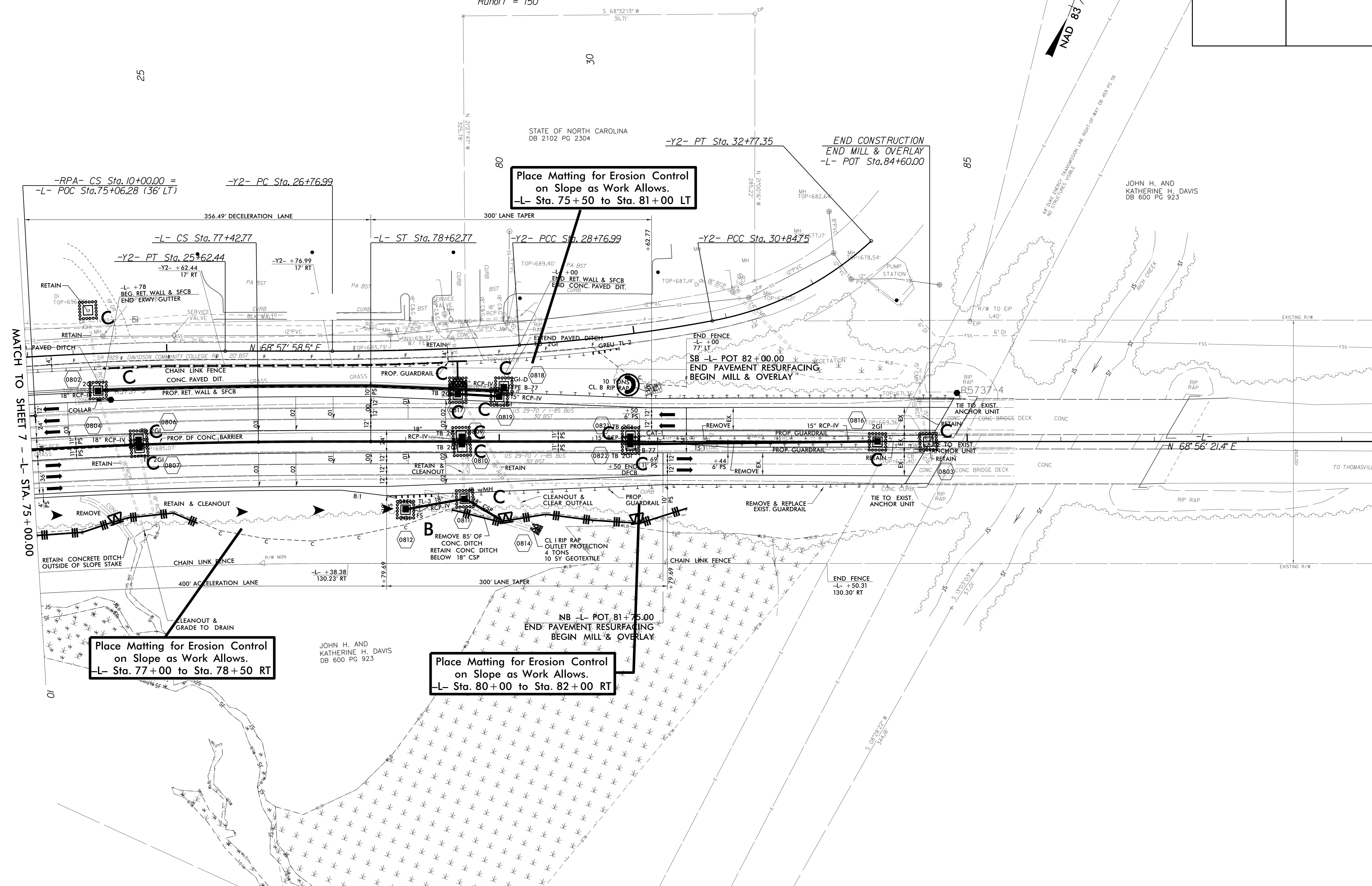
PROJECT REFERENCE NO. <i>R-5737</i>	SHEET NO. <i>EC-22/CONST.08</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CURVE DATA FOR -Y2-

PI Sta 27+77.03 Δ = 3° 49' 11.0" (LT) D = 1' 54' 35.5" L = 200.00' T = 100.00' R = 3,000.00' Se = EXIST.	PI Sta 29+80.99 Δ = 6° 42' 23.1" (LT) D = 3' 13' 40.6" L = 207.76' T = 104.00' R = 1,775.00' Se = EXIST.	PI Sta 31+83.69 Δ = 32° 20' 34.3" (LT) D = 16' 47' 33.9" L = 192.60' T = 98.94' R = 341.19' Se = EXIST.
--	--	---

CURVE DATA FOR -L-

PI Sta 70+27.77 Δ = 15° 12' 24.7" (RT) D = 1' 03' 25.6" L = 1,438.52' T = 723.51' R = 5,420.00' Se = 0.03 Runoff = 150'	PIs Sta 77+82.77 Θs = 0° 38' 03.4" Ls = 120.00' LT = 80.00' ST = 40.00'
--	---



**Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 75+50 to Sta. 81+00 LT**

**Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 77+00 to Sta. 78+50 RT**

**Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 80+00 to Sta. 82+00 RT**

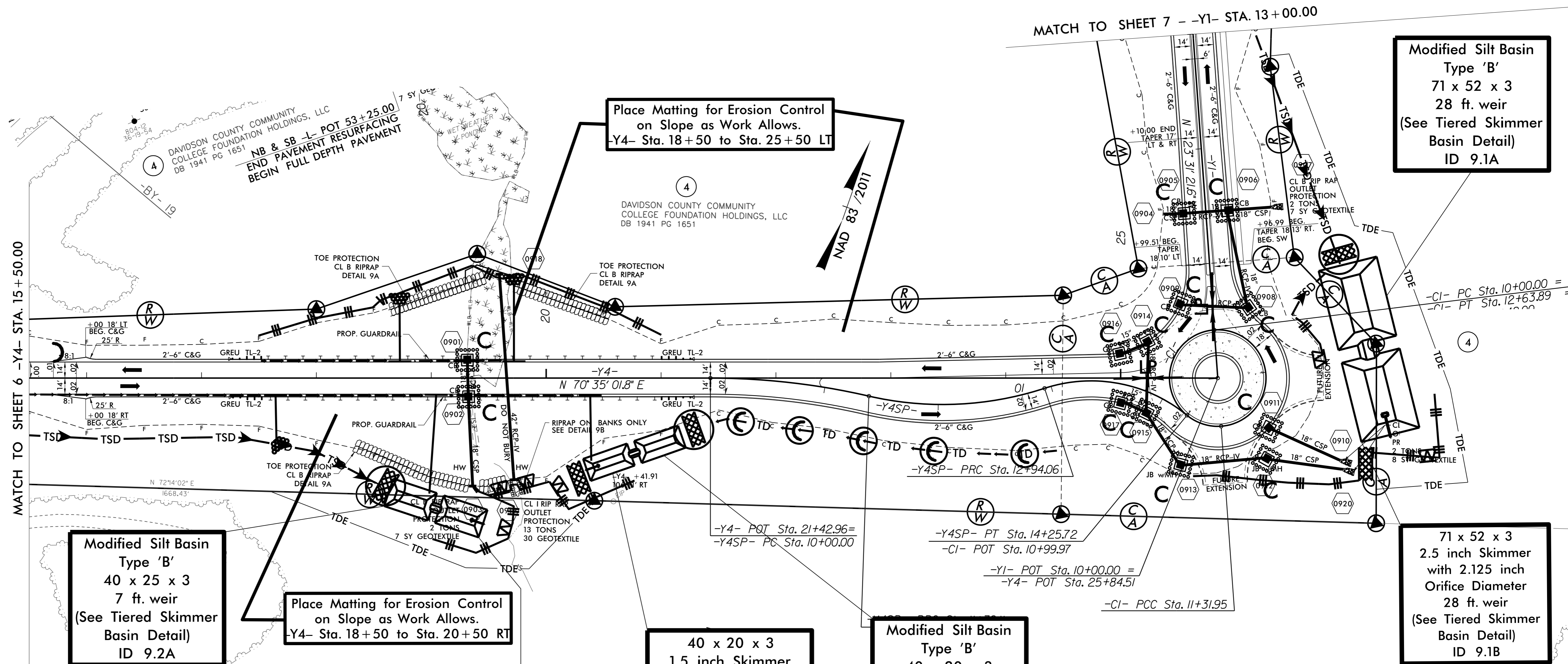
STATE OF NORTH CAROLINA
DB 2102 PG 2304

JOHN H. AND
KATHERINE H. DAVIS
DB 600 PG 923

MATCH TO SHEET 7 - L- STA. 75 + 00.00

TO THOMASVILLE

PROJECT REFERENCE NO. <i>R-5737</i>		SHEET NO. <i>EC-23/CONST.09</i>
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



**DETAIL 9A
TOE PROTECTION
(Not to Scale)**

d = 1 Ft.
b = 2 Ft.

Type of Liner = CL B Rip-Rap

LOCATION	TON	SY
-Y4 STA. 18+50 TO STA. 19+30 LT	30	87
-Y4 STA. 18+50 TO STA. 19+68 RT	35	116
-Y4 STA. 19+65 TO STA. 20+50 LT	32	92

LEGEND

- 5' MONOLITHIC CONCRETE ISLAND
- 7' CONCRETE TRUCK ISLAND
- 4' CONCRETE SIDEWALK

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