

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5972	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

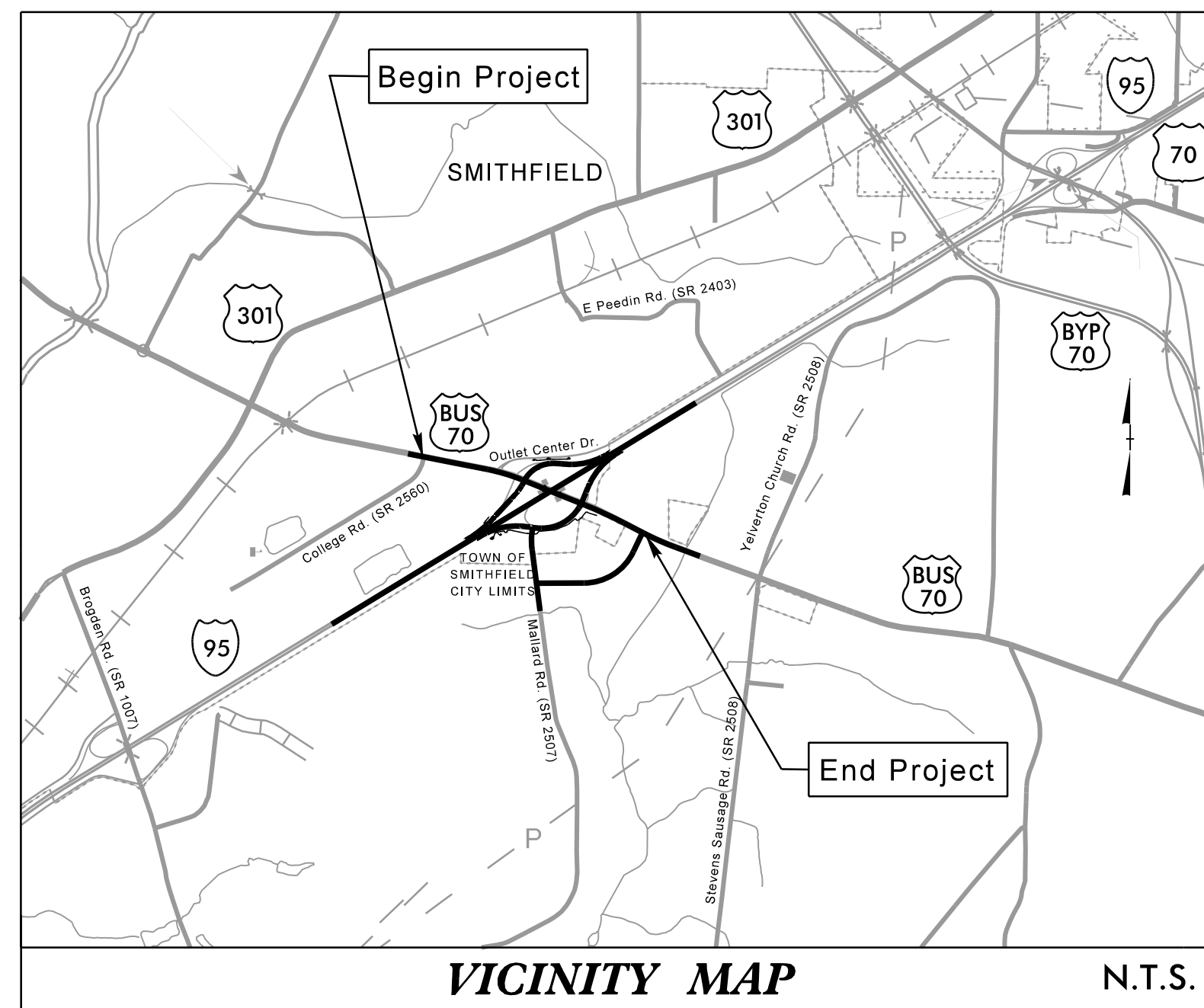


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
JOHNSTON COUNTY

LOCATION: I-95 AND US-70 BUSINESS, (E. MARKET STREET), EXIT 95 INTERCHANGE FROM OUTLET CENTER DR. TO WEST OF YELVERTON GROVE RD.

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



VICINITY MAP N.T.S.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

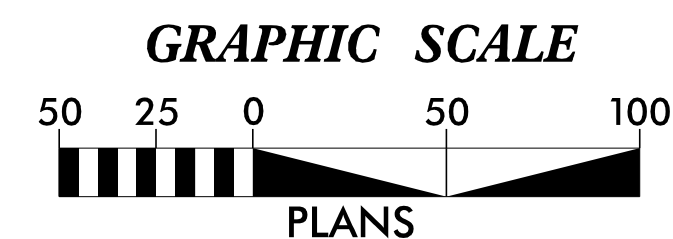
ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

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

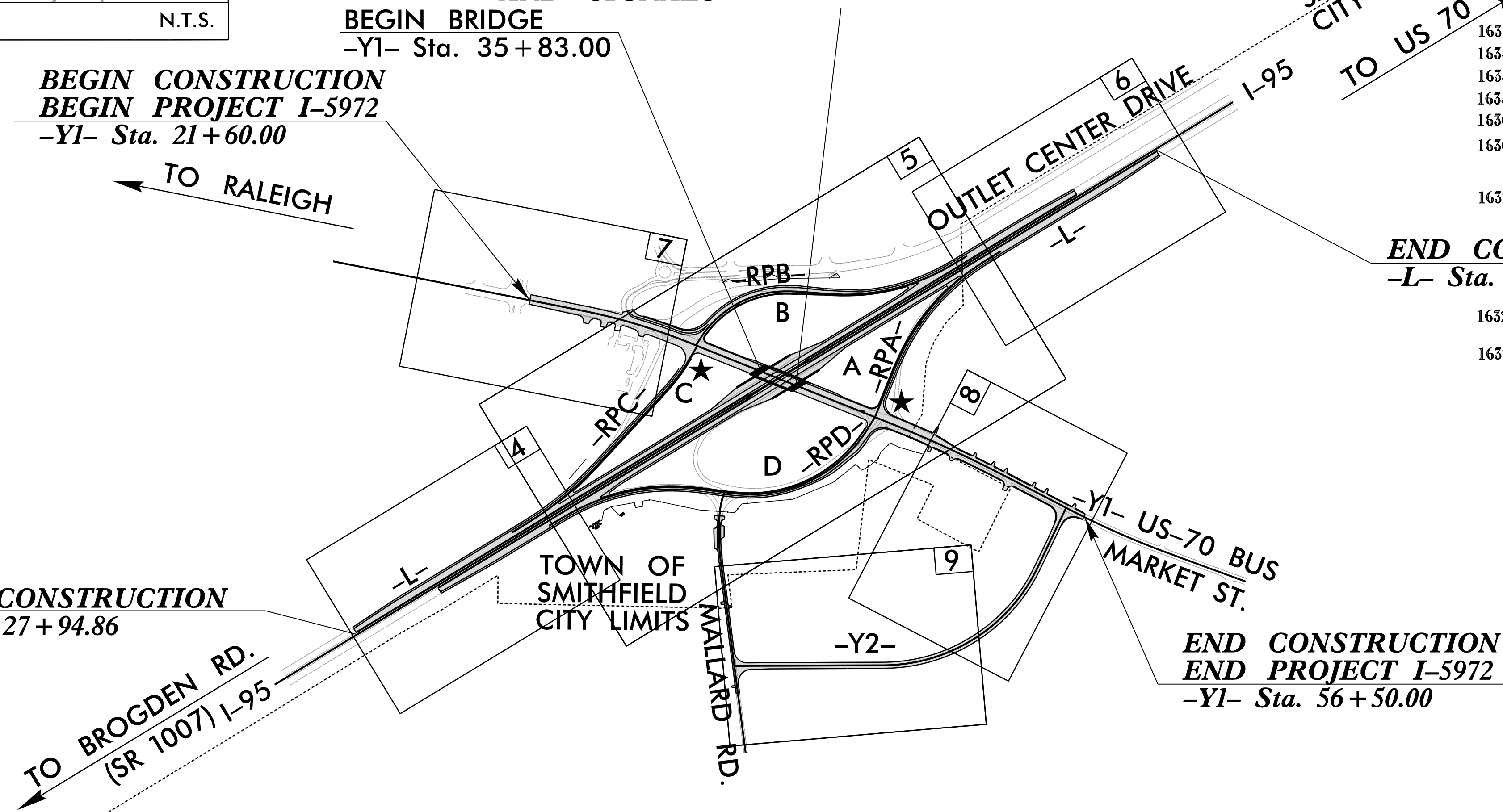
- Clearing and Grubbing Phase
- Final Phase
- Both Phases
- Matting For Erosion Control

NOTE:

1. THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.



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



EROSION AND SEDIMENT CONTROL MEASURES

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

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



Prepared in the Office of:
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NC LICENSE NO. F-0112
1-888-521-4455 OR 919-878-9560

FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2018 STANDARD SPECIFICATIONS

Designed by:
Robert B. Huskey, P.E. 3493
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

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

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type J
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 J
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type J	1634.02 Temporary Rock Sediment Dam Type J
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 J
1630.05 Temporary Diversion	1640.01 Coir Fiber Jaffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

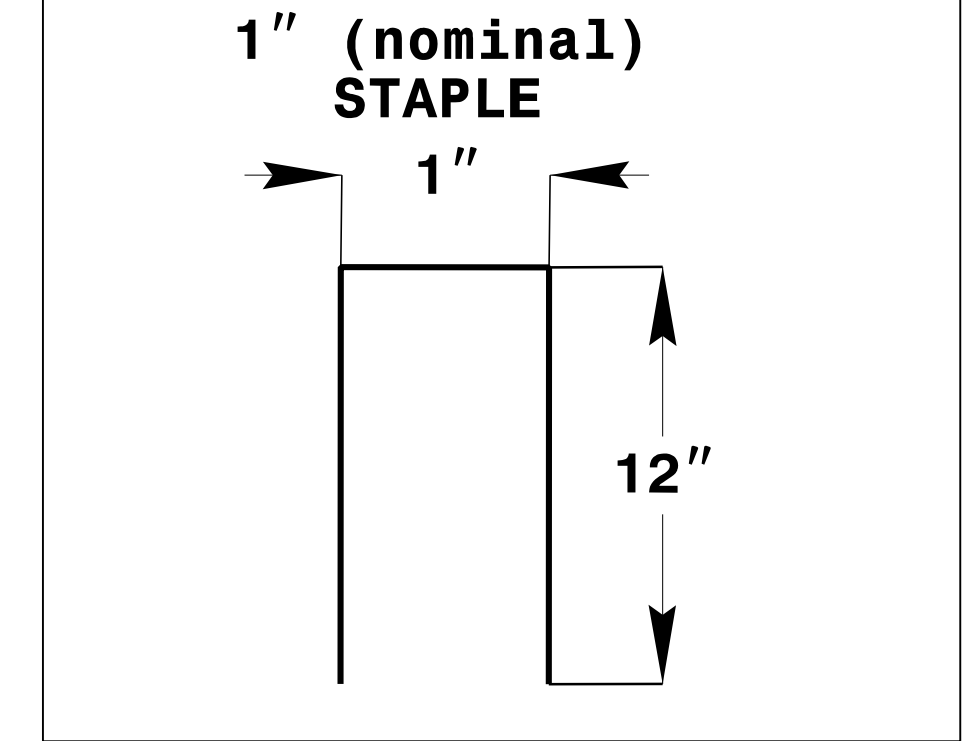
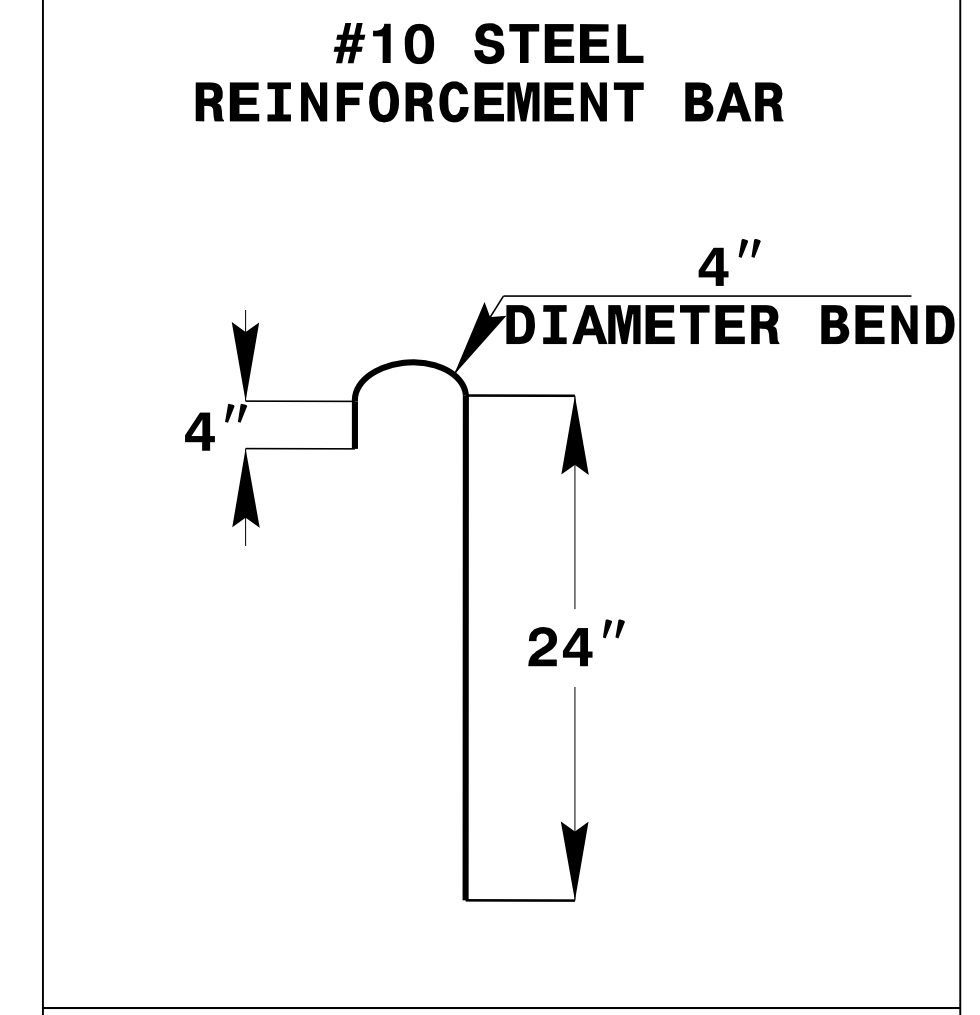
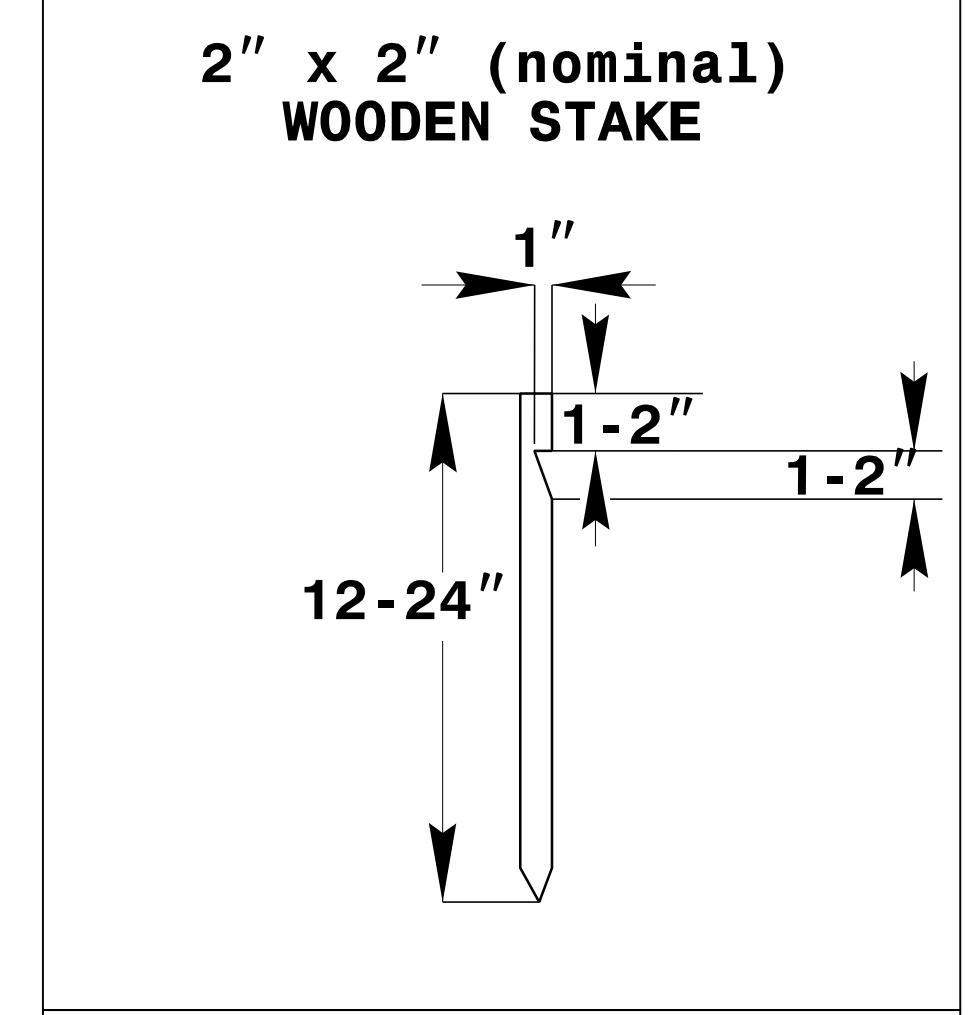
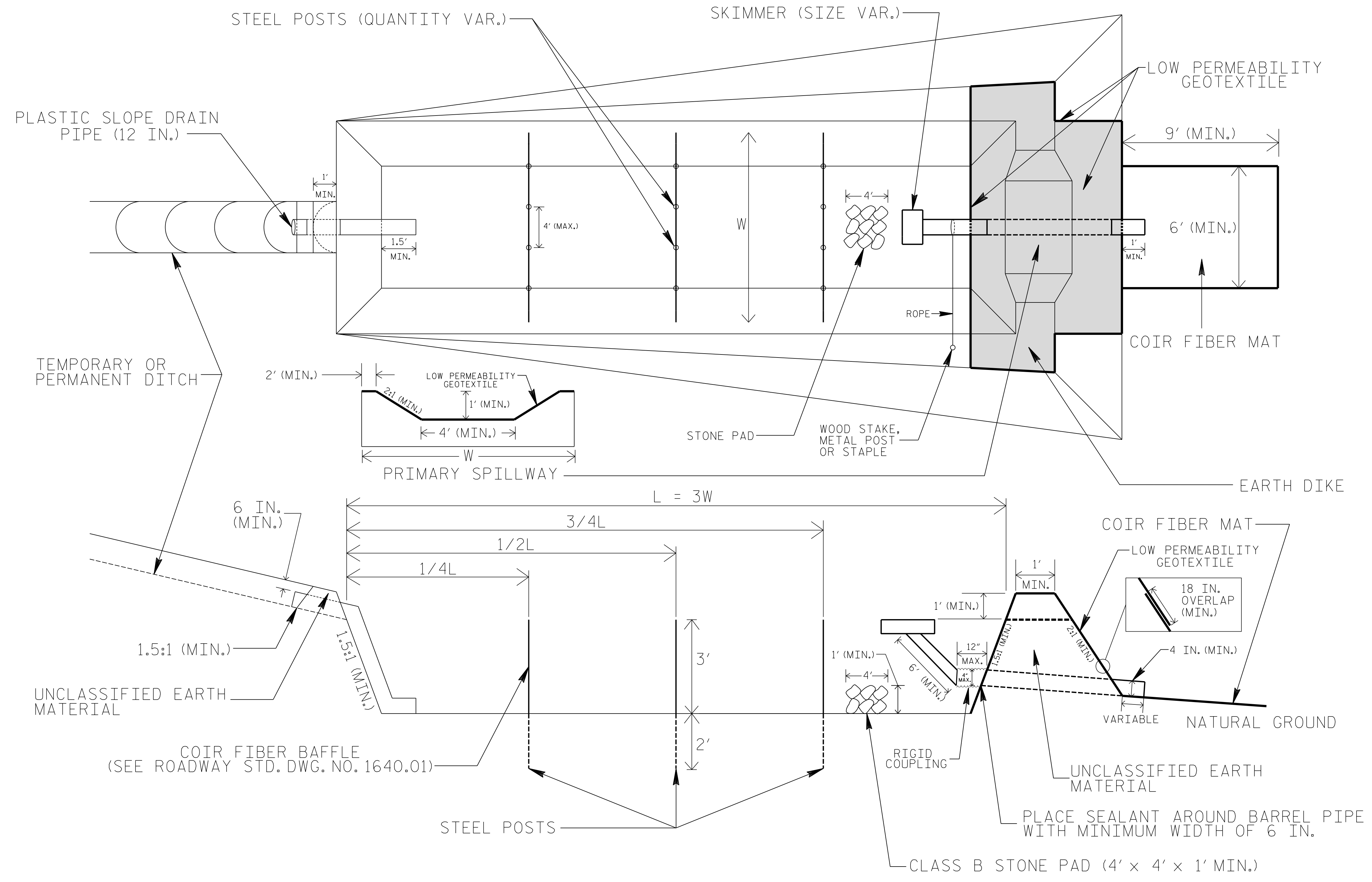
TIP PROJECT: I-5972

CONTRACT: C203991

8/2/2023 R:\Hydraulics\CADD\PSH\Erosion Control\I5972_EC.tsh.dgn Bhuskey

PROJECT REFERENCE NO. I-5972	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL (EAST)



COIR FIBER MAT ANCHOR OPTIONS

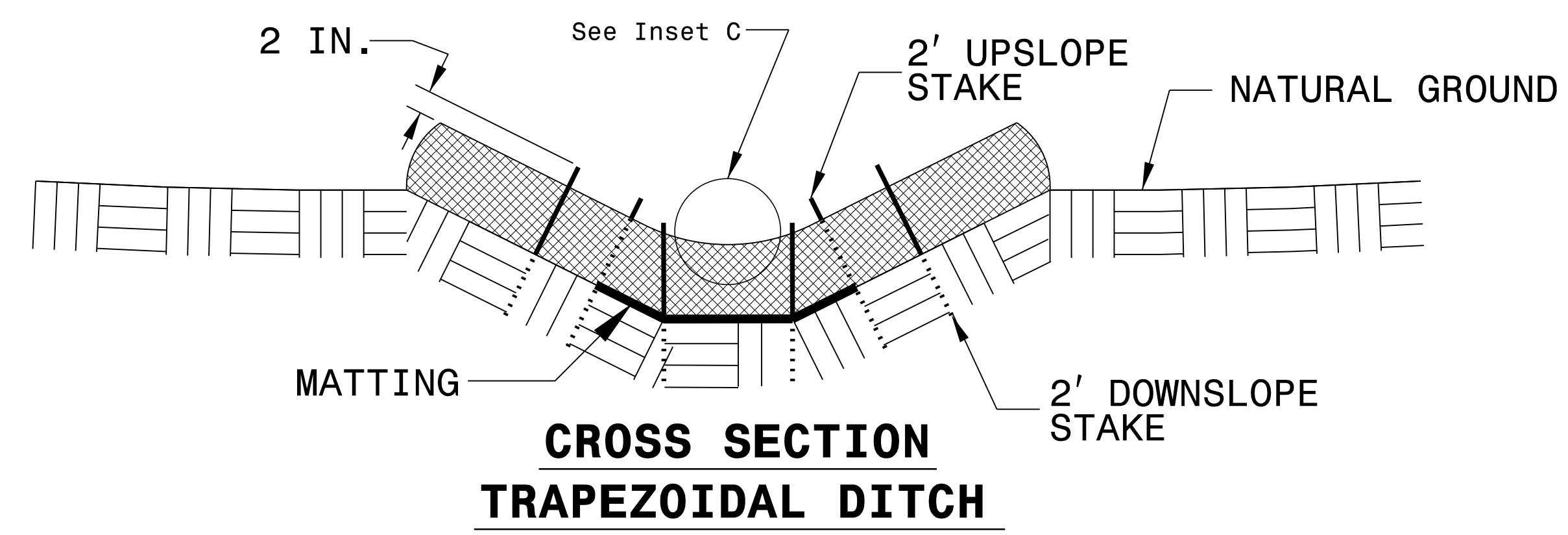
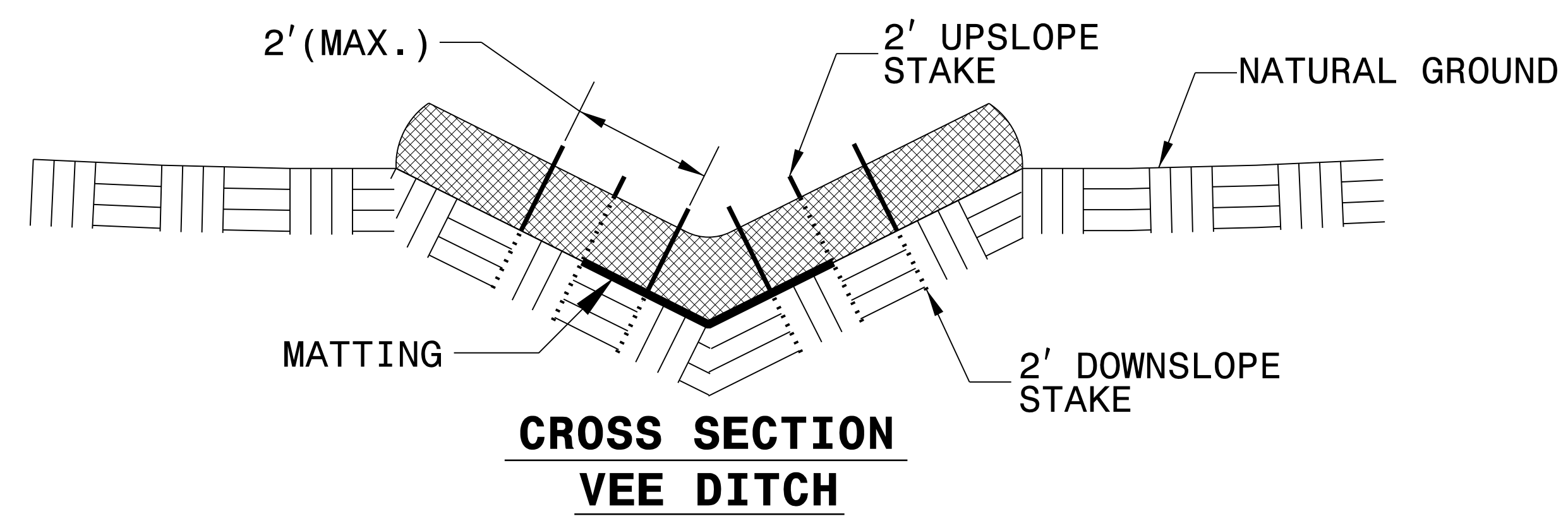
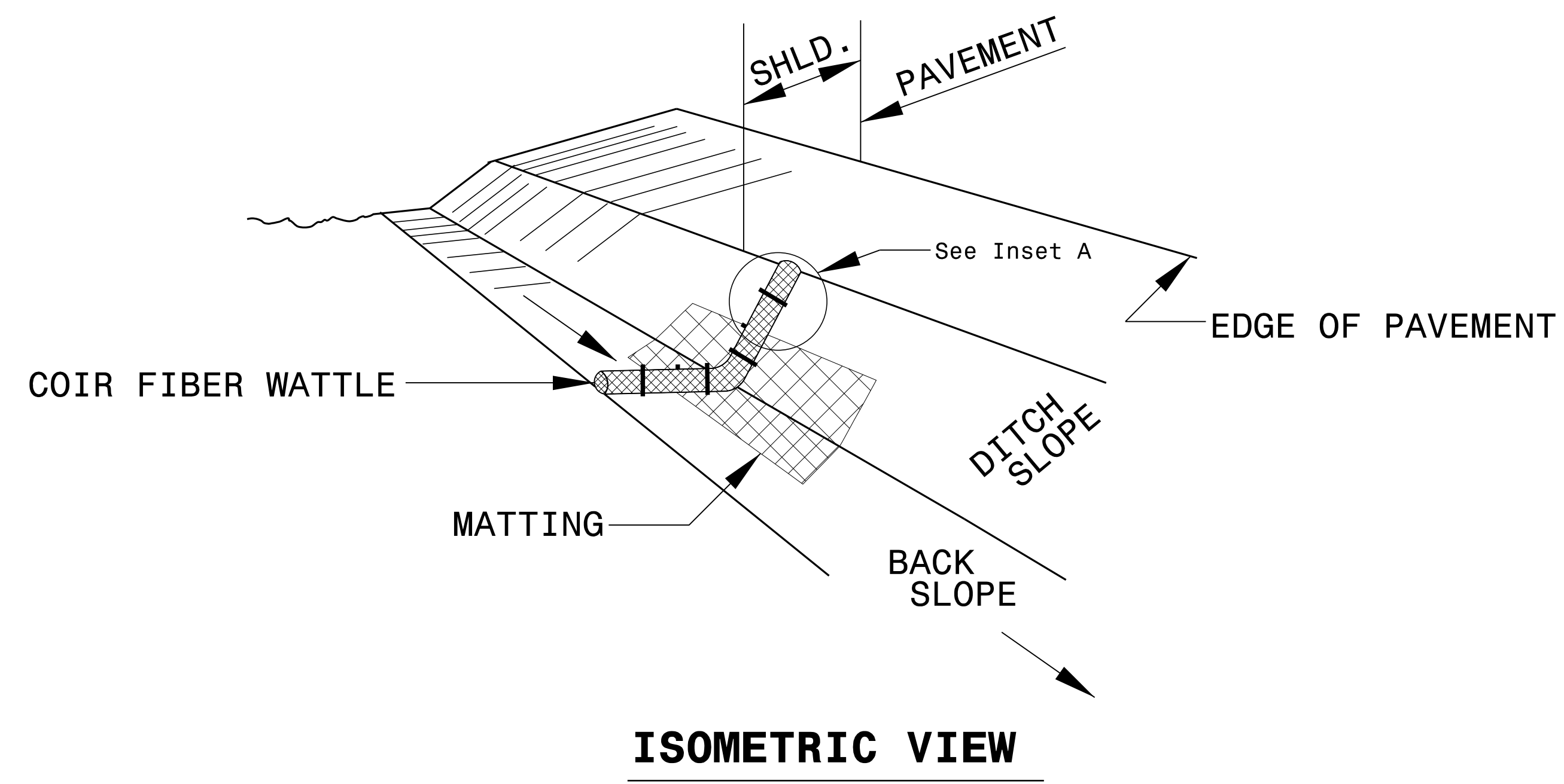
NOTES

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

NOT TO SCALE

PROJECT REFERENCE NO. 1-5972	SHEET NO. EC-02B
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.

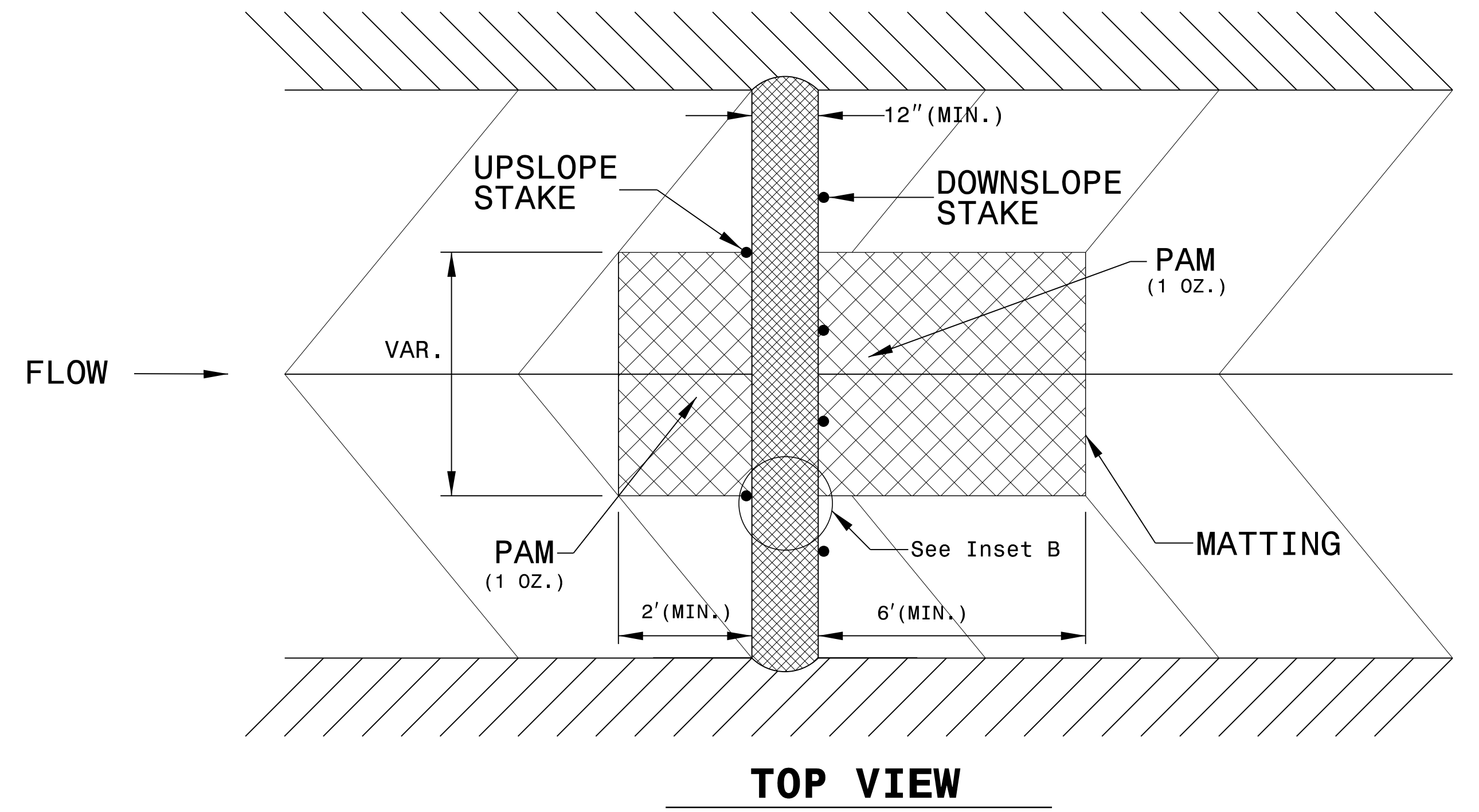
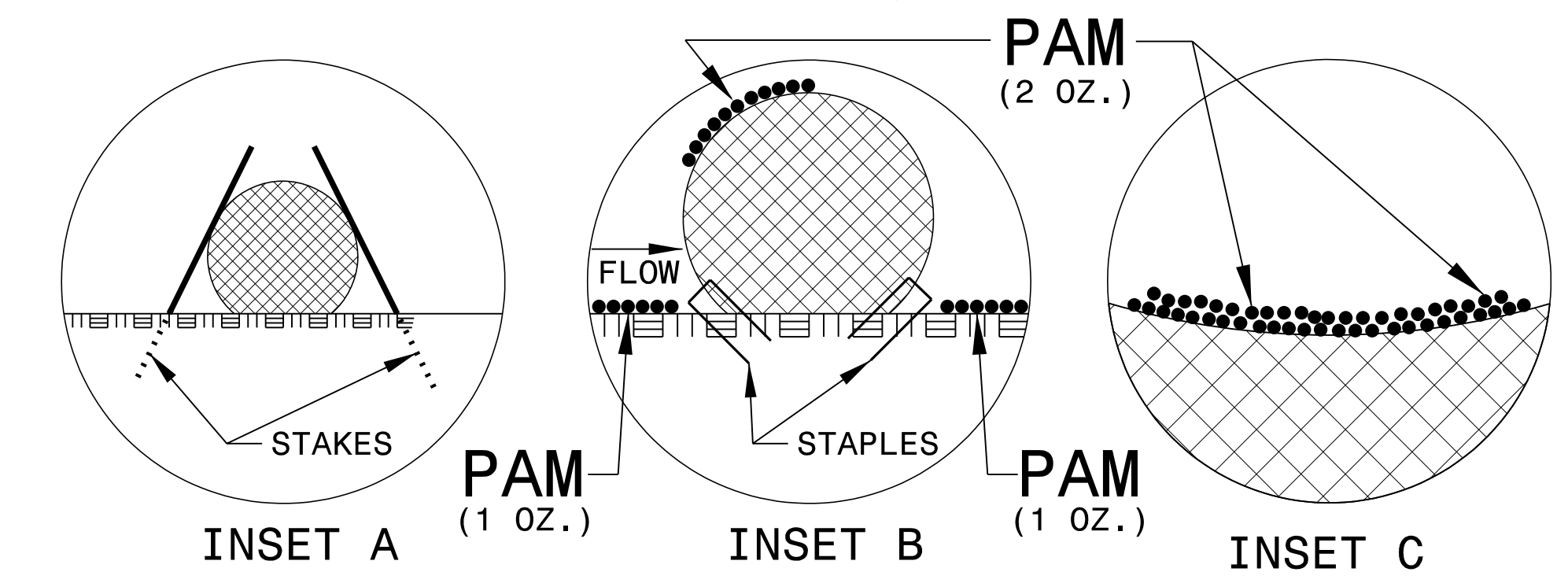
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

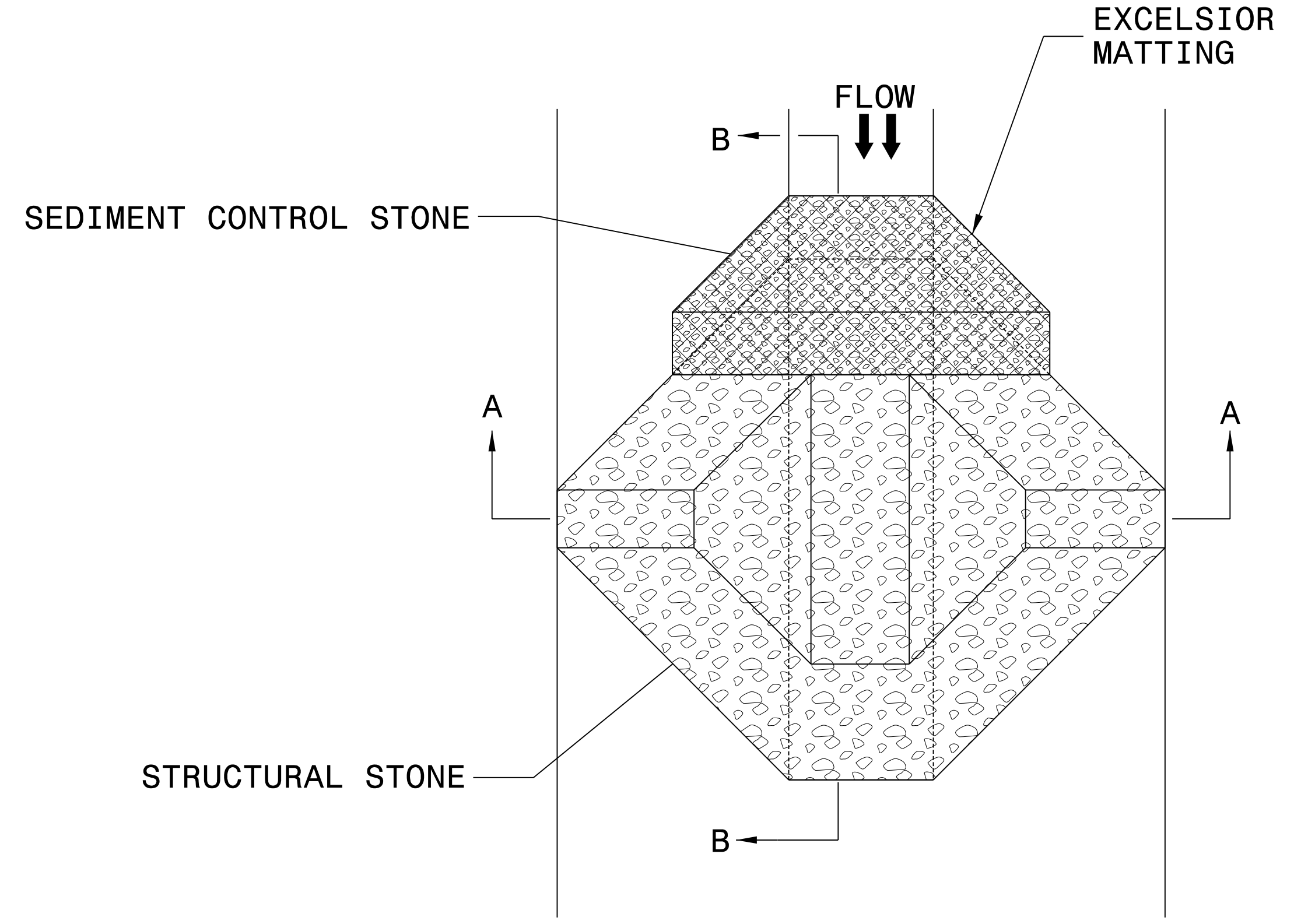
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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.



PROJECT REFERENCE NO. 1-5972	SHEET NO. EC-02C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN

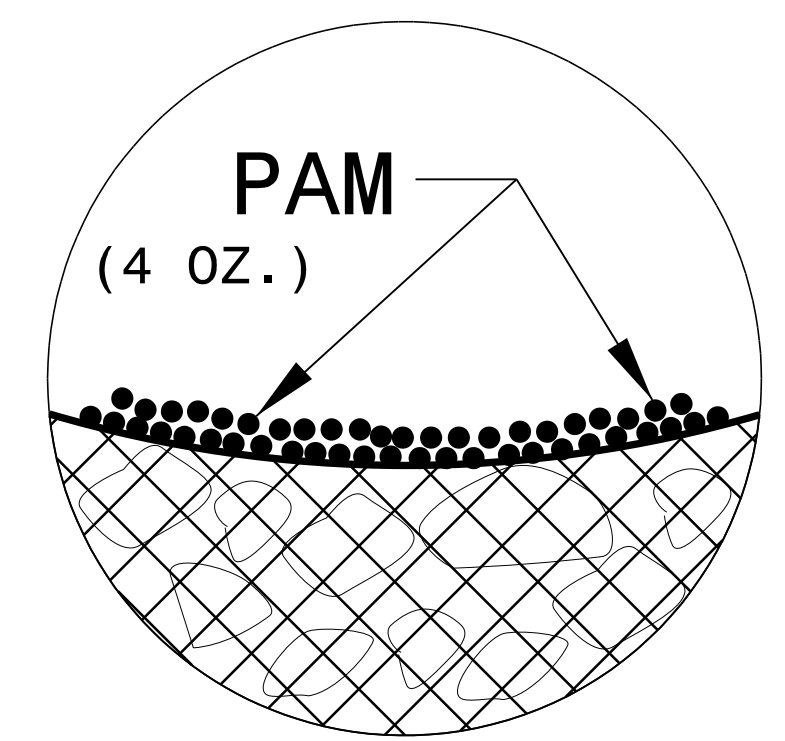
NOTES:

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

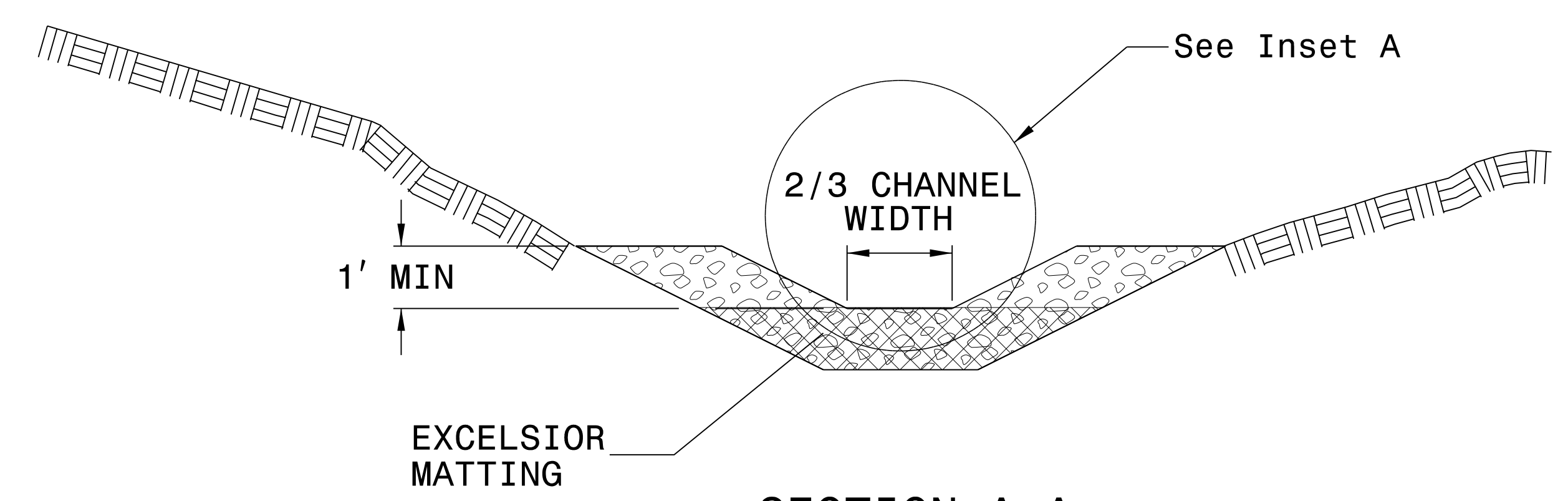
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

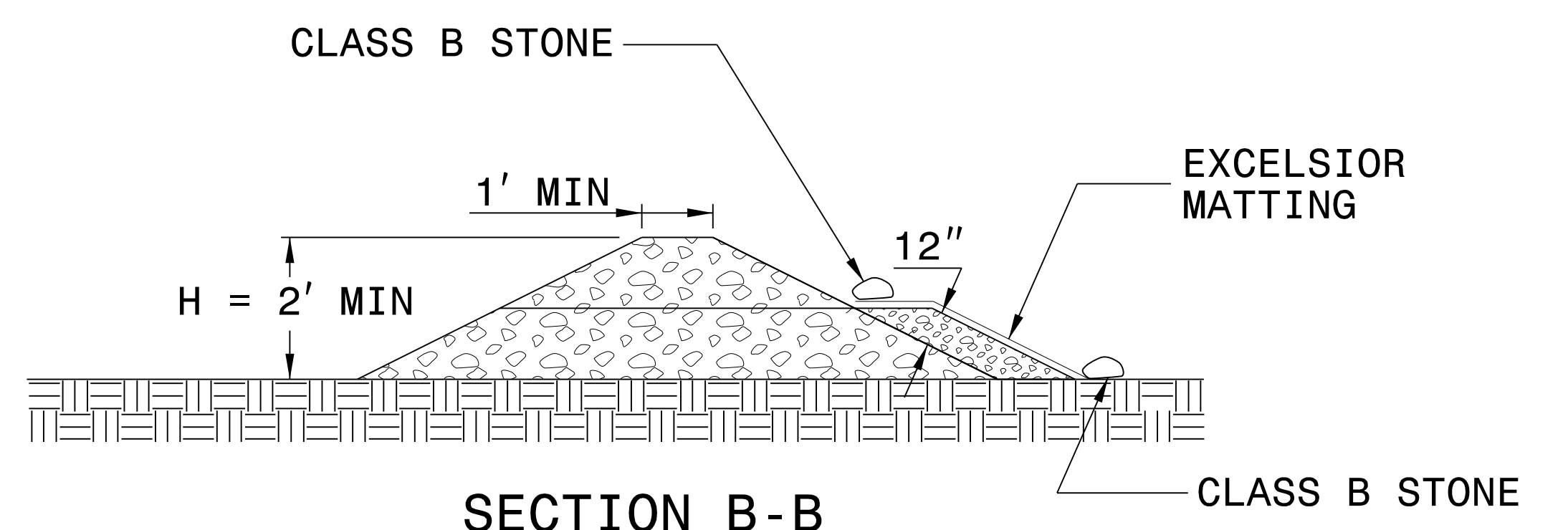
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



SECTION B-B

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

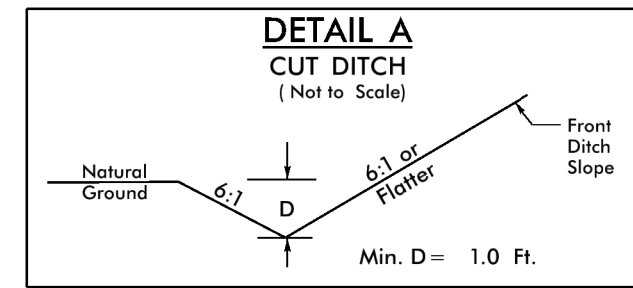
PROJECT REFERENCE NO. <i>I-5972</i>	SHEET NO. <i>EC-030</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

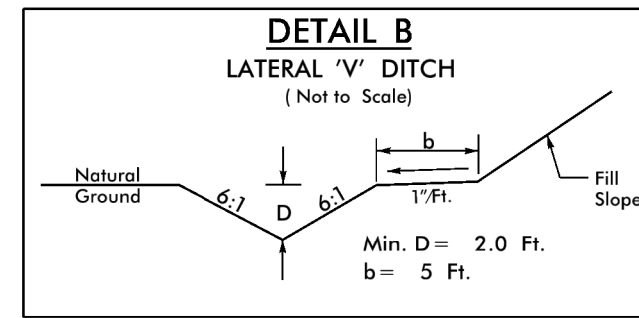
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES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

PLAN SHEET 5 DITCH DETAILS

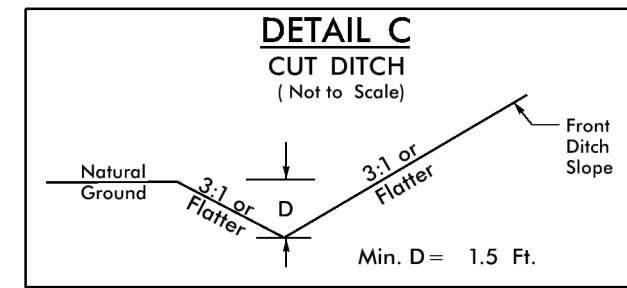
PROJECT REFERENCE NO. 1-5972		SHEET NO. DITCH DETAIL	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			



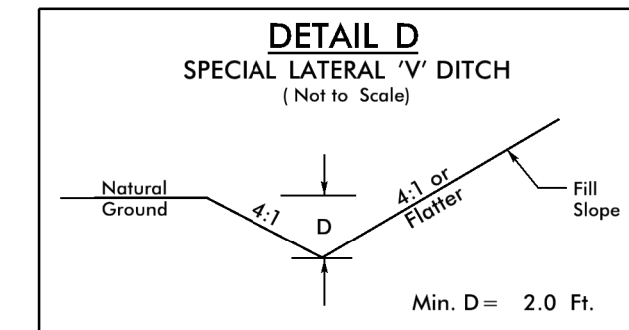
-Y1- STA. 46+00 TO STA. 53+75 LT
-Y1- STA. 46+80 TO STA. 54+50 RT



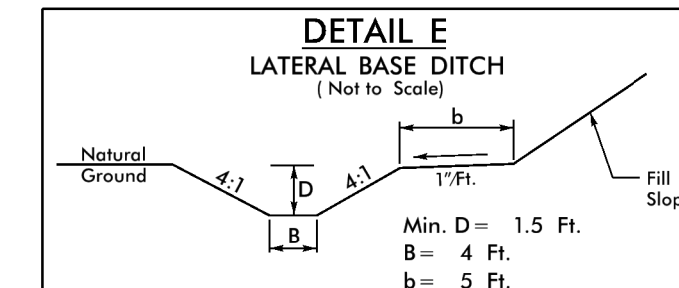
-Y1- STA. 44+50 TO STA. 46+00 LT



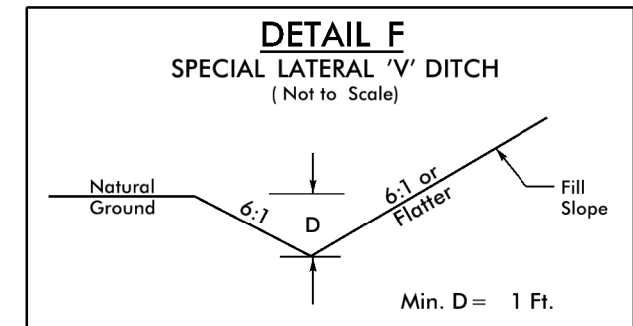
-RPD- STA. 20+50 TO STA. 29+00 LT



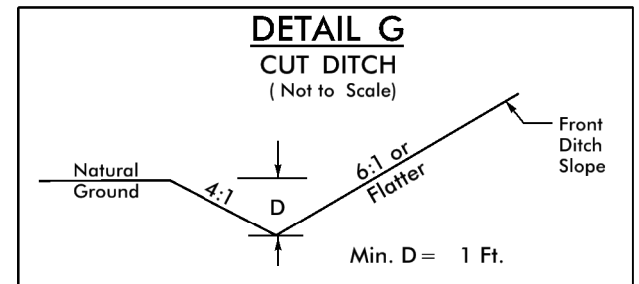
-RPC- STA. 20+00 TO STA. 24+20 LT
-RPD- STA. 29+00 TO STA. 29+25 LT



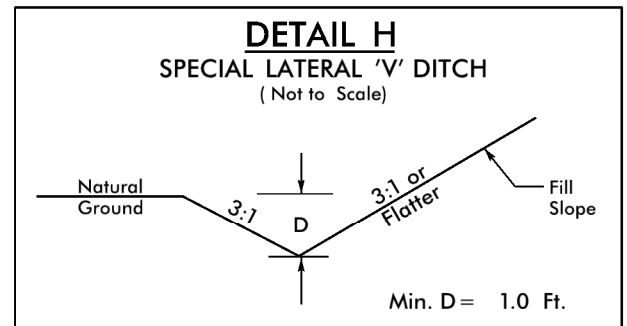
-L- STA. 61+00 TO STA. 63+32.5 LT
-RPA- STA. 19+05.65 TO STA. 21+15 RT



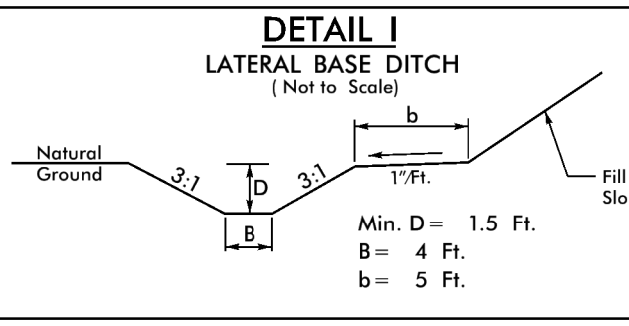
-L- STA. 46+00 TO STA. 47+00 RT
-RPC- STA. 18+00 TO STA. 20+00 LT



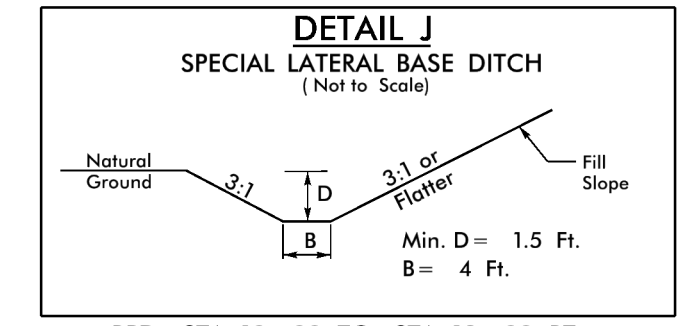
-RPB- STA. 13+90.79 TO STA. 19+00 RT
-RPC- STA. 12+00 TO STA. 15+50 LT
-RPD- STA. 18+50 TO STA. 20+50 LT
-RPD- STA. 15+50 TO STA. 21+00 RT
-Y1- STA. 45+50 TO STA. 46+65 RT



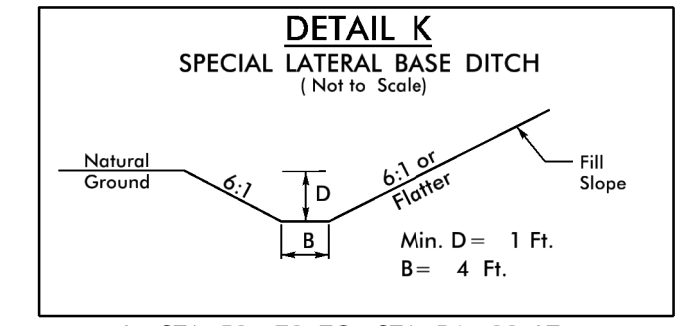
-RPD- STA. 27+50 TO STA. 29+50 RT
-Y1- STA. 39+37.5 TO STA. 41+85 LT



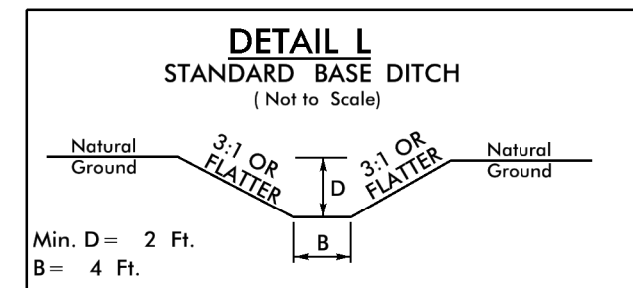
-RPC- STA. 15+50 TO STA. 18+00 LT



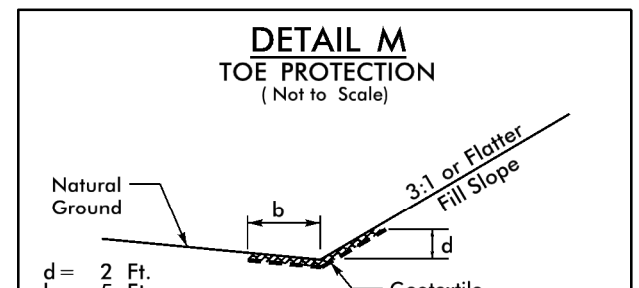
-RPD- STA. 10+00 TO STA. 13+00 RT
-Y1- STA. 32+25 TO STA. 34+54 RT



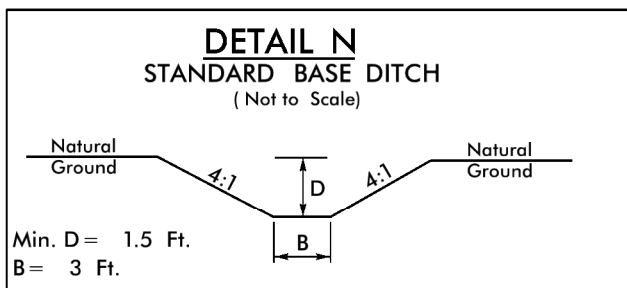
-L- STA. 50+70 TO STA. 54+00 LT



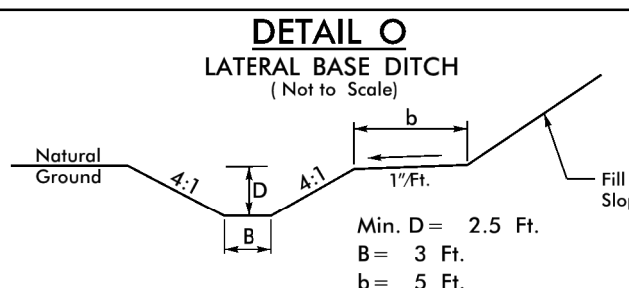
-L- STA. 54+00 RT, L=136',
BEG. EL=145.00', END EL= 144.85', S=0.10%
-L- STA. 61+00 RT, L=250',
BEG. EL=142.68', END EL= 142.61', S=0.21%
-RPC- STA. 17+10 RT, L=30',
BEG. EL=144.00', END EL=143.90', S=0.30%



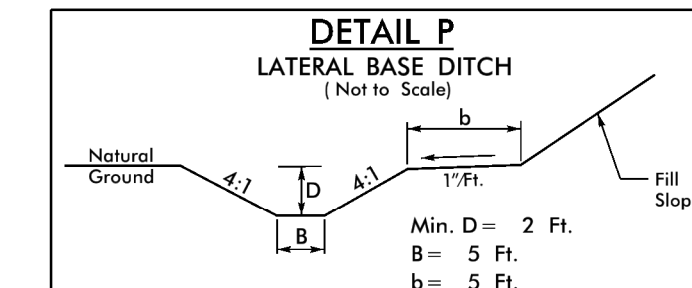
-Y1- FROM STA. 44+50 TO STA. 45+00 RT



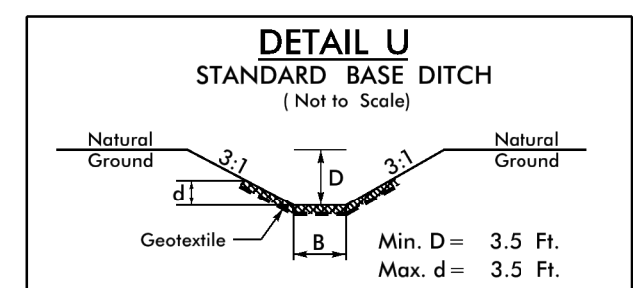
-RPA- STA. 20+75 TO STA. 21+42 LT
BEG. EL 144.34', END EL 144.14', S=0.30%
-Y1- STA. 30+50 TO STA. 31+57 LT
BEG. EL 143.69', END EL 143.68', S=0.10%



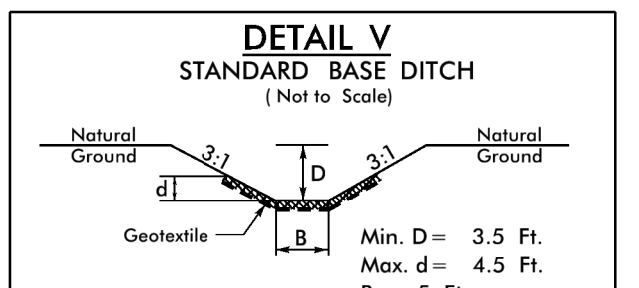
-Y1- STA. 28+50 TO STA. 30+50 LT
-Y1- STA. 32+89 TO STA. 36+75 LT
-L- STA. 57+87 TO STA. 61+00 LT



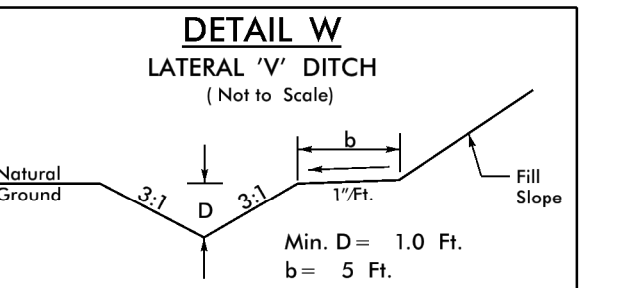
-RPD- STA. 29+25 TO STA. 29+94 LT



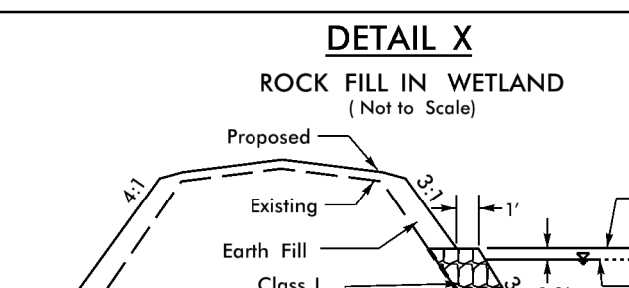
*When B is < 6.0'
Type of Liner = Class 1 Rip-Rap
-RPD- STA. 15+50 RT, L=46',
BEG. EL=143.10', END EL= 142.90', S=0.40%



*When B is < 6.0'
Type of Liner = Class 1 Rip-Rap
-RPD- STA. 29+50 RT, L=80',
BEG. EL=141.54', END EL= 141.40', S=0.18%



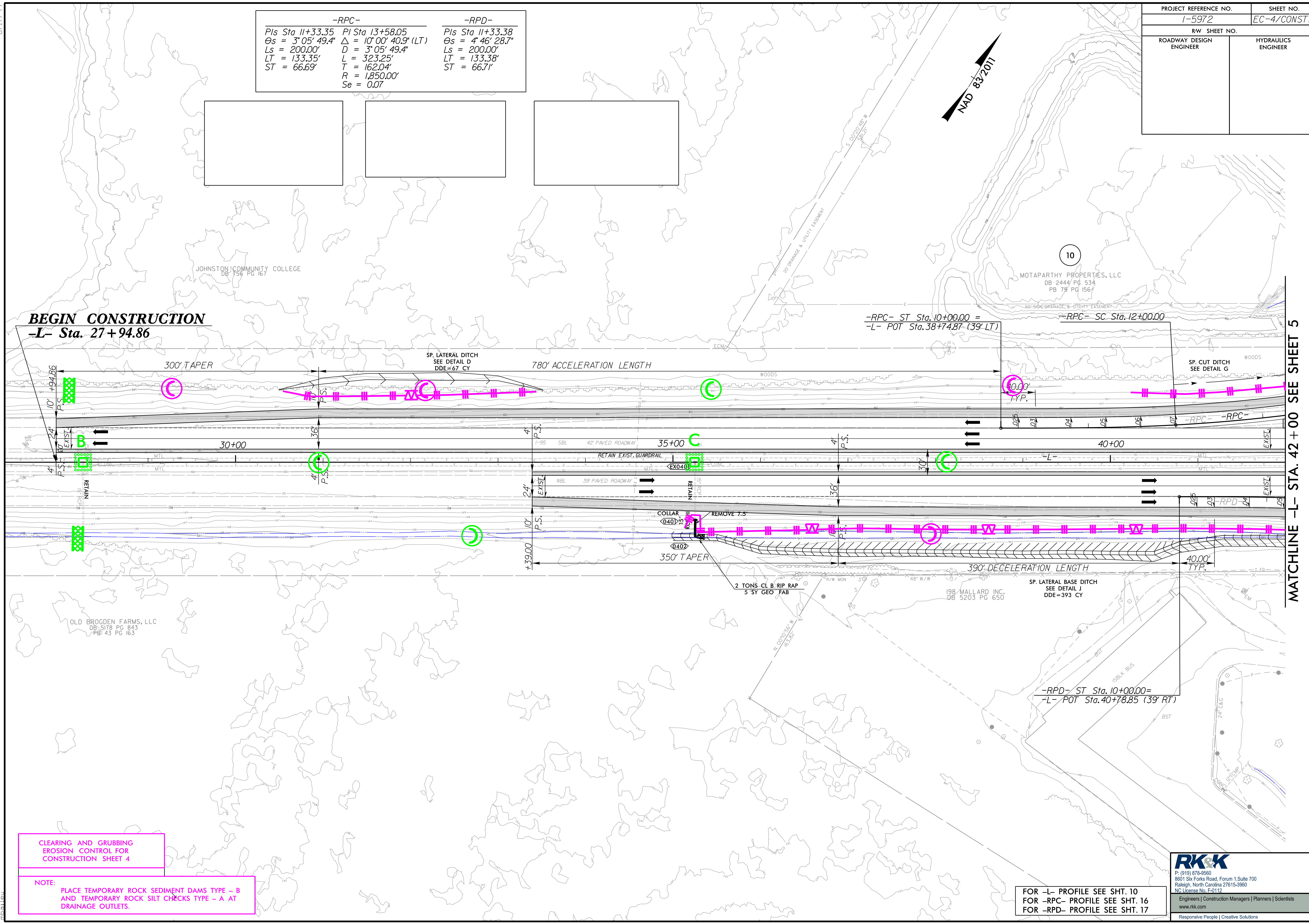
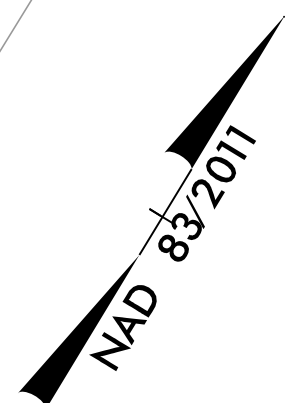
-Y1- STA. 44+50 TO STA. 45+50 RT



-Y1- FROM STA. 37+40 TO STA. 41+54 RT

PROJECT REFERENCE NO.	SHEET NO.
I-5972	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-RPC-		-RPD-	
Pls Sta 11+33.35	PI Sta 13+58.05	Pls Sta 11+33.38	
$\Theta_s = 3^{\circ}05'49.4"$	$\Delta = 10^{\circ}00'40.9"$ (LT)	$\Theta_s = 4^{\circ}46'28.7"$	
$L_s = 200.00'$	$D = 3^{\circ}05'49.4"$	$L_s = 200.00'$	
$LT = 133.35'$	$L = 323.25'$	$LT = 133.38'$	
$ST = 66.69'$	$T = 162.04'$	$ST = 66.71'$	
	$R = 1,850.00'$		
	$Se = 0.07$		



BEGIN CONSTRUCTION
-L- Sta. 27+94.86

-RPC- ST Sta. 10+00.00 =
-L- POT Sta. 38+74.87 (39' LT)

-RPC- SC Sta. 12+00.00

-RPD- ST Sta. 10+00.00 =
-L- POT Sta. 40+78.85 (39' RT)

MATCHLINE -L- STA. 42 + 00 SEE SHEET 5

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

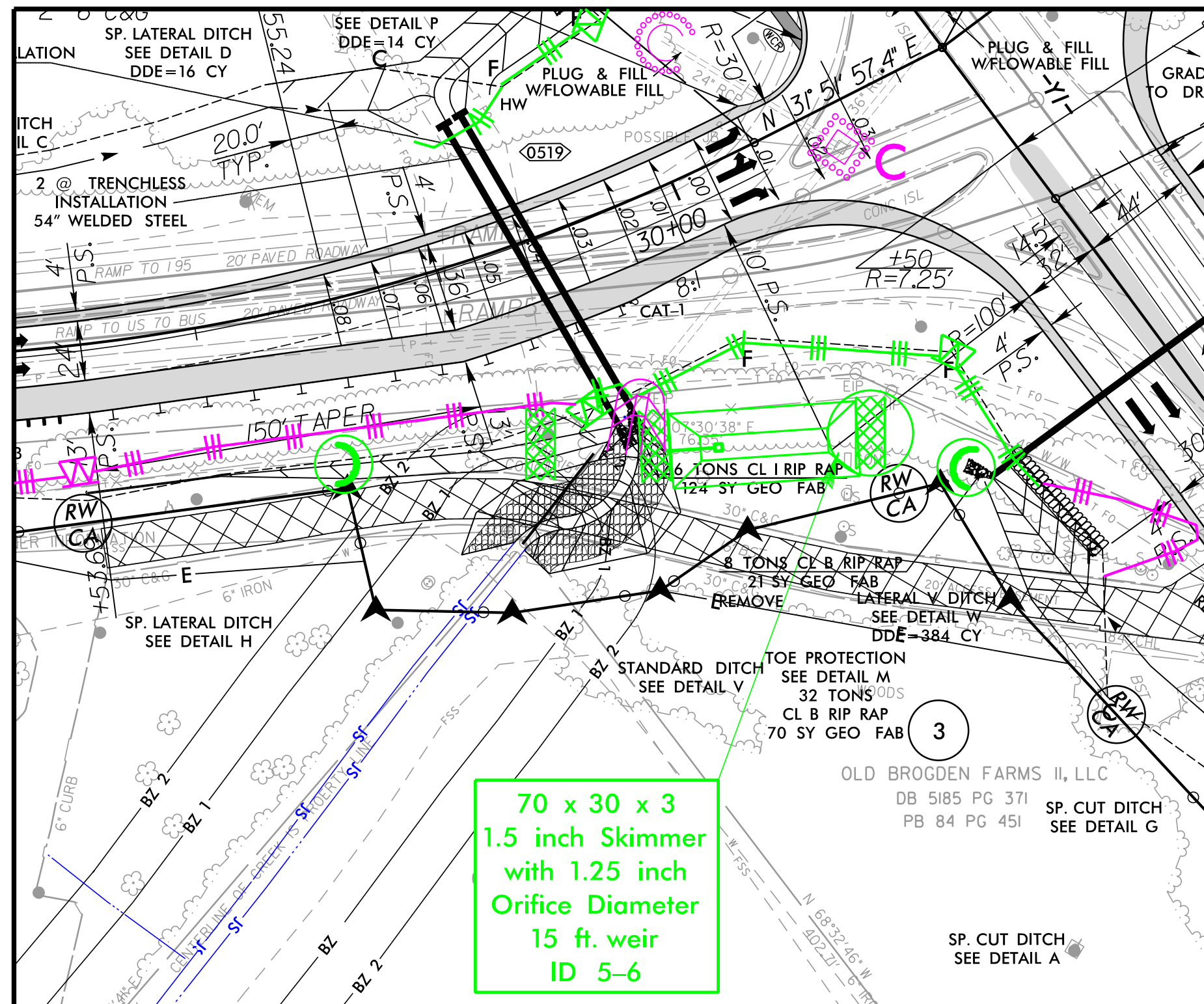
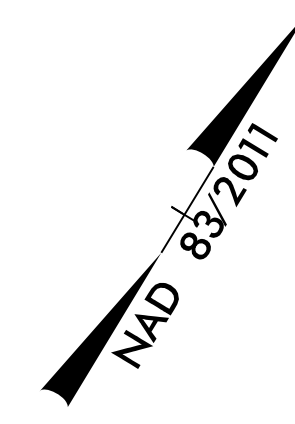
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

RKK
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Raleigh, North Carolina 27615-3960
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Engineers | Construction Managers | Planners | Scientists
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FOR -L- PROFILE SEE SHT. 10
FOR -RPC- PROFILE SEE SHT. 16
FOR -RPD- PROFILE SEE SHT. 17

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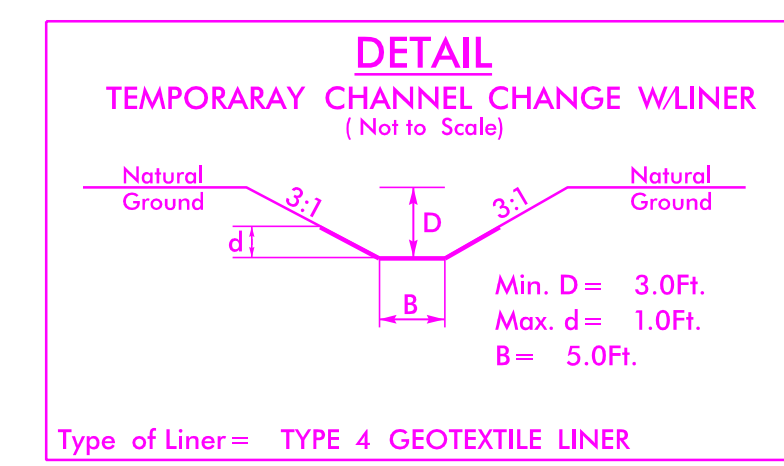
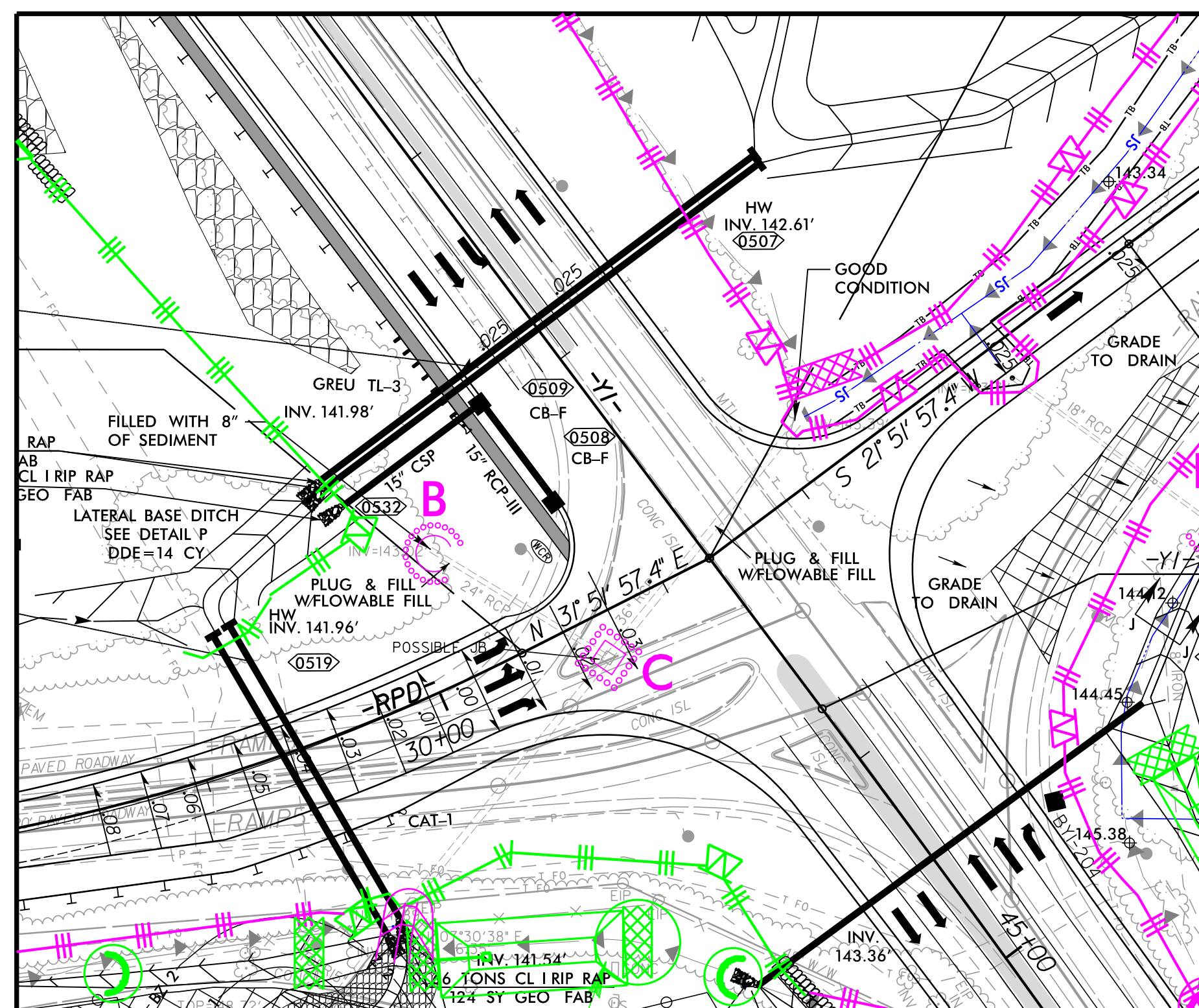
PROJECT REFERENCE NO.	SHEET NO.
1-5972	EC-5A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



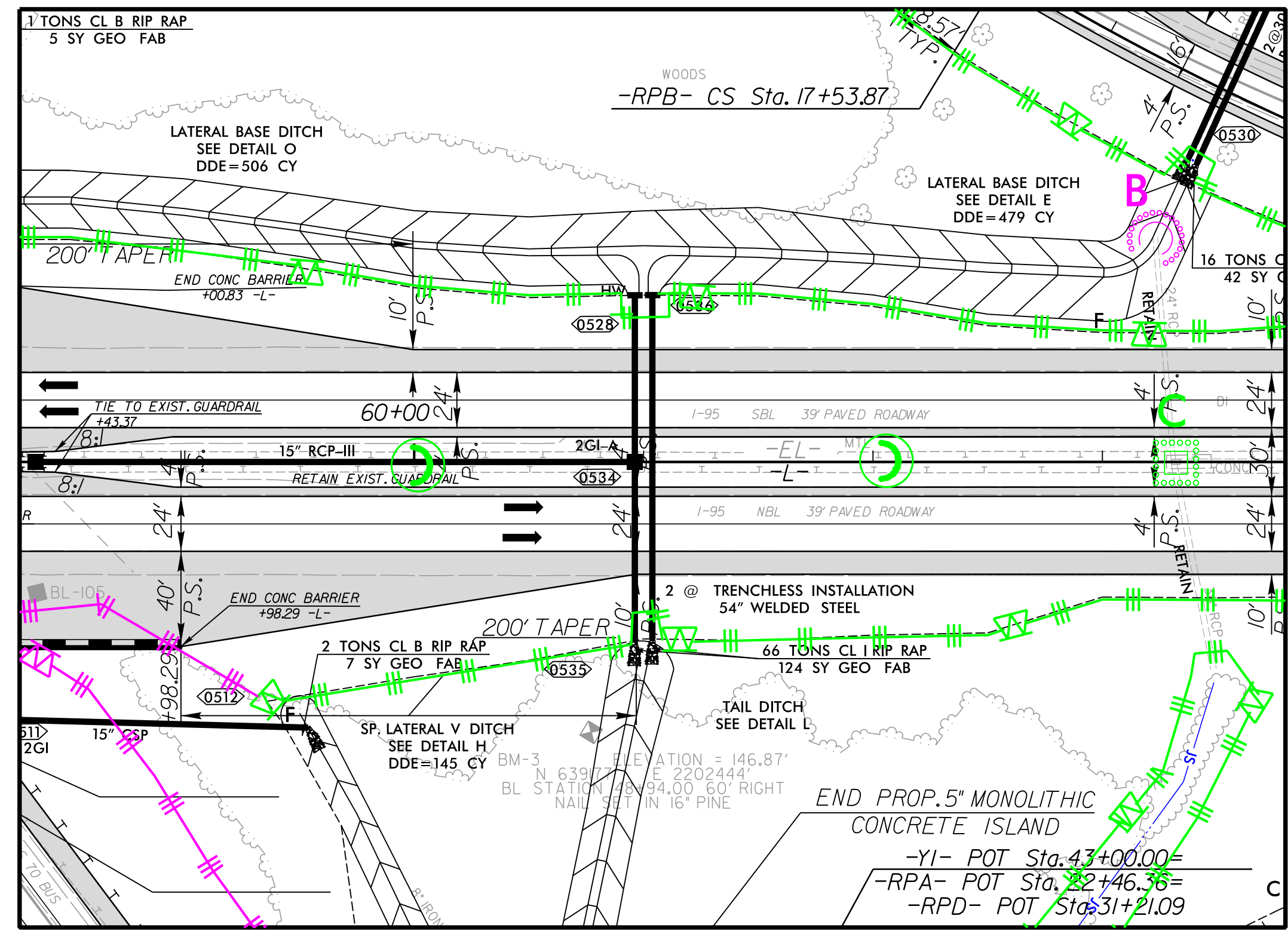
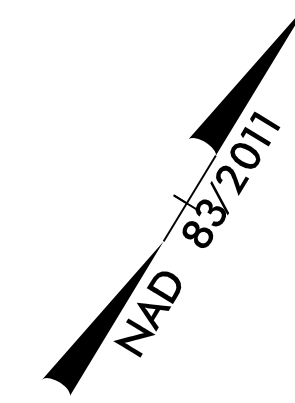
70 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
15 ft. weir
ID 5-6

PIPE INSTALLATION SEQUENCE STA. 29+26 -RPD- AND STA. 41+90 -Y1-

1. REMOVE PIPE AND DRIVE ON HOTEL PROPERTY
2. BUILD OUTLET IMPROVEMENT CHANNEL WITH A TEMPORARY CHANNEL CONNETING EX 36" TO PROPOSED CHANNEL.
3. INSTALL DUAL 54" UNDER RPD
4. INSTALL DUAL 54" UNDER Y1
5. BUILD ALL DITCHES AND REMAINING CHANNEL WORK
6. DIVERT WATER THROUGH NEW DITCHES AND PIPES
7. ABANDON EXISTING 36" PIPE, BUILD ROADWAY FILL



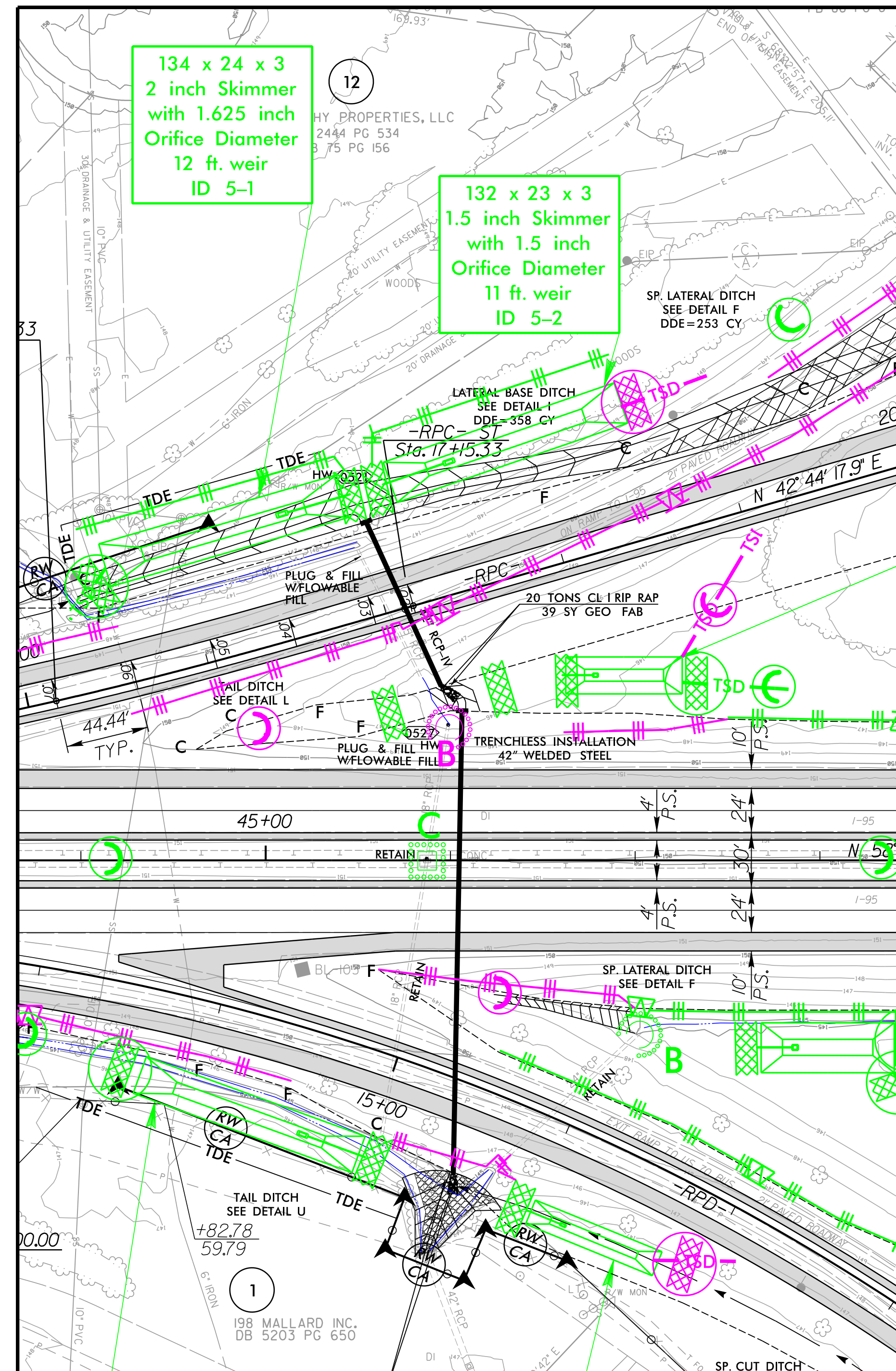
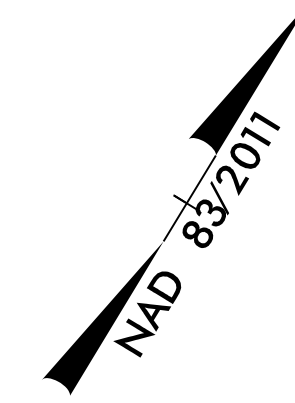
PROJECT REFERENCE NO. 1-5972	SHEET NO. EC-5B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PIPE INSTALLATION SEQUENCE STA. 61+00 -L-

1. INSTALL ALL BOTH AND CLEARING AND GRUBBING DEVICES.
2. INSTALL DUAL 54" PIPES WHILE MAINTAINING FLOW THROUGH EXSITING 24" PIPE. STRUCTURES DOWNSTREAM SHOULD BE COMPLETED BEFORE CONSTRUCTION ON THESE PIPES BEGIN.
3. INSTALL SYSTEM CONNECTED TO 54" PIPES.
4. INSTALL DITCHES AT INLET OF PIPE TO ALLOW FLOW THROUGH PIPES.
5. BUILD ROADWAY FILL.
6. INSTALL ALL FINAL PHASE DEVICES.

PROJECT REFERENCE NO. 1-5972	SHEET NO. EC-5C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

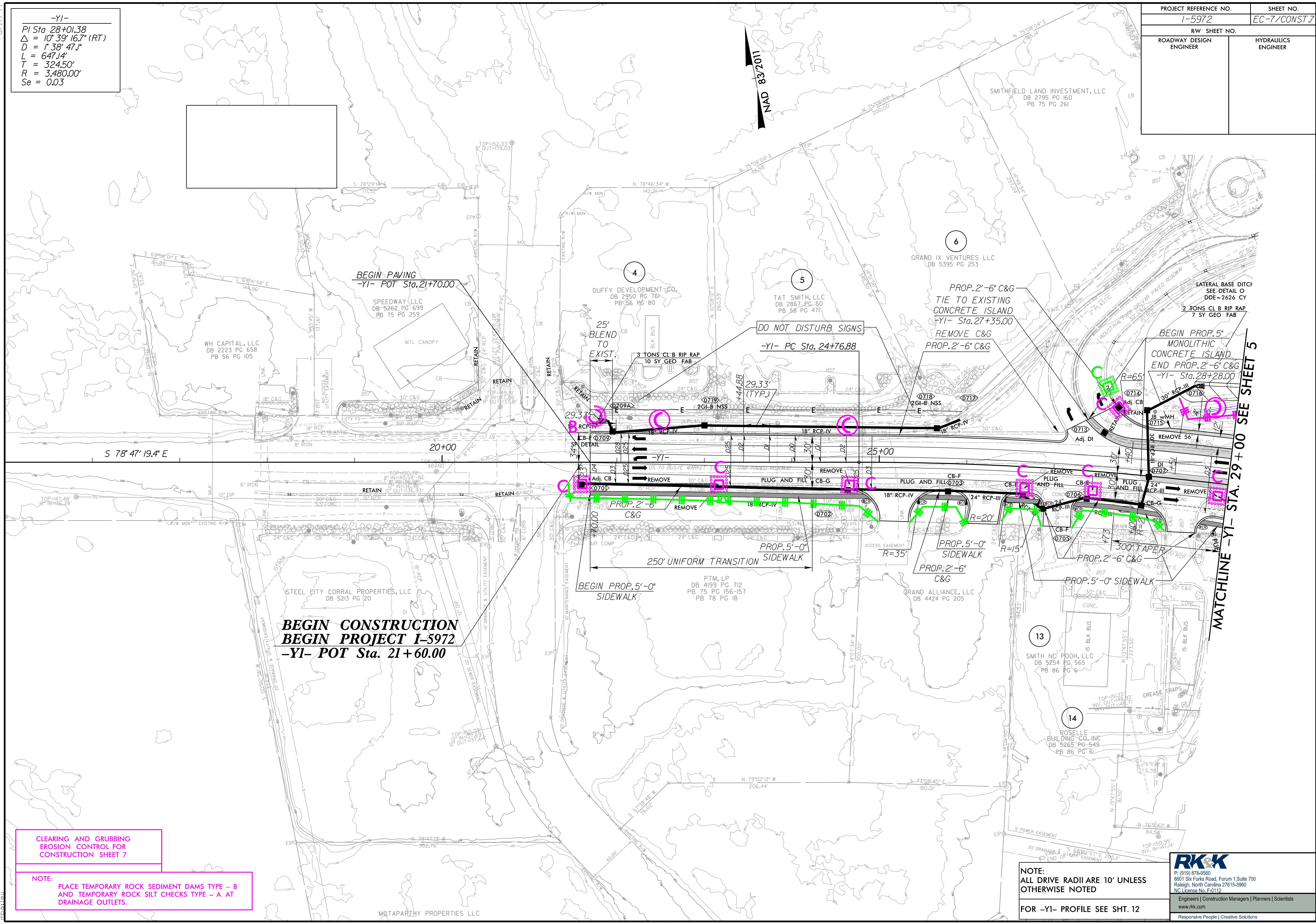


PIPE INSTALLATION SEQUENCE STA. 46+05 -L-

1. INSTALL ALL BOTH PHASE AND CLEARING AND GRUBBING PHASE DEVICES.
2. INSTALL THE 42" PIPE UNDER -RPC- WHILE MAINTAINING EXSITING 15" PIPE.
3. INSTALL THE 42" PIPE UNDER -L- WHILE MAINTAINING EXISTING 18" PIPE.
4. BUILD BOTH TAIL DITCHES
5. RE-ROUTE DITCHES THROUGH NEW PIPES.
6. ABANDON EXISTING PIPES AND BUILD ROADWAY FILL.
7. RE-ROUTE DITCHES TO USE ALL NEW PIPES.
8. INSTALL ALL FINAL PHASE DEVICES

PROJECT REFERENCE NO.		SHEET NO.	
I-5972		EC-7/CONST.7	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

-YI-
 PI Sta 28+01.38
 $\Delta = 10' 39' 16.7''$ (RT)
 $D = 1' 38' 47.1''$
 $L = 647.14'$
 $T = 324.50'$
 $R = 3,480.00'$
 $Se = 0.03$



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.

NOTE:
 ALL DRIVE RADII ARE 10' UNLESS
 OTHERWISE NOTED

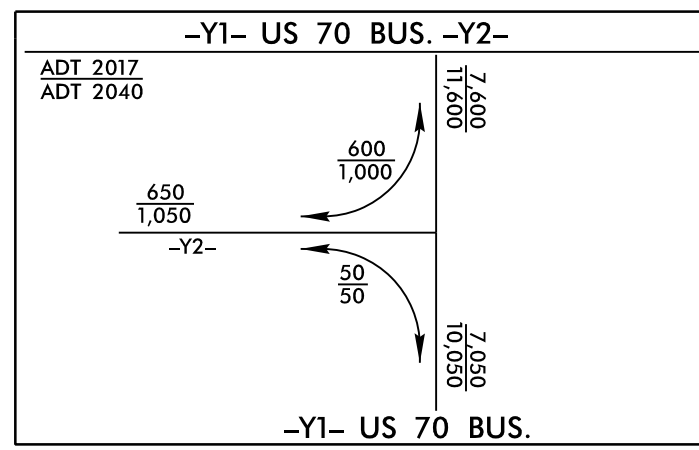
FOR -YI- PROFILE SEE SHT. 12

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MATCHLINE -YI- STA. 29+00 SEE SHEET 5

7/7/2023 R:\Highways\I-5972\EC-7\Const\I-5972_EC_psh07.dgn

PROJECT REFERENCE NO.	SHEET NO.
1-5972	EC-8/CONST.8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



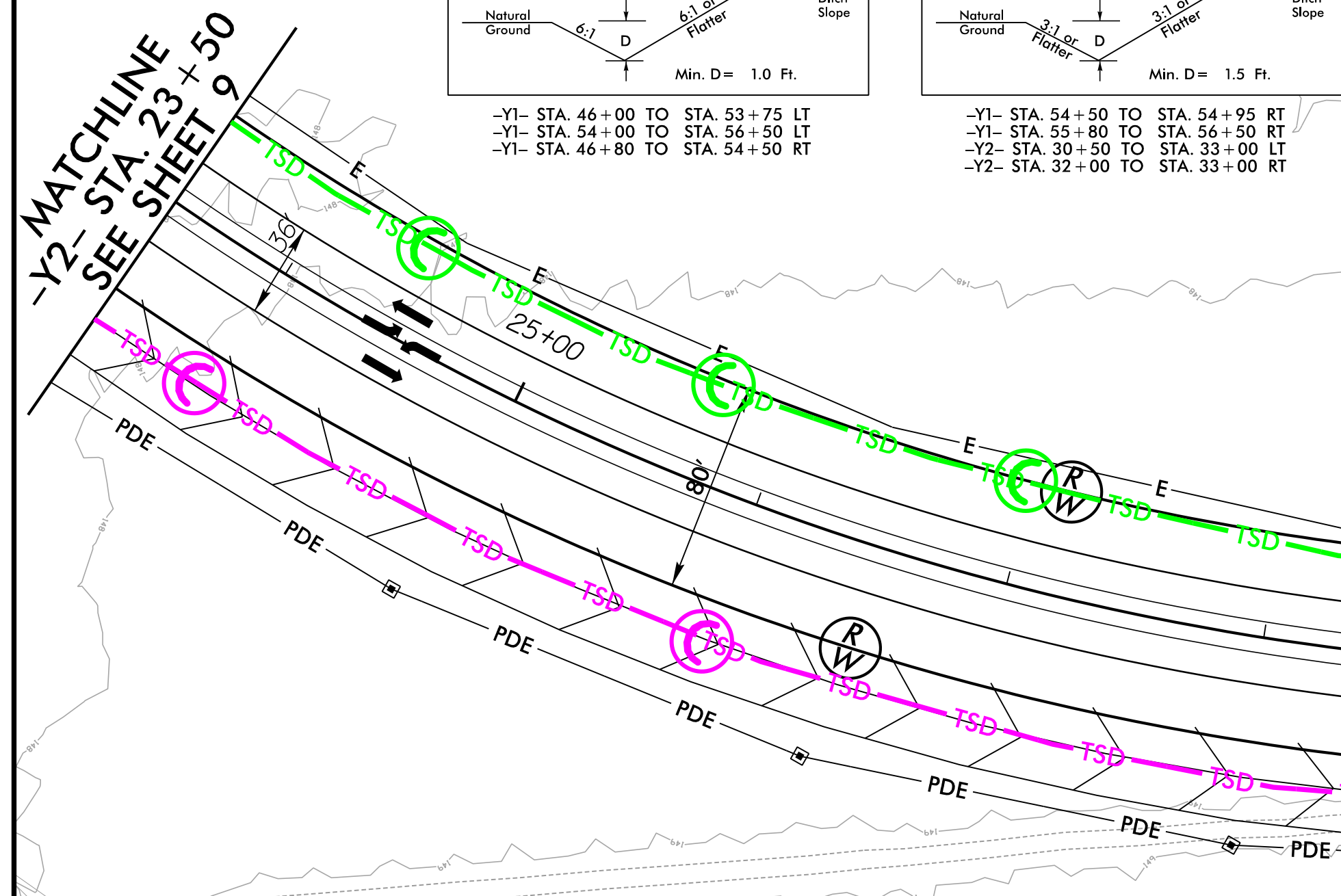
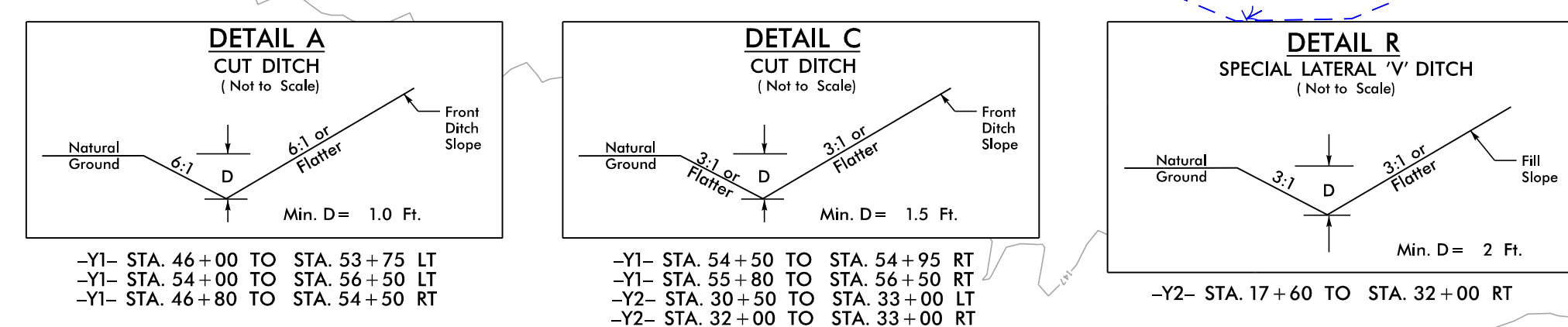
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8

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

MATCHLINE -Y1- STA. 47+00 SEE SHEET 5

-Y1-	
PI Sta 47+63.37	PI Sta 58+74.92
$\Delta = 5' 37'' 12.9''$ (RT)	$\Delta = 7' 21'' 16.3''$ (LT)
$D = 0' 43' 30.9''$	$D = 1' 08' 45.3''$
$L = 774.92'$	$L = 641.80'$
$T = 387.77'$	$T = 321.34'$
$R = 7,900.00'$	$R = 5,000.00'$
	Se = EXIST.
-Y2-	
PI Sta 24+96.11	
$\Delta = 64' 09'' 43.2''$ (LT)	
$D = 5' 43' 46.5''$	
$L = 1,119.84'$	
$T = 626.84'$	
$R = 1,000.00'$	
$Se = 0.06$	

MATCHLINE
-Y2- STA. 23+50
SEE SHEET 9



END CONSTRUCTION
END PROJECT 1-5972
-Y1- Sta. 56+50.00

NOTE:
ALL DRIVEWAYS ARE 16' WIDE
UNLESS OTHERWISE NOTED
ALL DRIVE RADII ARE 10' UNLESS
OTHERWISE NOTED
FOR -Y1- PROFILE SEE SHTS. 12 & 13
FOR -Y2- PROFILE SEE SHTS. 14

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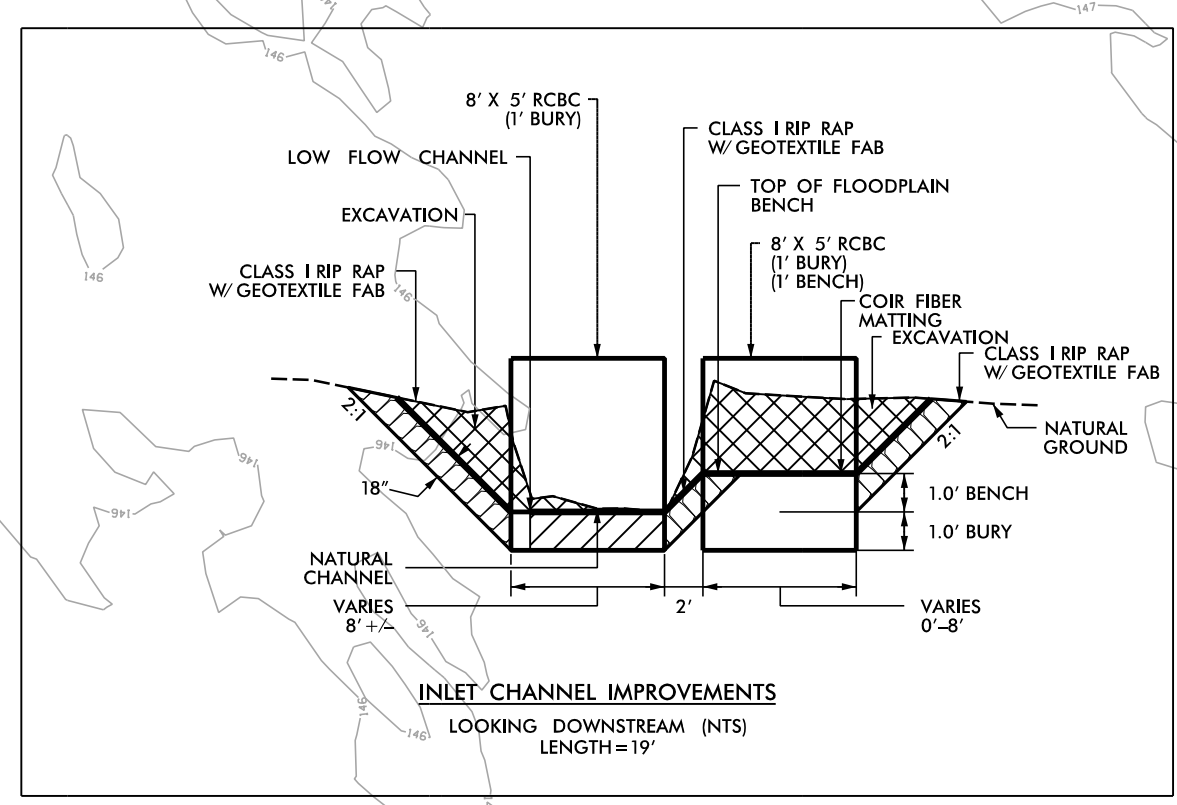
MATCHLINE
-Y3- STA. 20+50
SEE SHEET 5

PROJECT REFERENCE NO. 1-5972	SHEET NO. EC-9/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/2011

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.



65 x 22 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
5 ft. weir
ID 9-2

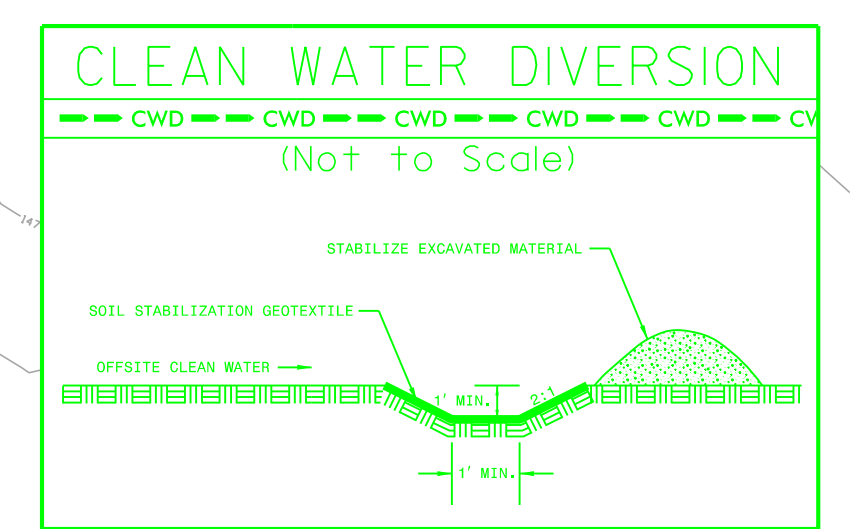
60 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
9 ft. weir
ID 9-1

BEGIN CONSTRUCTION
-Y2- Sta. 10+10.00

55 x 23 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 9-5

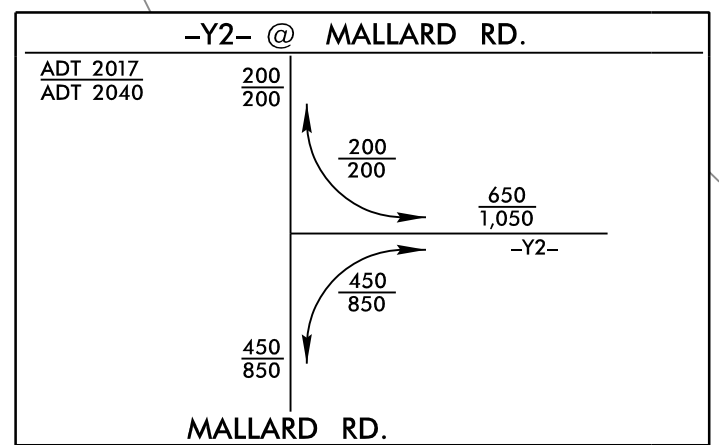
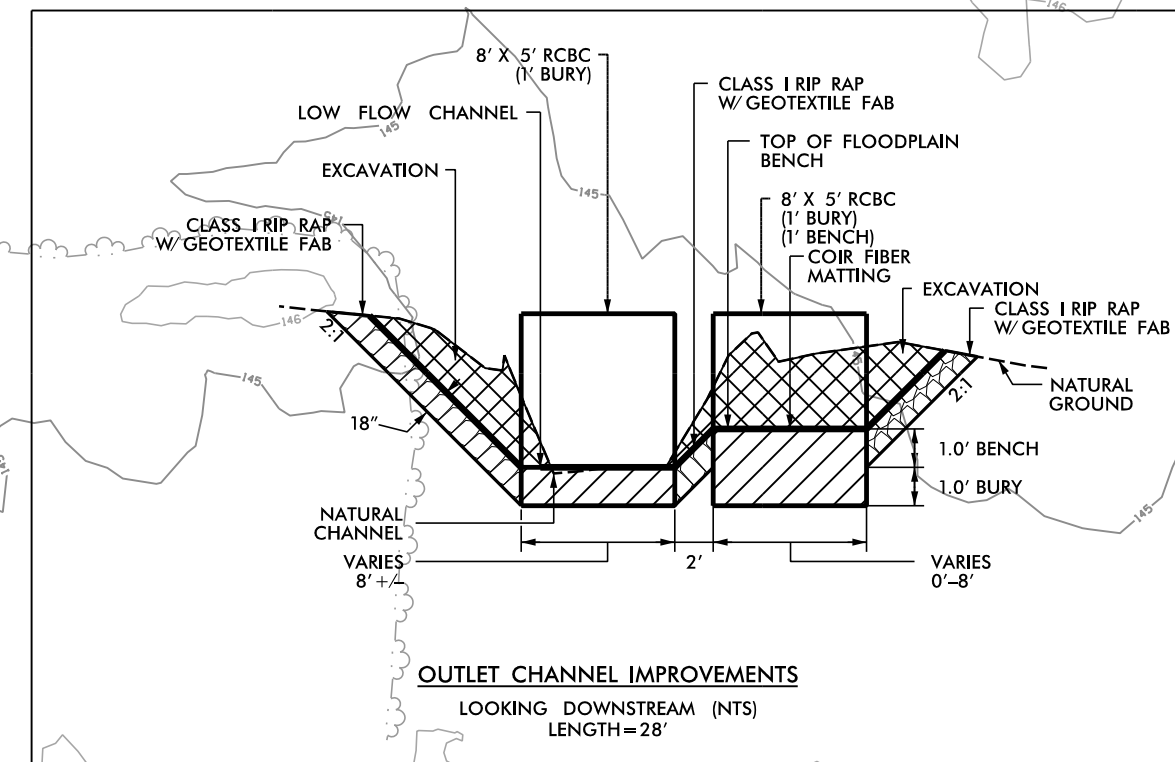
36 x 18 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
4 ft. weir
ID 9-4

BEGIN CONSTRUCTION/OVERLAY
-Y3- Sta. 13+50.00



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

134 x 34 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
18 ft. weir
ID 9-3



-Y2-
PI Sta. 24+96.11
 $\Delta = 64'09''43.2''(LT)$
 $D = 5'43''46.5''$
 $L = 1,119.84'$
 $T = 626.84'$
 $R = 1,000.00'$
 $Se = 0.06$

NOTE:
ALL DRIVE RADII ARE 10' UNLESS
OTHERWISE NOTED

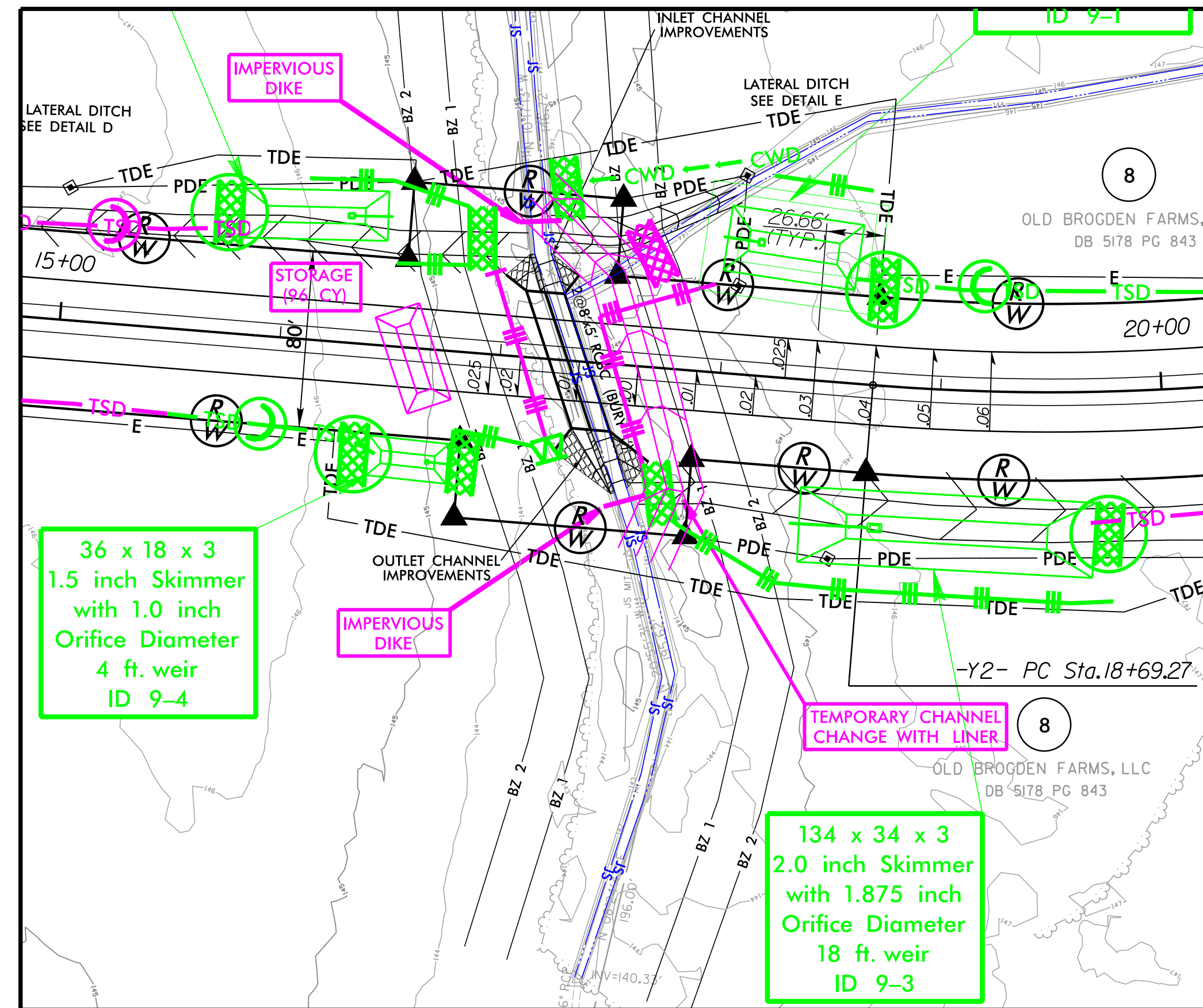
FOR -Y2- PROFILE SEE SHT. 13
FOR -Y3- PROFILE SEE SHT. 18
FOR CULVERT CONST. PLANS SEE
SHTS. C1-1 THRU C1-5

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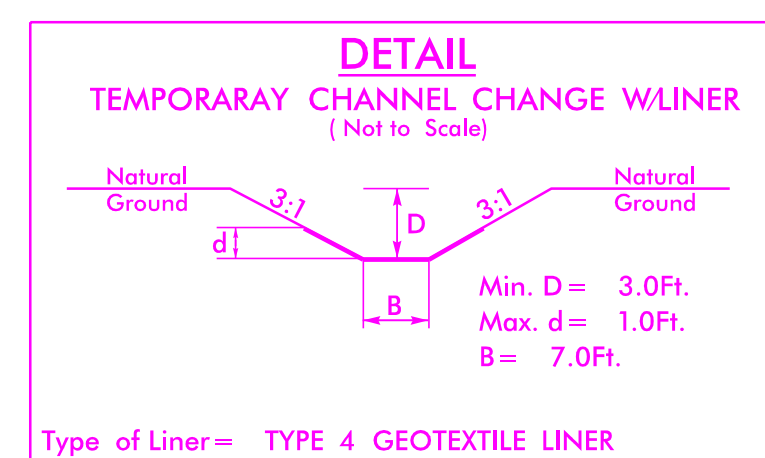
PROJECT REFERENCE NO. 1-5972	SHEET NO. EC-9A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/2011



CULVERT INSTALLATION SEQUENCE STA. 17+26 -Y2-

1. INSTALL FOUR SEDIMENT BASINS AROUND CULVERT LOCATION
2. INSTALL IMPERVIOUS DIKES AND APPROXIMATELY 190 LF OF OF TEMPORARY CHANNEL CHANGE W/LINER AS SHOWN IN DETAIL.
3. DIVERT FLOW THROUGH TEMPORARY CHANNEL.
4. INSTALL STILLING BASIN.
5. CONSTRUCT PROPOSED CULVERT.
6. REMOVE IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE.
7. DIVERT FLOW THROUGH NEW CULVERT.



PROJECT REFERENCE NO.		SHEET NO.	
1-5972		EC-10/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

-RPC-		-RPD-	
PIs Sta 11+33.35	PI Sta 13+58.05	PIs Sta 11+33.38	
$\Theta s = 3^{\circ}05'49.4"$	$\Delta = 10^{\circ}00'40.9"$ (LT)	$\Theta s = 4^{\circ}46'28.7"$	
$Ls = 200.00'$	$D = 3^{\circ}05'49.4"$	$Ls = 200.00'$	
$LT = 133.35'$	$L = 323.25'$	$LT = 133.38'$	
$ST = 66.69'$	$T = 162.04'$	$ST = 66.71'$	
	$R = 1,850.00'$		
	$Se = 0.07$		

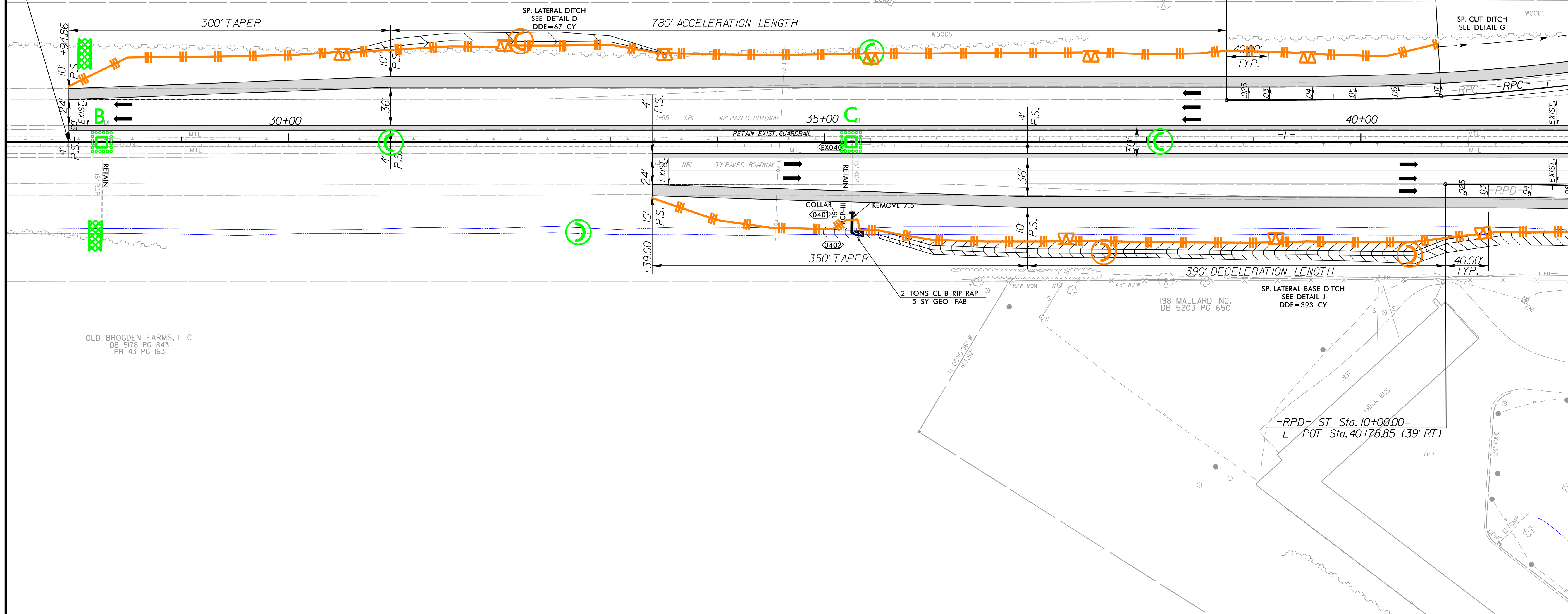
JOHNSTON COMMUNITY COLLEGE
DB 756 PG 167

10
MOTAPARTHY PROPERTIES, LLC
DB 2444 PG 534
PB 75 PG 156

BEGIN CONSTRUCTION
-L- Sta. 27+94.86

-RPC- ST Sta. 10+00.00 =
-L- POT Sta. 38+74.87 (39' LT)

-RPC- SC Sta. 12+00.00



MATCHLINE -L- STA. 42+00 SEE SHEET 5

OLD BROGDEN FARMS, LLC
DB 5178 PG 843
PB 43 PG 163

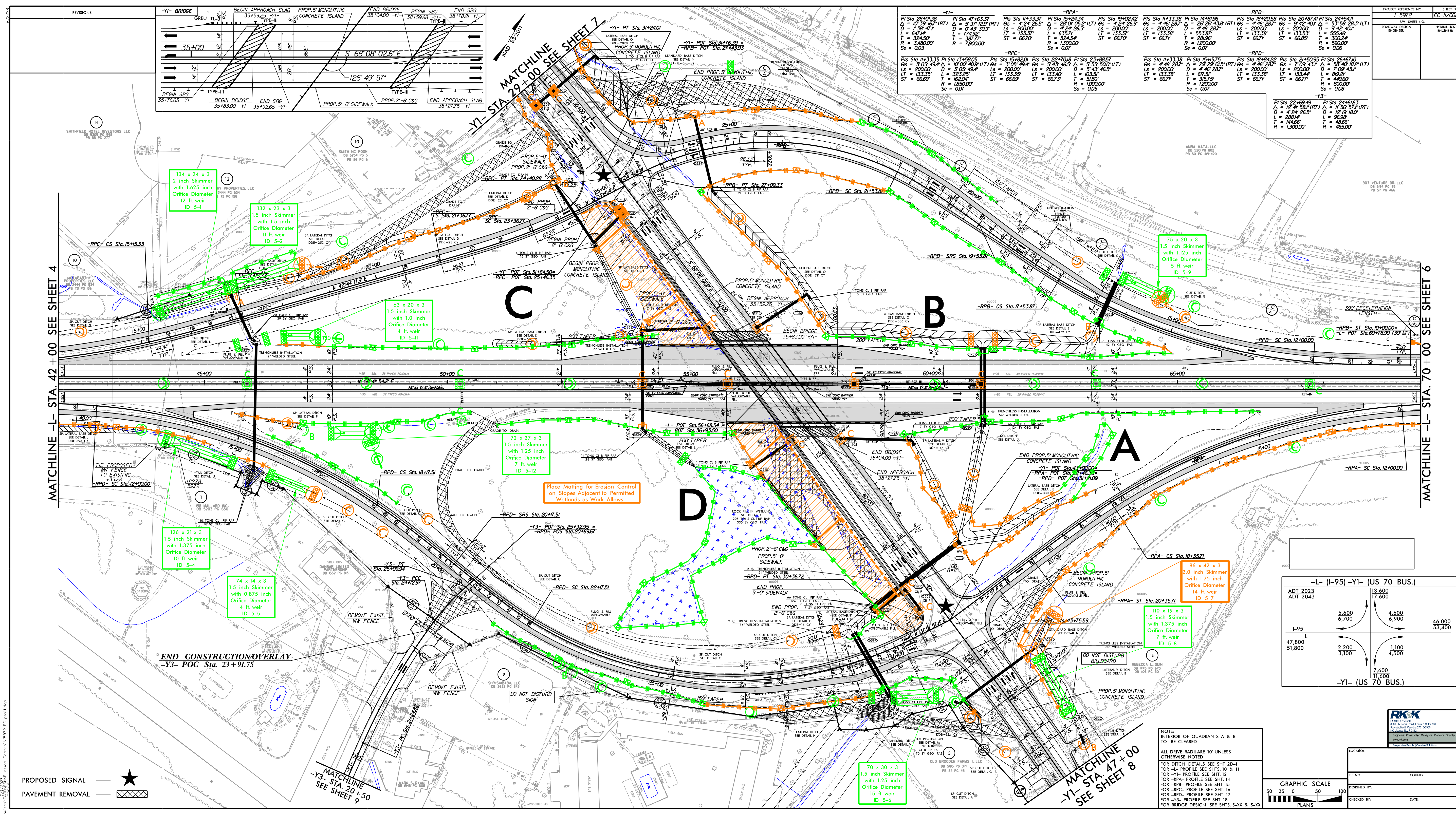
198 MALLARD INC.
DB 5203 PG 650

-RPD- ST Sta. 10+00.00 =
-L- POT Sta. 40+78.85 (39' RT)

FOR -L- PROFILE SEE SHT. 10
FOR -RPC- PROFILE SEE SHT. 16
FOR -RPD- PROFILE SEE SHT. 17

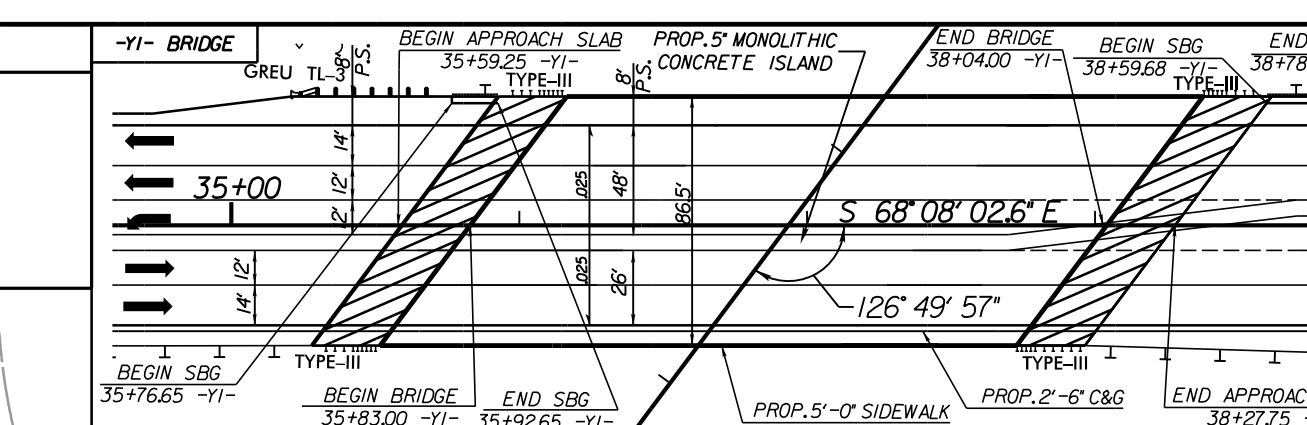
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7/7/2023
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REVISIONS

1	BRIDGE	35+00
2	BRIDGE	35+83.00
3	BRIDGE	35+92.65



Station	PI	LS	ST	RT	LT	ST	RT	LT
28+00.38	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
41+63.37	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
15+24.34	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
19+02.42	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
31+33.38	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
14+18.96	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
20+58.58	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
20+187.41	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38
24+15.41	11.3337	17.38	66.69	11.3337	17.38	66.69	11.3337	17.38

134 x 24 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 5-1

132 x 23 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
11 ft. weir
ID 5-2

63 x 20 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
ID 5-11

72 x 27 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 5-12

126 x 21 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
10 ft. weir
ID 5-4

74 x 14 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 5-5

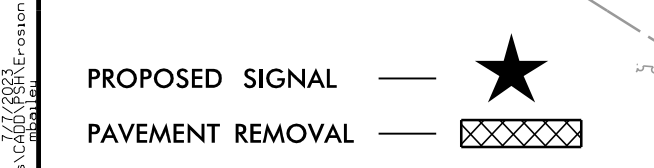
75 x 20 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
5 ft. weir
ID 5-9

86 x 42 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
14 ft. weir
ID 5-7

110 x 19 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
ID 5-8

70 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
15 ft. weir
ID 5-6

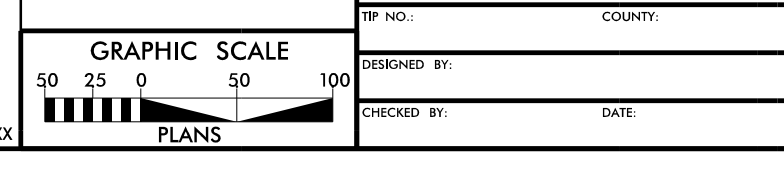
Place Matting for Erosion Control
on Slopes Adjacent to Permitted
Wetlands as Work Allows.



-L- (I-95) -Y1- (US 70 BUS.)

ADT 2023	13,600	46,000
ADT 2043	17,600	53,400
I-95	5,600	6,700
-Y1- (US 70 BUS.)	4,600	6,900
47,800	2,200	1,100
51,800	3,100	4,500
	7,600	11,600

NOTE:
INTERIOR OF QUADRANTS A & B
TO BE CLEARED
ALL DRIVE RADII ARE 10' UNLESS
OTHERWISE NOTED
FOR DITCH DETAILS SEE SHT. 20-1
FOR -L- PROFILE SEE SHT. 10 & 11
FOR -Y1- PROFILE SEE SHT. 12
FOR -RPA- PROFILE SEE SHT. 14
FOR -RPA- PROFILE SEE SHT. 15
FOR -RPA- PROFILE SEE SHT. 16
FOR -RPA- PROFILE SEE SHT. 17
FOR -Y3- PROFILE SEE SHT. 18
FOR BRIDGE DESIGN SEE SHTS. 3-XX & 3-XX



LOCATION: _____

TRIP NO.: _____ COUNTY: _____

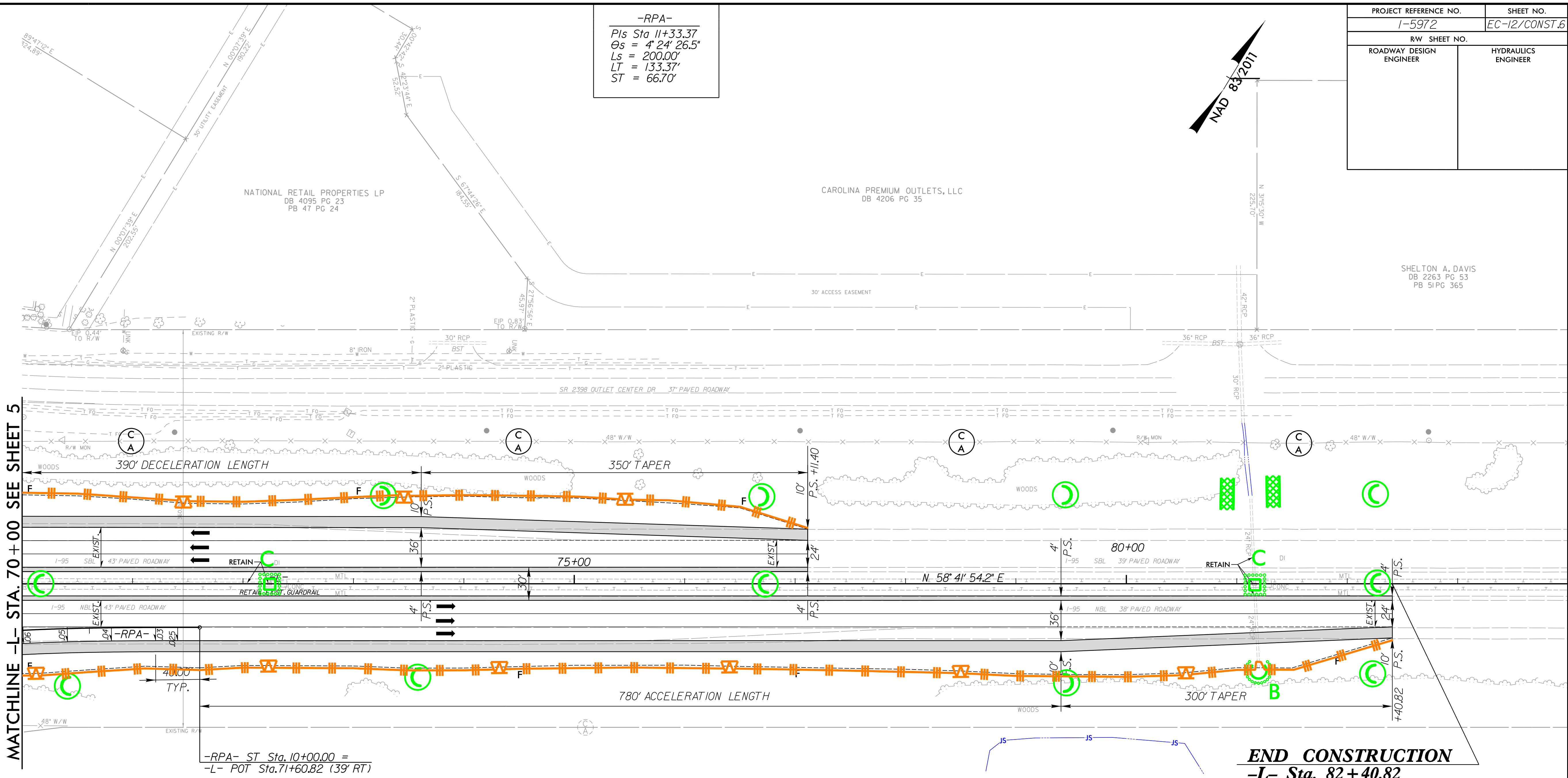
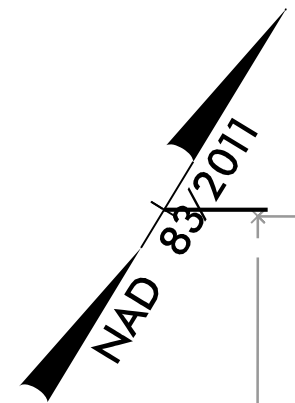
DESIGNED BY: _____

CHECKED BY: _____ DATE: _____

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
1-5972	EC-12/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-RPA-
 Pls Sta 11+33.37
 $\theta_s = 4^{\circ} 24' 26.5''$
 $L_s = 200.00'$
 $LT = 133.37'$
 $ST = 66.70'$



MATCHLINE -L- STA. 70 + 00 SEE SHEET 5

-RPA- ST Sta. 10+00.00 =
 -L- POT Sta. 71+60.82 (39' RT)

END CONSTRUCTION
 -L- Sta. 82 + 40.82

JOHN TIMOTHY HUGHES
 JAMES WILLIAM HUGHES
 DB 1293 PG 564

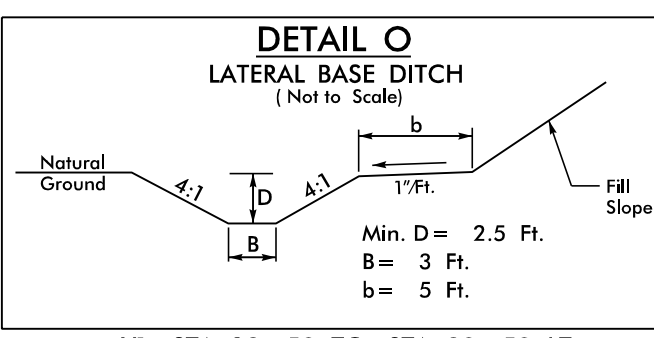
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FOR -L- PROFILE SEE SHT. 11
 FOR -RPA- PROFILE SEE SHT. 14

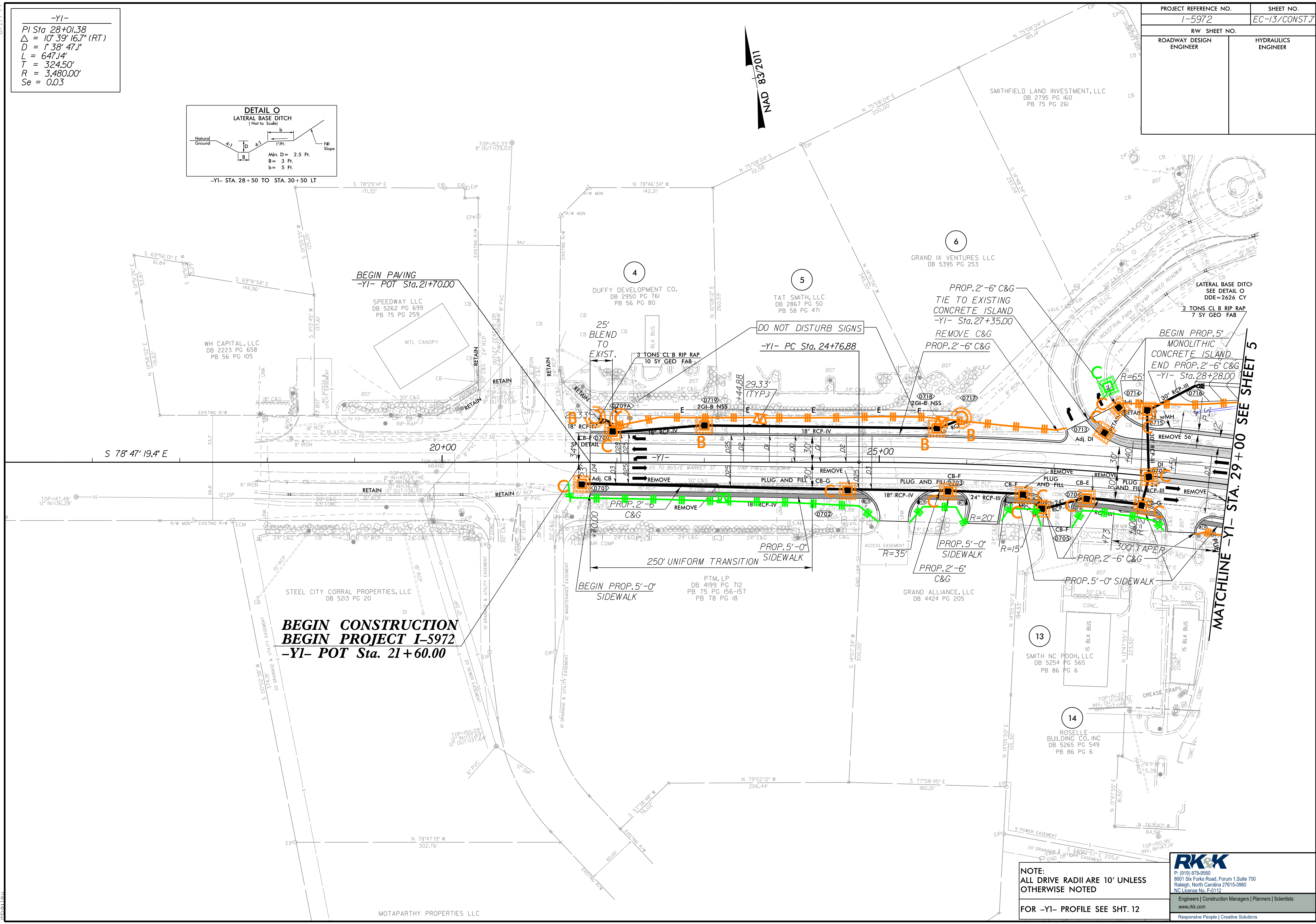
7/7/2023
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PROJECT REFERENCE NO.		SHEET NO.	
I-5972		EC-13/CONST.7	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			

-Y1-
 $PI\ Sta\ 28+01.38$
 $\Delta = 10^{\circ} 39' 16.7'' (RT)$
 $D = 1^{\circ} 38' 47.1''$
 $L = 647.14'$
 $T = 324.50'$
 $R = 3,480.00'$
 $Se = 0.03$



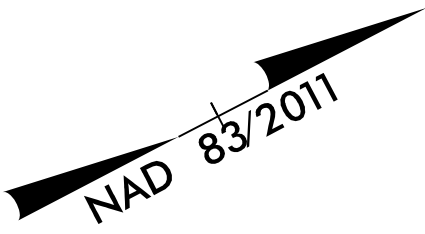
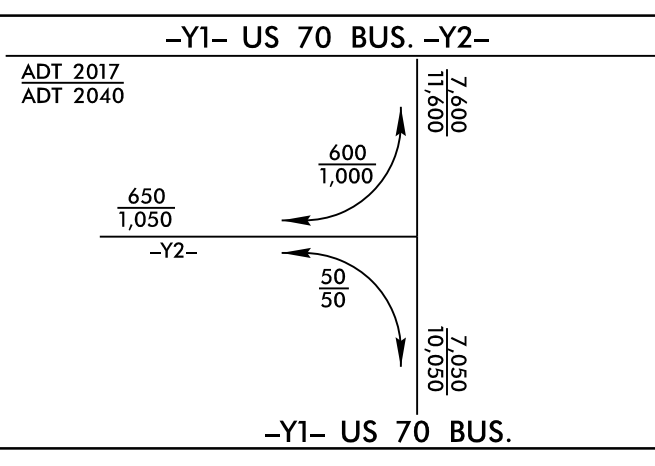
8/17/99
 7/7/2023
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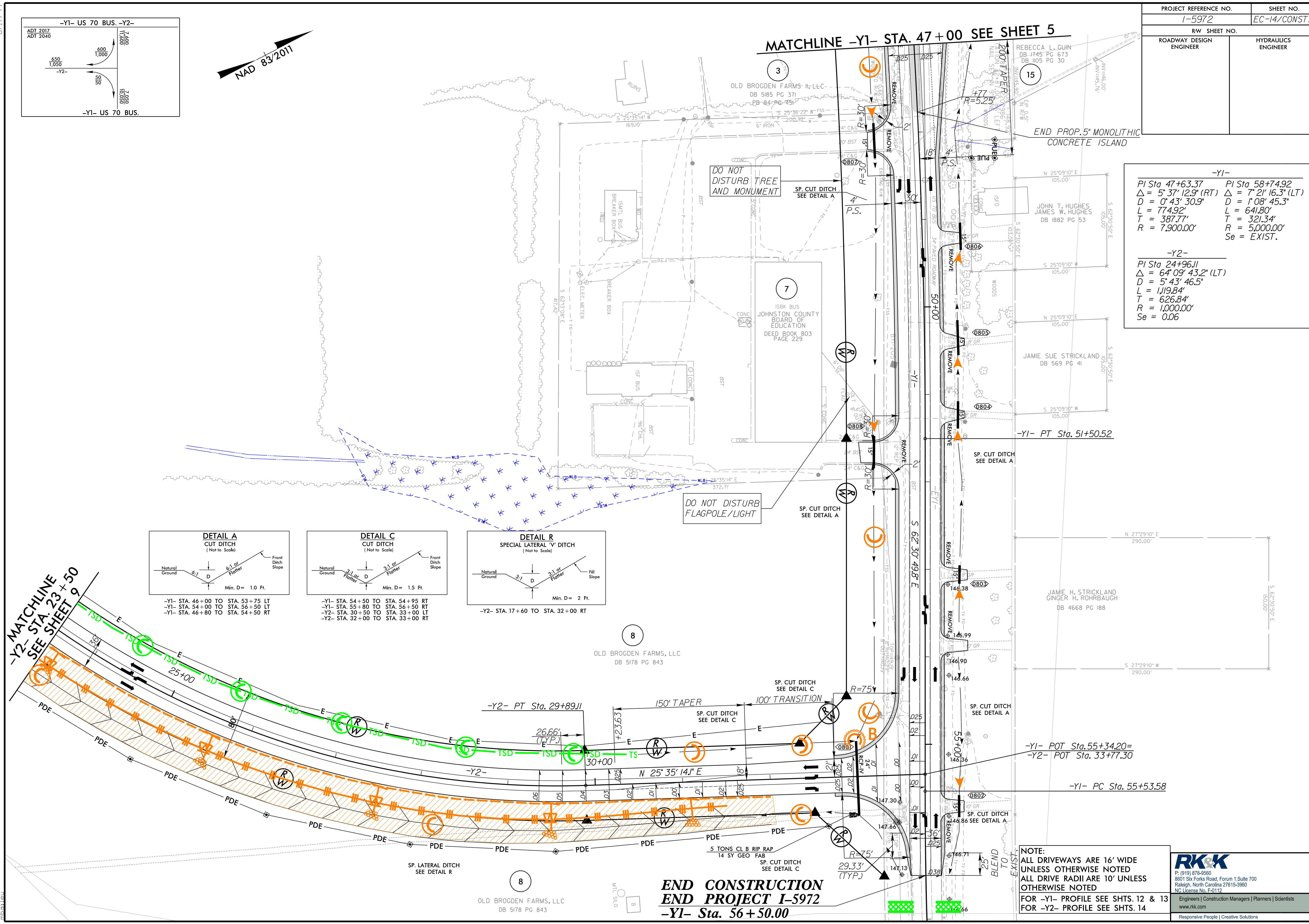
NOTE:
 ALL DRIVE RADII ARE 10' UNLESS OTHERWISE NOTED
 FOR -Y1- PROFILE SEE SHT. 12

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PROJECT REFERENCE NO. I-5972
SHEET NO. EC-14/CONST.8
RW SHEET NO. ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

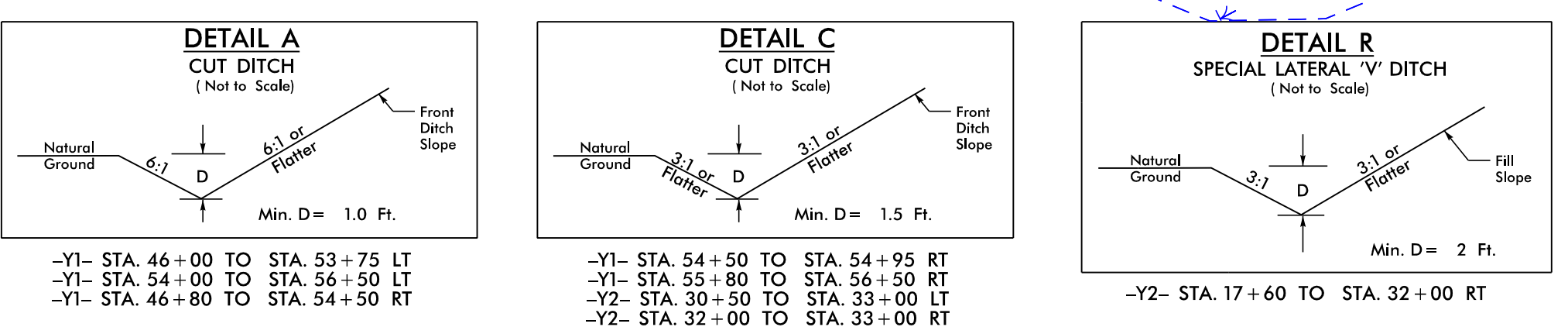


MATCHLINE -Y1- STA. 47+00 SEE SHEET 5



-Y1-
PI Sta 47+63.37
Δ = 5' 37' 12.9" (RT)
D = 0' 43' 30.9"
L = 774.92'
T = 387.77'
R = 7,900.00'
PI Sta 58+74.92
Δ = 7' 21' 16.3" (LT)
D = 1' 08' 45.3"
L = 641.80'
T = 321.34'
R = 5,000.00'
Se = EXIST.

-Y2-
PI Sta 24+96.11
Δ = 64' 09' 43.2" (LT)
D = 5' 43' 46.5"
L = 1,119.84'
T = 626.84'
R = 1,000.00'
Se = 0.06



MATCHLINE
-Y2- STA. 23+50
SEE SHEET 9

END CONSTRUCTION
END PROJECT I-5972
-Y1- Sta. 56+50.00

NOTE:
ALL DRIVEWAYS ARE 16' WIDE
UNLESS OTHERWISE NOTED
ALL DRIVE RADII ARE 10' UNLESS
OTHERWISE NOTED
FOR -Y1- PROFILE SEE SHTS. 12 & 13
FOR -Y2- PROFILE SEE SHTS. 14

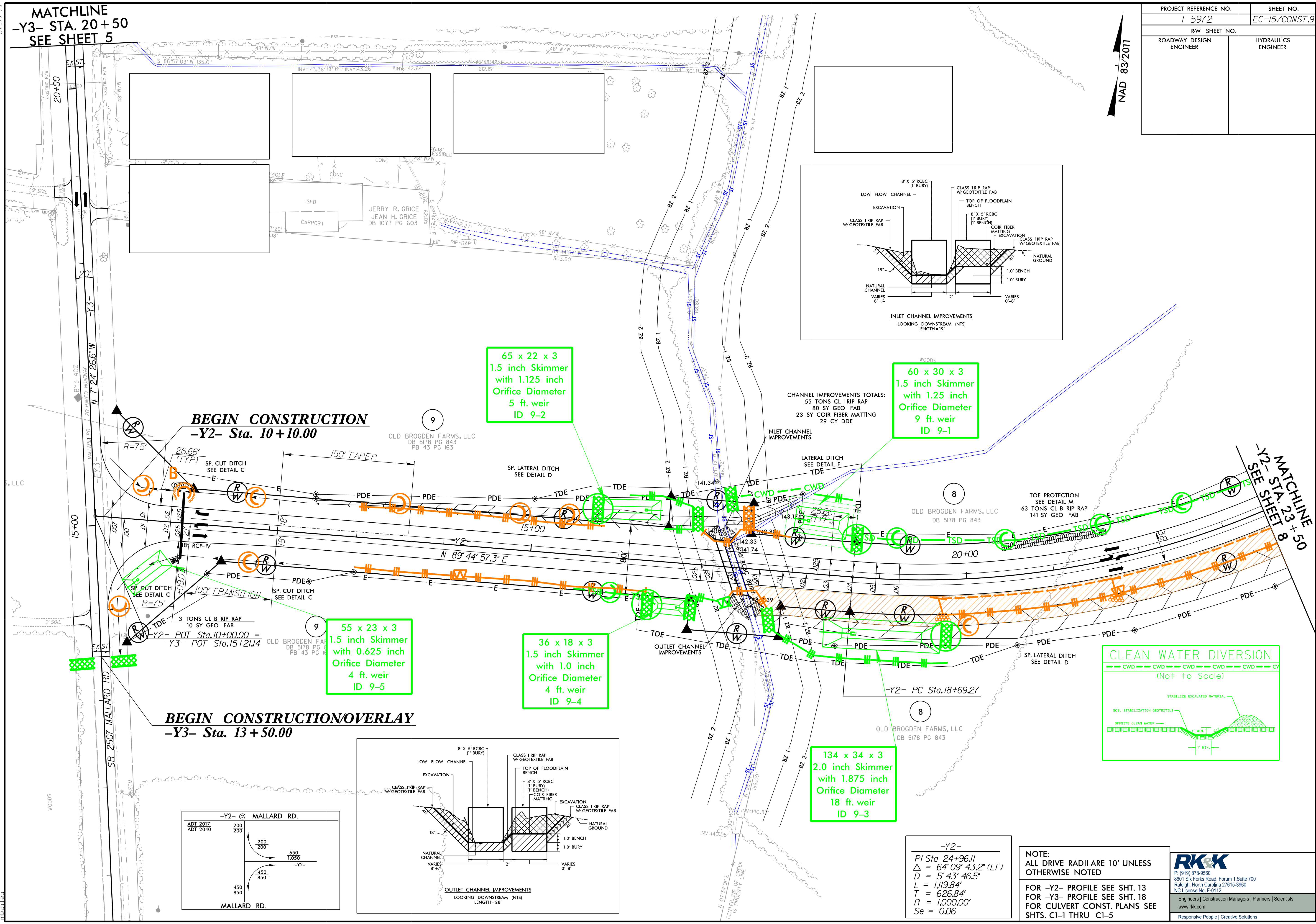
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8/17/99
7/7/2023
RA\H\cdoullins\CAADD\PSH\Eroston_Control\I5972_EC_psh14.dgn

MATCHLINE
-Y3- STA. 20+50
SEE SHEET 5

PROJECT REFERENCE NO. 1-5972	SHEET NO. EC-15/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/2011



65 x 22 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
5 ft. weir
ID 9-2

60 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
9 ft. weir
ID 9-1

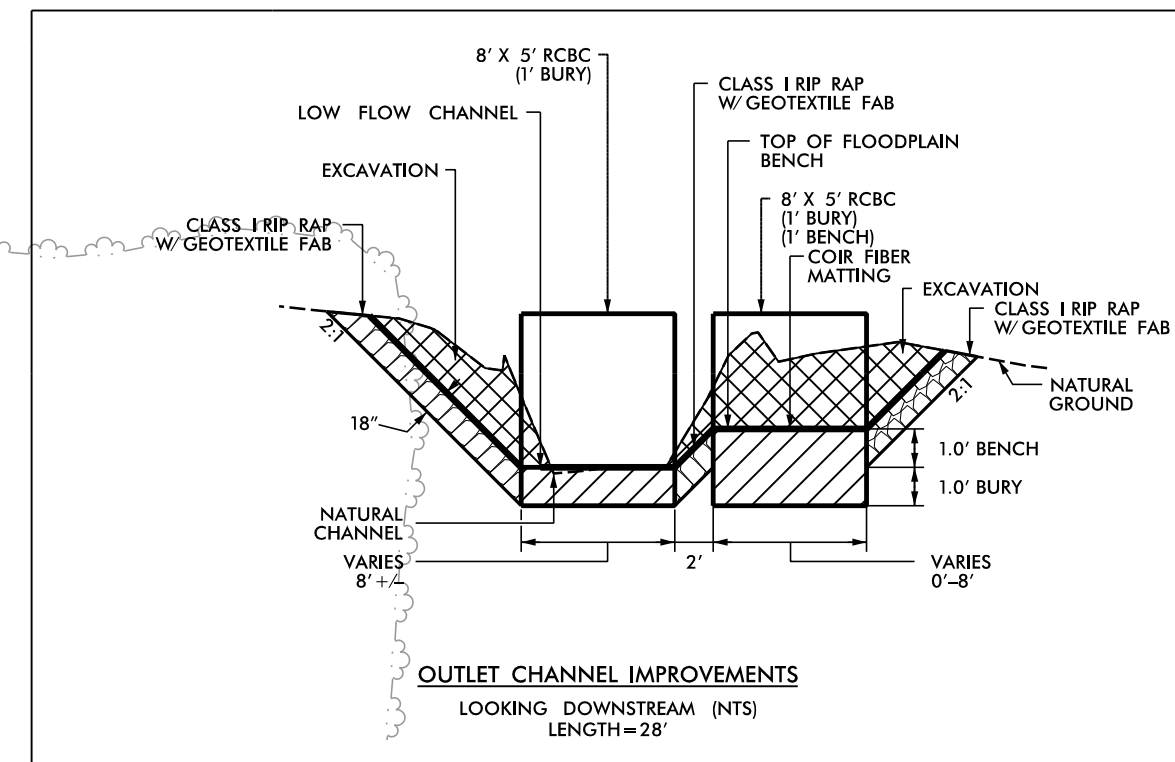
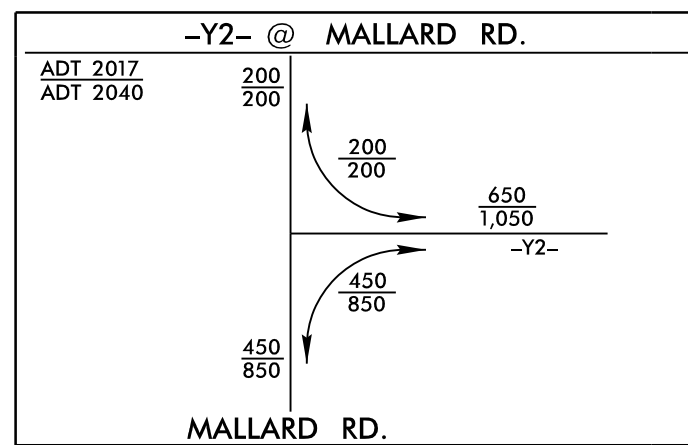
55 x 23 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 9-5

36 x 18 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
4 ft. weir
ID 9-4

134 x 34 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
18 ft. weir
ID 9-3

BEGIN CONSTRUCTION
-Y2- Sta. 10+10.00

BEGIN CONSTRUCTION/OVERLAY
-Y3- Sta. 13+50.00



-Y2-
PI Sta. 24+96.11
Δ = 64'09" 43.2" (LT)
D = 5' 43" 46.5"
L = 1,119.84'
T = 626.84'
R = 1,000.00'
Se = 0.06

NOTE:
ALL DRIVE RADII ARE 10' UNLESS
OTHERWISE NOTED

FOR -Y2- PROFILE SEE SHT. 13
FOR -Y3- PROFILE SEE SHT. 18
FOR CULVERT CONST. PLANS SEE
SHTS. C1-1 THRU C1-5

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