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TIP PROJECT: U-5104

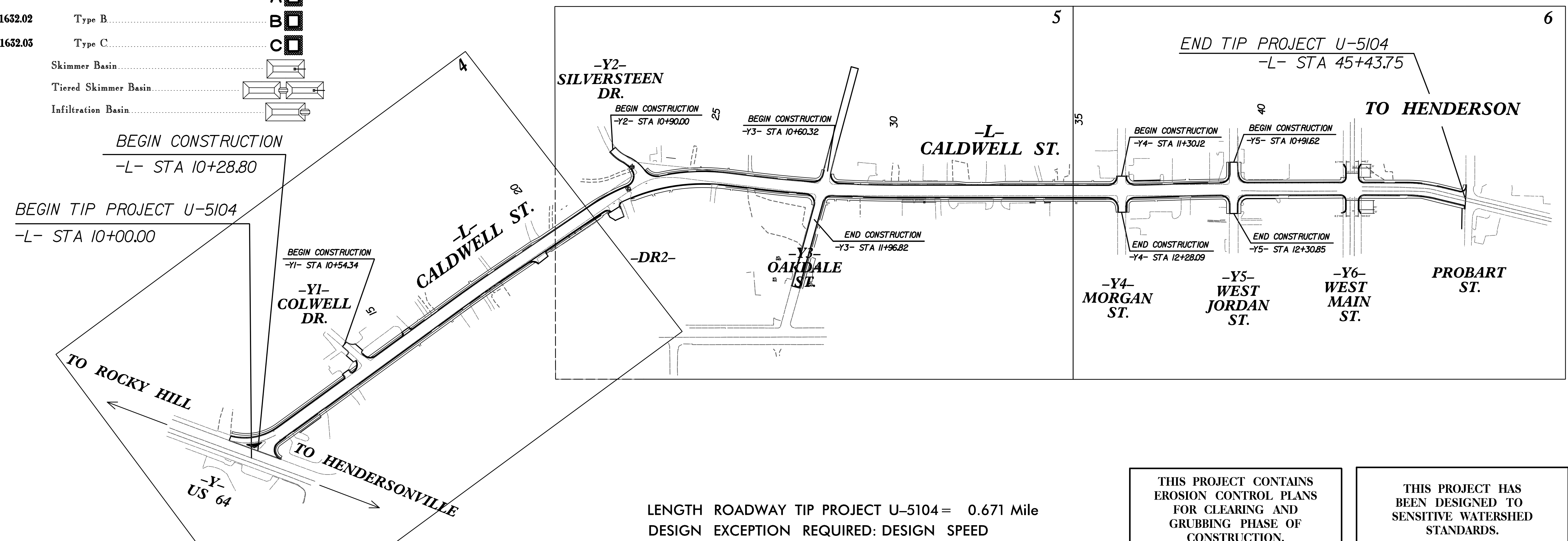
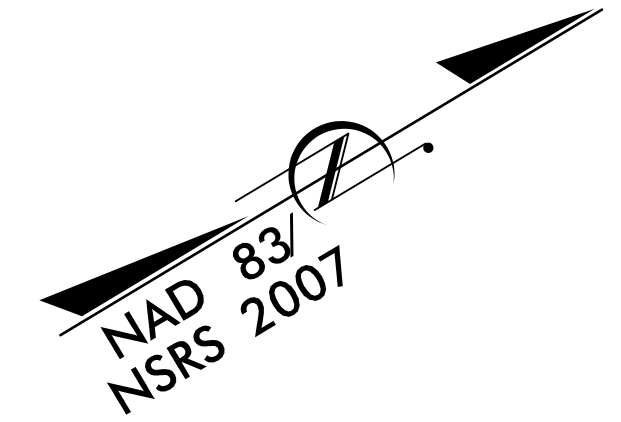
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
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	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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

LOCATION: S. CALDWELL STREET FROM (BUS. 64)
ROSMAN HIGHWAY (US 64) TO PROBART STREET
TYPE OF WORK: GRADING, DRAINAGE, EROSION CONTROL, PAVING,
AND SIGNALS

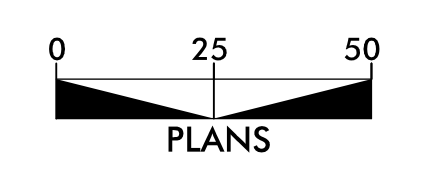
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5104	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	



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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared In the Office of:

SEPI ENGINEERING & CONSTRUCTION

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197

2012 STANDARD SPECIFICATIONS

Designed by:

BRIAN MAZZOCHI, PE 3120
NAME LEVEL III CERTIFICATION NO.

Reviewed In the Office of:

ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2012 STANDARD SPECIFICATIONS

Reviewed by:

JENNIFER PARISH

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 2012 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 Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-5104</i>	SHEET NO. <i>EC-2</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

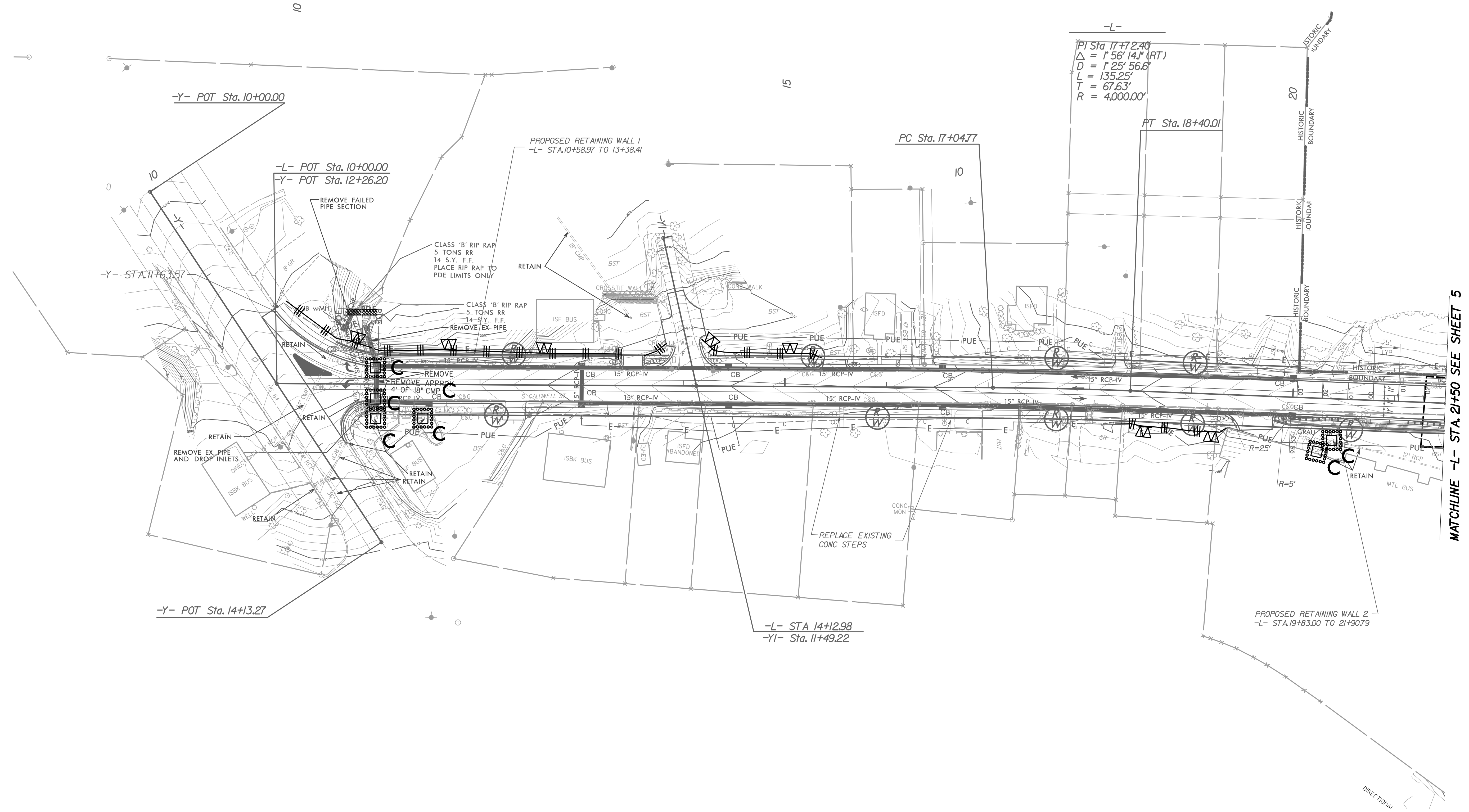
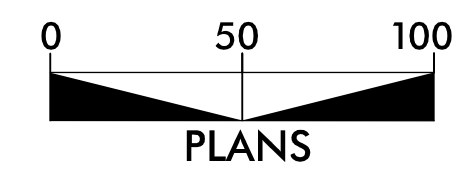
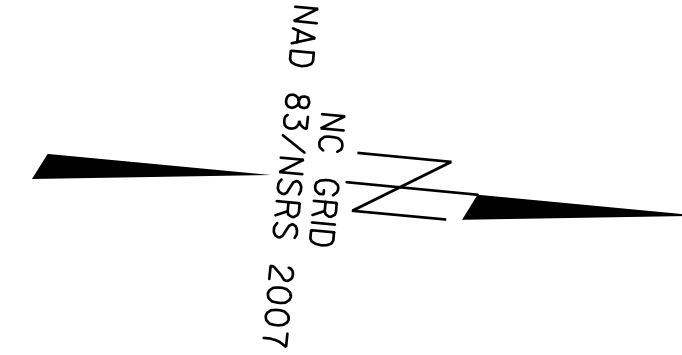
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES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

PROJECT REFERENCE NO. U-5104	SHEET NO. EC-3/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.

For Slopes Excavated Greater Than 10 feet
 Install Matting for Erosion Control on
 Entire Slope as Work Allows.



MATCHLINE -L- STA 21+50 SEE SHEET 5

PROJECT REFERENCE NO.	SHEET NO.
U-5104	EC-4/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

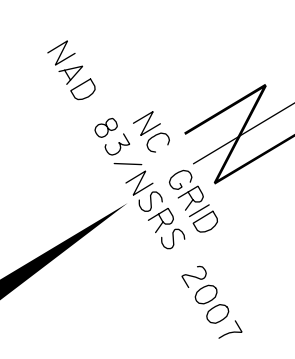


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Raleigh, NC 27605
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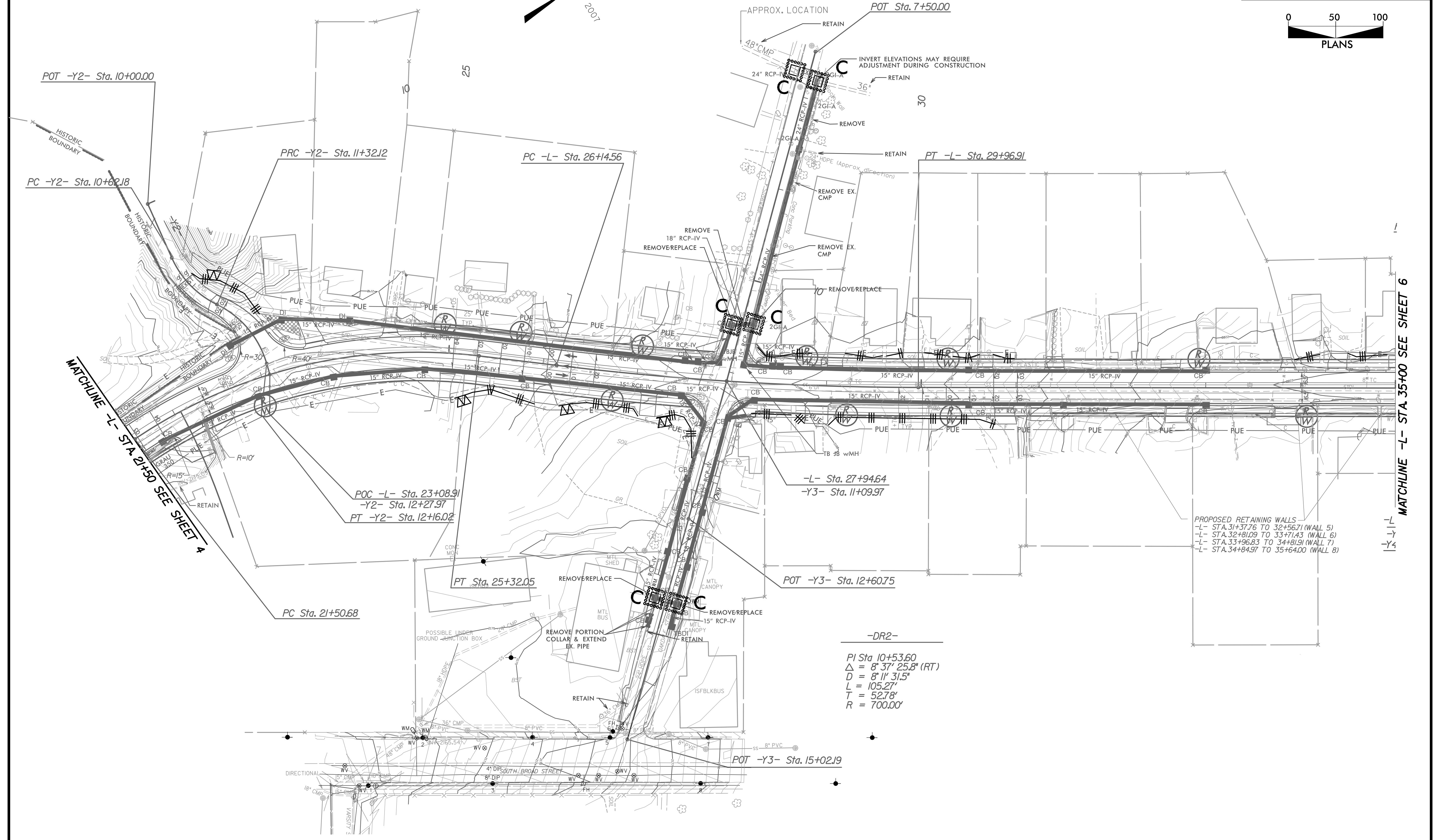
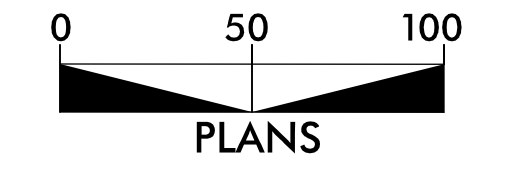
For Slopes Excavated Greater Than 10 feet
Install Matting for Erosion Control on
Entire Slope as Work Allows.

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.



-L-
PI Sta 23+49.94 PI Sta 28+05.97
Δ = 40° 59' 46.8" (RT) Δ = 6° 50' 45.5" (LT)
D = 10' 44' 58.8" D = 1' 47' 25.8"
L = 381.37' L = 382.35'
T = 199.26' T = 191.40'
R = 533.00' R = 3,200.00'



MATCHLINE -L- STA. 21+50 SEE SHEET A

MATCHLINE -L- STA. 35+00 SEE SHEET 6

PROPOSED RETAINING WALLS
-L- STA. 31+37.76 TO 32+56.71 (WALL 5)
-L- STA. 32+81.09 TO 33+71.43 (WALL 6)
-L- STA. 33+96.83 TO 34+81.91 (WALL 7)
-L- STA. 34+84.97 TO 35+64.00 (WALL 8)

-DR2-
PI Sta 10+53.60
Δ = 8° 37' 25.8" (RT)
D = 8' 11' 31.5"
L = 105.27'
T = 52.78'
R = 700.00'

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

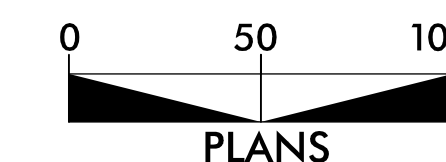
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

PI Sta 36+57.11	PI Sta 38+36.32	PI Sta 42+01.74	PI Sta 44+23.66
$\Delta = 2' 12" 42.3" (LT)$	$\Delta = 2' 04" 00.0" (RT)$	$\Delta = 0' 12" 33.1" (RT)$	$\Delta = 13' 25' 41.9" (RT)$
$D = 1' 11" 37.2"$	$D = 1' 11" 37.2"$	$D = 0' 13' 45.1"$	$D = 16' 22' 12.8"$
$L = 185.29'$	$L = 173.14'$	$L = 91.28'$	$L = 82.03'$
$T = 92.66'$	$T = 86.58'$	$T = 45.64'$	$T = 41.20'$
$R = 4,800.00'$	$R = 4,800.00'$	$R = 25,000.00'$	$R = 350.00'$



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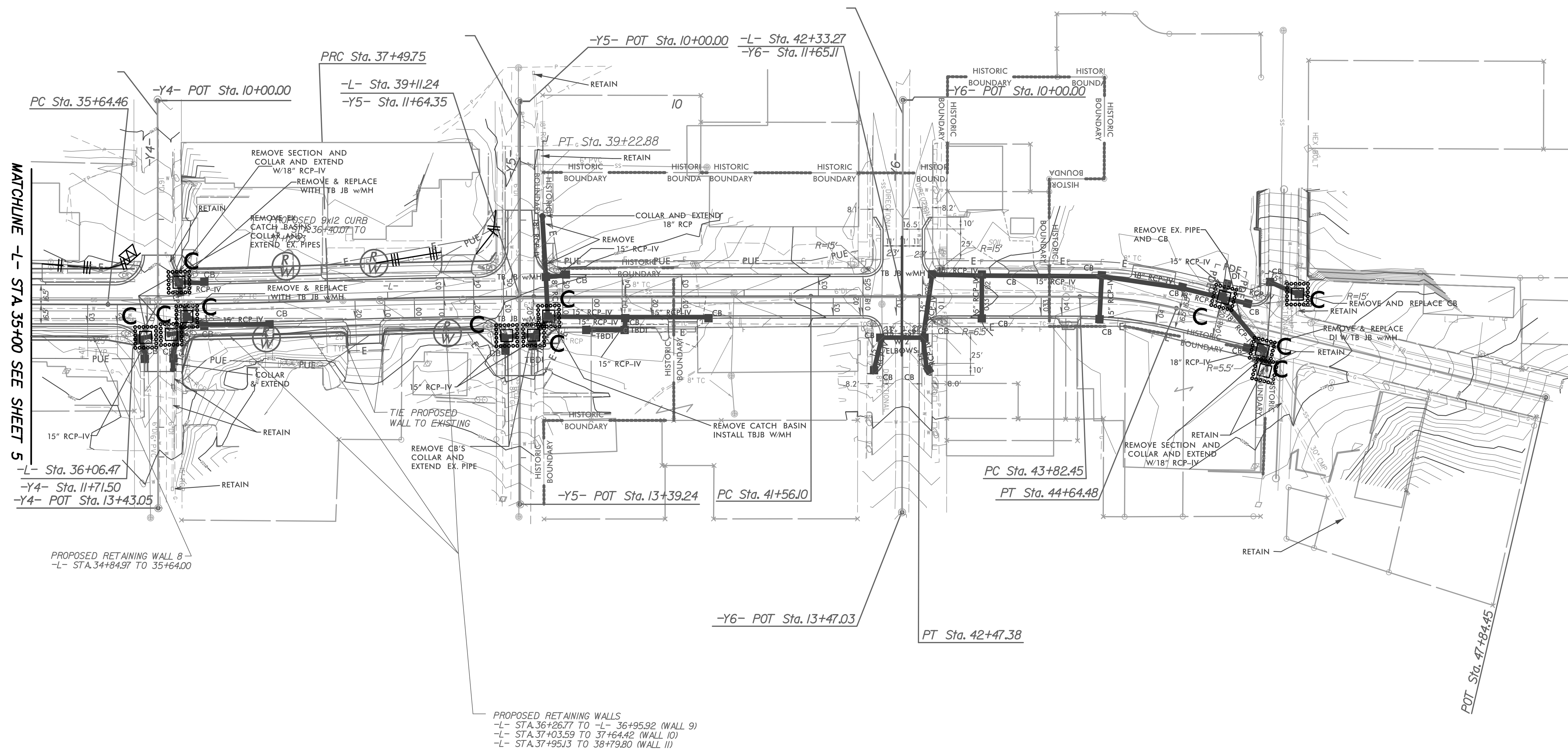
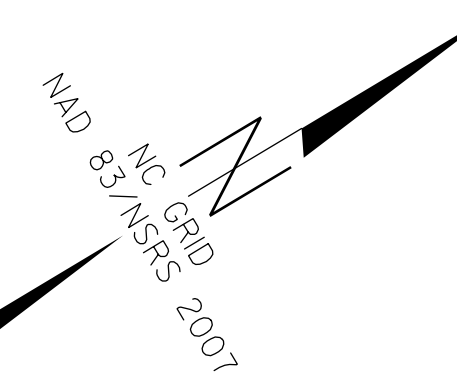
PROJECT REFERENCE NO. U-5104	SHEET NO. EC-5/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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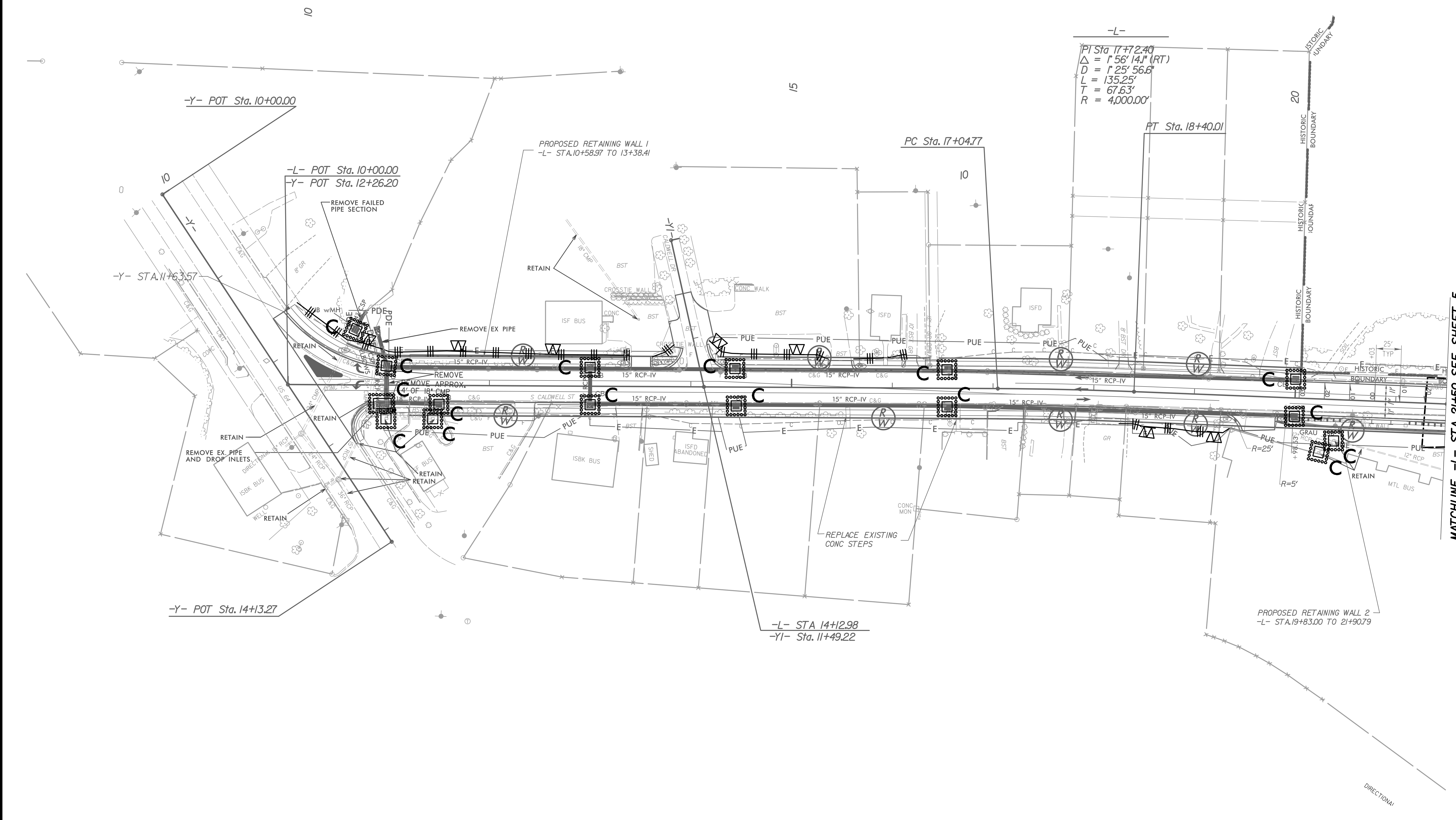
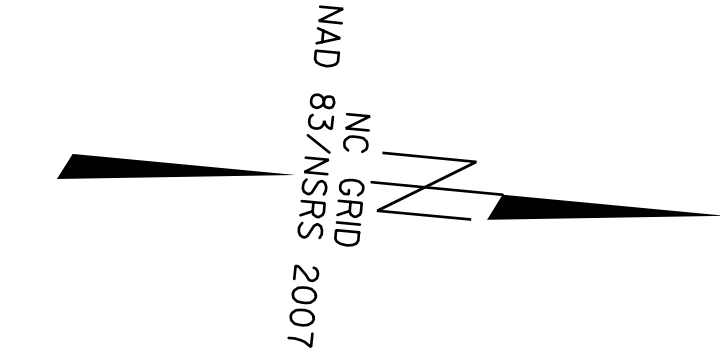
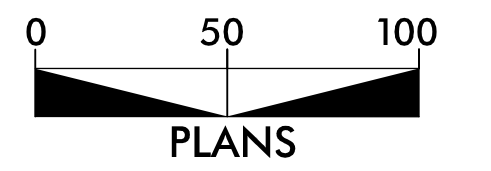


FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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ENGINEERING &
CONSTRUCTION

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197

PROJECT REFERENCE NO. <i>U-5104</i>	SHEET NO. <i>EC-6/CONST.4</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

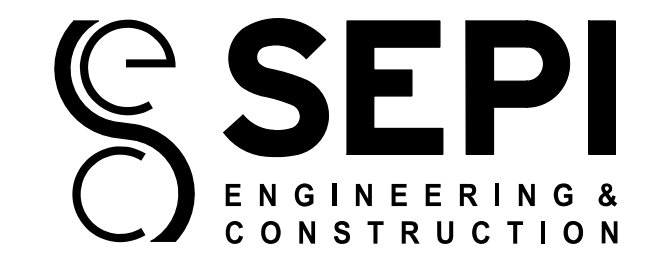


-L-
PI Sta. 17+72.40
 $\Delta = 1^{\circ}56'14.1''$ (RT)
 $D = 1^{\circ}25'56.6''$
 $L = 135.25'$
 $T = 67.63'$
 $R = 4,000.00'$

MATCHLINE -L- STA. 21+50 SEE SHEET 5

DIRECTIONAL

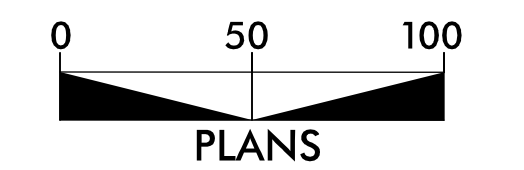
PROJECT REFERENCE NO.	SHEET NO.
U-5104	EC-7/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



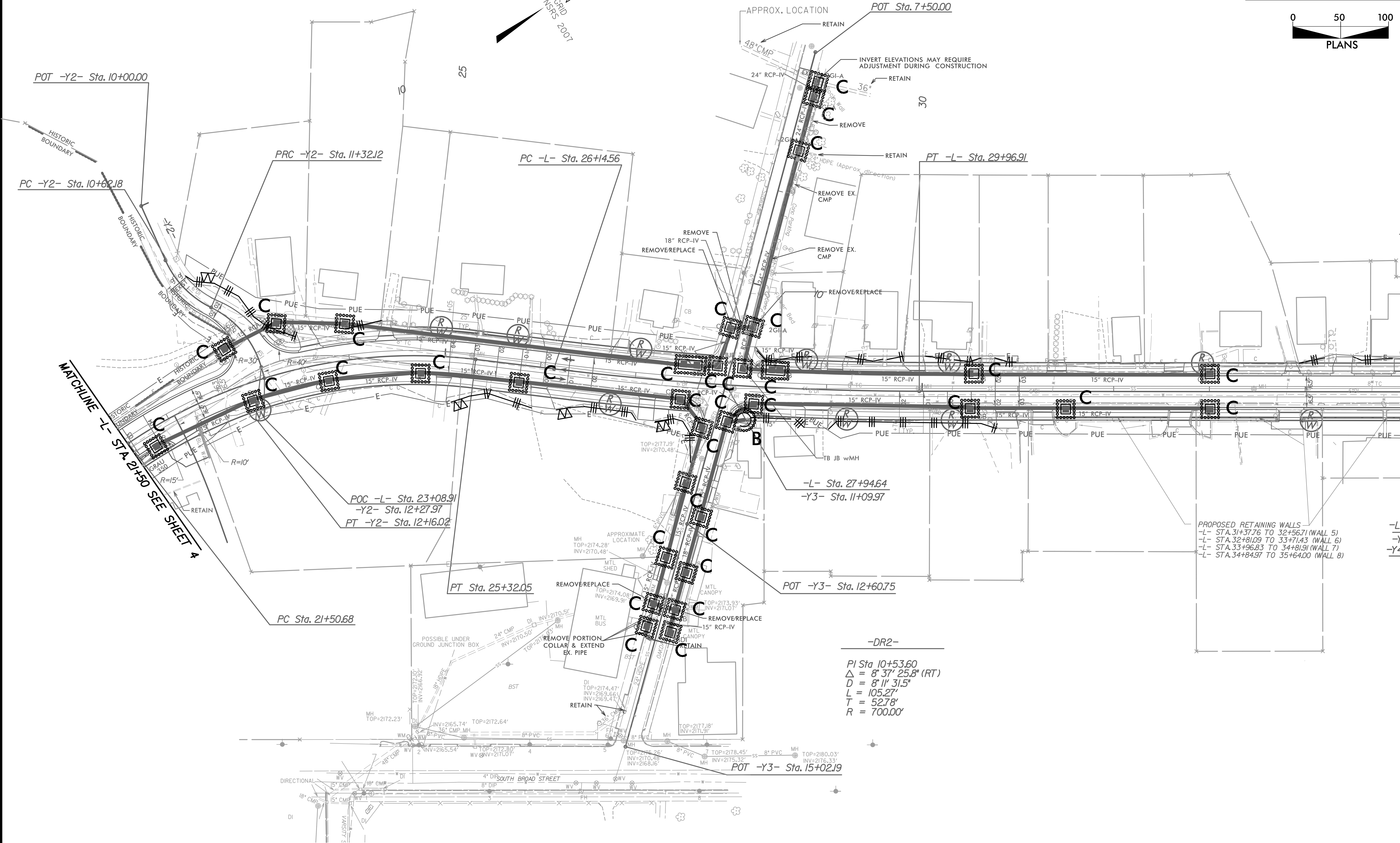
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FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

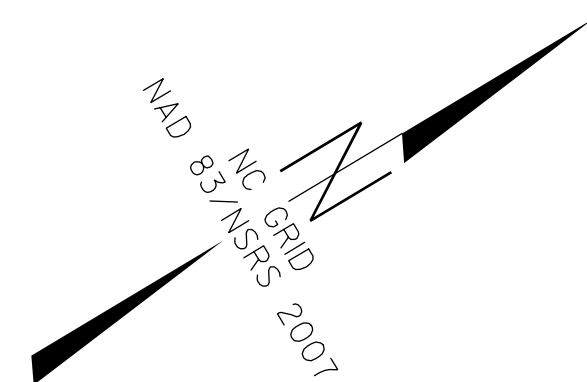
-L-
 PI Sta 23+49.94 PI Sta 28+05.97
 $\Delta = 40^{\circ} 59' 46.8''$ (RT) $\Delta = 6^{\circ} 50' 45.5''$ (LT)
 $D = 10^{\circ} 44' 58.8''$ $D = 1^{\circ} 47' 25.8''$
 $L = 381.37'$ $L = 382.35'$
 $T = 199.26'$ $T = 191.40'$
 $R = 533.00'$ $R = 3,200.00'$



MATCHLINE -L- STA. 35+00 SEE SHEET 6



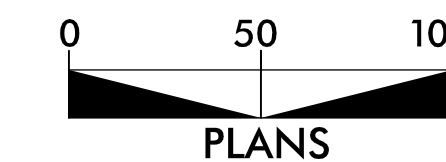
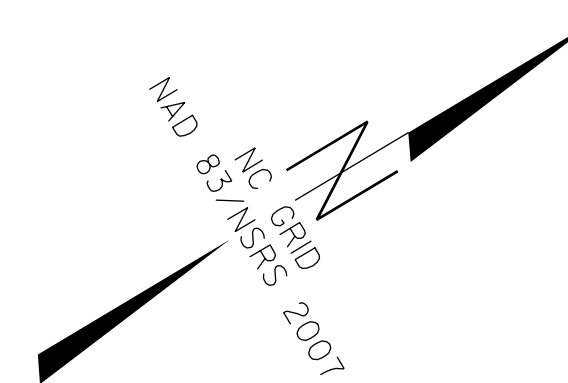
PROPOSED RETAINING WALLS
 -L- STA. 31+37.76 TO 32+56.71 (WALL 5)
 -L- STA. 32+81.09 TO 33+71.43 (WALL 6)
 -L- STA. 33+96.83 TO 34+81.91 (WALL 7)
 -L- STA. 34+84.97 TO 35+64.00 (WALL 8)



PROJECT REFERENCE NO. U-5104	SHEET NO. EC-8/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L-

PI Sta 36+57.11 Δ = 2°12'42.3" (LT) D = 1°11'37.2" L = 185.29' T = 92.66' R = 4,800.00'	PI Sta 38+36.32 Δ = 2°04'00.0" (RT) D = 1°11'37.2" L = 173.14' T = 86.58' R = 4,800.00'	PI Sta 42+01.74 Δ = 0°12'33.1" (RT) D = 0°13'45.1" L = 91.28' T = 45.64' R = 25,000.00'	PI Sta 44+23.66 Δ = 13°25'41.9" (RT) D = 16°22'12.8" L = 82.03' T = 41.20' R = 350.00'
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