

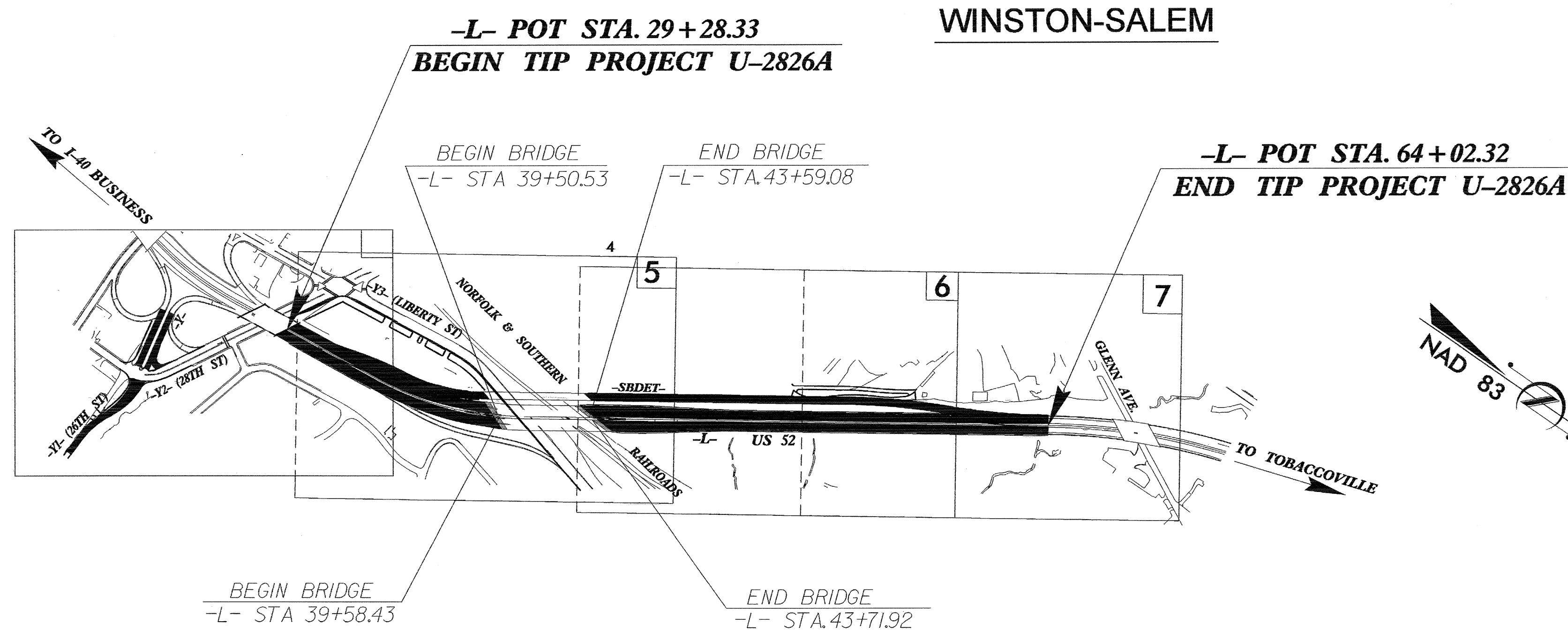
TIP PROJECT: U-2826A

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

FORSYTH COUNTY

**LOCATION: US 52 OVER THE NORFOLK SOUTHERN RAILROAD
 IN WINSTON-SALEM**

**TYPE OF WORK: GRADING, PAVING, DRAINAGE, RESURFACING, WIDENING,
 CURB & GUTTER, SIGNING, SIGNALS, STRUCTURES,
 AND INTELLIGENT TRANSPORTATION SYSTEMS**



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2826A	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	SD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.01	Riser Basin	RB
1630.01	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
1633.01	Temporary Rock Silt Check Type-B	TRSCB
	Wattle	W
1654.01	Temporary Rock Sediment Dam Type-A	TRSDA
1654.02	Temporary Rock Sediment Dam Type-B	TRSDB
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRB
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
Rock Inlet Sediment Trap:		
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SB
	Tiered Skimmer Basin	TSB
	Infiltration Basin	IB

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

GRAPHIC SCALE

0

 PLANS

0

 PROFILE (HORIZONTAL)

0

 PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

Prepared In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

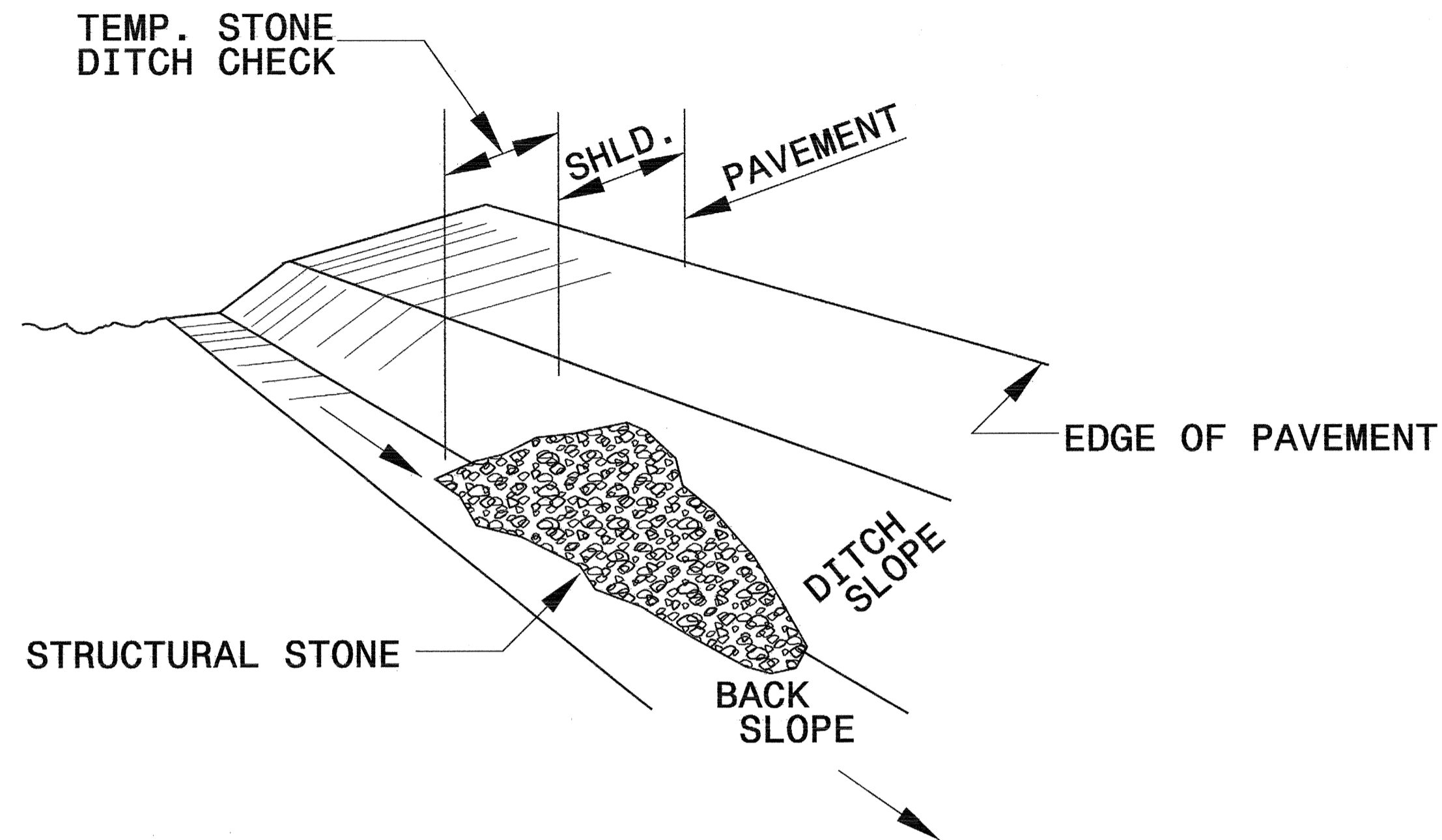
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.05 Temporary Diversion
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	1635.02 Rock Pipe Inlet Sediment Trap Type B

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 2826A-EC-1.dwg

PROJECT REFERENCE NO.	SHEET NO.
U-2826A	EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

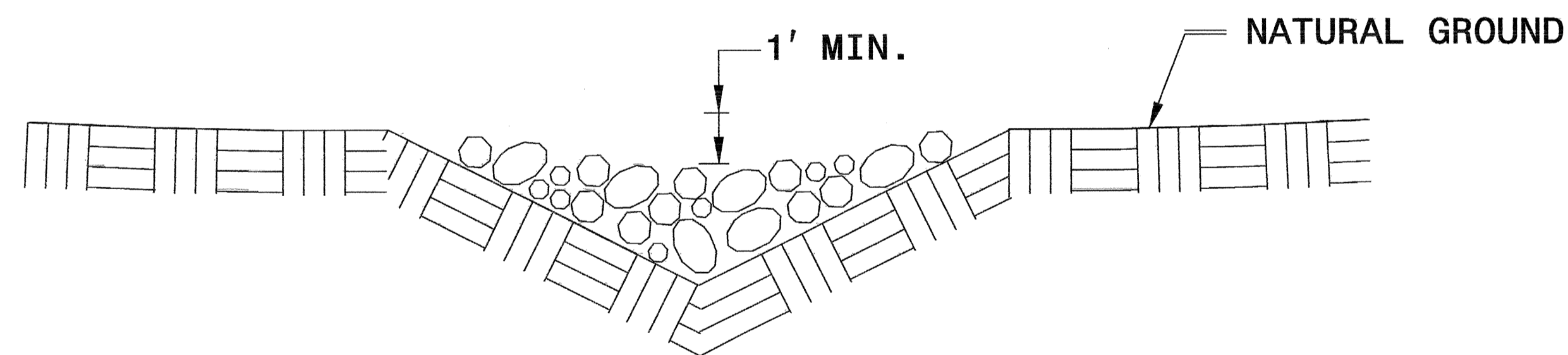


ISOMETRIC VIEW

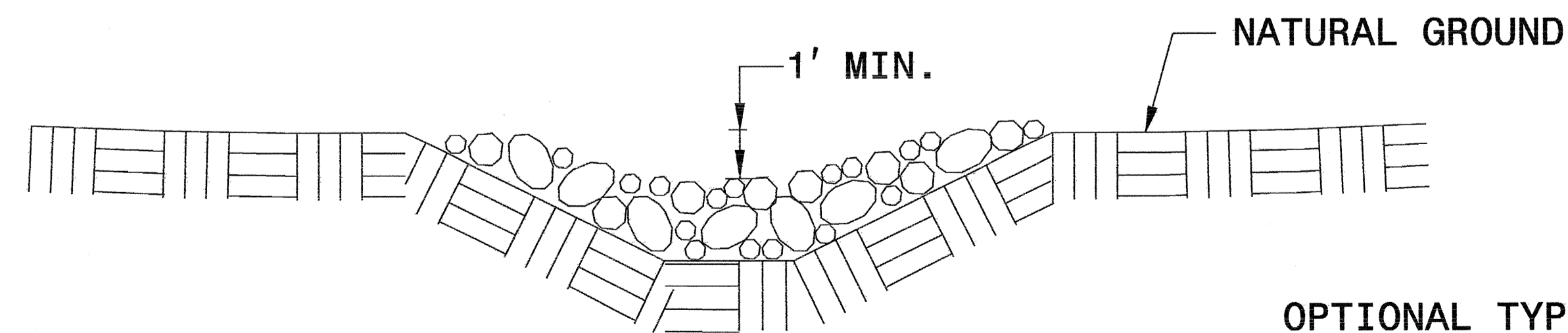
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

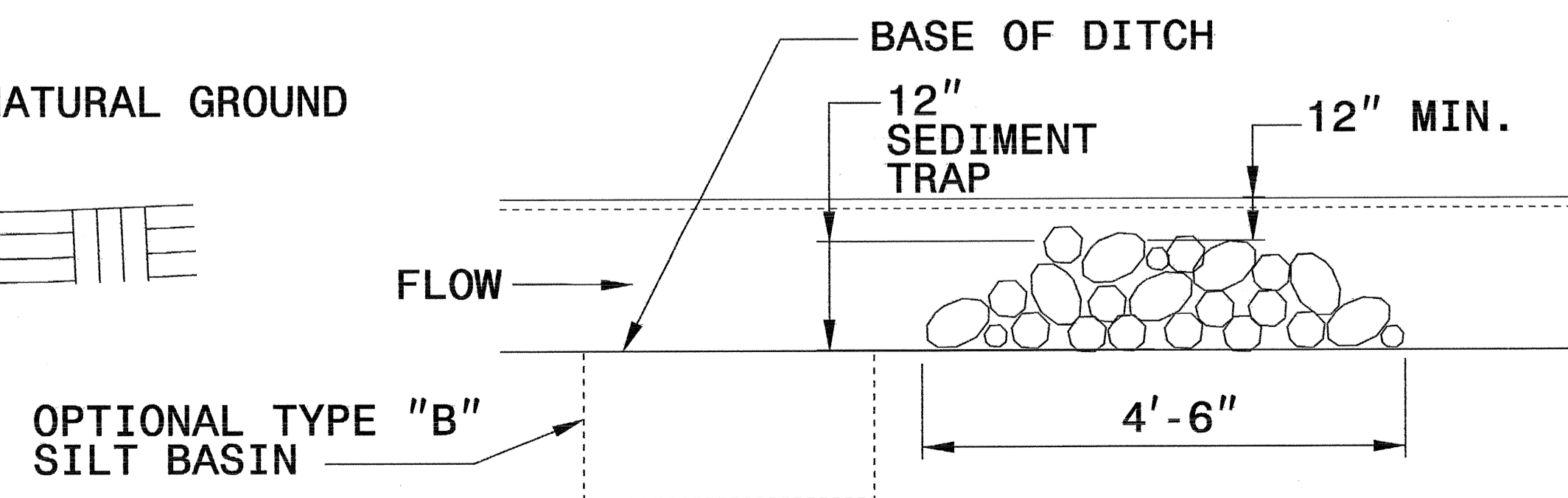
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



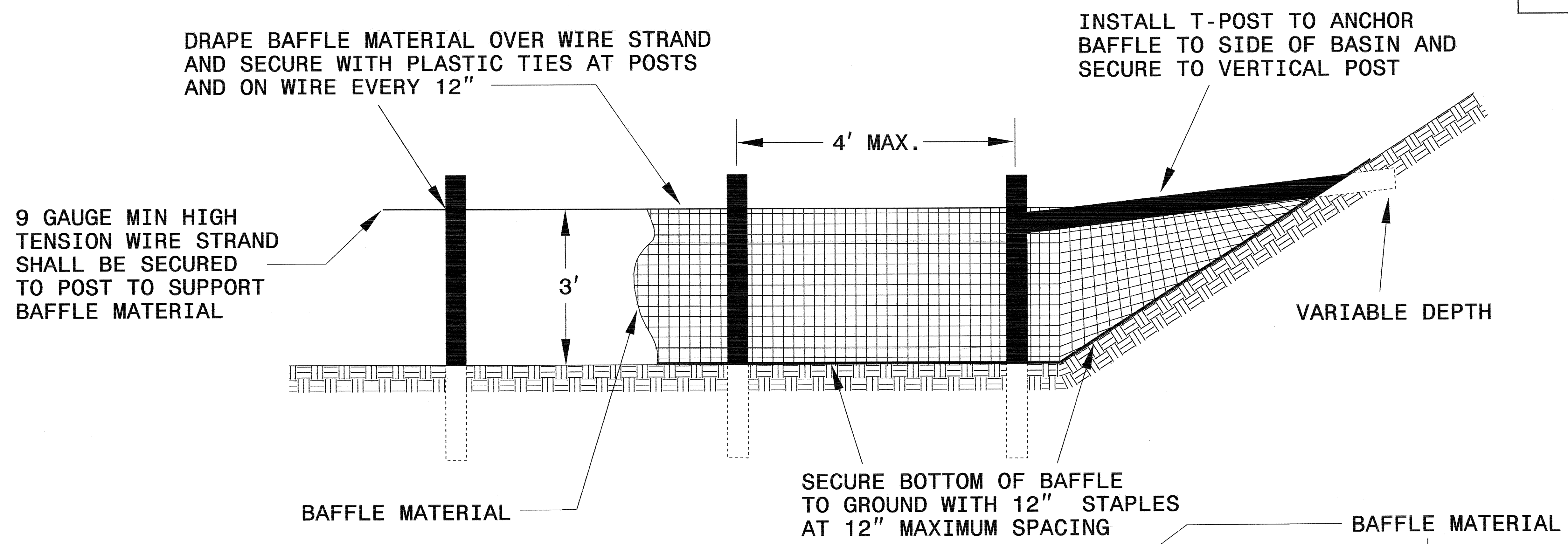
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

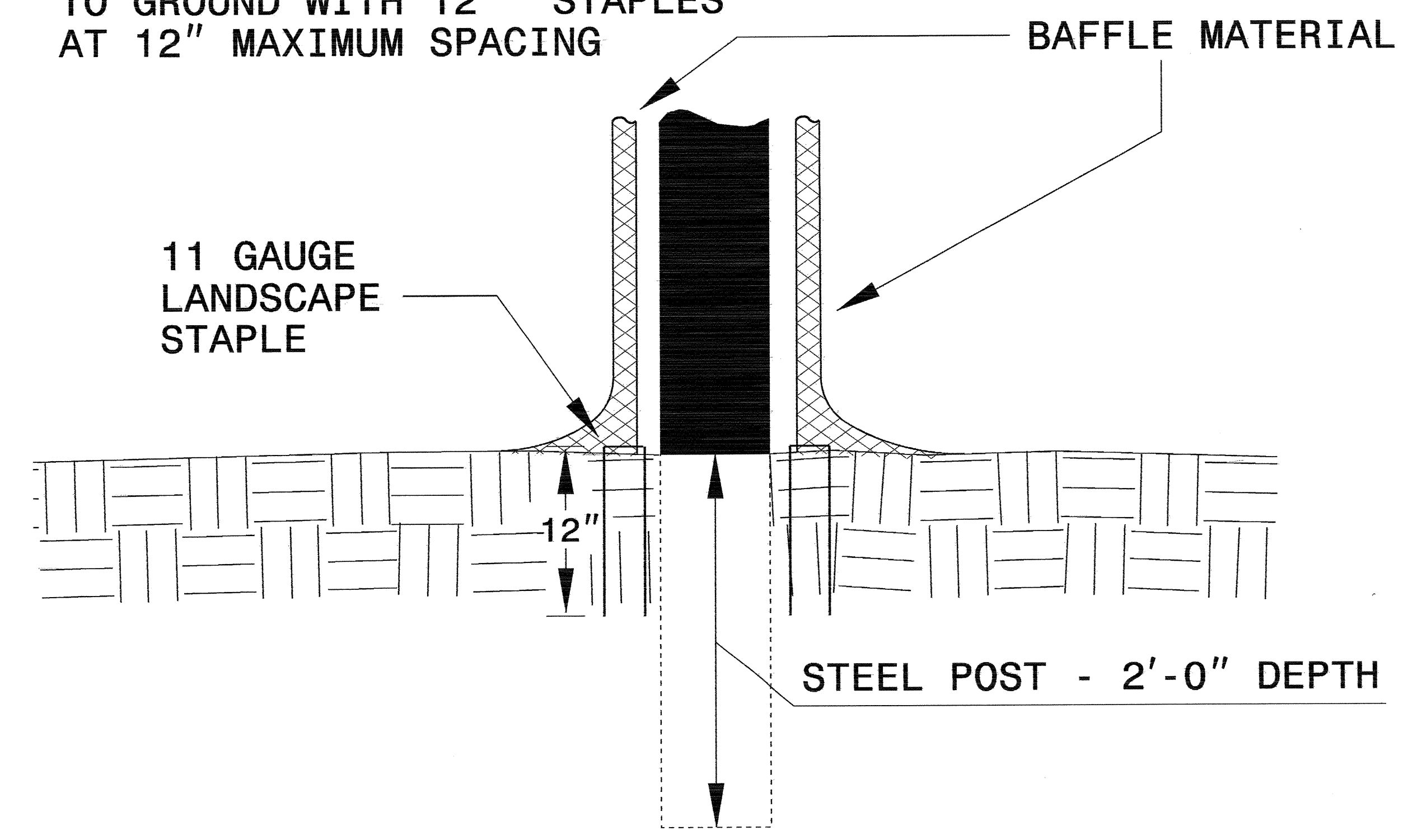
PROJECT REFERENCE NO. U-2826A	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



NOTES:

1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH.
2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

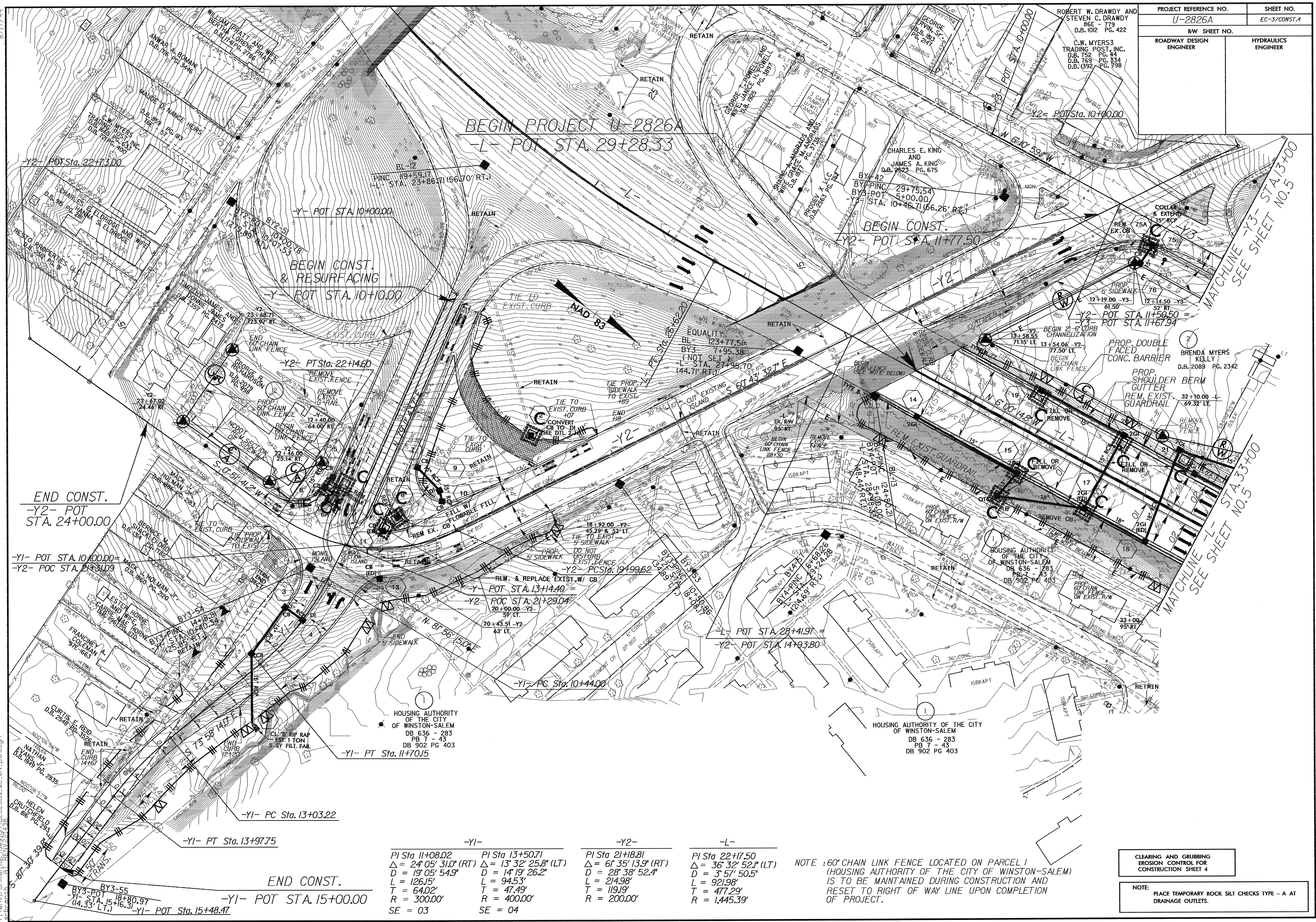


8/17/99

PROJECT REFERENCE NO. U-2826A	SHEET NO. EC-3/CONST.4
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

ROBERT W. DRAWDY AND STEVEN C. DRAWDY
86E - 779
D.B. 1012 PG. 422

C.W. MYERS3 TRADING POST, INC.
D.B. 782 PG. 44
D.B. 769 PG. 334
D.B. 392 PG. 798



BEGIN PROJECT U-2826A
-L- POT STA. 29+28.33

BEGIN CONST. & RESURFACING
-Y- POT STA. 10+10.00

BEGIN CONST.
-Y2- POT STA. 11+75.50

END CONST.
-Y2- POT STA. 24+00.00

END CONST.

-Y1-	-Y2-	-L-
PI Sta 11+08.02	PI Sta 21+18.81	PI Sta 22+17.50
$\Delta = 24' 05'' 31.0''$ (RT)	$\Delta = 13' 32'' 25.8''$ (LT)	$\Delta = 6' 35'' 13.9''$ (RT)
D = 19' 05'' 54.9'	D = 14' 19'' 26.2'	D = 3' 57'' 50.5'
L = 126.15'	L = 94.53'	L = 214.98'
T = 64.02'	T = 47.49'	T = 119.19'
R = 300.00'	R = 400.00'	R = 477.29'
SE = 03	SE = 04	R = 1,445.39'

NOTE: 60' CHAIN LINK FENCE LOCATED ON PARCEL 1 (HOUSING AUTHORITY OF THE CITY OF WINSTON-SALEM) IS TO BE MAINTAINED DURING CONSTRUCTION AND RESET TO RIGHT OF WAY LINE UPON COMPLETION OF PROJECT.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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

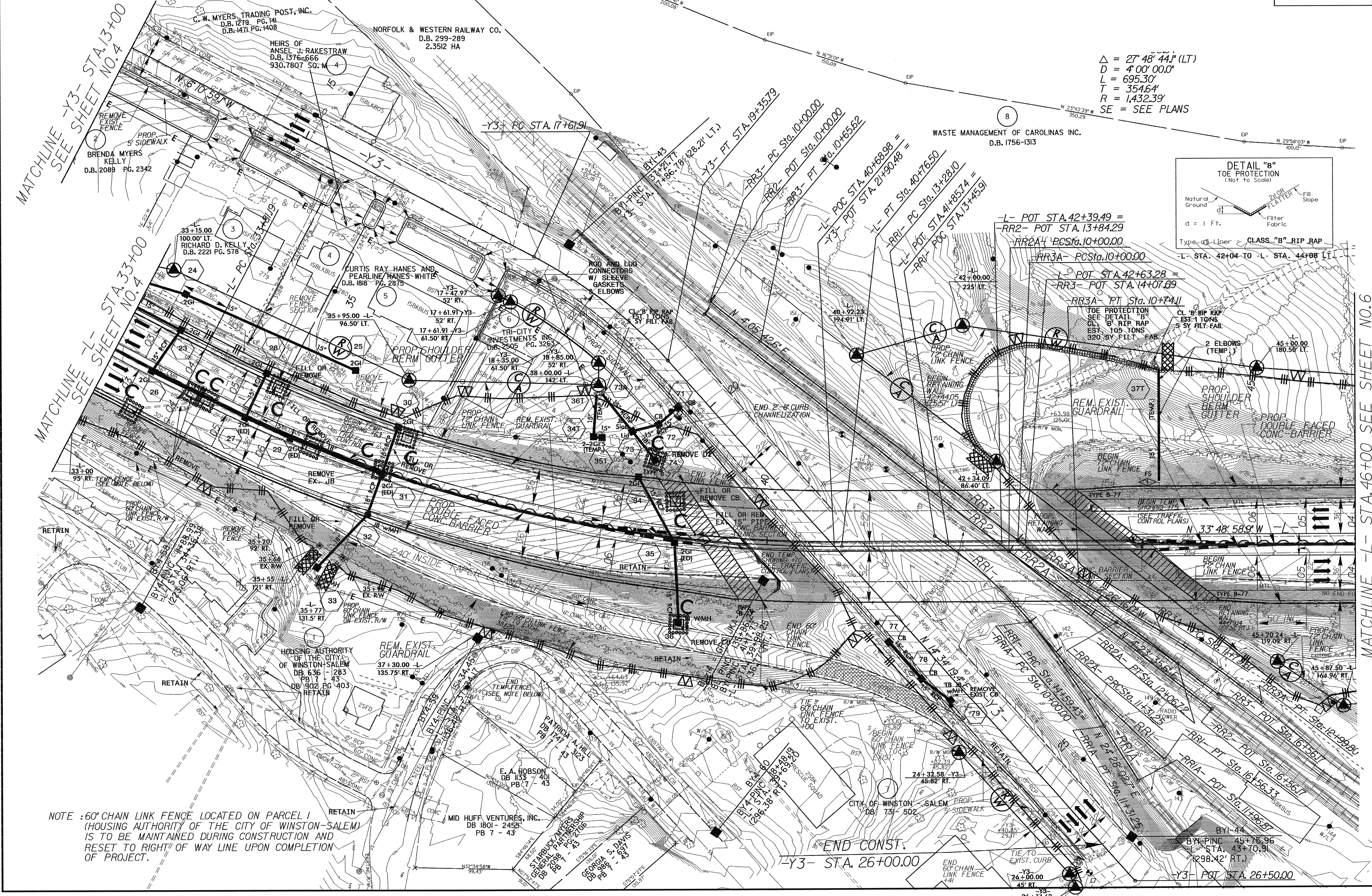
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8/17/99

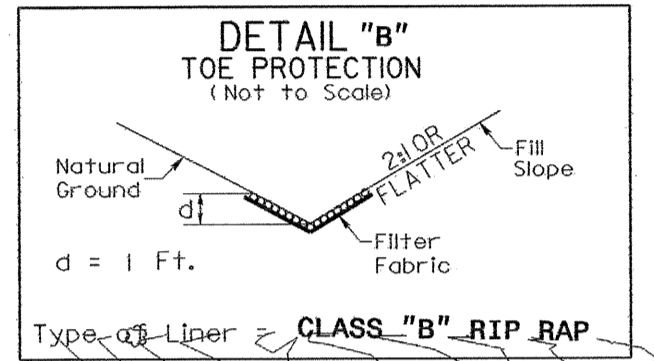
NOTE: PLACE TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

PROJECT REFERENCE NO. U-2826A	SHEET NO. EC-4/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



$\Delta = 27' 48' 44.1''$ (LT)
 $D = 4' 00' 00.0''$
 $L = 695.30'$
 $T = 354.64'$
 $R = 1,432.39'$
 SE = SEE PLANS



MATCHLINE -Y3- STA. 13+00
SEE SHEET NO. 4

MATCHLINE -L- STA. 33+00
SEE SHEET NO. 4

MATCHLINE -L- STA. 46+00 SEE SHEET NO. 6

NOTE: 60" CHAIN LINK FENCE LOCATED ON PARCEL 1 (HOUSING AUTHORITY OF THE CITY OF WINSTON-SALEM) IS TO BE MAINTAINED DURING CONSTRUCTION AND RESET TO RIGHT OF WAY LINE UPON COMPLETION OF PROJECT.

END CONST.
-Y3- STA. 26+00.00

-Y3- POT STA. 26+50.00

REVISIONS

8/17/99

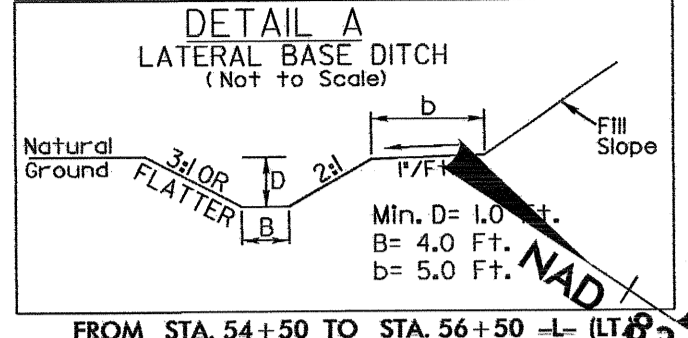
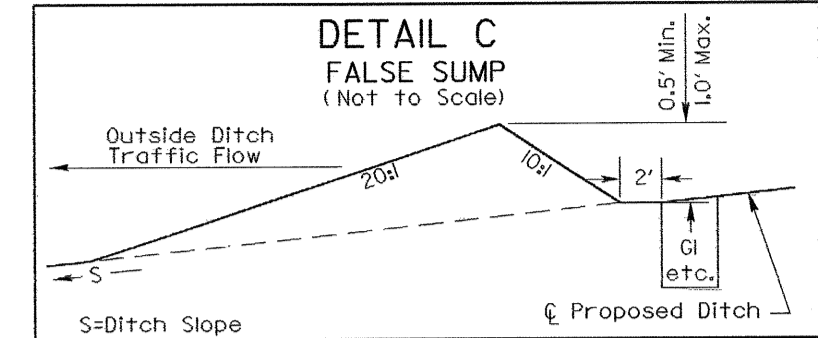
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

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

PROJECT REFERENCE NO. U-2826A	SHEET NO. EC-5/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

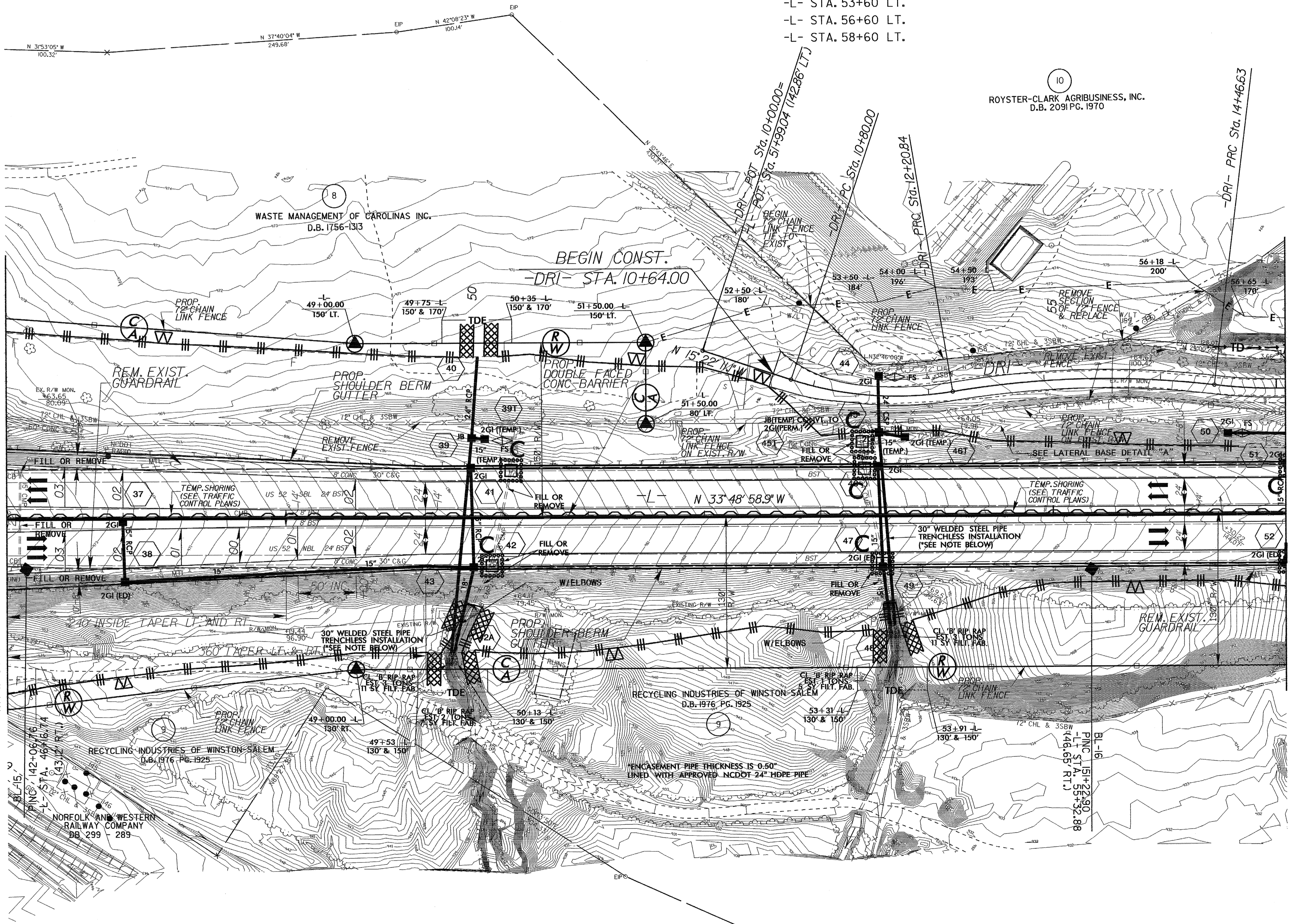
-DRI-

PI Sta 11+51.84 Δ = 27° 49' 32.8" (LT) D = 19' 45" 25.8" L = 140.84' T = 71.84' R = 290.00'	PI Sta 13+34.51 Δ = 16° 22' 34.0" (RT) D = 7' 15" 09.5" L = 225.80' T = 113.67' R = 790.00'	PI Sta 14+97.01 Δ = 12° 46' 27.6" (LT) D = 12' 43" 56.6" L = 100.33' T = 50.37' R = 450.00'
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- L- STA. 43+90 LT.
- L- STA. 50+25 LT.
- L- STA. 53+60 LT.
- L- STA. 56+60 LT.
- L- STA. 58+60 LT.

MATCHLINE -L- STA. 46+00 SEE SHEET NO.5



MATCHLINE -L- STA. 57+00 SEE SHEET NO.7

ROYSYER-CLARK AGRIBUSINESS, INC.
D.B. 2091 PG. 1970

BEGIN CONST.
-DRI- STA. 10+64.00

ENCASUREMENT PIPE THICKNESS IS 0.50"
LINED WITH APPROVED NCDOT 24" HDPE PIPE

BL-16
PINC 151+23.90
-L- STA. 56+30.88
(46.65 RT.)

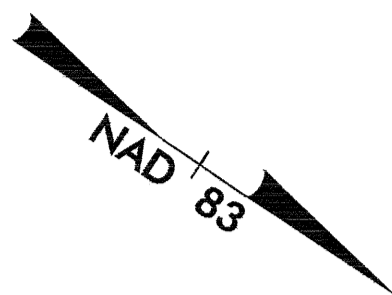
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

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

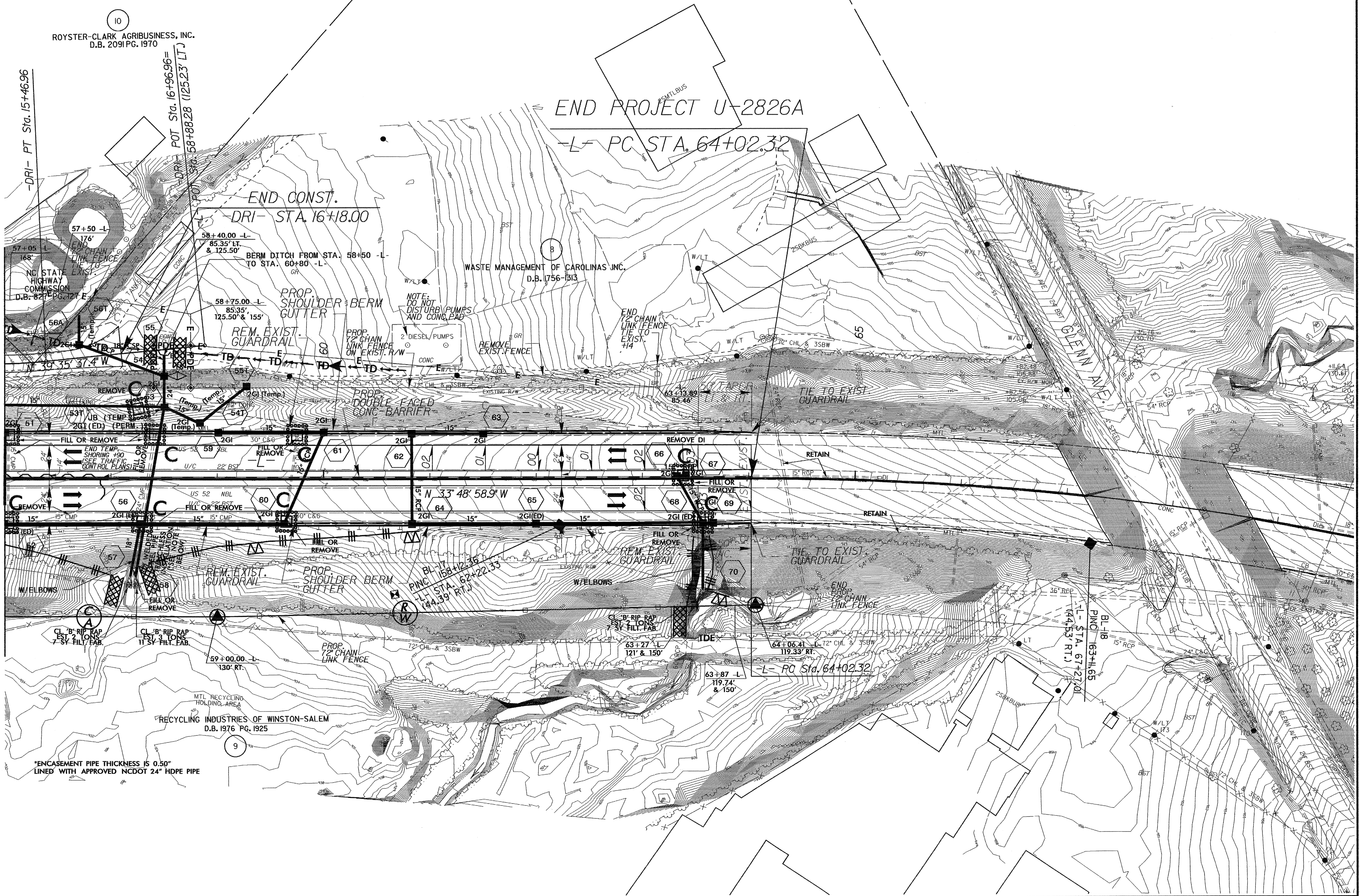
PROJECT REFERENCE NO.	SHEET NO.
U-2826A	EC-6/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-DRI-
PI Sta 14+97.01
 $\Delta = 12' 46' 27.6''$ (LT)
 $D = 12' 43' 56.6''$
 $L = 100.33'$
 $T = 50.37'$
 $R = 450.00'$

-L-
PI Sta 72+95.17
 $\Delta = 34' 31' 48.0''$ (RT)
 $D = 1' 59' 39.9''$
 $L = 1,731.32'$
 $T = 892.85'$
 $R = 2,872.79'$
SE = EXIST.



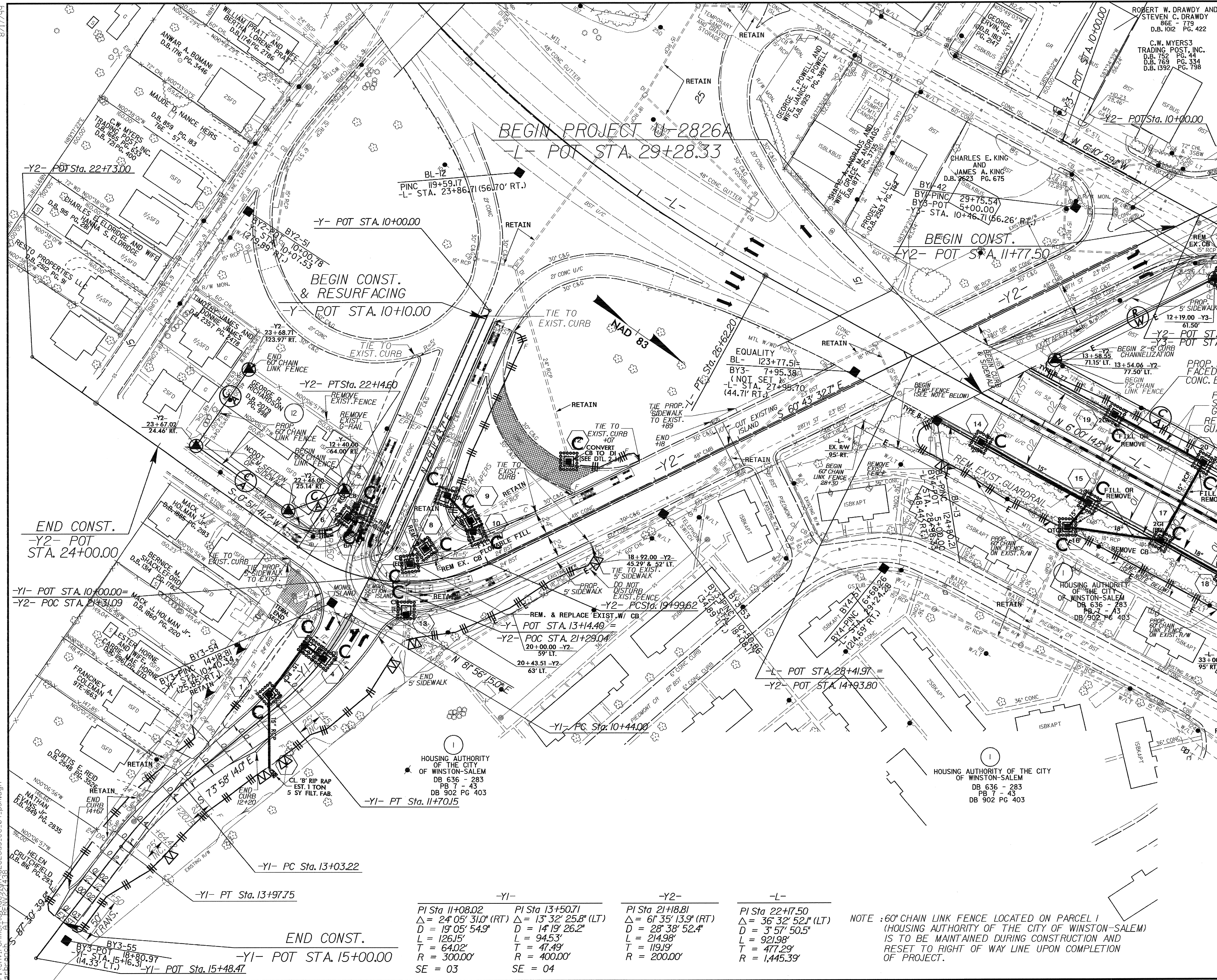
MATCHLINE -L- STA. 57+00 SEE SHEET NO.6



*ENCASEMENT PIPE THICKNESS IS 0.50"
LINED WITH APPROVED NCDOT 24" HDPE PIPE

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PROJECT REFERENCE NO. U-2826A	SHEET NO. EC-7/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-Y1-	-Y2-	-L-
PI Sta 11+08.02 Δ = 24° 05' 31.0" (RT) D = 19' 05' 54.9" L = 126.15' T = 64.02' R = 300.00' SE = 03	PI Sta 13+50.71 Δ = 13° 32' 25.8" (LT) D = 14' 19' 26.2" L = 94.53' T = 47.49' R = 400.00' SE = 04	PI Sta 21+18.81 Δ = 61° 35' 13.9" (RT) D = 28' 38' 52.4" L = 214.98' T = 119.19' R = 200.00'
		PI Sta 22+17.50 Δ = 36° 32' 52.1" (LT) D = 3' 57' 50.5" L = 921.98' T = 477.29' R = 1,445.39'

NOTE: 60" CHAIN LINK FENCE LOCATED ON PARCEL 1 (HOUSING AUTHORITY OF THE CITY OF WINSTON-SALEM) IS TO BE MAINTAINED DURING CONSTRUCTION AND RESET TO RIGHT OF WAY LINE UPON COMPLETION OF PROJECT.

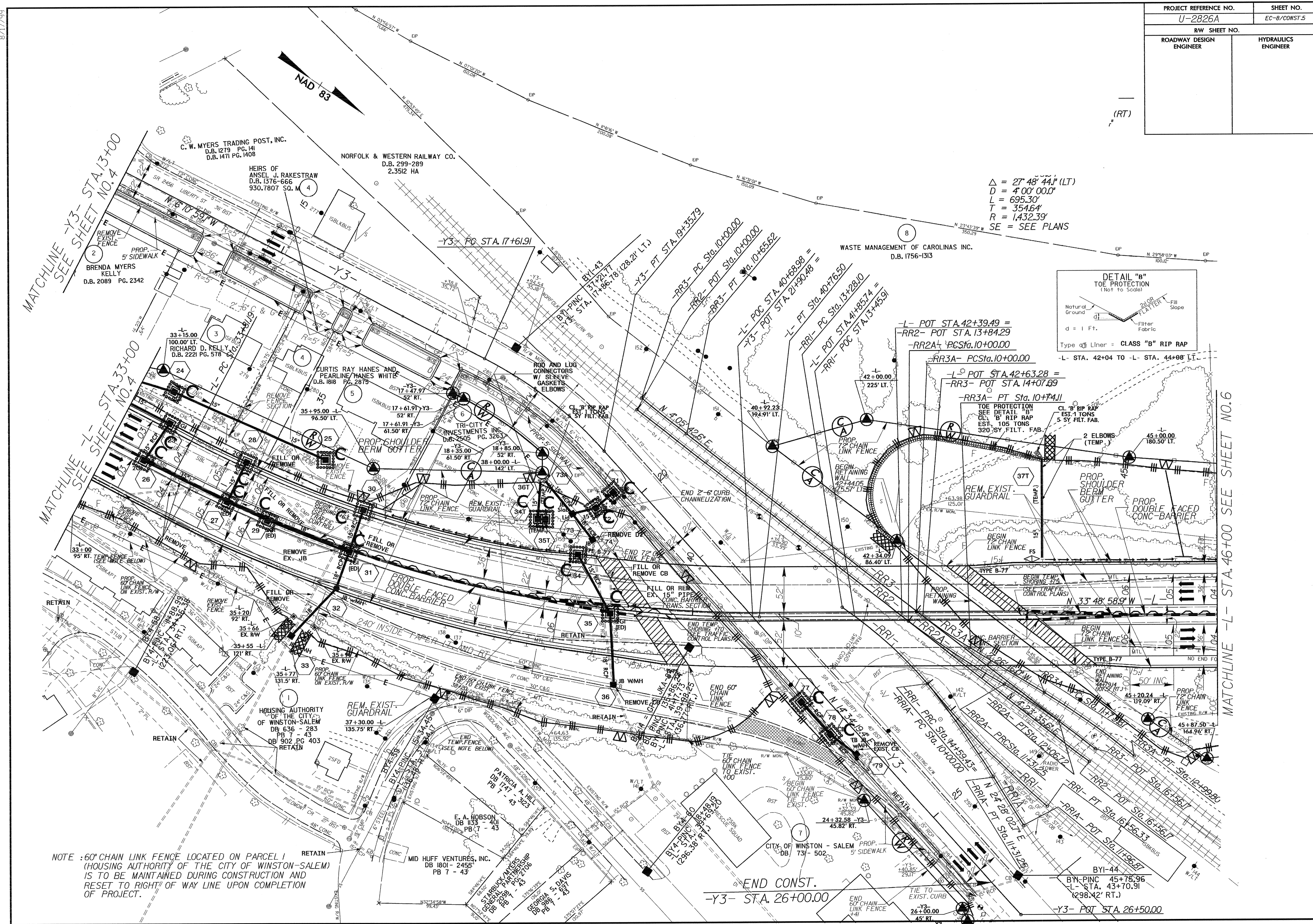
MATCHLINE -Y3- STA. 13+100
 SEE SHEET NO. 5

MATCHLINE -L- STA. 33+100
 SEE SHEET NO. 5

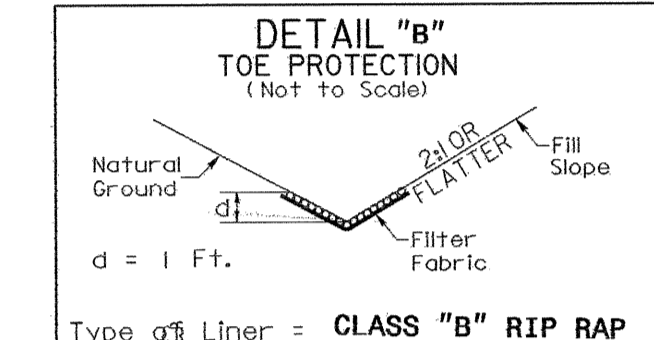
MATCHLINE -Y1- STA. 10+000
 SEE SHEET NO. 4

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-2826A	EC-B/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



$\Delta = 27^{\circ} 48' 44.1''$ (LT)
 $D = 4^{\circ} 00' 00.0''$
 $L = 695.30'$
 $T = 354.64'$
 $R = 1,432.39'$
 SE = SEE PLANS



NOTE: 60" CHAIN LINK FENCE LOCATED ON PARCEL 1 (HOUSING AUTHORITY OF THE CITY OF WINSTON-SALEM) IS TO BE MAINTAINED DURING CONSTRUCTION AND RESET TO RIGHT OF WAY LINE UPON COMPLETION OF PROJECT.

REVISIONS

MATCHLINE -Y3- STA. 13+00
 SEE SHEET NO. 4

MATCHLINE SEE L- STA. 33+00
 SEE SHEET NO. 4

MATCHLINE -L- STA. 46+00 SEE SHEET NO. 6

END CONST.
 -Y3- STA. 26+00.00

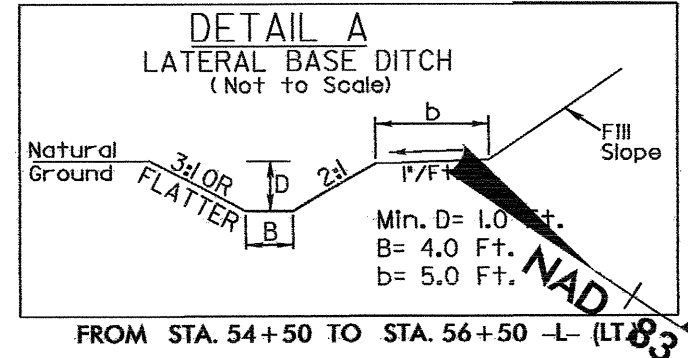
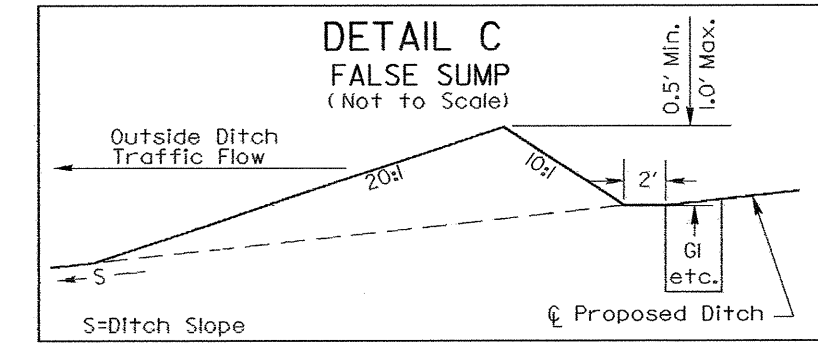
-Y3- POT STA. 26+50.00

8/17/99

PROJECT REFERENCE NO. U-2826A	SHEET NO. EC-9/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

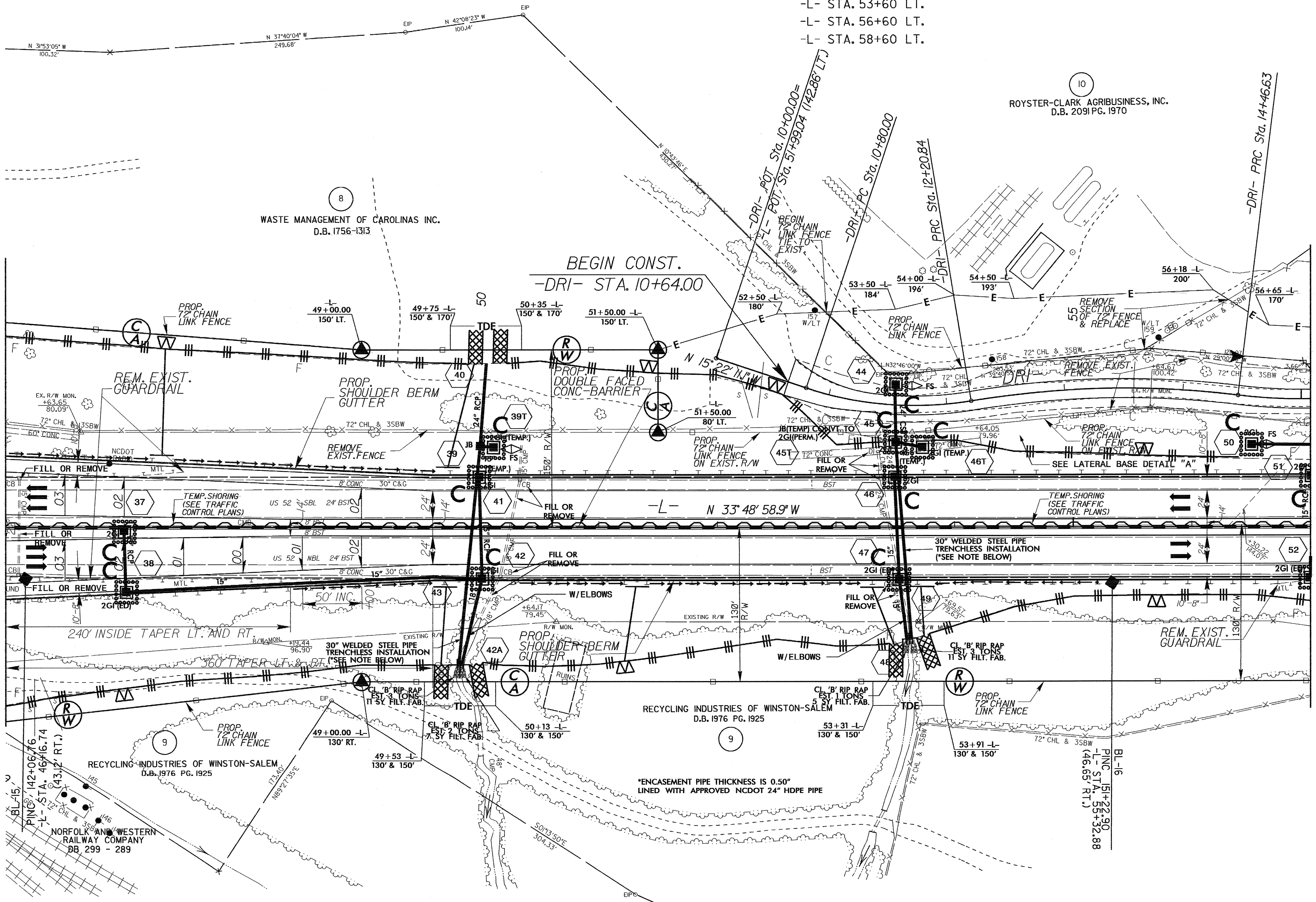
-DRI-

PI Sta. 11+51.84 Δ = 27° 49' 32.8" (LT) D = 19' 45' 25.8" L = 140.84' T = 71.84' R = 290.00'	PI Sta. 13+34.51 Δ = 16° 22' 34.0" (RT) D = 7' 15' 09.5" L = 225.80' T = 113.67' R = 790.00'	PI Sta. 14+97.01 Δ = 12° 46' 27.6" (LT) D = 12' 43' 56.6" L = 100.33' T = 50.37' R = 450.00'
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- L- STA. 43+90 LT.
- L- STA. 50+25 LT.
- L- STA. 53+60 LT.
- L- STA. 56+60 LT.
- L- STA. 58+60 LT.

MATCHLINE -L- STA. 46+00 SEE SHEET NO.5



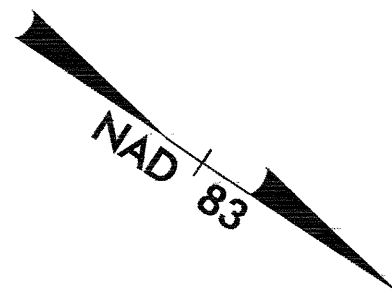
MATCHLINE -L- STA. 57+00 SEE SHEET NO.7

*ENCASEMENT PIPE THICKNESS IS 0.50\"/>

PROJECT REFERENCE NO.	SHEET NO.
U-2826A	EC-10/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

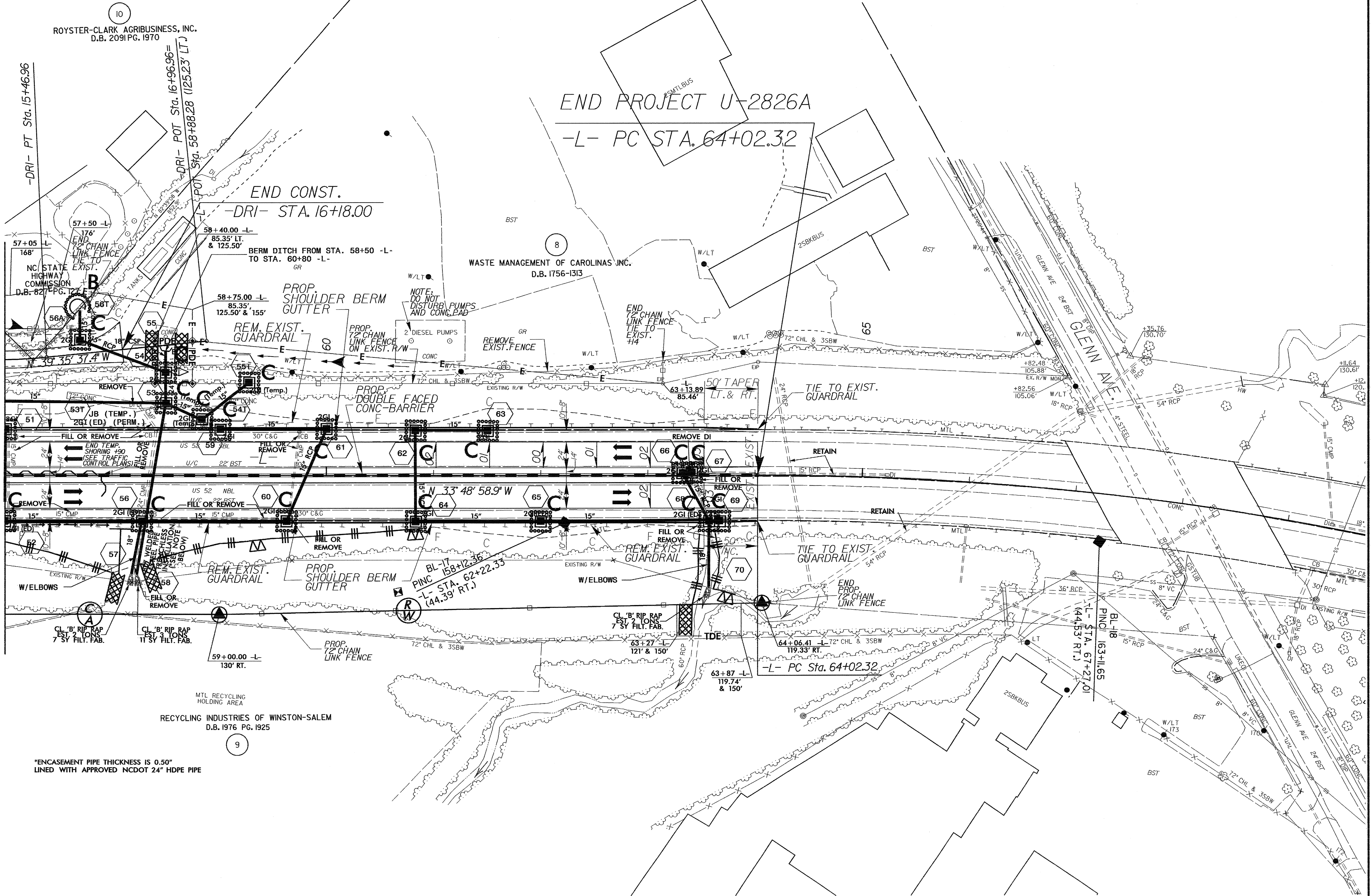
-DRI-
 PI Sta 14+97.01
 $\Delta = 12' 46" 27.6" (LT)$
 $D = 12' 43" 56.6"$
 $L = 100.33'$
 $T = 50.37'$
 $R = 450.00'$

-L-
 PI Sta 72+95.17
 $\Delta = 34' 31" 48.0" (RT)$
 $D = 1' 59" 39.9"$
 $L = 1,731.32'$
 $T = 892.85'$
 $R = 2,872.79'$
 SE = EXIST.



END PROJECT U-2826A
 -L- PC STA. 64+02.32

MATCHLINE -L- STA. 57+00 SEE SHEET NO.6

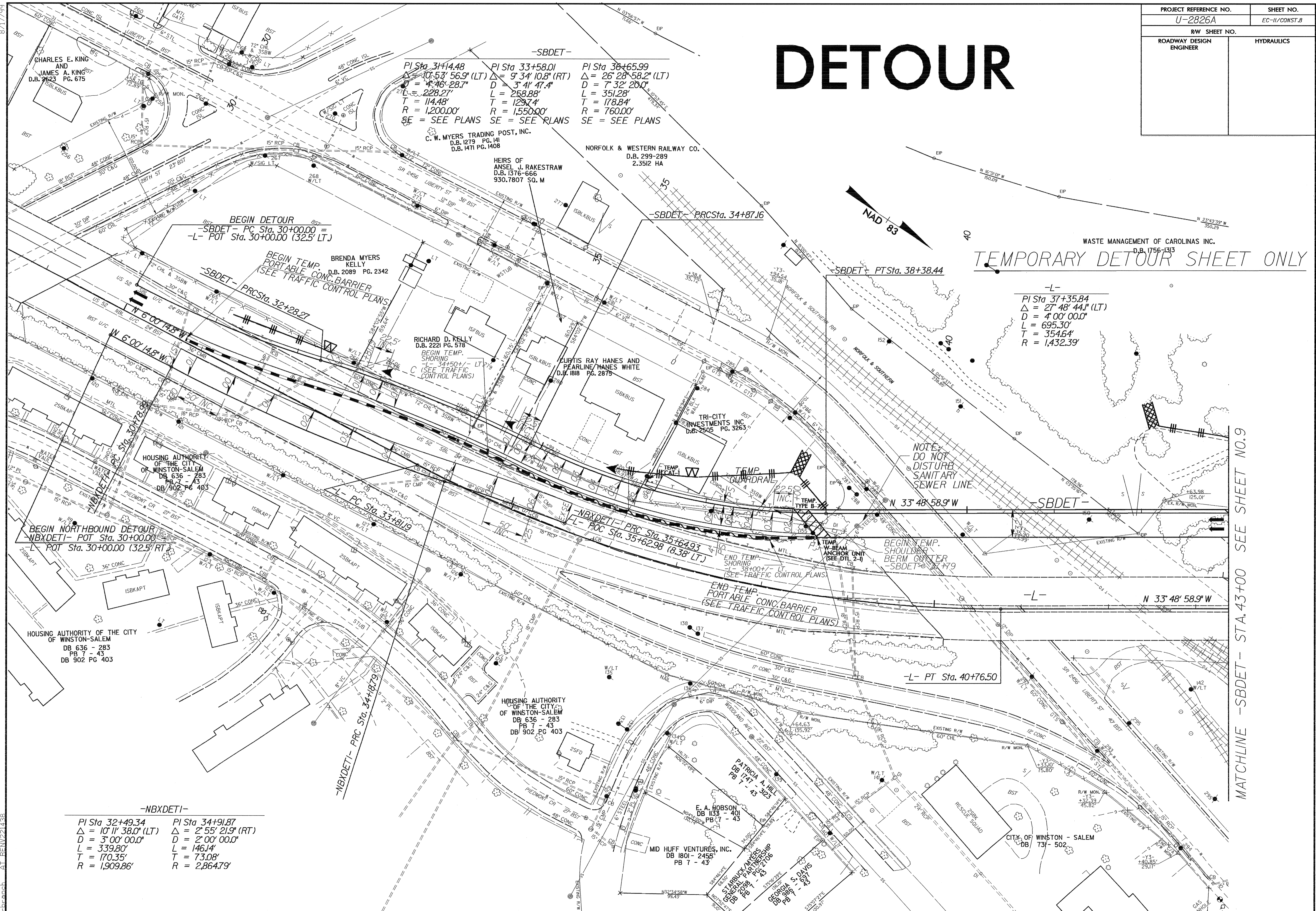


*ENCASMENT PIPE THICKNESS IS 0.50"
 LINED WITH APPROVED NCDOT 24" HDPE PIPE

PROJECT REFERENCE NO. U-2826A	SHEET NO. EC-II/CONST-B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS

DETOUR

WASTE MANAGEMENT OF CAROLINAS INC.
D.B. 1756-1313
TEMPORARY DETOUR SHEET ONLY



-SBDET-

PI Sta 31+14.48 $\Delta = 10^{\circ} 53' 56.9''$ (LT) $D = 4^{\circ} 46' 28.7''$ $L = 228.27'$ $T = 114.48'$ $R = 1,200.00'$ SE = SEE PLANS	PI Sta 33+58.01 $\Delta = 9^{\circ} 34' 10.8''$ (RT) $D = 3^{\circ} 41' 47.4''$ $L = 258.88'$ $T = 129.74'$ $R = 1,550.00'$ SE = SEE PLANS	PI Sta 36+65.99 $\Delta = 26^{\circ} 28' 58.2''$ (LT) $D = 7^{\circ} 32' 20.0''$ $L = 351.28'$ $T = 178.84'$ $R = 760.00'$ SE = SEE PLANS
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-L-

PI Sta 37+35.84 $\Delta = 27^{\circ} 48' 44.1''$ (LT) $D = 4^{\circ} 00' 00.0''$ $L = 695.30'$ $T = 354.64'$ $R = 1,432.39'$

-NBXDETI-

PI Sta 32+49.34 $\Delta = 10^{\circ} 11' 38.0''$ (LT) $D = 3^{\circ} 00' 00.0''$ $L = 339.80'$ $T = 170.35'$ $R = 1,909.86'$	PI Sta 34+91.87 $\Delta = 2^{\circ} 55' 21.9''$ (RT) $D = 2^{\circ} 00' 00.0''$ $L = 146.14'$ $T = 73.08'$ $R = 2,864.79'$
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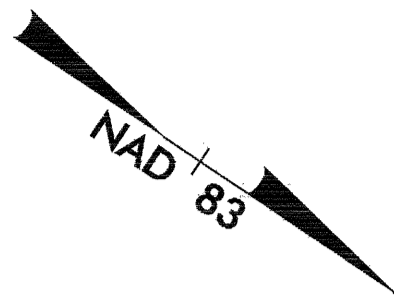
MATCHLINE - SBDET - STA. 43+00 SEE SHEET NO. 9

8/17/99
AT-REIN221438

8/17/99

PROJECT REFERENCE NO. U-2826A		SHEET NO. EC-12/CONST.9	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

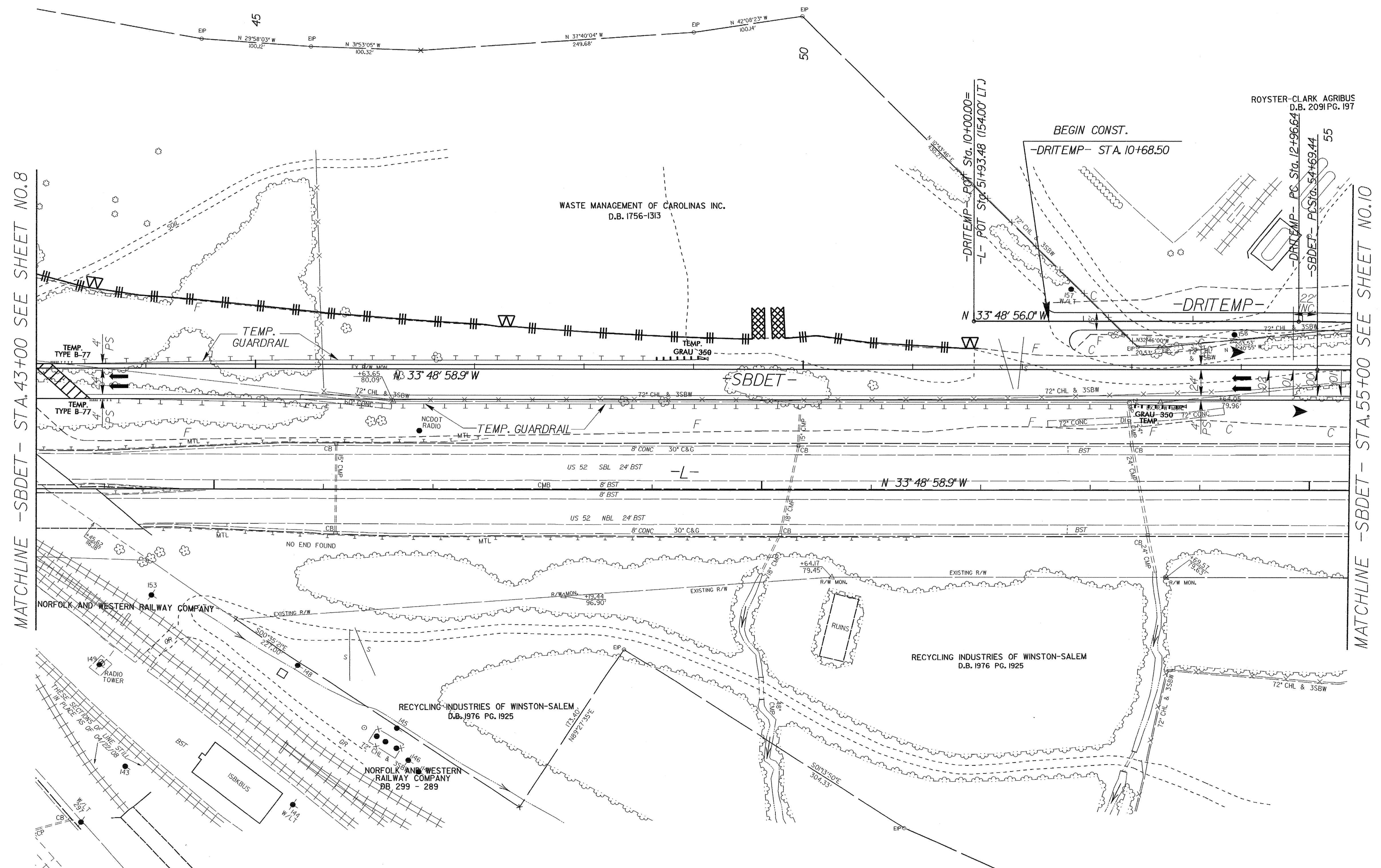
DETOUR



-SBDET-
 PI Sta 56+94.03
 $\Delta = 8^{\circ} 57' 55.4''$ (RT)
 $D = 2^{\circ} 00' 00.0''$
 $L = 448.27'$
 $T = 224.59'$
 $R = 2,864.79'$
 SE = SEE PLANS

-DRITEMP-
 PI Sta 13+63.79
 $\Delta = 5^{\circ} 07' 35.0''$ (RT)
 $D = 3^{\circ} 49' 11.0''$
 $L = 134.21'$
 $T = 67.15'$
 $R = 1,500.00'$

TEMPORARY DETOUR SHEET ONLY

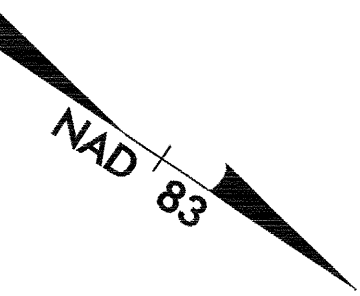


MATCHLINE -SBDET- STA. 43+00 SEE SHEET NO.8

MATCHLINE -SBDET- STA. 55+00 SEE SHEET NO.10

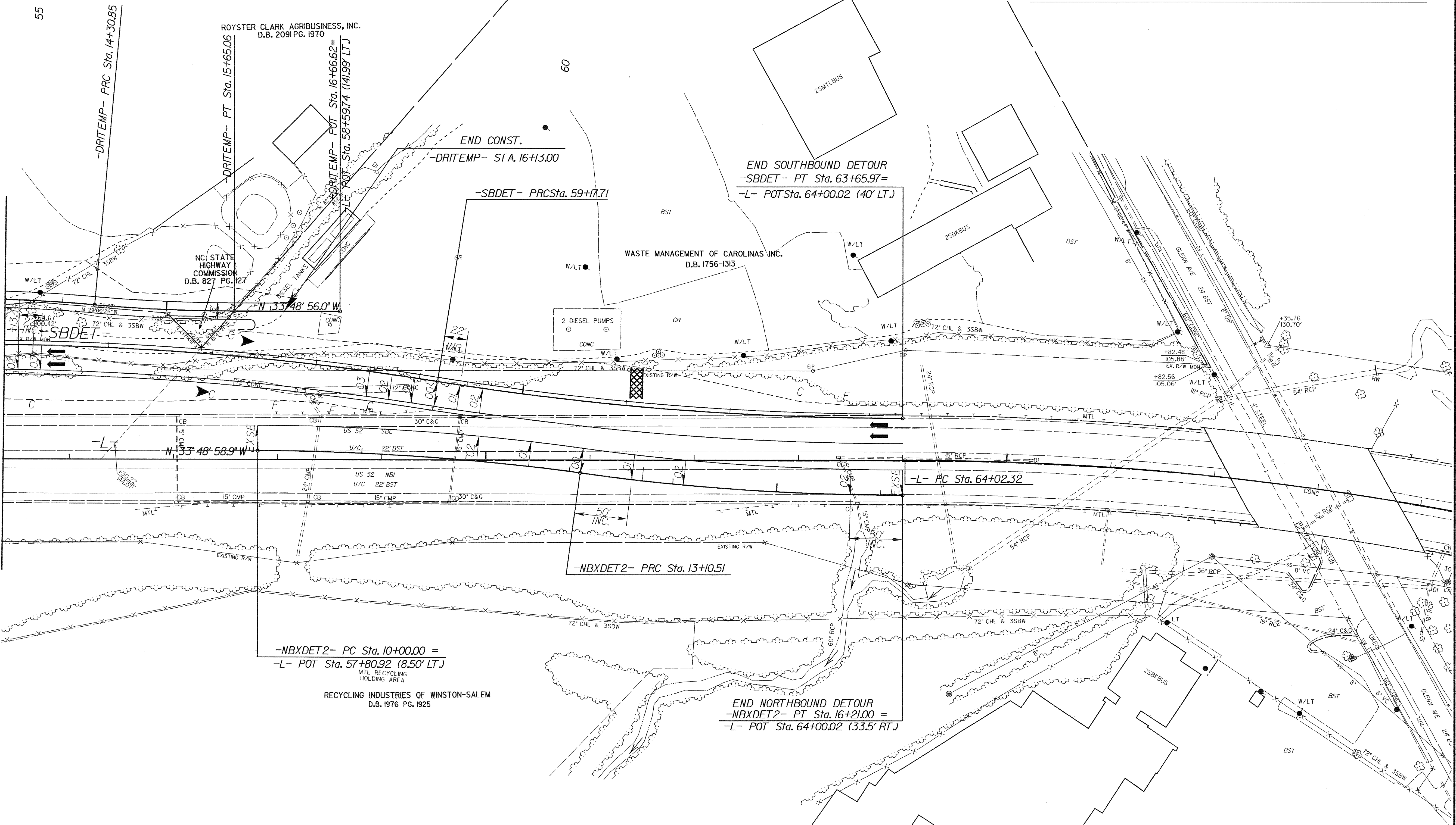
PROJECT REFERENCE NO. <i>U-2826A</i>	SHEET NO. <i>EC-13/CONST 10</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DETOUR



TEMPORARY DETOUR SHEET ONLY

MATCHLINE STA. 55+00 SEE SHEET NO. 9



ROYSTER-CLARK AGRIBUSINESS, INC.
D.B. 2091 PG. 1970

NC STATE HIGHWAY COMMISSION
D.B. 827 PG. 127

WASTE MANAGEMENT OF CAROLINAS JNC.
D.B. 1756-1313

RECYCLING INDUSTRIES OF WINSTON-SALEM
D.B. 1976 PG. 1925

END NORTHBOUND DETOUR
-NBXDET2- PT Sta. 16+21.00 =
-L- POT Sta. 64+00.02 (33.5' RT.)

END SOUTHBOUND DETOUR
-SBDET- PT Sta. 63+65.97 =
-L- POT Sta. 64+00.02 (40' LT.)

END CONST.
-DRITEMP- STA. 16+13.00