

TIP PROJECT: U-5302

CONTRACT: C204512

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

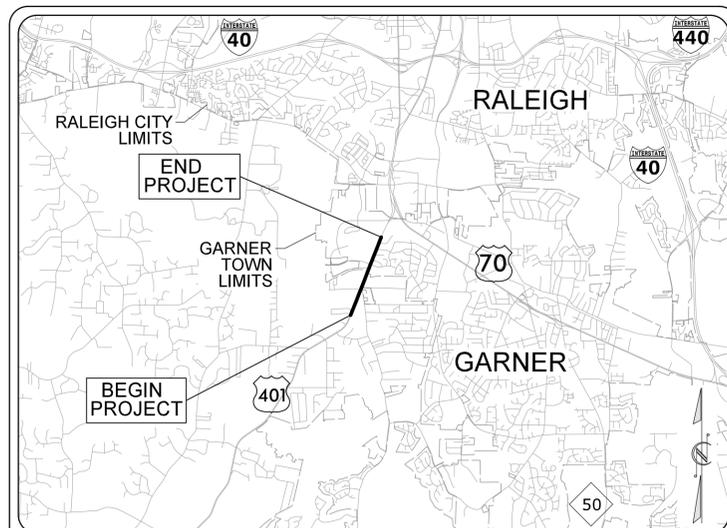
WAKE COUNTY

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

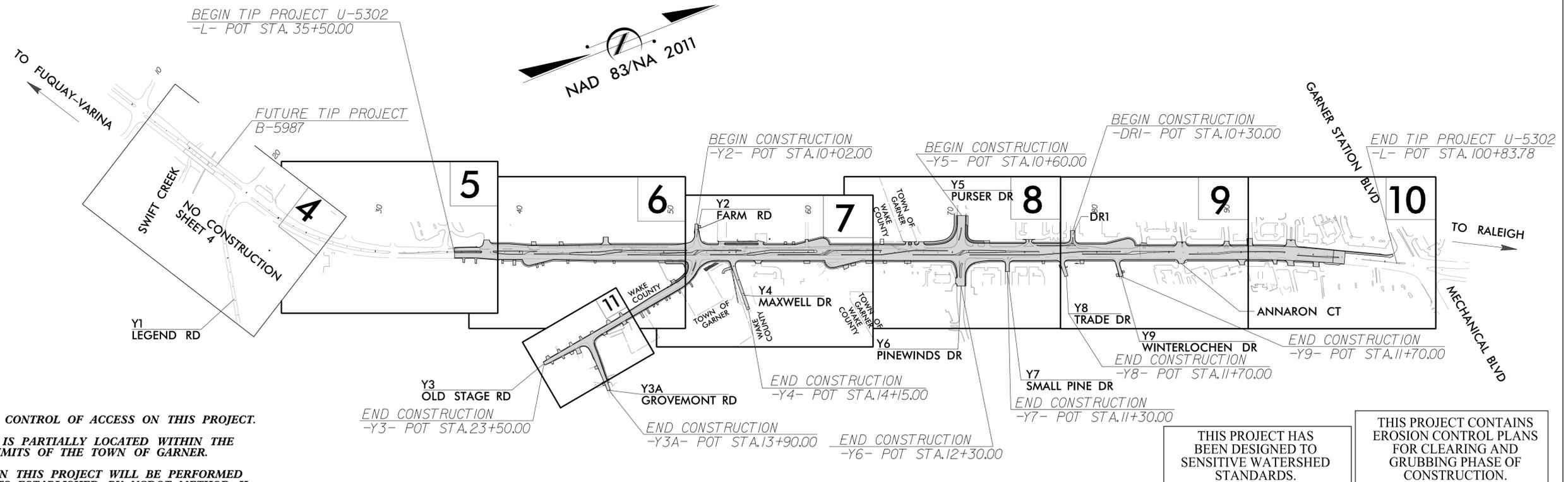
LOCATION: US 401 SOUTH OF SR 1006 (OLD STAGE ROAD) TO SOUTH
OF SR 2538 (MECHANICAL BOULEVARD)

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

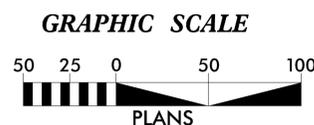
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5302	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
48000.1.1	N/A	PE	
48000.2.1	N/A	ROW+UTILITIES	
48000.3.1	N/A	CONST	



VICINITY MAP
NOT TO SCALE



THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
 THE PROJECT IS PARTIALLY LOCATED WITHIN THE MUNICIPAL LIMITS OF THE TOWN OF GARNER.
 CLEARING ON THIS PROJECT WILL BE PERFORMED TO THE LIMITS ESTABLISHED BY NCDOT METHOD II.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.



Prepared in the Office of:
AECOM
 Firm License No. F-0342
 5438 Wade Park Boulevard, Suite 200
 Raleigh NC 27607
 +1-919-461-1100

Designed by:
RENE REMY, CPESC, CPSWQ 3125
 NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

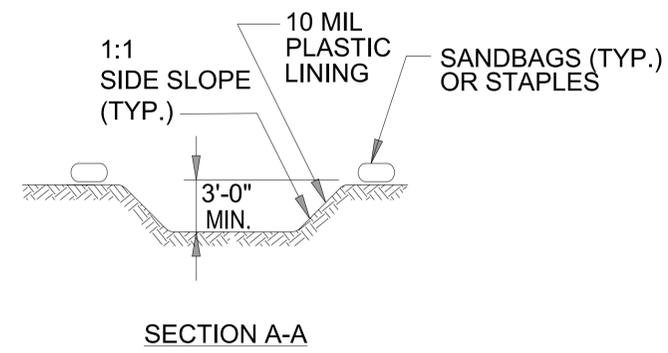
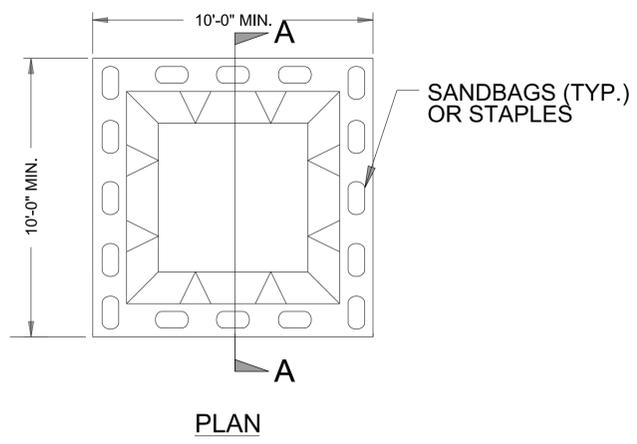
Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

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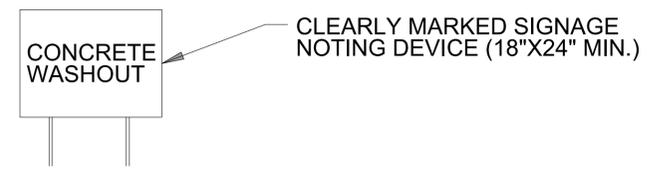
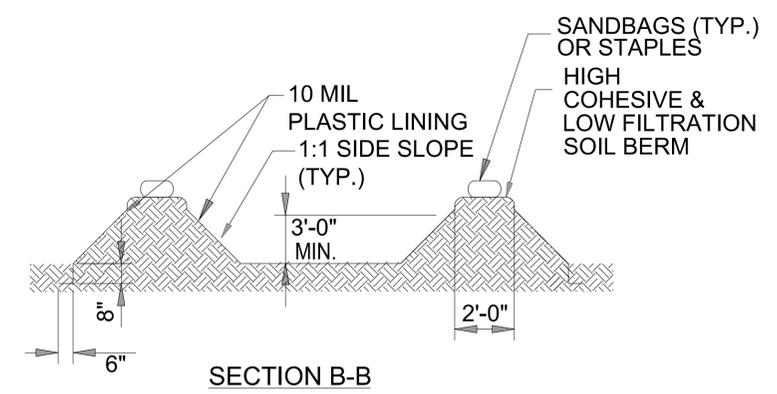
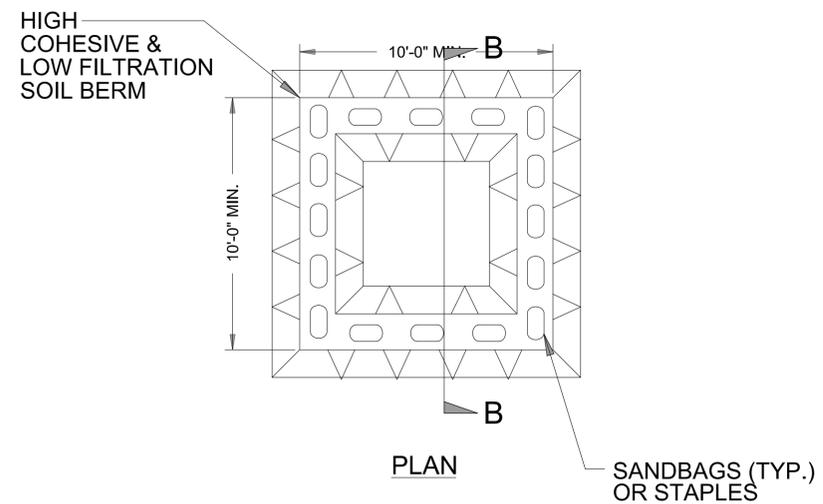
PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-02A
RW SHEET NO.	
Prepared in the Office of: AECOM	
<small> NC FIRM LICENSE No: F-0342 5438 Wade Park Boulevard, Suite 200 Raleigh, NC 27607 1-919-461-8000 </small>	

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

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PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-05/CONST.5
RW SHEET NO.	
Prepared in the Office of:	NC FIRM LICENSE No F-0342 AECOM 5438 Wade Park Boulevard, Suite 200 Raleigh, NC 27607 +1-919-461-6000

50 25 0 50 100
PLANS

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.

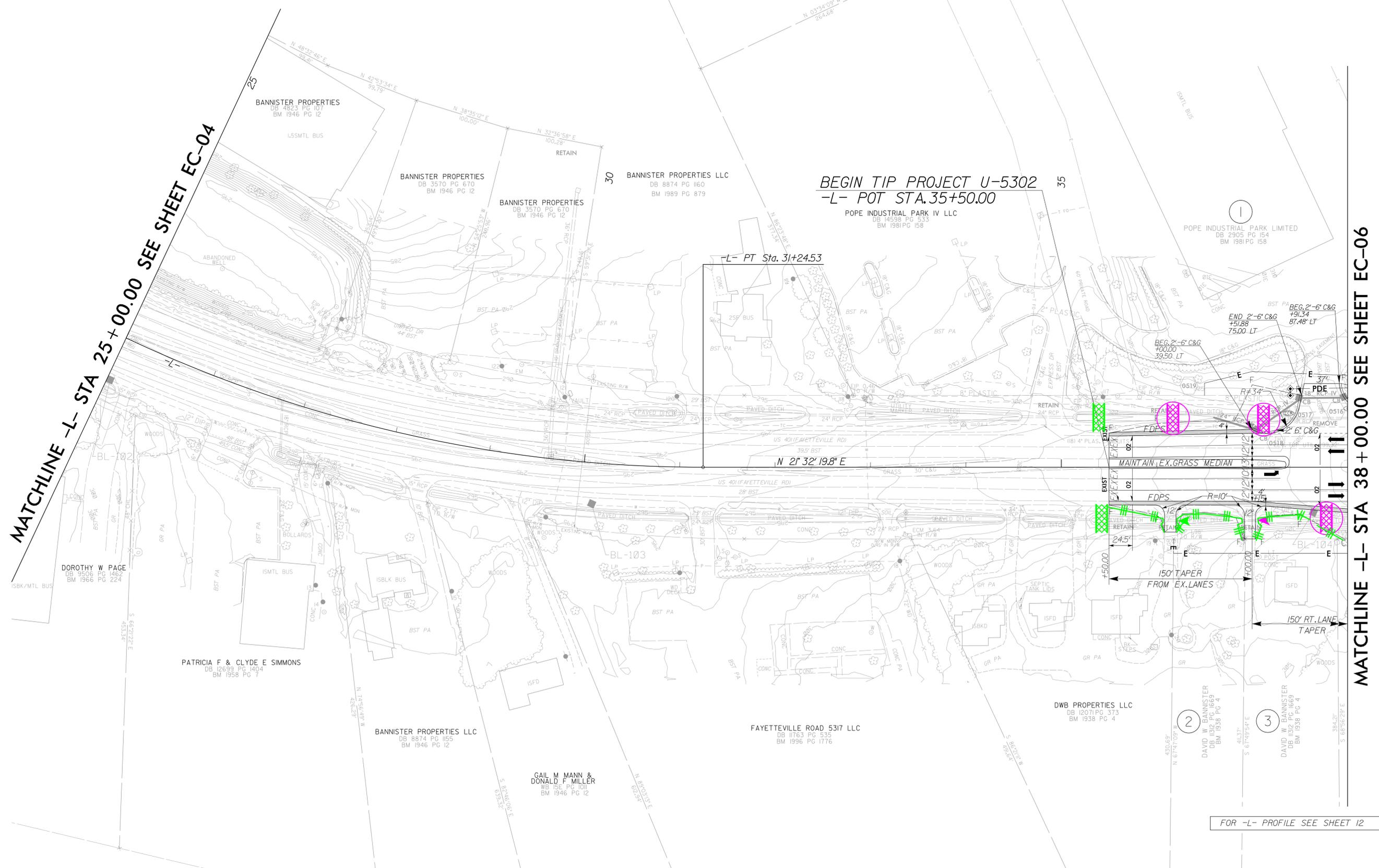
-L-
PI Sta 26+75.11
 $\Delta = 37^{\circ} 41' 17.2''$ (LT)
D = 4' 02' 05.7"
L = 934.05'
T = 484.63'
R = 1,420.00'
e = EXIST
Runoff = EXIST



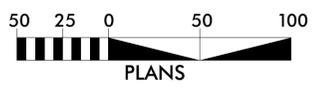
MATCHLINE -L- STA 25+00.00 SEE SHEET EC-04

BEGIN TIP PROJECT U-5302
-L- POT STA. 35+50.00

MATCHLINE -L- STA 38+00.00 SEE SHEET EC-06



FOR -L- PROFILE SEE SHEET 12



**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7**

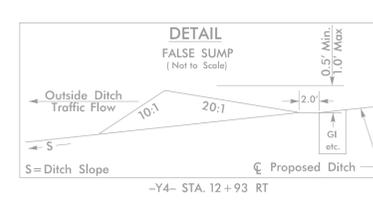
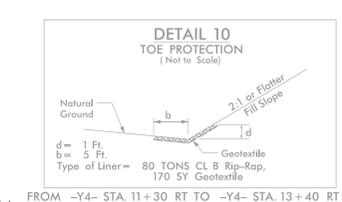
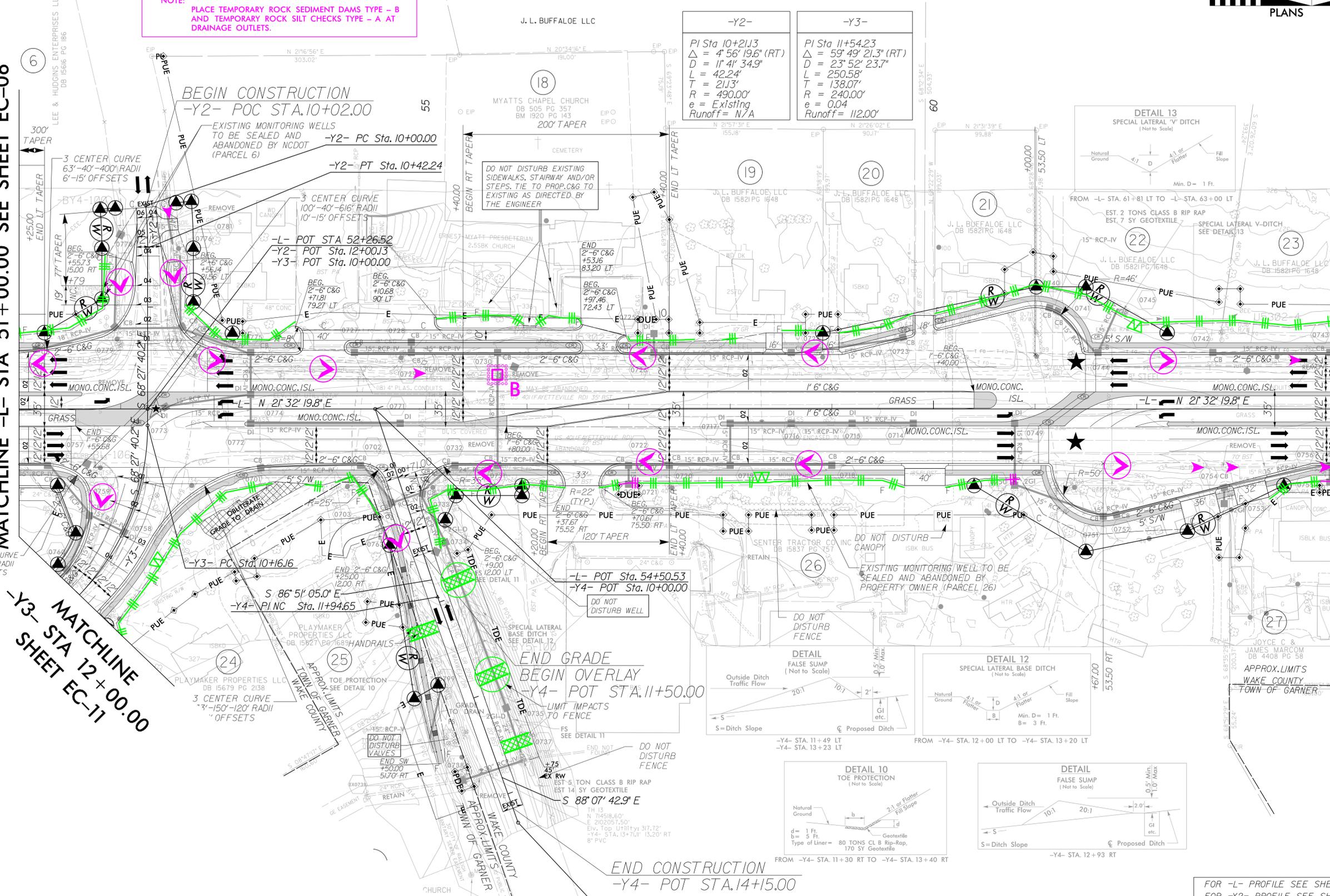
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

-Y2-	-Y3-
PI Sta 10+21.3 $\Delta = 4' 56'' 19.6''$ (RT) $D = 1' 41'' 34.9''$ $L = 42.24'$ $T = 21.13'$ $R = 490.00'$ $e = \text{Existing}$ Runoff = N/A	PI Sta 11+54.23 $\Delta = 59' 49'' 21.3''$ (RT) $D = 23' 52'' 23.7''$ $L = 250.58'$ $T = 138.07'$ $R = 240.00'$ $e = 0.04$ Runoff = 112.00'

MATCHLINE -L- STA 51 + 00.00 SEE SHEET EC-06

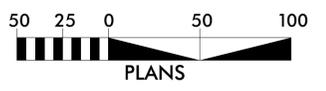
MATCHLINE -Y3- STA 12 + 00.00 SHEET EC-11

MATCHLINE -L- STA 64 + 00.00 SEE SHEET EC-08



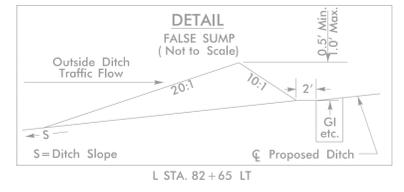
FOR -L- PROFILE SEE SHEET 13
 FOR -Y2- PROFILE SEE SHEET 15
 FOR -Y3- PROFILE SEE SHEET 15
 FOR -Y4- PROFILE SEE SHEET 16

PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-09/CONST.9
RW SHEET NO.	
Prepared in the Office of: AECOM	
<small>NC FIRM LICENSE No.F-0342 5438 Wade Park Boulevard, Suite 200 Raleigh, NC 27607 +1-919-461-6000</small>	



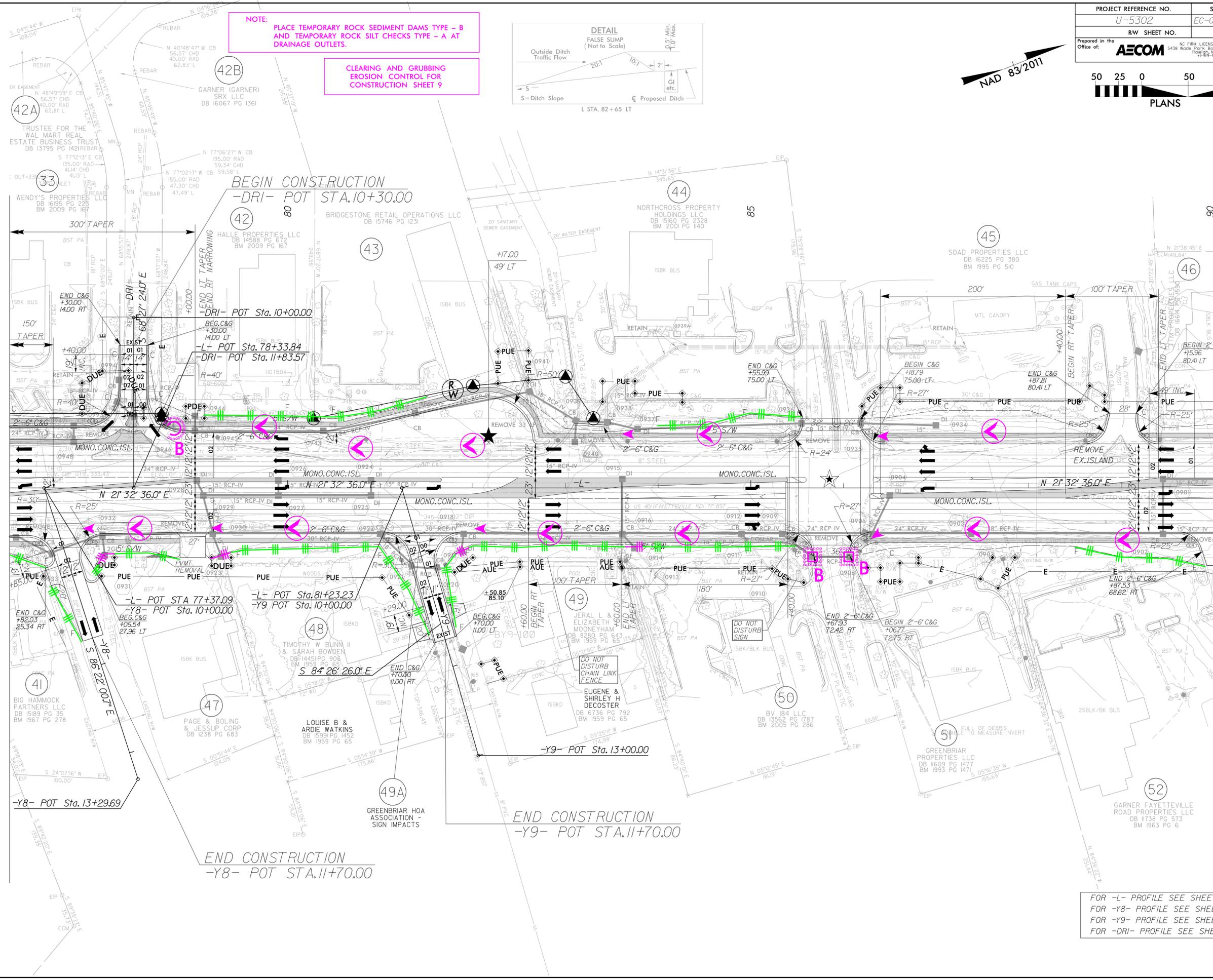
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9



MATCHLINE -L- STA 77 + 00.00 SEE SHEET EC-08

MATCHLINE -L- STA 90 + 00.00 SEE SHEET EC-10

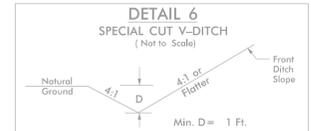


FOR -L- PROFILE SEE SHEETS 14
FOR -Y8- PROFILE SEE SHEET 16
FOR -Y9- PROFILE SEE SHEET 16
FOR -DRI- PROFILE SEE SHEET 16

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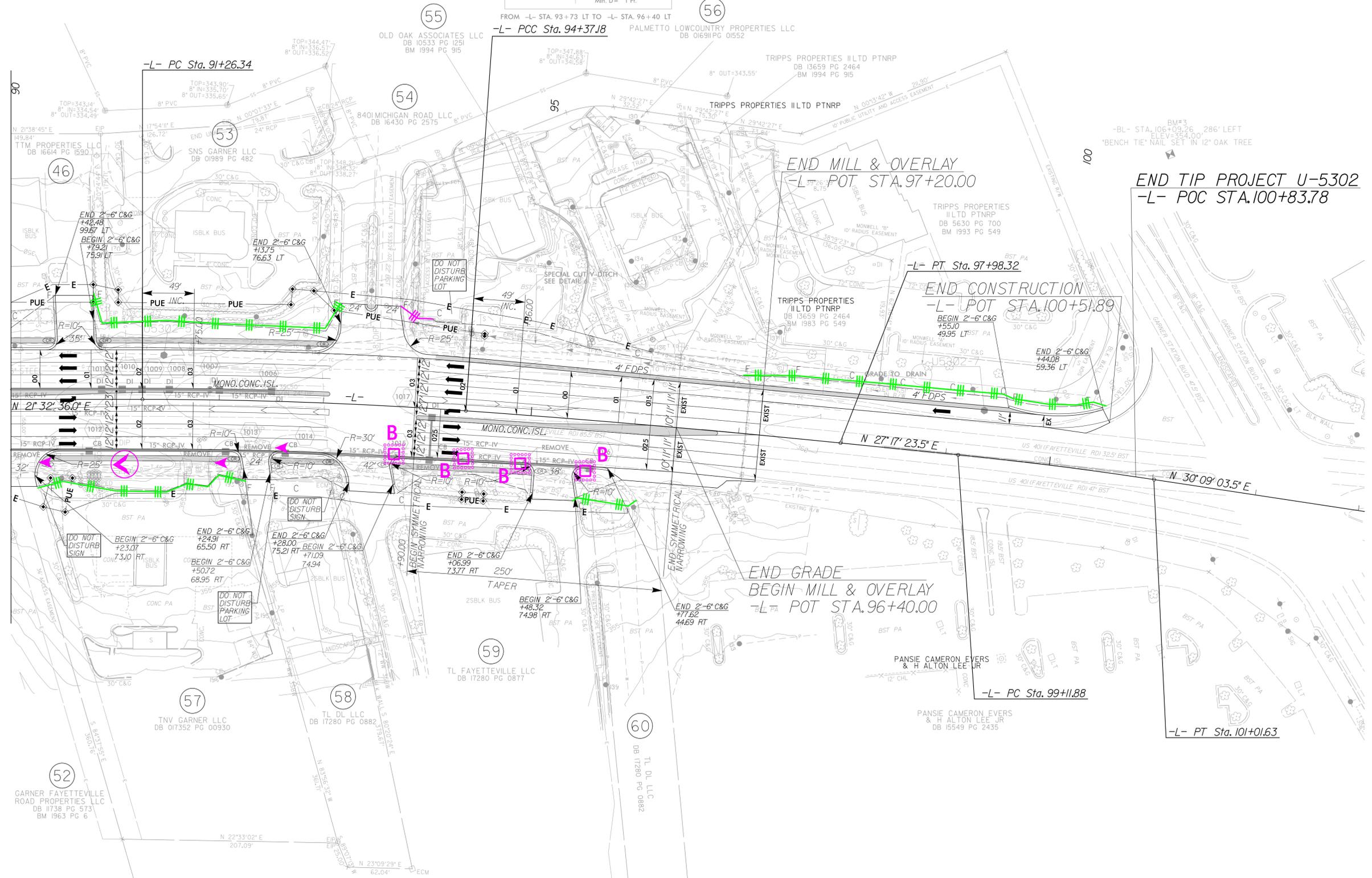
-L-		
PI Sta 92+81.83	PI Sta 96+17.77	PI Sta 100+06.77
$\Delta = 4^{\circ} 02' 51.7''$ (RT)	$\Delta = 1^{\circ} 41' 55.9''$ (RT)	$\Delta = 2^{\circ} 51' 39.9''$ (RT)
D = 1'18" 07.8"	D = 0'28" 13.5"	D = 1'30" 28.0"
L = 310.84'	L = 361.14'	L = 189.75'
T = 155.49'	T = 180.58'	T = 94.90'
R = 4,400.00'	R = 12,180.00'	R = 3,800.00'
e = 3%	e = NC	e = EXIST
Runoff = 147'	Runoff = N/A	Runoff = EXIST



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

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

MATCHLINE -L- STA 90+00.00 SEE SHEET EC-09

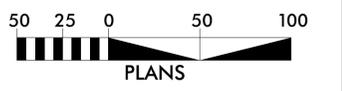


FOR -L- PROFILE SEE SHEET 14

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PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-II/CONST. II
R/W SHEET NO.	
Prepared in the Office of:	NC FIRM LICENSE No F-0342 5438 Wade Park Boulevard, Suite 200 Raleigh, NC 27607 419-461-6000



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET II

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

MATCHLINE -Y1- STA 13+90.00
SEE SHEET EC-04

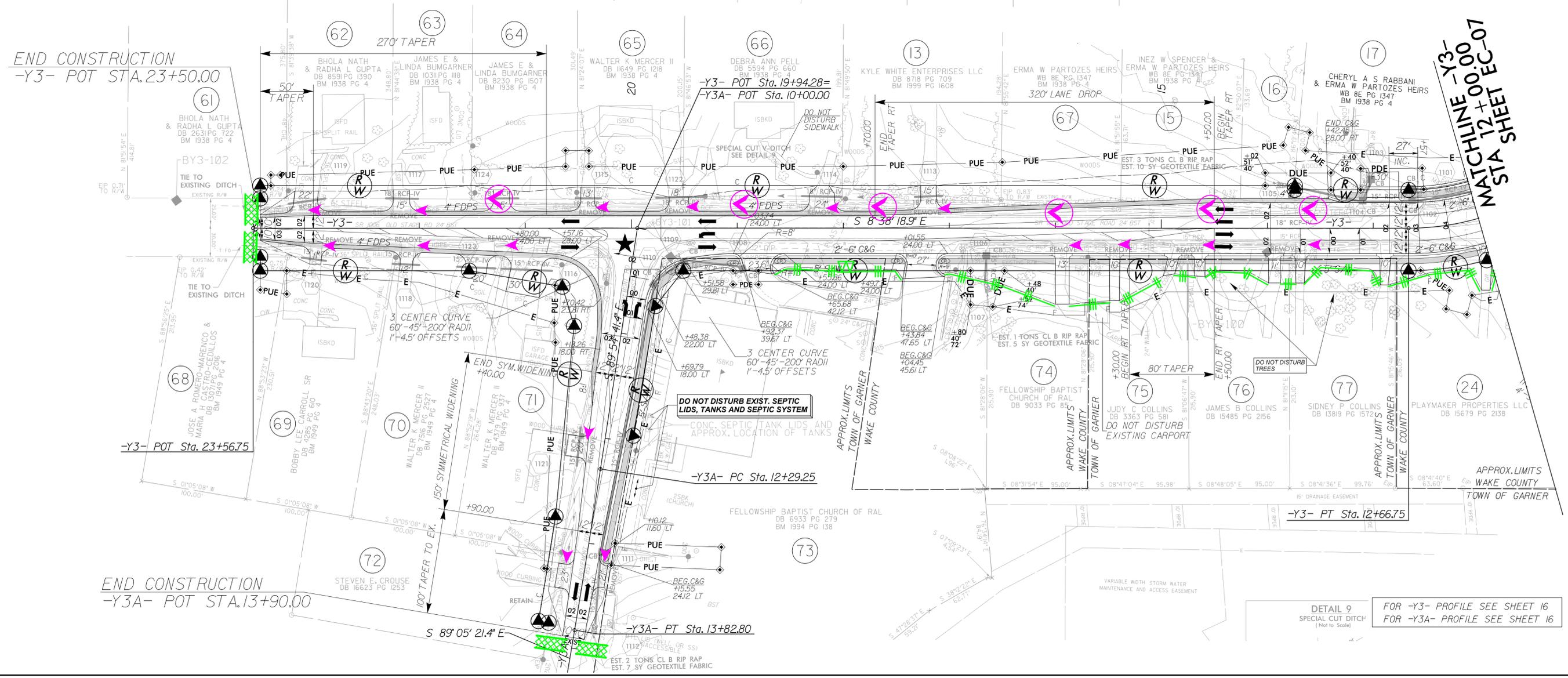
NAD 83/2011

NAD 83/2011

END CONSTRUCTION
-Y3- POT STA. 23+50.00

MATCHLINE -Y3-
STA 12+00.00 EC-07

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END CONSTRUCTION
-Y3A- POT STA. 13+90.00

DETAIL 9
SPECIAL CUT DITCH
(Not to Scale)

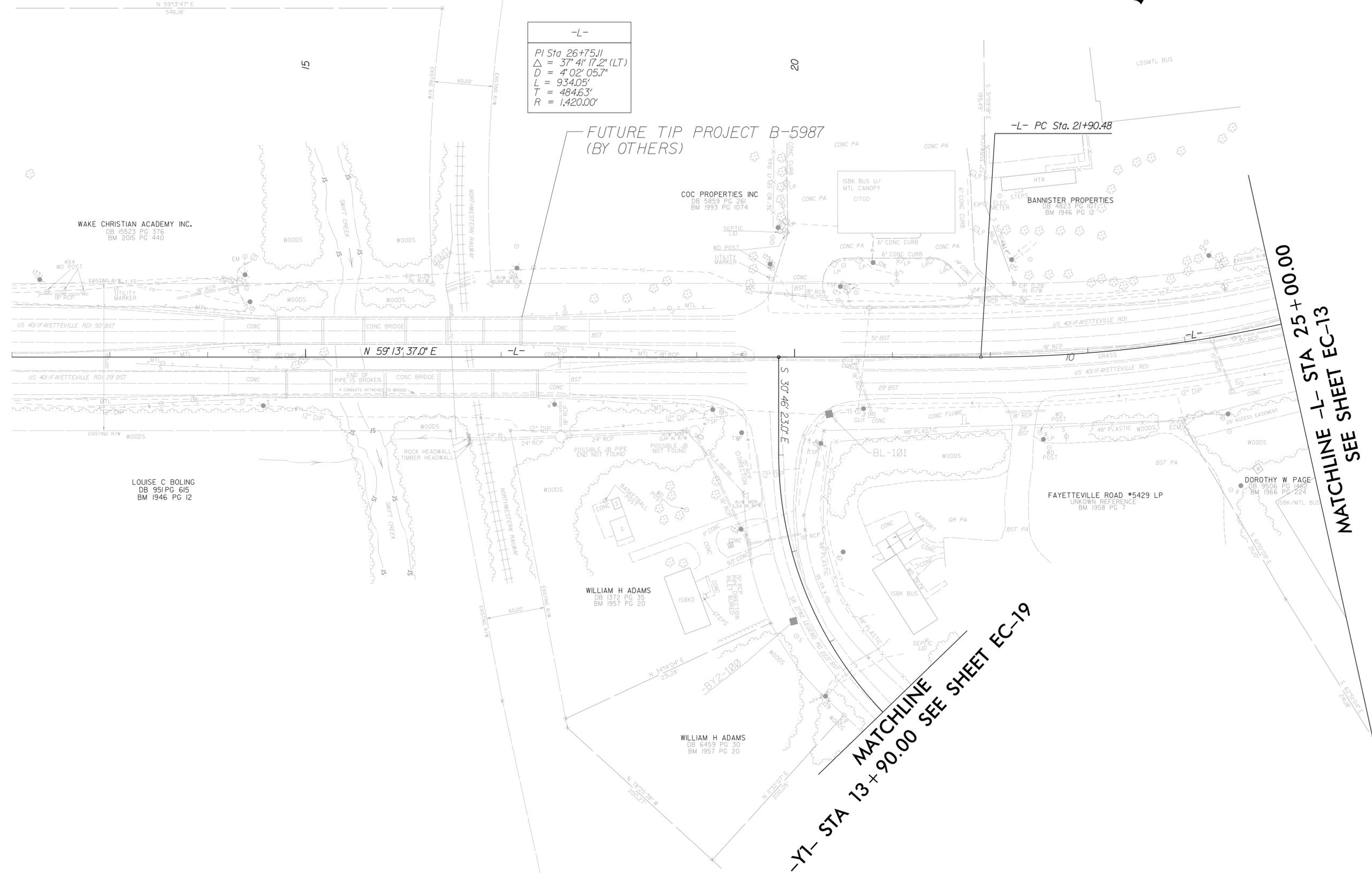
FOR -Y3- PROFILE SEE SHEET 16
FOR -Y3A- PROFILE SEE SHEET 16

NO CONSTRUCTION SHEET 4

PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-12/CONST.4
RW SHEET NO.	
Prepared in the Office of: AECOM	
<small>NC FIRM LICENSE No F-0342 5438 Wade Park Boulevard, Suite 200 Raleigh, NC 27607 +1-919-461-1000</small>	



-L-
 PI Sta. 26+75.11
 $\Delta = 37^{\circ}41'17.2''$ (LT)
 $D = 4^{\circ}02'05.7''$
 $L = 934.05'$
 $T = 484.63'$
 $R = 1,420.00'$



FUTURE TIP PROJECT B-5987
(BY OTHERS)

-L- PC Sta. 21+90.48

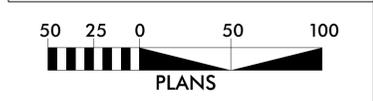
MATCHLINE -L- STA 25+00.00
 SEE SHEET EC-13

MATCHLINE -YI- STA 13+90.00 SEE SHEET EC-19

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PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-13/CONST.5
RW SHEET NO.	



-L-
PI Sta 26+75.11
 $\Delta = 37' 4" 17.2" (LT)$
 $D = 4' 02" 05.7"$
 $L = 934.05'$
 $T = 484.63'$
 $R = 1,420.00'$
 $e = EXIST$
Runoff = EXIST



MATCHLINE -L- STA 25+00.00 SEE SHEET EC-12

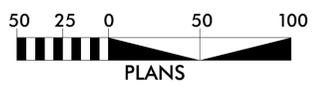
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FOR -L- PROFILE SEE SHEET 12

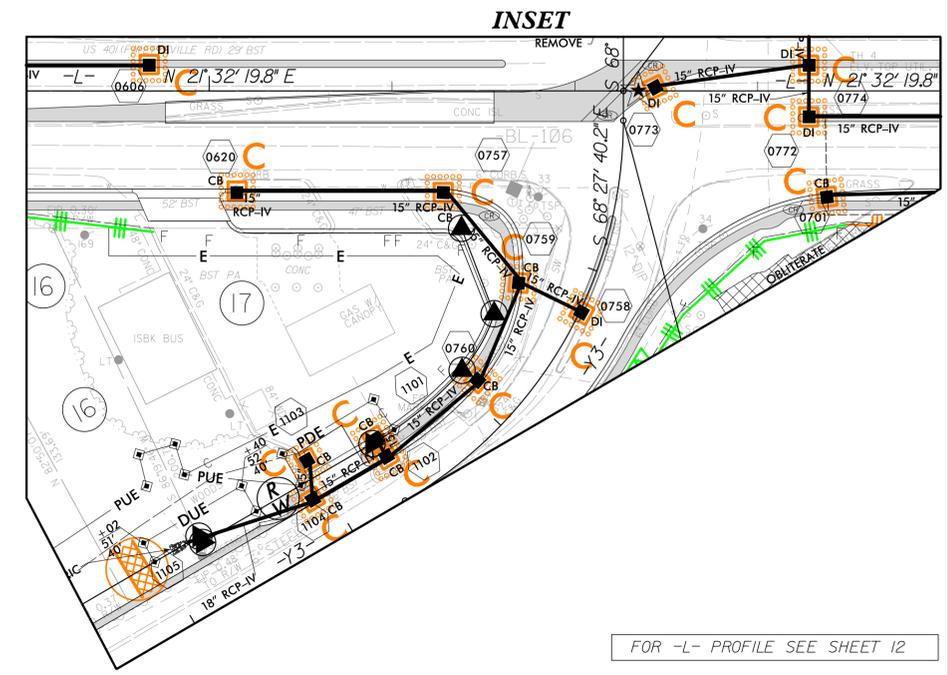
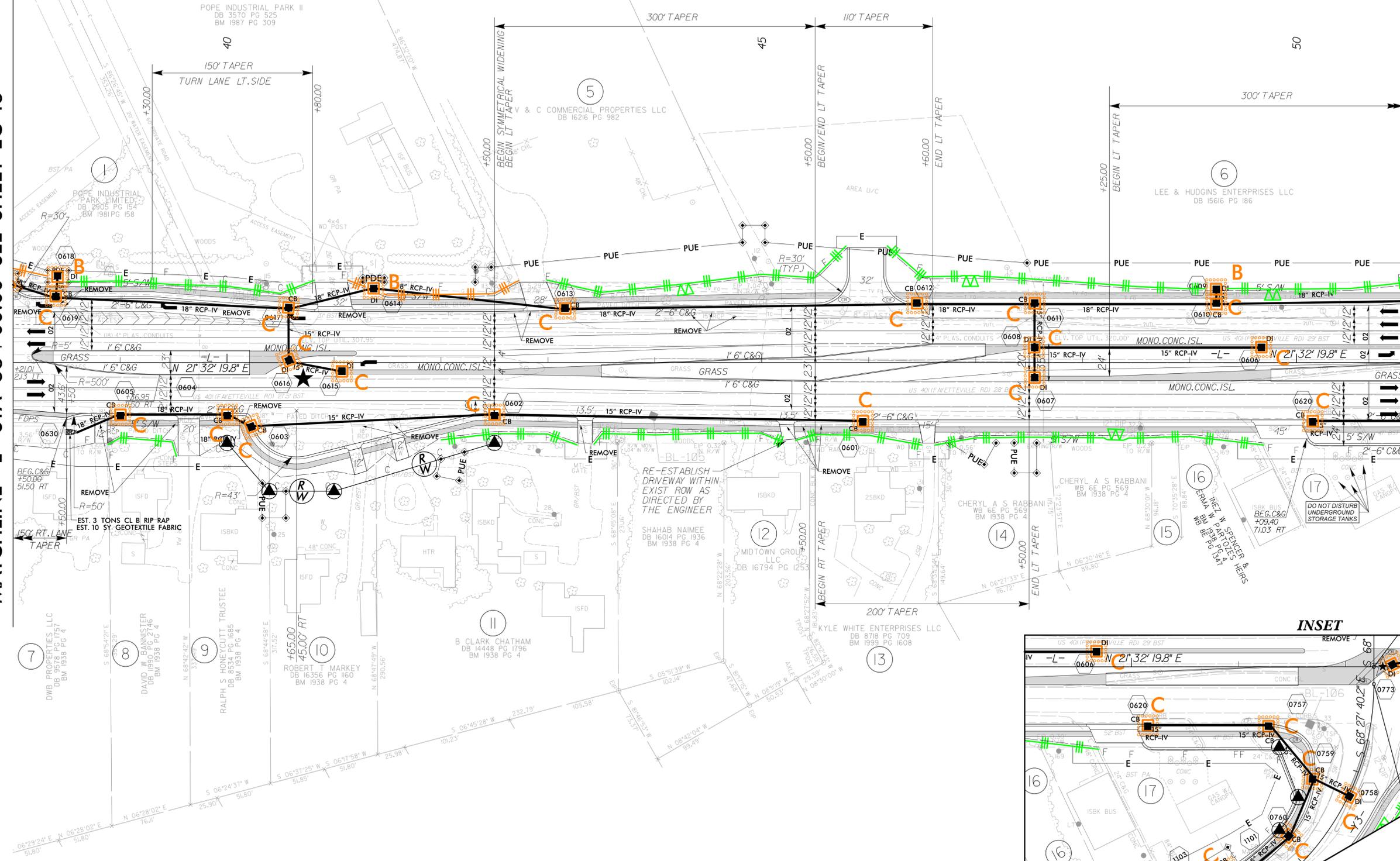
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PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-14/CONST.6
RW SHEET NO.	
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NC FIRM LICENSE No F-0342 5438 Wade Park Boulevard, Suite 200 Raleigh, NC 27607 +1-919-461-6000	



MATCHLINE -L- STA 38 + 00.00 SEE SHEET EC-13

MATCHLINE -L- STA 51 + 00.00 SEE SHEET EC-15



FOR -L- PROFILE SEE SHEET 12



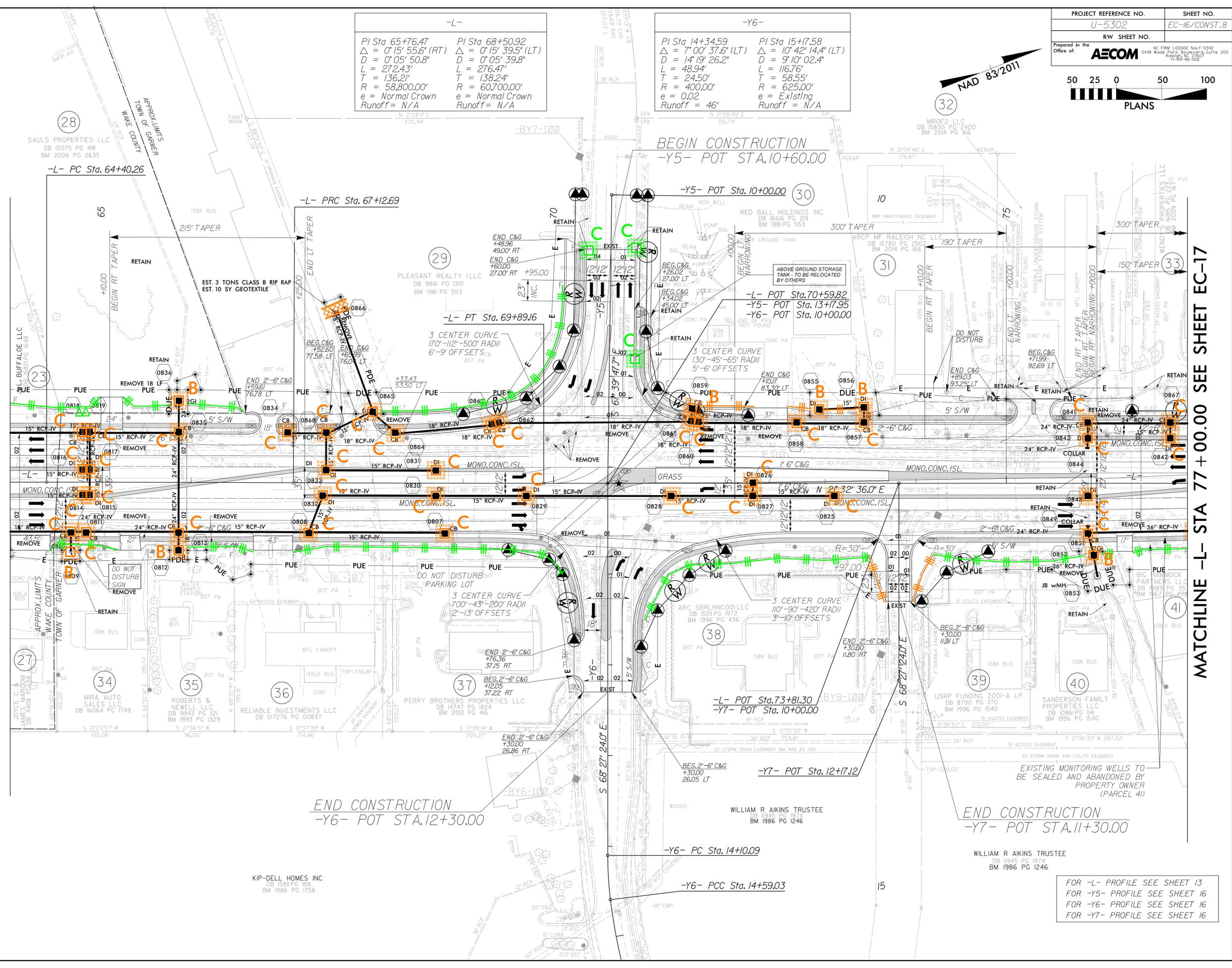
-L-
 PI Sta 65+76.47 Δ = 0°15'55.6" (RT) D = 0°05'50.8" L = 272.43' T = 136.21' R = 58,800.00' e = Normal Crown Runoff = N/A
 PI Sta 68+50.92 Δ = 0°15'39.5" (LT) D = 0°05'39.8" L = 276.47' T = 138.24' R = 60,700.00' e = Normal Crown Runoff = N/A

-Y6-
 PI Sta 14+34.59 Δ = 7°00'37.6" (LT) D = 14°19'26.2" L = 48.94' T = 24.50' R = 400.00' e = 0.02 Runoff = 46'
 PI Sta 15+17.58 Δ = 10°42'14.4" (LT) D = 9°10'02.4" L = 116.76' T = 58.55' R = 625.00' e = Existing Runoff = N/A



MATCHLINE -L- STA 64+00.00 SEE SHEET EC-15

MATCHLINE -L- STA 77+00.00 SEE SHEET EC-17



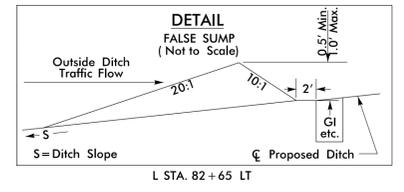
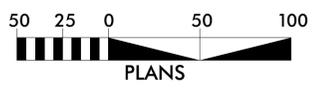
END CONSTRUCTION
 -Y6- POT STA.12+30.00

END CONSTRUCTION
 -Y7- POT STA.11+30.00

FOR -L- PROFILE SEE SHEET 13
 FOR -Y5- PROFILE SEE SHEET 16
 FOR -Y6- PROFILE SEE SHEET 16
 FOR -Y7- PROFILE SEE SHEET 16

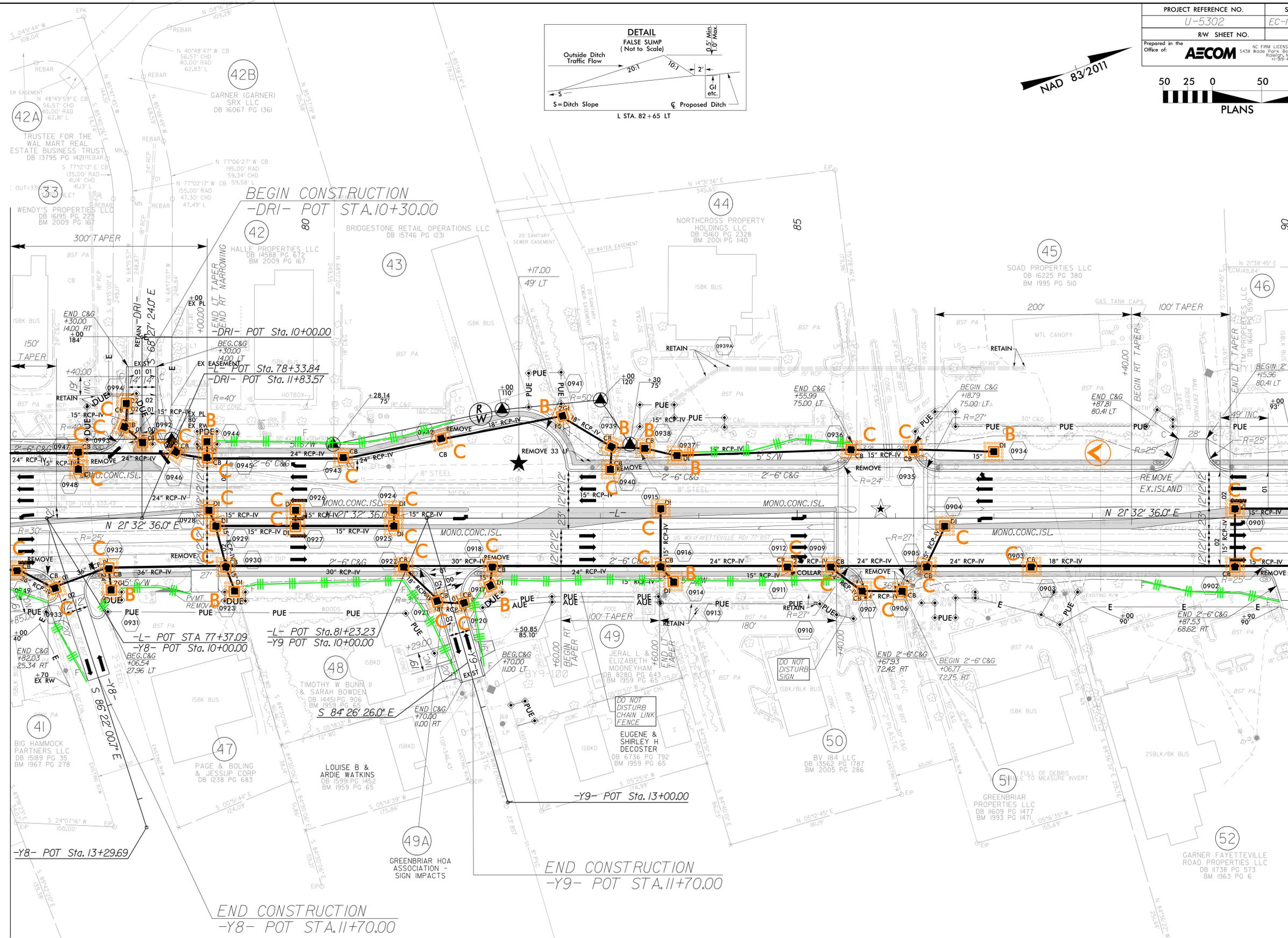
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PROJECT REFERENCE NO.	SHEET NO.
U-5302	EC-17/CONST.9
RW SHEET NO.	
Prepared in the Office of:	
AECOM	NC FIRM LICENSE No.F-0342 5438 Wade Park Boulevard, Suite 200 Raleigh, NC 27607 +1-919-461-1000



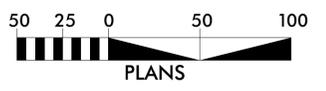
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MATCHLINE -L- STA 90 + 00.00 SEE SHEET EC-18

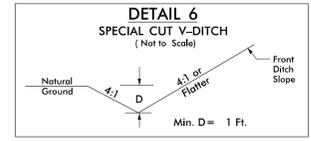


FOR -L- PROFILE SEE SHEETS 14
 FOR -Y8- PROFILE SEE SHEET 16
 FOR -Y9- PROFILE SEE SHEET 16
 FOR -DRI- PROFILE SEE SHEET 16

5/14/99
 4/20/14 PM
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-L-		
PI Sta 92+81.83	PI Sta 96+17.77	PI Sta 100+06.77
$\Delta = 4^{\circ} 02' 51.7''$ (RT)	$\Delta = 1^{\circ} 41' 55.9''$ (RT)	$\Delta = 2^{\circ} 51' 39.9''$ (RT)
D = 1'18' 07.8"	D = 0' 28' 13.5"	D = 1' 30' 28.0"
L = 310.84'	L = 361.14'	L = 189.75'
T = 155.49'	T = 180.58'	T = 94.90'
R = 4,400.00'	R = 12,180.00'	R = 3,800.00'
e = 3%	e = NC	e = EXIST
Runoff = 147'	Runoff = N/A	Runoff = EXIST



MATCHLINE -L- STA 90+00.00 SEE SHEET EC-17



FOR -L- PROFILE SEE SHEET 14

5/14/99
 3/20/10 PM
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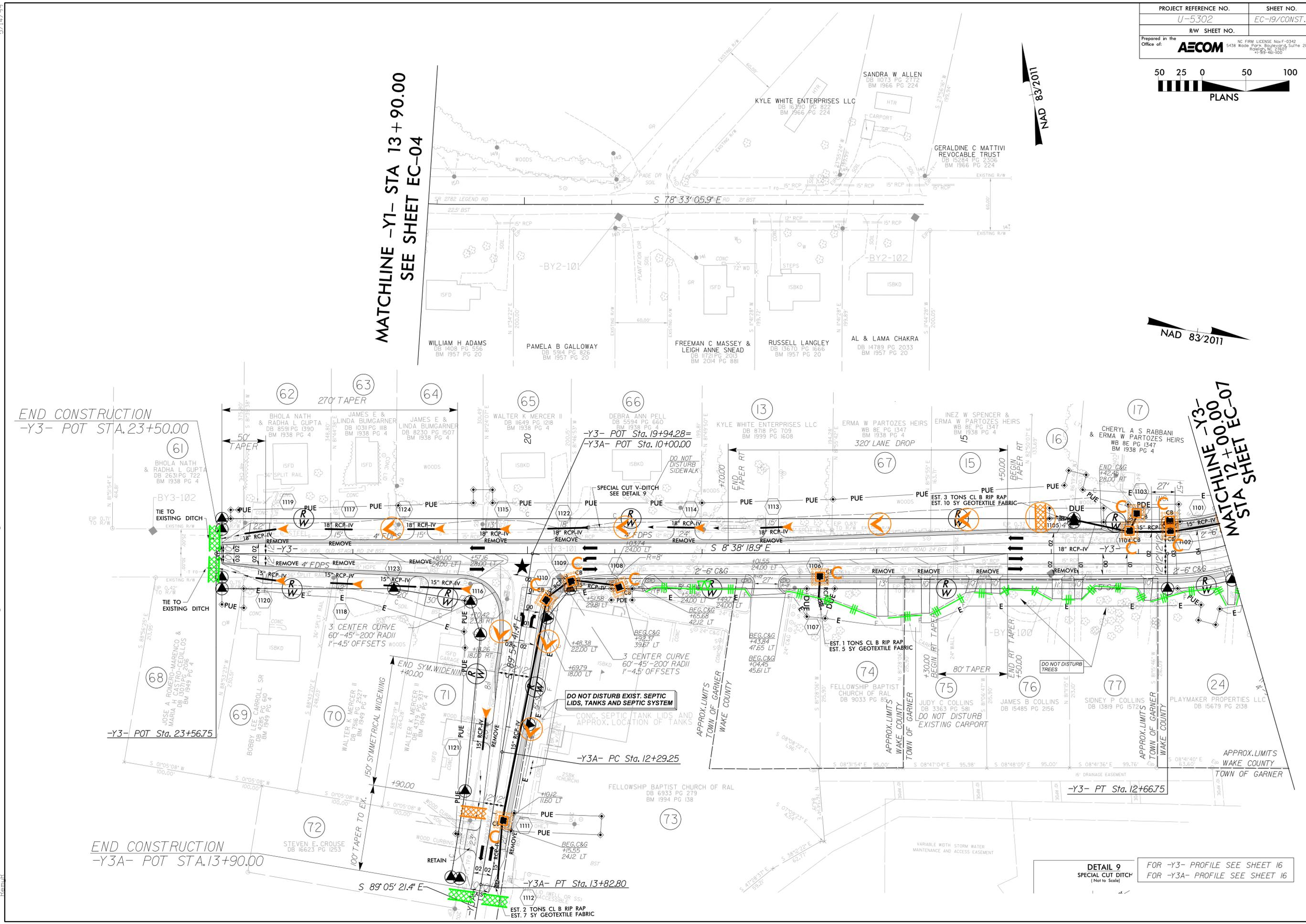


NAD 83/2011

MATCHLINE -Y1- STA 13+90.00
SEE SHEET EC-04

END CONSTRUCTION
-Y3- POT STA. 23+50.00

MATCHLINE -Y3-
STA 12+00.00
SEE SHEET EC-07



END CONSTRUCTION
-Y3A- POT STA. 13+90.00

DETAIL 9
SPECIAL CUT DITCH
(Not to Scale)

FOR -Y3- PROFILE SEE SHEET 16
FOR -Y3A- PROFILE SEE SHEET 16

5/14/09
4/21/08 P.M.
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