

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

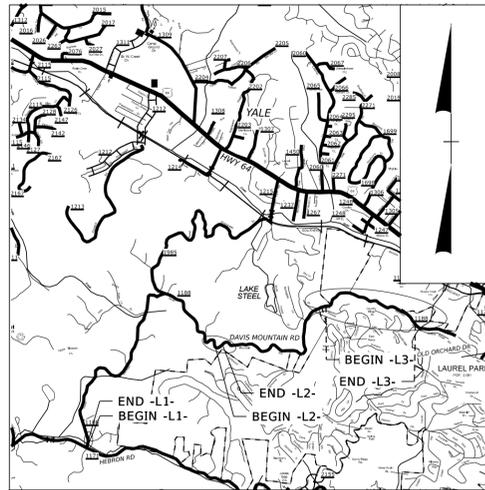
**UTILITIES BY OTHERS PLANS
HENDERSON COUNTY**

LOCATION: *SR 1188 (DAVIS MOUNTAIN RD) FROM SR 1171 (HEBRON RD)
TO 3.3 MILES NORTH OF SR-1171 (HEBRON ROAD)*

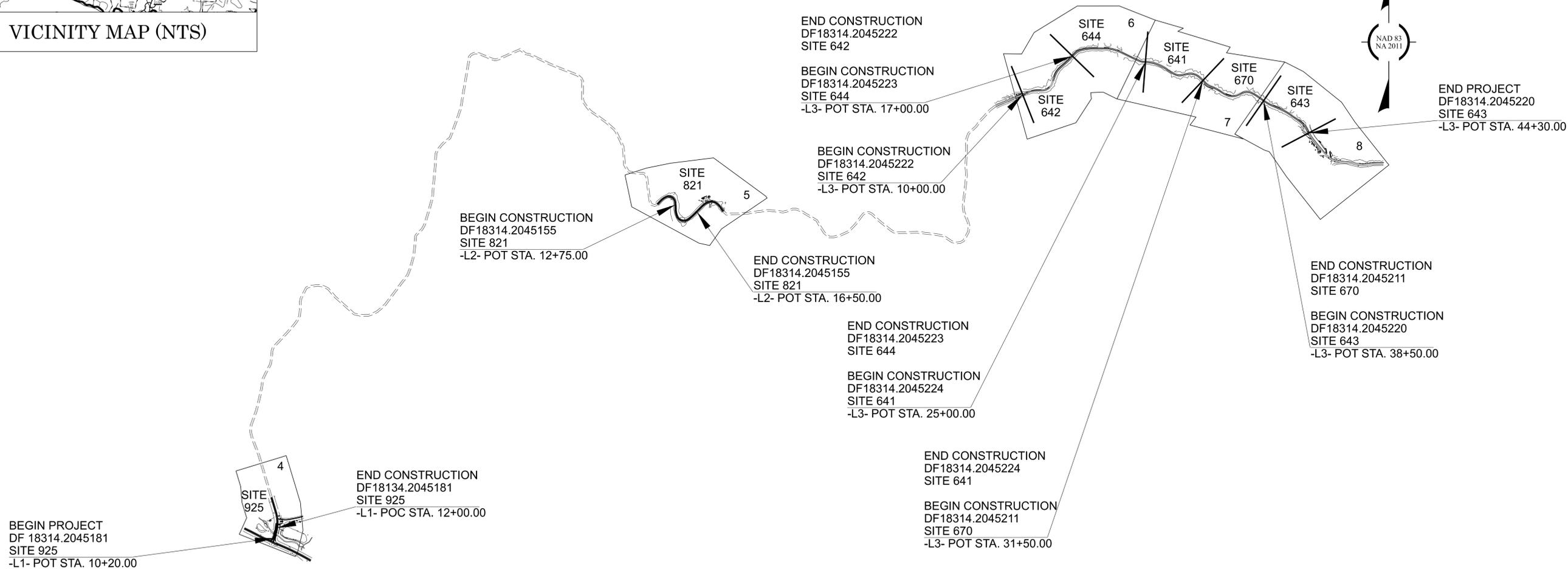
TYPE OF WORK: *GRADING, PAVING, DRAINAGE, CULVERT, AND RETAINING WALLS*

W.B.S.	SHEET NO.
DF183.14.2045155 W03294	UO-1

NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



VICINITY MAP (NTS)

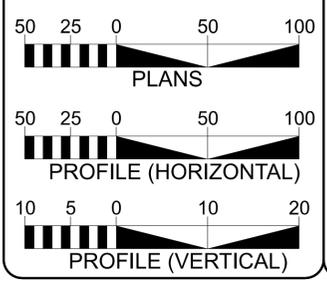


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UNLESS ALL SIGNATURES COMPLETED

WBS PROJECT: DF18314.2045155 W03294

CONTRACT:

GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UO-1	TITLE SHEET
UO-2	SYMBOLGY SHEET
UO-4 THRU UO-8	UTILITY BY OTHERS SHEETS

UTILITY OWNERS WITH CONFLICTS

- (A) POWER - DUKE ENERGY
- (B) TELEPHONE - AT&T
- (C) NATURAL GAS - ENBRIDGE

PREPARED IN THE OFFICE OF

Johnson, Mirmiran, & Thompson Inc.
4700 Falls of Neuse Rd, Suite 100,
Raleigh, NC, 27609
License No: C-3097

**DIVISION 14
UTILITIES UNIT**
253 WEBSTER ROAD
SYLVA, NC 28779
PHONE (828) 524-1964

JAMES MONTGOMERY CONSULTANT CONTACT #1
CHARLES YOUNG, PE, PMP CONSULTANT CONTACT #2

BOB GOLDING DIVISION UTILITY ENGINEER
ROBERT DYER ASSISTANT DIVISION UTILITY ENGINEER

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

DF18314.2045155W03294

UD	2
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NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HENDERSON COUNTY



UTILITIES UNIT

UTILITY BY OTHERS
PLANS ONLY

ALL PROPOSED UTILITY
WORK SHOWN ON THIS
SHEET WILL BE DONE
BY OTHERS. NO PAYMENT
WILL BE MADE TO THE
CONTRACTOR FOR
UTILITY WORK SHOWN ON
THIS SHEET.

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

REVISED:

UTILITIES ENGINEERING SEC.
PHONE:(919)707-6690
FAX:(919)250-4151

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement Method	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records		Sanitary Sewer Cleanout	
End of Information			

*For Existing Utilities

Utility Line Drawn from Record (Type as Shown)

Designated Utility Line (Type as Shown)

REVISIONS



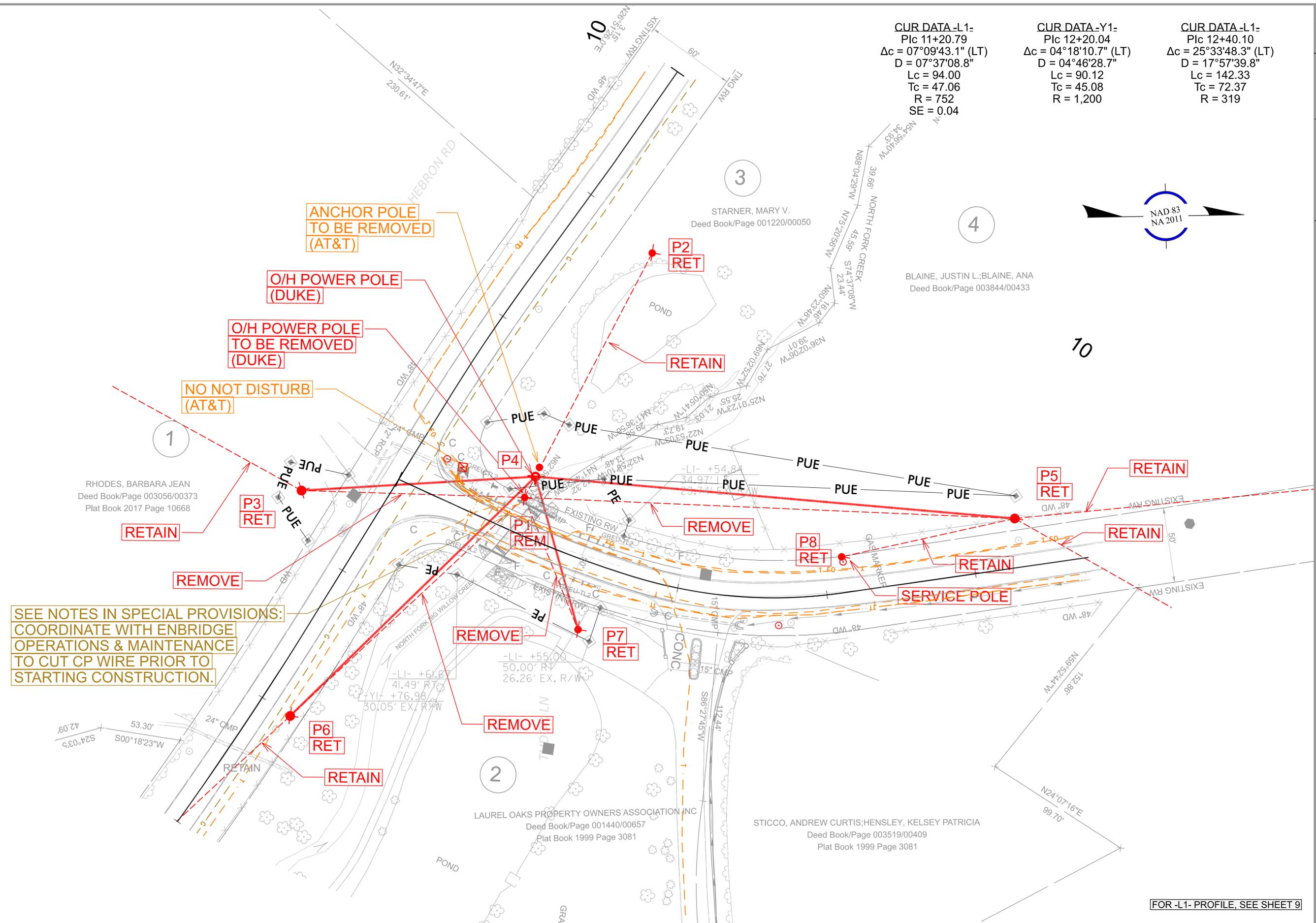
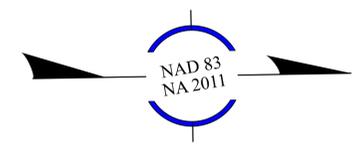
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



CUR DATA-L1-
Plc 11+20.79
 $\Delta c = 07^{\circ}09'43.1''$ (LT)
 $D = 07^{\circ}37'08.8''$
Lc = 94.00
Tc = 47.06
R = 752
SE = 0.04

CUR DATA-Y1-
Plc 12+20.04
 $\Delta c = 04^{\circ}18'10.7''$ (LT)
 $D = 04^{\circ}46'28.7''$
Lc = 90.12
Tc = 45.08
R = 1,200

CUR DATA-L1-
Plc 12+40.10
 $\Delta c = 25^{\circ}33'48.3''$ (LT)
 $D = 17^{\circ}57'39.8''$
Lc = 142.33
Tc = 72.37
R = 319

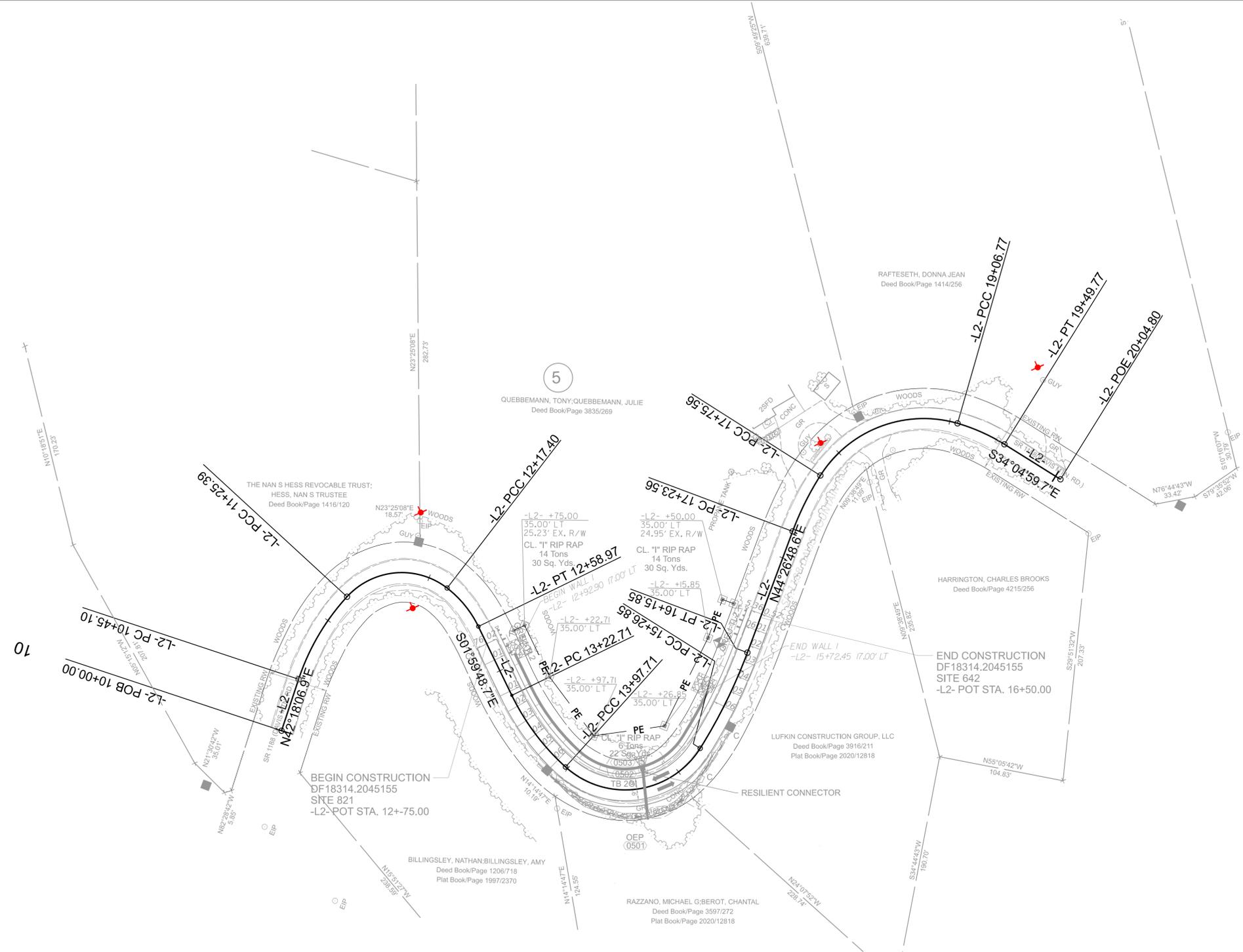
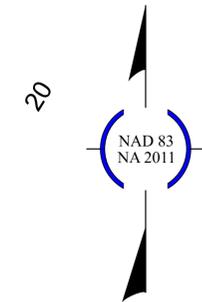


SEE NOTES IN SPECIAL PROVISIONS:
COORDINATE WITH ENBRIDGE
OPERATIONS & MAINTENANCE
TO CUT CP WIRE PRIOR TO
STARTING CONSTRUCTION.

FOR -L1- PROFILE, SEE SHEET 9



ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



CUR DATA -L2-
 Plc 10+85.85
 $\Delta c = 24^{\circ}12'49.4"$ (RT)
 D = 30'09'20.4"
 Lc = 80.30
 Tc = 40.76
 R = 190

CUR DATA -L2-
 Plc 11+82.23
 $\Delta c = 85^{\circ}01'28.6"$ (RT)
 D = 92'24'45.2"
 Lc = 92.01
 Tc = 56.84
 R = 62

CUR DATA -L2-
 Plc 12+38.56
 $\Delta c = 26^{\circ}27'46.4"$ (RT)
 D = 63'39'43.1"
 Lc = 41.57
 Tc = 21.16
 R = 90

CUR DATA -L2-
 Plc 13+60.67
 $\Delta c = 21^{\circ}55'27.9"$ (LT)
 D = 29'13'57.1"
 Lc = 75.00
 Tc = 37.96
 R = 196
 SE = 0.06

CUR DATA -L2-
 Plc 14+85.88
 $\Delta c = 99^{\circ}59'22.6"$ (LT)
 D = 77'25'36.2"
 Lc = 129.14
 Tc = 88.17
 R = 74
 SE = 0.06

CUR DATA -L2-
 Plc 15+71.50
 $\Delta c = 11^{\circ}38'32.3"$ (LT)
 D = 13'04'52.4"
 Lc = 89.00
 Tc = 44.65
 R = 438
 SE = 0.06

CUR DATA -L2-
 Plc 17+49.66
 $\Delta c = 11^{\circ}52'12.2"$ (RT)
 D = 22'49'37.2"
 Lc = 52.00
 Tc = 26.09
 R = 251

CUR DATA -L2-
 Plc 18+52.01
 $\Delta c = 73^{\circ}42'17.7"$ (RT)
 D = 56'10'20.4"
 Lc = 131.21
 Tc = 76.45
 R = 102

CUR DATA -L2-
 Plc 19+28.41
 $\Delta c = 15^{\circ}53'41.8"$ (RT)
 D = 36'57'54.1"
 Lc = 43.00
 Tc = 21.64
 R = 155

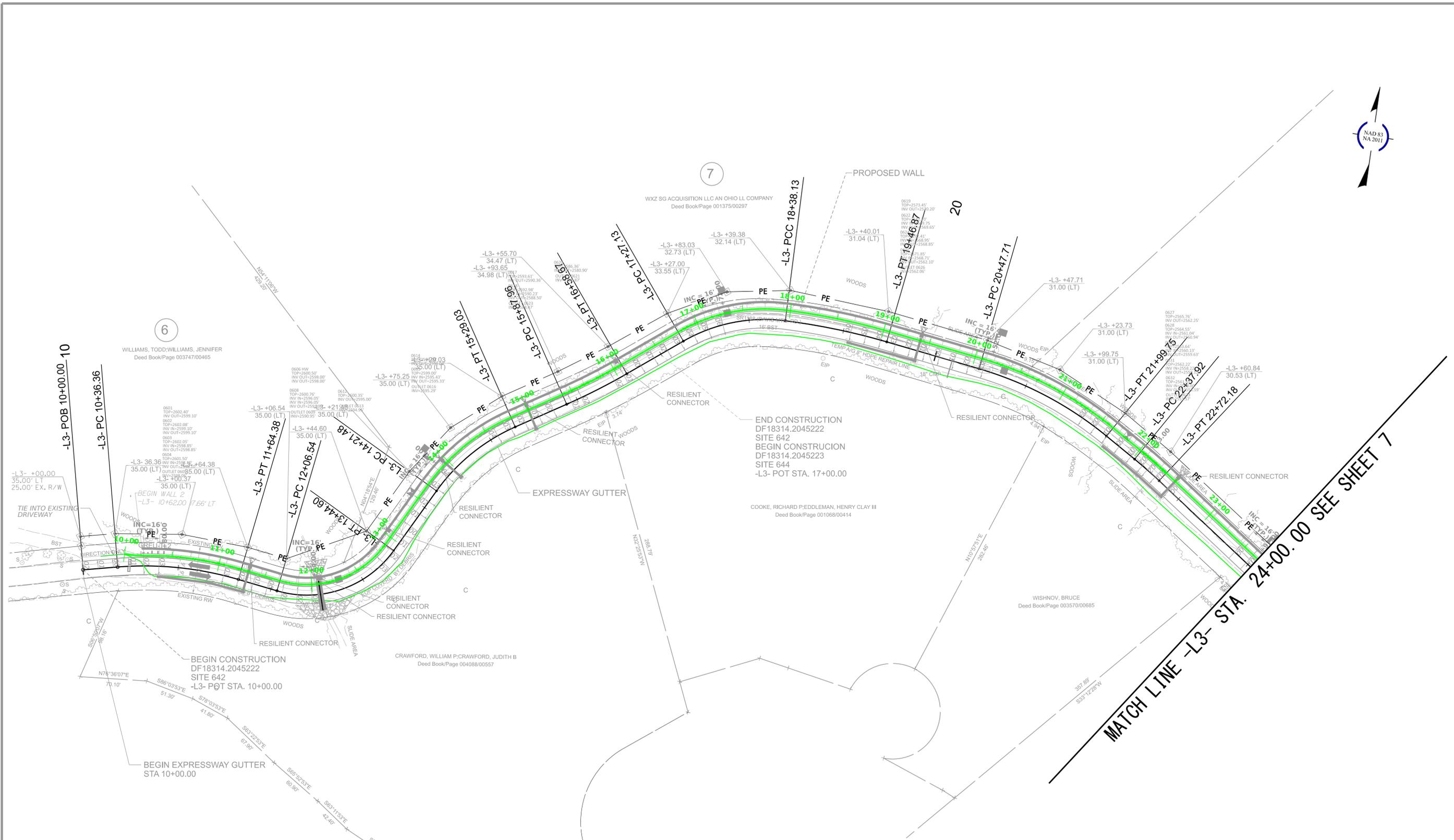
FOR -L2- PROFILE, SEE SHEET 10



ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



Johnson, Mirman, & Thompson Inc.
4700 Falls of Neuse Rd., Suite 100,
Raleigh, NC 27609
License No. C-3097



MATCH LINE -L3- STA. 24+00.00 SEE SHEET 7

CUR DATA -L3- Plc 11+01.09 Δc = 20°57'27.4" (RT) D = 16°22'12.8" Lc = 128.02 Tc = 64.73 R = 350 SE = 0.03	CUR DATA -L3- Plc 12+85.88 Δc = 70°37'46.6" (LT) D = 51°09'25.0" Lc = 138.06 Tc = 79.34 R = 112 SE = 0.03	CUR DATA -L3- Plc 14+76.56 Δc = 30°30'17.7" (RT) D = 28°21'51.3" Lc = 107.55 Tc = 55.08 R = 202 SE = 0.04	CUR DATA -L3- Plc 16+24.41 Δc = 05°21'53.0" (LT) D = 08°38'30.8" Lc = 62.08 Tc = 31.06 R = 663 SE = 0.02	CUR DATA -L3- Plc 17+84.11 Δc = 37°11'31.2" (RT) D = 33°30'22.7" Lc = 111.00 Tc = 57.53 R = 171 SE = 0.06	CUR DATA -L3- Plc 18+87.76 Δc = 08°09'17.7" (RT) D = 08°08'19.0" Lc = 100.20 Tc = 50.19 R = 704 SE = 0.06	CUR DATA -L3- Plc 21+22.03 Δc = 23°08'42.0" (RT) D = 15°23'11.6" Lc = 150.42 Tc = 76.25 R = 372.38 SE = 0.03	CUR DATA -L3- Plc 22+41.62 Δc = 03°41'22.1" (RT) D = 12°25'41.4" Lc = 29.69 Tc = 14.85 R = 461.02 SE = 0.02
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FOR -L3- PROFILE, SEE SHEET 11



ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



MATCH LINE -L3- STA. 24+00.00 SEE SHEET 6

MATCH LINE -L3- STA. 38+00.00 SEE SHEET 8



8

9

10

LODGE, AARON THOMAS; LODGE, MICHELLE
Deed Book/Page 003411/00123

JARRELL, JAMES C.; MACK, DEBORAH M.
Deed Book/Page 003330/00023

CHILDS, RYAN; LAWRENCE, DAVID
Deed Book/Page 003997/00200

LOUISE CHARLESWORTH CO LLC
Deed Book/Page 004005/00558

KING, TODD; KING, TRICIA
Deed Book/Page 004077/00021

SHADLE, STEVEN LAMAR; SHADLE, RACHELLE DEBRA
Deed Book/Page 003405/00371

COX, JOSEPHINE U TRUSTEE;
JOSEPHINE U COX REVOCABLE TRUST
Deed Book/Page 003274/00041

HUMMEL, LORETTA L.; THOMPSON, GARRIE B. III
Deed Book/Page 003928/00457

KOKAL, RUSSELL T.; KOKAL, LINDA J.
Deed Book/Page 003544/00060

KOKAL, RUSSELL T.; KOKAL, LINDA J.
Deed Book/Page 003735/00313

END CONSTRUCTION
DF18314.2045224
SITE 641
BEGIN CONSTRUCTION
DF18314.2045221
SITE 670
-L3- POT STA. 31+50.00

END CONSTRUCTION
DF18314.2045223
SITE 644
BEGIN CONSTRUCTION
DF18314.2045224
SITE 641
-L3- POT STA. 25+00.00

CUR DATA -L3-
P/c 24+49.95
 $\Delta c = 21^{\circ}29'10.1''$ (LT)
D = 24'16'40.3"
Lc = 88.50
Tc = 44.78
R = 236
SE = 0.02

CUR DATA -L3-
P/c 26+01.89
 $\Delta c = 24^{\circ}45'33.2''$ (RT)
D = 15'07'03.4"
Lc = 163.78
Tc = 83.19
R = 379
SE = 0.02

CUR DATA -L3-
P/c 27+26.47
 $\Delta c = 03^{\circ}52'39.0''$ (RT)
D = 07'16'15.7"
Lc = 53.33
Tc = 26.67
R = 788
SE = 0.02

CUR DATA -L3-
P/c 28+63.97
 $\Delta c = 44^{\circ}59'11.2''$ (LT)
D = 47'21'06.8"
Lc = 95.00
Tc = 50.10
R = 121
SE = 0.03

CUR DATA -L3-
P/c 30+39.02
 $\Delta c = 55^{\circ}26'39.6''$ (RT)
D = 39'47'19.4"
Lc = 139.35
Tc = 75.67
R = 144
SE = 0.02

CUR DATA -L3-
P/c 32+11.46
 $\Delta c = 19^{\circ}07'04.4''$ (LT)
D = 23'06'11.3"
Lc = 82.75
Tc = 41.76
R = 248
SE = 0.03

CUR DATA -L3-
P/c 33+16.13
 $\Delta c = 07^{\circ}00'41.3''$ (RT)
D = 12'33'53.5"
Lc = 55.80
Tc = 27.94
R = 456
SE = 0.02

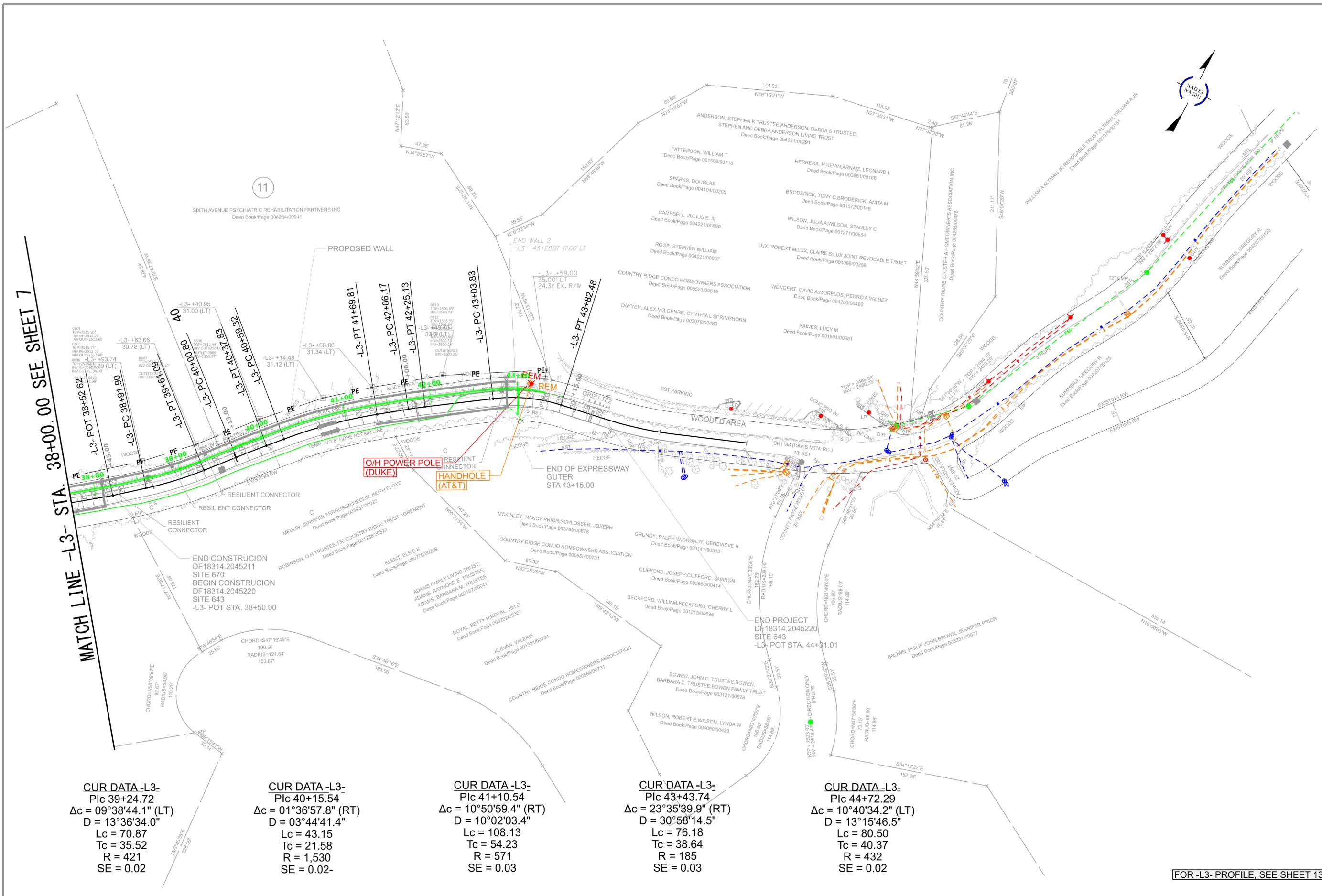
CUR DATA -L3-
P/c 36+55.31
 $\Delta c = 50^{\circ}52'28.9''$ (RT)
D = 49'23'34.5"
Lc = 103.00
Tc = 55.17
R = 116
SE = 0.04

CUR DATA -L3-
P/c 37+38.57
 $\Delta c = 08^{\circ}38'24.6''$ (RT)
D = 12'12'59.7"
Lc = 70.72
Tc = 35.43
R = 469
SE = 0.05

FOR -L3- PROFILE, SEE SHEET 12



ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



MATCH LINE -L3- STA. 38+00.00 SEE SHEET 7

11

CUR DATA -L3-
P/c 39+24.72
Δc = 09°38'44.1" (LT)
D = 13°36'34.0"
Lc = 70.87
Tc = 35.52
R = 421
SE = 0.02

CUR DATA -L3-
P/c 40+15.54
Δc = 01°36'57.8" (RT)
D = 03°44'41.4"
Lc = 43.15
Tc = 21.58
R = 1,530
SE = 0.02-

CUR DATA -L3-
P/c 41+10.54
Δc = 10°50'59.4" (RT)
D = 10°02'03.4"
Lc = 108.13
Tc = 54.23
R = 571
SE = 0.03

CUR DATA -L3-
P/c 43+43.74
Δc = 23°35'39.9" (RT)
D = 30°58'14.5"
Lc = 76.18
Tc = 38.64
R = 185
SE = 0.03

CUR DATA -L3-
P/c 44+72.29
Δc = 10°40'34.2" (LT)
D = 13°15'46.5"
Lc = 80.50
Tc = 40.37
R = 432
SE = 0.02

FOR -L3- PROFILE, SEE SHEET 13