

09/08/99

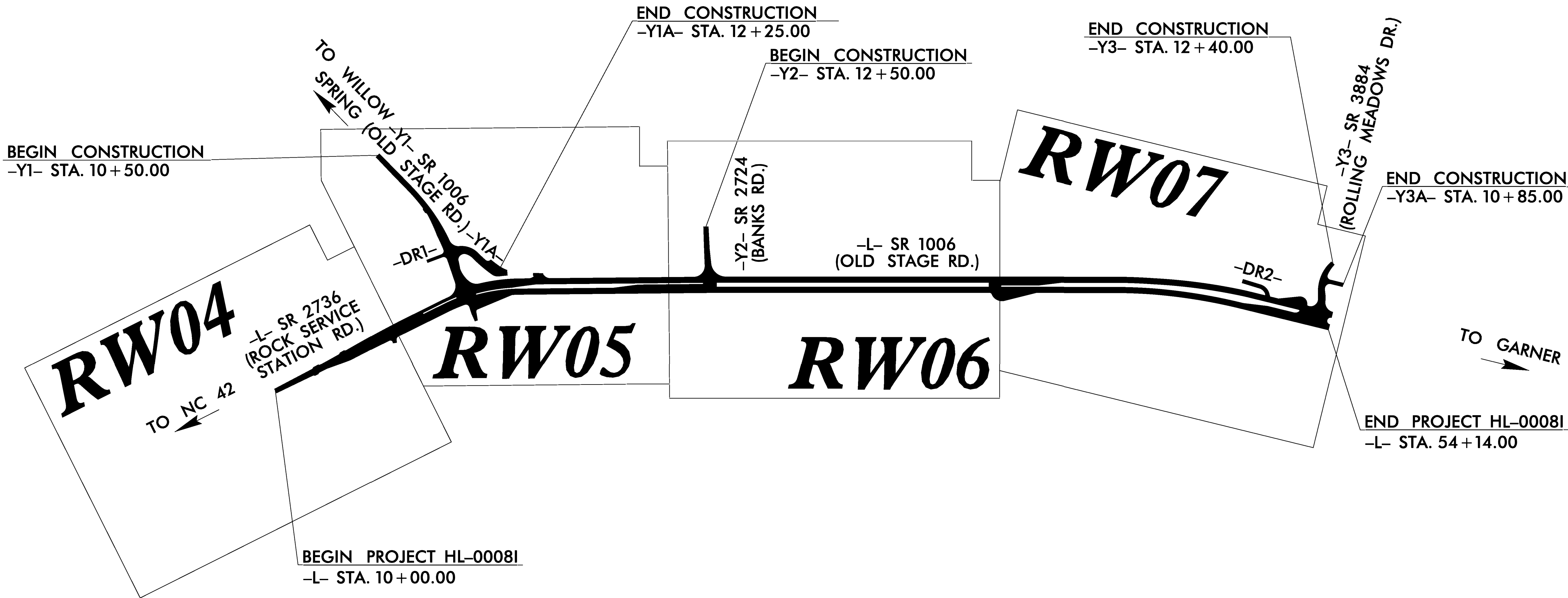
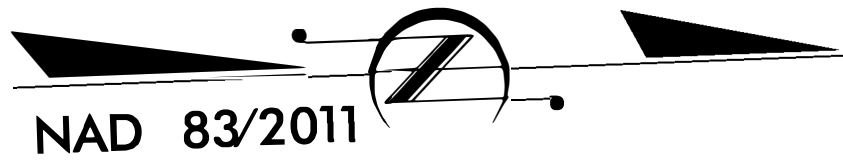
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HL-0008I	RW01	10

TIP PROJECT: HL-0008I

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURVEY CONTROL, EXISTING CENTERLINES,
RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

WAKE COUNTY



GRAPHIC SCALE



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "R2828-AZ-1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 686,984.226(ft) EASTING: 2,106,646.066(ft) ELEVATION: 385.67(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99988804 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R2828-AZ-1" TO -L- STATION 10+00.00 IS S 77-34'59.5" W 8762.35(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88(GEOID 12B)

Prepared In the Office of:

NV5

NV5 ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
P: 919.851.1912 www.NV5.com
NC License # F-1333
Formerly CALIX Engineers & Consultants

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 22, 2023

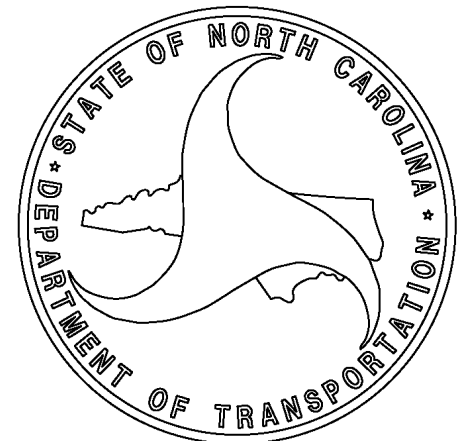
LETTING DATE:
DECEMBER 16, 2025

PROFESSIONAL LAND
SURVEYOR



Signed by:
G. Scott Cranford
SIGNATURE

09/25/2025
Date:



17-JUL-2025 09:39
G:\Project\2025\130725-20250509\SUR\rw_sheets\HL-0008I\is_rw01.dgn
scott.cranford AT NCCAR-CRANSUD

SURVEY CONTROL SHEET
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

I, C. ANDREW HEATH, JR., PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA
Type of GPS field procedure: STATIC
Dates of survey: 7/26/2017 TO 8/03/2017
Datum/Epoch: NAD 83 (CONUS)
Published/Fixed-control use: CORS STA'S -NCJL, NCLI, NCNA, NCRD, NCSF AND SNFD
Localized around: R2828-AZ-1
Northing: 686,984.226
Easting: 2,106,646.066
Combined grid factor: (GROUND TO GRID) = 0.99988804
Geoid model: GEOID 12B
Units: US SURVEY FT

I also certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from JANUARY 2022 to FEBRUARY 2022 and again in DECEMBER 2024 , and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 10th day of January, 2025:

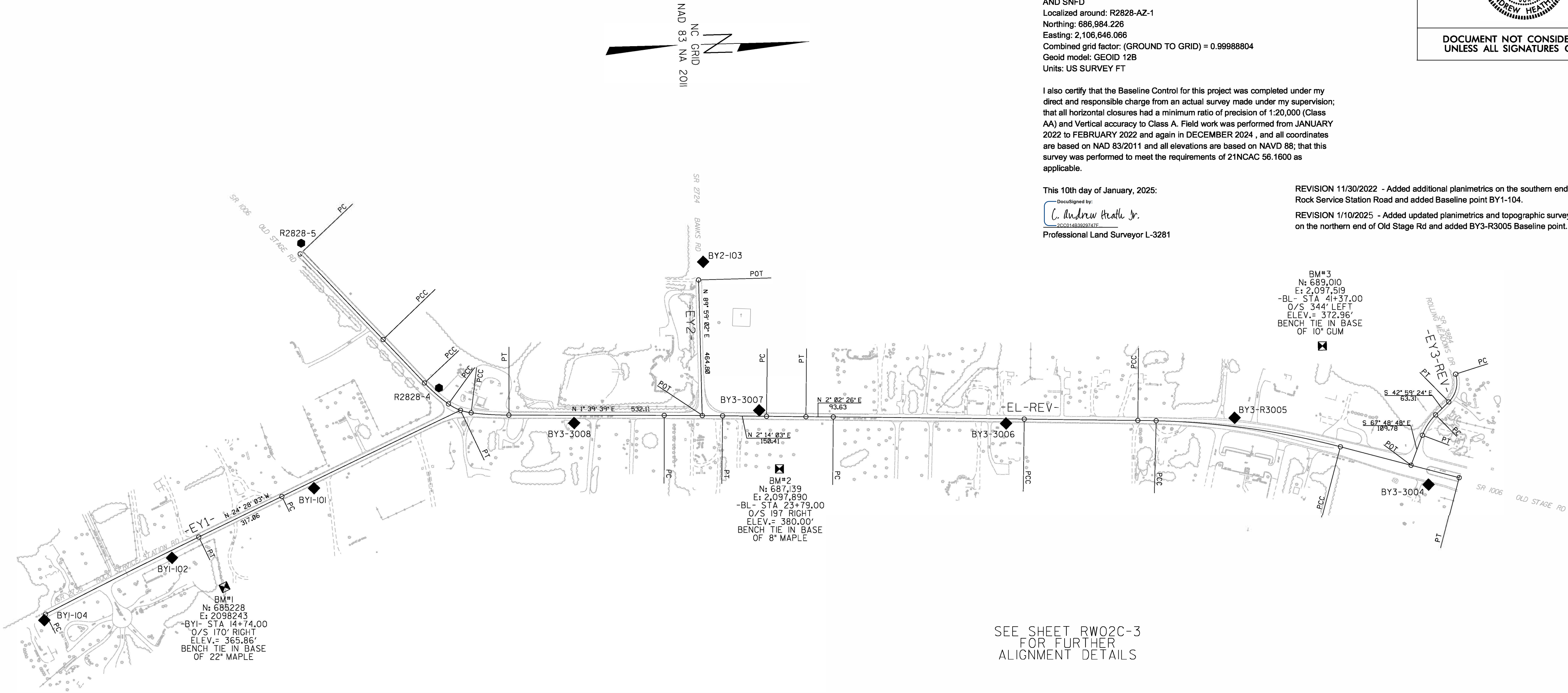
DocuSigned by:
C. Andrew Heath Jr.

Professional Land Surveyor L-3281

REVISION 11/30/2022 - Added additional planimetrics on the southern end of Rock Service Station Road and added Baseline point BY1-104.

REVISION 1/10/2025 - Added updated planimetrics and topographic surveys on the northern end of Old Stage Rd and added BY3-R3005 Baseline point.

PROJECT REFERENCE NO.	SHEET NO.
HL-00081	RW02C-1
Location and Surveys	
NIV5 NVS ENGINEERS & CONSULTANTS, INC. 3300 REGENCY PARKWAY, SUITE 100 CARY, NC 27515 P: 919.854.1912 www.NVS.com NC License # 18333 Formerly CIVIL Engineers & Consultants	
PROJECT SURVEYOR NORTH CAROLINA PROFESSIONAL SEAL L-3281 CIVIL SURVEYOR ANDREW HEATH, JR.	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



SEE SHEET RW02C-3
FOR FURTHER
ALIGNMENT DETAILS

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

SURVEY CONTROL SHEET
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BL	POINT	DESC.	NORTH	EAST	ELEVATION
	R2828+5	REBAR AND GPS CAP	685522.3520	2097071.2650	369.84
	R2828+4	REBAR AND GPS CAP	685981.1620	2097580.5110	375.88
	BY3-3008	REBAR AND TRV CAP	686439.7570	2097713.1320	365.44
	BY3-3007	REBAR AND TRV CAP	687075.1940	2097687.0380	383.20
	BY3-3006	REBAR AND TRV CAP	687919.3450	2097754.7070	386.69
	BY3-R3005	REBAR AND TRV CAP	688702.5720	2097756.7050	398.80
	BY3-3004	REBAR AND TRV CAP	689360.7800	2098003.9870	395.66

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
	R2828+4	REBAR AND GPS CAP	685981.1620	2097580.5110	375.88
	BY1+101	REBAR AND TRV CAP	685543.1580	2097912.2330	368.64
	BY1+102	REBAR AND TRV CAP	685050.2780	2098137.4350	372.86
	BY1+104	REBAR AND TRV CAP	684607.3280	2098338.9910	369.55

BY2	POINT	DESC.	NORTH	EAST	ELEVATION
	BY2+103	REBAR AND TRV CAP	686897.5960	2097172.3650	382.71
	BY3-3007	REBAR AND TRV CAP	687075.1940	2097687.0380	383.20

BM1 ELEVATION = 365.86
N 685228 E 2098243
BY1 STATION 14+74.00 170 LEFT
BENCH TIE IN 22' MAPLE

BM2 ELEVATION = 380.00
N 687139 E 2097890
BL STATION 23+79.00 197 RIGHT
BENCH TIE IN 8' MAPLE

BM3 ELEVATION = 372.96
N 689010 E 2097519
BL STATION 41+37.00 344 LEFT
BENCH TIE IN 10' GUM

PROJECT REFERENCE NO.
HL-00081

SHEET NO.
RW02C-2

Location and Surveys

N|V|S

NVS ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
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NC License # E-5333 formerly OAKY Engineers & Consultants

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, C. ANDREW HEATH, JR., PLS, certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from JANUARY 2022 to FEBRUARY 2022 and again in DECEMBER 2024, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 10th day of January, 2025:

DocuSigned by:

20250116035027617
Professional Land Surveyor L-3281

REVISION 11/30/2022 - Added Baseline point BY1+104.
REVISION 1/10/2025 - Added Baseline point BY3-R3005.

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

SURVEY CONTROL SHEET
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

EL-REV POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	685519.128	2097106.383							
CURVE			N 47°51'04.4" E	409.08	00°25'06.0"(LT)	00°06'08.1"	409.08	204.54	56028.76
PCC	685793.642	2097409.675							
CURVE			N 47°55'58.5" E	205.49	00°34'54.1"(RT)	00°16'59.1"	205.49	102.75	20240.75
PCC	685931.323	2097562.225							
CURVE			N 42°45'08.9" E	109.19	10°56'33.6"(LT)	10°00'22.3"	109.36	54.85	572.60
PCC	686011.502	2097636.349							
CURVE			N 22°50'41.5" E	83.52	28°52'21.2"(LT)	34°12'23.2"	84.41	43.12	167.50
PCC	686088.468	2097668.773							
CURVE			N 05°02'05.0" E	129.47	06°44'51.7"(LT)	05°12'31.3"	129.55	64.85	1100.00
PT	686217.440	2097680.135							
LINE			N 01°39'39.2" E	532.11					
PC	686749.329	2097695.558							
CURVE			N 01°56'51.0" E	200.10	00°34'23.6"(RT)	00°17'11.3"	200.10	100.05	20000.00
PT	686949.309	2097702.358							
LINE			N 02°14'02.8" E	150.41					
PC	687099.602	2097708.221							
CURVE			N 02°08'14.4" E	135.14	00°11'36.9"(LT)	00°08'35.7"	135.14	67.57	40000.00
PT	687234.645	2097713.261							
LINE			N 02°02'25.9" E	93.63					
PC	687328.216	2097716.595							
CURVE			N 02°11'53.9" E	654.35	00°18'55.9"(RT)	00°02'53.6"	654.35	327.18	118827.15
PCC	687982.086	2097741.694							
CURVE			N 02°13'24.4" E	389.18	00°15'54.8"(LT)	00°04'05.3"	389.18	194.59	84073.89
PCC	688370.978	2097756.793							
CURVE			N 02°31'35.3" E	62.73	00°52'16.7"(RT)	01°23'20.4"	62.73	31.37	4125.00
PCC	688433.646	2097759.559							
CURVE			N 09°36'01.2" E	637.54	13°16'17.5"(RT)	02°04'37.3"	638.96	320.92	2758.53
PCC	689062.254	2097865.883							
CURVE			N 16°08'06.9" E	420.43	00°12'23.5"(LT)	00°02'56.8"	420.43	210.22	116644.94
PT	689466.123	2097982.723							

EY1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	684612.052	2098318.639							
CURVE			N 25°09'57.8" W	587.59	01°23'50.2"(RT)	00°14'16.1"	587.61	293.82	24094.90
PT	685143.869	2098068.769							
LINE			N 24°28'02.7" W	317.06					
PC	685432.459	2097937.450							
CURVE			N 24°11'30.6" W	679.24	00°33'04.2"(RT)	00°04'52.1"	679.24	339.62	70610.94
PT	686052.044	2097659.103							

EY2 POINT	N	E	BEARING	DIST
POT	686879.523	2097234.959		
LINE			N 89°59'02.3" E	464.80
POT	686879.653	2097699.762		

EY3-REV POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	689463.536	2097627.918							
CURVE			S 74°35'28.8" E	97.80	63°12'10.1"(RT)	61°23'53.1"	102.94	57.41	93.32
PT	689437.550	2097722.202							
LINE			S 42°59'23.8" E	63.31					
PC	689391.242	2097765.370							
CURVE			S 55°24'05.8" E	83.28	24°49'23.9"(LT)	29°34'28.3"	83.93	42.64	193.73
PT	689343.954	2097833.922							
LINE			S 67°48'47.8" E	109.78					
POT	689302.497	2097935.576							

PROJECT REFERENCE NO.
HL-00081

SHEET NO.
RW02C-3

Location and Surveys

NIV5

NIV5 ENGINEERS & CONSULTANTS, INC.

3300 REGENCY PARKWAY, SUITE 100

CARY, NC 27518

P: 919.851.1912 www.NIV5.com

NC License #E-5333 formerly CIVIL Engineers & Consultants

PROJECT SURVEYOR

STATE OF NORTH CAROLINA

PROFESSIONAL

SEAL

L-3281

C. ANDREW HEATH, JR.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, C. ANDREW HEATH, JR., PLS. certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from JANUARY 2022 to NOVEMBER 2022 and again in DECEMBER 2024, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 10th day of January, 2025:

DocuSigned by
C. Andrew Heath Jr.
XC001483029747E
Professional Land Surveyor L-3281

- REVISION 11/30/2022 - Extended EY1.
REVISION 1/10/2025 - Added EL-REV and EY3-REV

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

6/2/99

17-JUL-2025 15:17
G:\Projects\2025\1330725-202501509\SURV\w_sheets\HL-00081.1s-rw02d-1.dgn
scottcranford AT NCCAF-CRANFORD

PROPOSED ALIGNMENT CONTROL SHEET

L POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	685100.1280	2098088.6740							
LINE			N 24°28'02.7" W	150.00					
PC	685236.6580	2098026.5470							
CURVE			N 25°34'12.6" W	192.45	02°12'19.7"(LT)	01°08'45.3"	192.46	96.24	5000.00
PCC	685410.2610	2097943.4810							
CURVE			N 25°27'06.9" W	213.09	02°26'31.1"(RT)	01°08'45.3"	213.10	106.57	5000.00
PT	685602.6670	2097851.9070							
LINE			N 24°13'51.3" W	216.39					
PC	685799.9930	2097763.0970							
CURVE			N 11°16'58.3" W	320.42	25°53'45.9"(RT)	08°00'48.2"	323.16	164.39	715.00
PT	686114.2160	2097700.4070							
LINE			N 01°39'54.6" E	783.90					
PC	686897.7870	2097723.1860							
CURVE			N 01°55'50.6" E	101.97	00°31'52.1"(RT)	00°31'15.1"	101.97	50.99	11000.00
PT	686999.6980	2097726.6210							
LINE			N 02°11'46.7" E	1529.81					
PC	688528.3890	2097785.2490							
CURVE			N 09°05'06.7" E	551.75	13°46'40.1"(RT)	02°29'28.0"	553.08	277.88	2300.00
PT	689073.2120	2097872.3710							
LINE			N 15°58'26.8" E	536.12					
POT	689588.6310	2098019.9130							

Y1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	685519.1290	2097106.3840							
CURVE			N 47°59'31.8" E	133.42	00°08'11.2"(LT)	00°06'08.1"	133.42	66.71	56028.76
PT	685608.4200	2097205.5240							
LINE			N 47°55'26.2" E	103.38					
PC	685677.6970	2097282.2600							
CURVE			N 60°38'00.2" E	334.41	25°25'08.0"(RT)	07°32'20.1"	337.17	171.40	760.00
PT	685841.6910	2097573.6990							
LINE			N 73°20'34.2" E	163.26					
POT	685888.4890	2097730.1080							

Y1A POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	685834.4580	2097550.8430							
LINE			N 18°27'52.4" W	17.81					
PC	685851.3510	2097545.2020							
CURVE			N 14°33'02.2" E	87.18	66°01'49.1"(RT)	71°37'11.0"	92.20	51.98	80.00
PCC	685935.7320	2097567.1040							
CURVE			N 42°25'24.4" E	102.64	10°17'04.6"(LT)	10°00'22.3"	102.78	51.53	572.60
PCC	686011.5020	2097636.3490							
CURVE			N 34°13'30.7" E	17.86	06°06'42.8"(LT)	34°12'23.2"	17.87	8.94	167.50
PT	686026.2690	2097646.3930							

Y2 POINT	N	E	BEARING	DIST
POT	686879.5230	2097234.9590		
LINE			N 89°59'02.3" E	487.70
POT	686879.6590	2097722.6590		

PROJECT REFERENCE NO.

HL-00081

SHEET NO.

RW02D-1

Location and Surveys

NIV5

NIVS ENGINEERS & CONSULTANTS, INC.
3300 RESISTANCE PARKWAY, SUITE 100
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NCE License #1533
Formerly NCEM Engineers & Consultants

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, G. SCOTT CRANFORD, PLS, certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

This 16th day of JULY, 2025.

G. Scott Cranford
Professional Land Surveyor L-3816

6/2/99

R\VISIONS

25-AUG-2025 09:42
G:\P\AUG-2025\1330725-2025015-29\SUR\PM SHEET\SV\HL-00081.LS r\w02e-1.dgn
AT NCCAF-CRANFORD

RIGHT OF WAY CONTROL SHEET

ROW MARKER IRON PIN & CAP				
ALIGN	STATION	OFFSET	NORTH	EAST
L	12+95.00	-37.00	685351.4523	2097931.3678
L	12+95.00	-27.91	685355.4557	2097939.5294
L	15+15.00	36.23	685580.8778	2097901.6216
L	15+15.00	50.00	685586.6314	2097914.1331
L	15+55.57	50.00	685623.1879	2097897.5016
L	15+90.00	-37.00	685618.8805	2097804.0349
L	16+95.00	47.00	685749.1047	2097837.5408
L	17+49.77	-33.70	685765.9310	2097741.4730
L	17+71.96	47.00	685819.2820	2097805.9563
L	18+11.50	49.62	685854.3138	2097794.1772
L	18+48.98	112.89	685906.7896	2097842.6529
L	19+08.81	114.12	685955.5758	2097830.2590
L	19+11.00	90.18	685951.9413	2097806.5179
L	19+40.00	85.72	685975.9023	2097796.9023
L	19+40.00	70.24	685973.0096	2097781.6877
L	20+25.00	52.09	686047.7325	2097753.7711
L	20+60.00	41.50	686079.9349	2097741.7401
L	21+44.53	50.00	686162.1555	2097751.8214
L	28+08.00	-53.16	686828.3425	2097667.9888
L	28+79.02	50.00	686896.3336	2097773.1646
L	29+55.00	-52.33	686975.6095	2097673.3609
L	29+80.99	50.00	686997.7819	2097776.5845
L	40+00.00	50.00	688016.0449	2097815.6364
L	40+27.00	85.00	688041.6838	2097851.6454
L	40+63.59	85.00	688078.2474	2097853.0476
L	42+03.16	50.00	688219.0534	2097823.4220
L	45+10.80	50.00	688526.4728	2097835.2120
L	45+86.69	50.00	688600.5938	2097839.2801
L	47+25.00	51.50	688734.9865	2097854.4607
L	48+84.88	52.58	688888.8855	2097881.3786

18" REBAR
18" REBAR
18" REBAR

EXISTING EIP
APPEARS NEW

18" REBAR
18" REBAR
18" REBAR

18" REBAR
18" REBAR

18" REBAR

18" REBAR

ROW MARKER IRON PIN & CAP				
ALIGN	STATION	OFFSET	NORTH	EAST
Y1	13+25.00	42.00	685698.6478	2097375.3476
Y1	13+25.00	34.26	685704.9571	2097370.8593
Y1	15+73.97	42.00	685801.4534	2097585.7376
Y1	16+50.00	50.00	685815.5816	2097660.8667

18" REBAR

ROW MARKER IRON PIN & CAP				
ALIGN	STATION	OFFSET	NORTH	EAST
Y2	13+43.00	-30.00	686909.6187	2097577.9508
Y2	14+00.00	-37.00	686916.6346	2097634.9488
Y2	14+06.00	30.00	686849.6363	2097640.9676

18" REBAR

18" REBAR

PERMANENT EASEMENT MARKER IRON PIN & CAP				
ALIGN	STATION	OFFSET	NORTH	EAST
L	13+61.50	57.00	685452.6799	2097986.0003
L	13+61.50	34.42	685442.6211	2097965.7855
L	13+72.00	70.00	685467.7450	2097993.0366
L	13+93.00	53.00	685478.8441	2097968.6229
L	14+20.00	54.00	685503.3017	2097957.8383
L	14+20.00	36.12	685495.5234	2097941.7369
L	14+59.00	-35.11	685499.9691	2097860.6531
L	14+59.00	-56.00	685491.0301	2097841.7744
L	14+61.00	78.00	685550.1549	2097962.0418
L	14+84.00	94.50	685577.6307	2097967.3557
L	14+91.00	37.33	685559.7191	2097912.6250
L	15+22.00	-79.50	685538.9892	2097793.5107
L	15+31.00	-68.50	685551.8686	2097799.7184
L	15+80.00	60.00	685649.5717	2097896.5932
L	15+80.00	49.47	685645.2518	2097886.9948
L	16+00.00	49.04	685663.3132	2097878.3941
L	16+00.00	60.00	685667.8097	2097888.3849
L	16+01.00	-71.00	685614.9572	2097768.5157
L	16+01.00	-87.50	685608.1854	2097753.4694
L	16+23.00	-72.00	685634.6086	2097758.5747
L	16+23.00	-86.00	685628.8628	2097745.8081
L	17+56.00	-78.00	685753.4286	2097698.5181
L	17+56.00	-87.00	685749.7349	2097690.3110
L	17+75.00	-95.00	685764.1493	2097675.0587
L	17+80.00	-80.00	685775.3345	2097686.5210
L	18+11.50	49.62	685854.3138	2097794.1772
L	19+28.75	210.25	685991.3715	2097920.7871
L	19+62.20	192.21	686011.7825	2097898.7346
L	21+01.00	62.00	686118.2948	2097762.5514
L	21+01.00	45.94	686118.7614	2097746.5007
L	21+19.00	78.00	686135.8223	2097779.0677
L	21+39.00	83.00	686155.6685	2097784.6468
L	21+57.00	76.00	686173.8644	2097778.1728
L	21+60.00	-53.92	686180.6385	2097648.3906
L	21+63.00	66.50	686180.1379	2097768.8511
L	21+93.00	-53.27	686213.6056	2097650.0010
L	21+96.13	-147.00	686219.4587	2097556.4040
L	22+09.00	-164.50	686232.8310	2097539.2854
L	22+33.42	-155.00	686256.9683	2097549.4911
L	23+32.00	-53.27	686352.5469	2097654.0401
L	23+32.00	-65.00	686352.8877	2097642.3176
L	23+35.00	50.00	686352.5447	2097757.3562
L	23+35.00	67.00	686352.0507	2097774.3490
L	23+53.00	-63.00	686373.8207	2097644.9270
L	23+53.00	-53.27	686373.5381	2097654.6487
L	23+57.00	-235.00	686382.8171	2097473.1158
L	23+77.00	-234.00	686402.7796	2097474.6966
L	24+06.00	67.00	686423.0207	2097776.4122
L	24+06.00	50.00	686423.5147	2097759.4193
L	25+79.00	67.00	686595.9477	2097781.4393
L	27+95.00	50.00	686812.3505	2097770.7231
L	27+95.00	68.34	686811.8175	2097789.0546
L	28+11.00	50.00	686828.3437	2097771.1881
L	28+11.00	68.44	686827.8079	2097789.6187
L	34+61.00	97.00	687475.6397	2097841.9456
L	34+61.00	67.55	687476.7685	2097812.5124
L	34+61.00	50.00	687477.4409	2097794.9801
L	34+68.00	-52.94	687488.3805	2097692.3889
L	34+77.00	-176.00	687502.0902	2097569.7593
L	34+86.00	249.00	687494.7962	2097994.7920
L	34+98.00	104.00	687512.3442	2097850.3584
L	34+99.00	-52.97	687519.3592	2097693.5383
L	35+04.08	67.50	687519.8219	2097814.1183
L	35+07.00	-174.00	687531.9915	2097572.9075
L	35+07.00	50.00	687523.4071	2097796.7430
L	35+07.00	-164.00	687531.6083	2097582.9002
L	35+07.00	-184.50	687532.3939	2097562.4152
L	35+15.00	237.00	687524.2347	2097983.9122
L	35+16.00	246.00	687524.8891	2097992.9439
L	35+16.00	257.50	687524.4484	2098004.4354
L	35+23.00	-184.00	687548.3630	2097563.5280
L	35+23.00	-163.00	687547.5582	2097584.5126
L	35+31.00	236.00	687540.2613	2097983.5261
L	35+32.00	256.50	687540.4750	2098004.0494
L	36+12.00	67.50	687627.6593	2097818.2541
L	36+43.00	67.50	687658.6365	2097819.4421
L	36+43.00	-53.05	687663.2563	2097698.9831
L	36+47.00	274.00	687654.7198	2098025.9437
L	36+50.00	-74.00	687671.0541	2097678.3143
L	36+68.00	-127.00	687691.0720	2097626.0430

18" REBAR

18" REBAR

NOT SET (POND)

18" REBAR

NOT SET (POND)

18" REBAR

18" REBAR

18" REBAR

18" REBAR

18" REBAR

18" REBAR

18" REBAR

18" REBAR

18" REBAR

18" REBAR

NOT SET (TREE)

PK NAIL

PK NAIL

18" REBAR

PK NAIL

I, G. SCOTT CRANFORD, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from June 30, 2025 to August 29, 2025, and all coordinates are based on NAD83(2011). That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 29th day of AUGUST, 2025.

G. Scott Cranford

Professional Land Surveyor L-3816

PERMANENT EASEMENT MARKER IRON PIN & CAP				
ALIGN	STATION	OFFSET	NORTH	EAST
L	36+76.00	-53.04	687696.2318	2097700.2554
L	36+78.00	268.00	687685.9270	2098021.1361
L	36+83.22	-74.00	687704.2471	2097679.5873
L	36+84.44	-75.30	687705.5214	2097678.3363
L	36+99.00	-118.00	687721.7043	2097636.2245
L	38+55.00	52.84	687875.0926	2097707.3163
L	38+55.00	-98.00	687876.8233	2097662.1882
L	38+60.00	67.00	687875.4963	2097827.2586
L	38+60.00	82.00	687874.9214	2097842.2476
L	38+81.00	82.00	687895.9060	2097843.0524
L	38+81.00	67.00	687896.4808	2097828.0634
L	38+86.00	-98.00	687907.8005	2097663.3762
L	38+86.00	-52.78	687906.0674	2097708.5665
L	40+13.11	67.00	688028.4981	2097833.1264
L	41+35.37	67.00	688150.6619	2097837.8116
L	42+92.00	-224.50	688318.3502	2097552.5284
L	43+23.00	-229.00	688349.4998	2097549.2197
L	43+24.00	-52.35	688343.7295	2097725.7739
L	43+51.00	67.00	688366.1356	2097846.0753
L	43+54.00	84.00	688368.4819	2097863.1778
L	43+55.00	-52.41	688374.7087	2097726.9105
L	43+74.00	67.00	688389.1187	2097846.9568
L	43+74.00	80.00	688388.6205	2097859.9472
L	45+39.00	67.00	688553.1696	2097853.4163
L	45+48.50	78.00	688561.7784	2097864.8853
L	45+98.00	50.43	688611.5964	2097840.5229
L	45+98.00	61.00	688610.7912	2097851.0639
L	46+82.00	-83.13	688708.4128	2097715.5629
L	47+07.34	-115.18	688738.4370	2097686.8608
L	47+37.17	-114.02	688769.3439	2097692.0728
L	47+63.00	-80.00	688791.1623	2097729.5696
L	48+84.88	69.00	688885.6079	2097897.4637
L	49+18.97	87.17	688914.0725	2097922.0585

18" REBAR

18" REBAR

18" REBAR

18" REBAR

18" REBAR

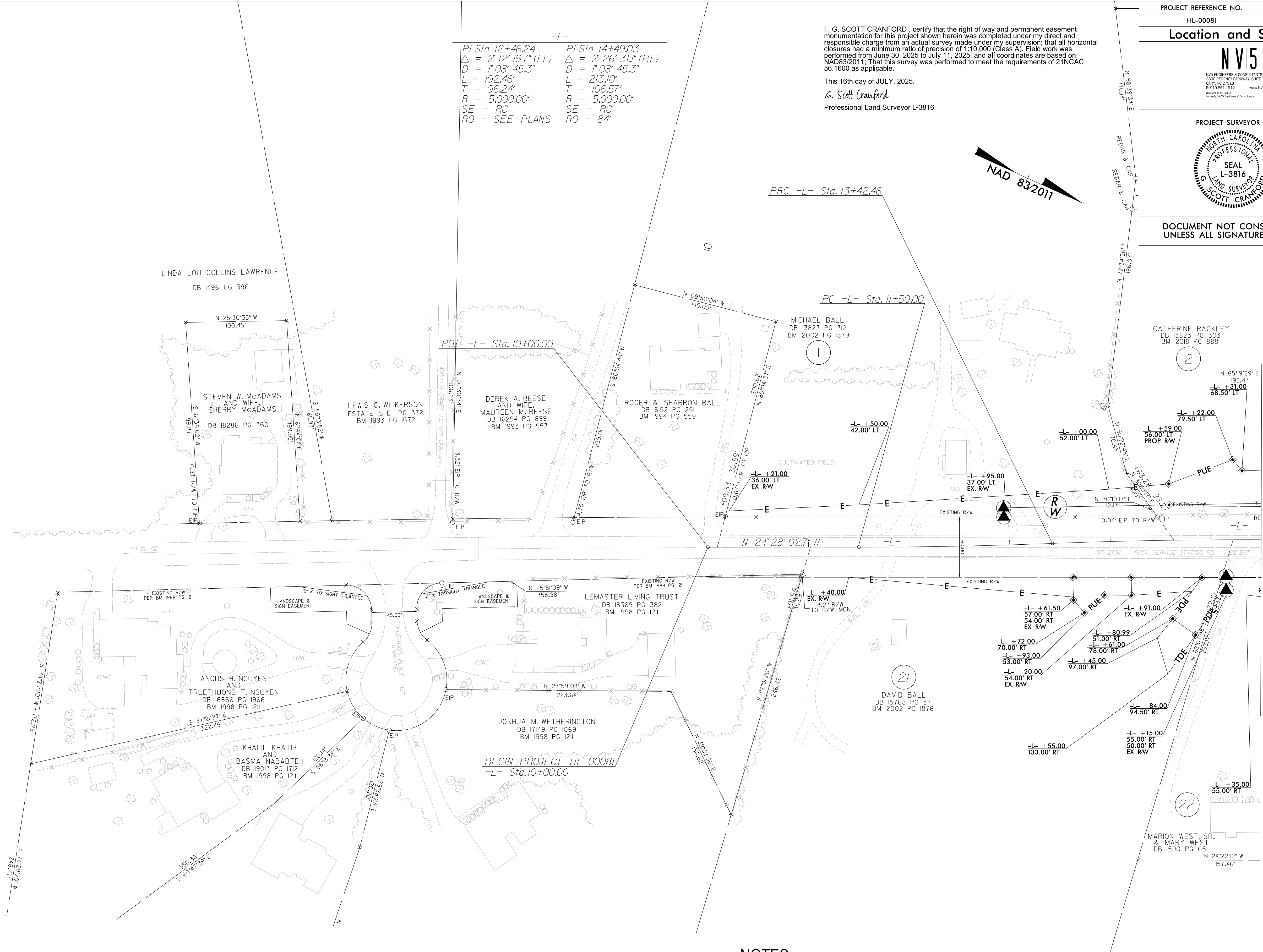
18" REBAR

18" REBAR

18" REBAR

18" REBAR

PROJECT REFERENCE NO.	SHEET NO.
HL-0008I	RW04
Location and Surveys	
NVS NVS ENGINEERS & CONSULTANTS, INC. 2800 RESISTANCE PARKWAY, SUITE 100 CARY, NC 27518 P. 919.351.1017 www.NVS.com NC License # E-5333 Serving North Carolina Engineers & Constructors	
PROJECT SURVEYOR  Seal: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL L-3816 SCOTT CRAIGHERO STATE OF NORTH CAROLINA LAND SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

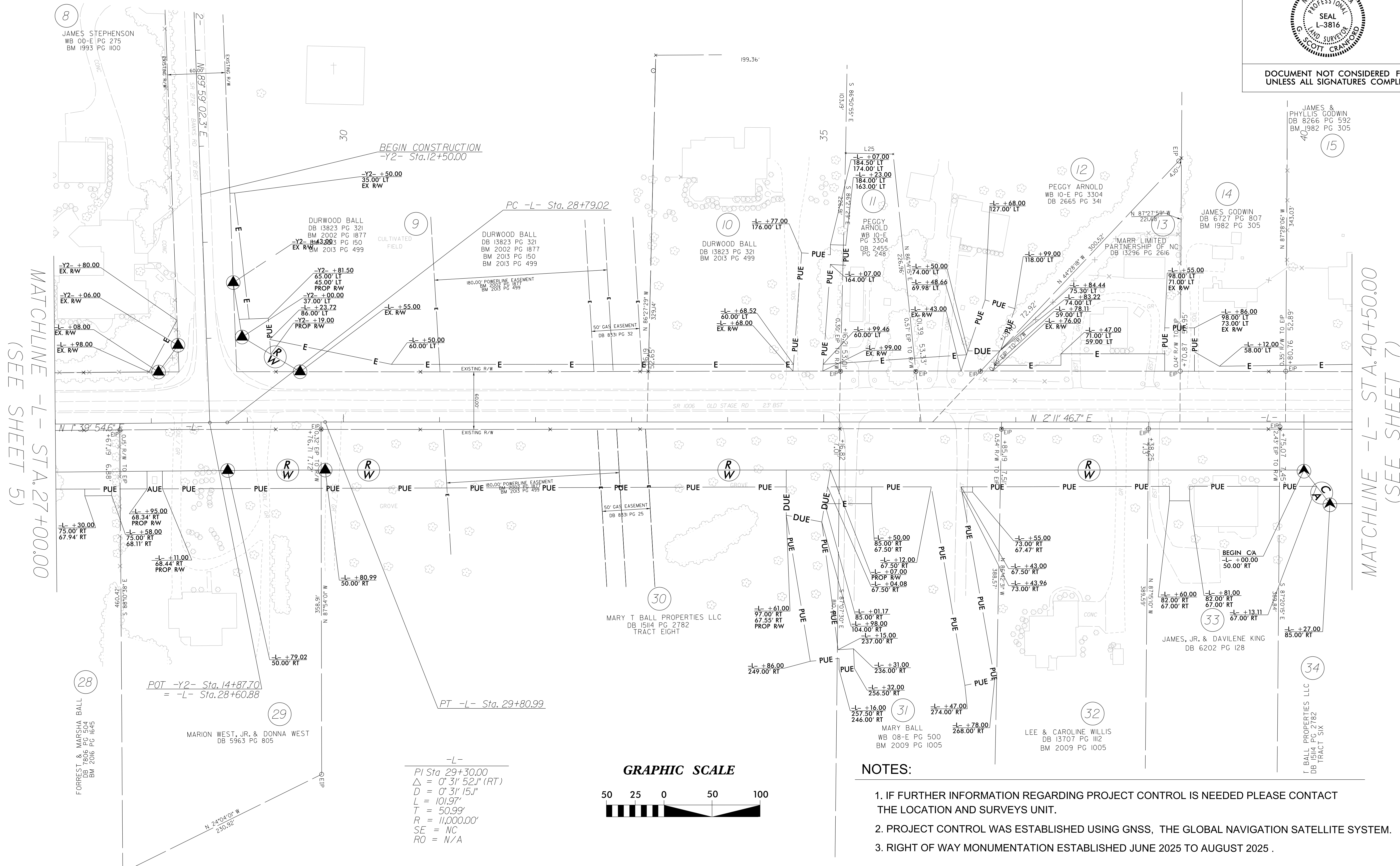


NOTES

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED JUNE 2025 TO JULY 2025 .

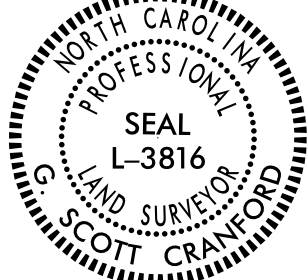
REVISIONS

MATCHLINE -L- STA. 15+50.00
(SEE SHEET 5)



I, G. SCOTT CRANFORD, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from June 30, 2025 to August 29, 2025, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 29th day of AUGUST, 2025.
G. Scott Cranford
Professional Land Surveyor L-3816

PROJECT REFERENCE NO.	SHEET NO.
HL-00081	RW06
Location and Surveys	
 NIVS ENGINEERS & CONSULTANTS, INC. 2380 PINEHURST PARKWAY, SUITE 100 CARY, NC 27519 P: 919.851.1952 www.niv5.com NO. LICENSED: 40-2181 Territory: CARY, Engineers & Consultants	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED JUNE 2025 TO AUGUST 2025 .

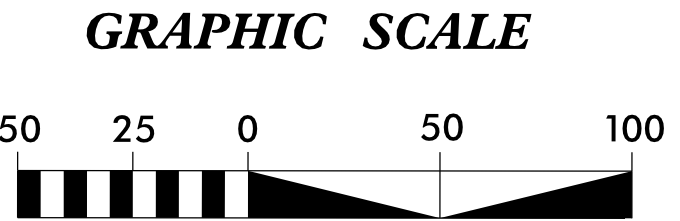
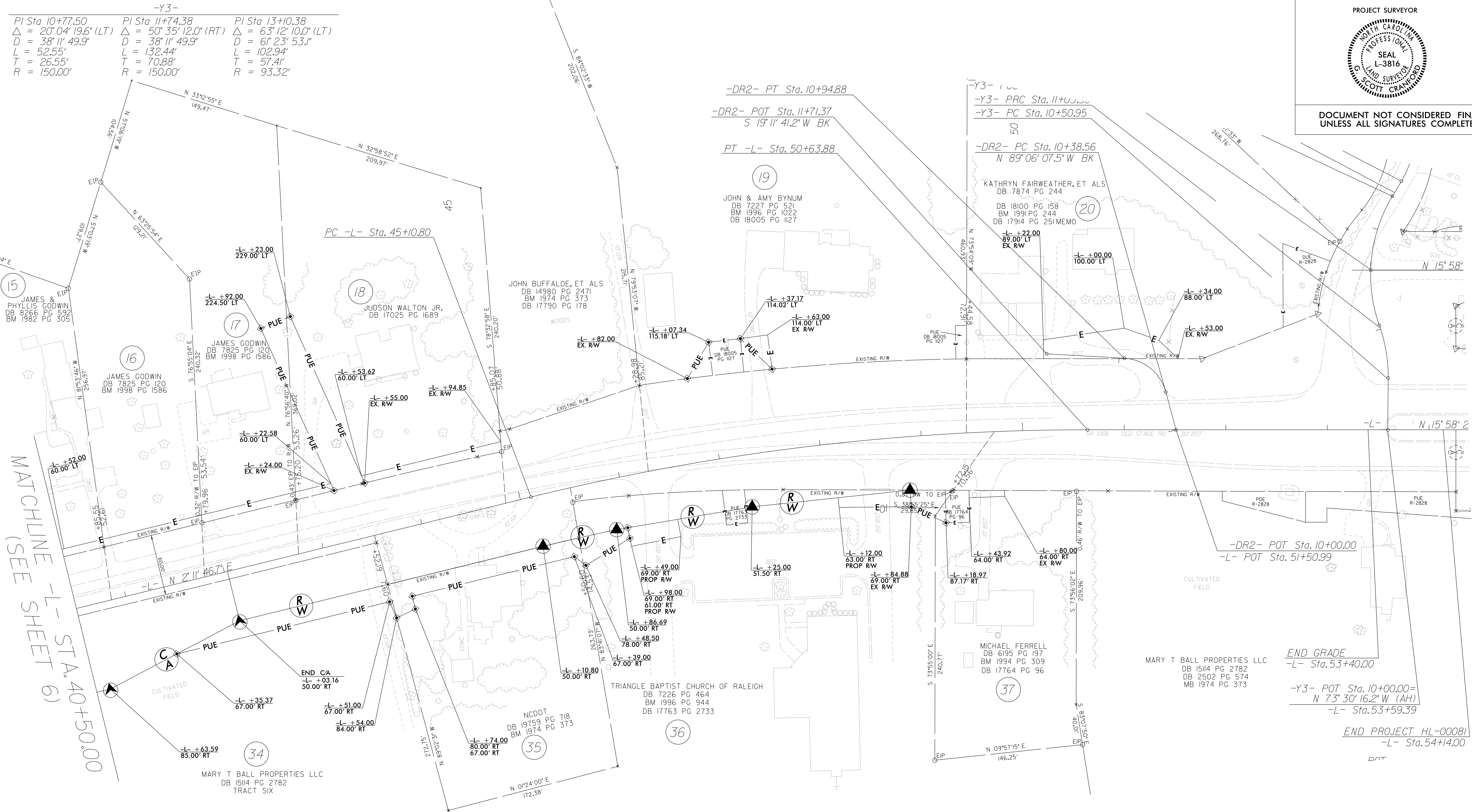
REVISIONS

-L-
PI Sta 47+88.68
 $\Delta = 13^{\circ} 46' 40.1''$ (RT)
D = 2' 29' 28.0"
L = 553.08'
T = 277.88'
R = 2,300.00'
SE = 03
RO = 126'

-Y3-
PI Sta 11+74.38
 $\Delta = 50^{\circ} 35' 12.0''$ (RT)
D = 38' 11' 49.9"
L = 52.55'
T = 26.55'
R = 150.00'

-Y3-
PI Sta 13+03.38
 $\Delta = 63^{\circ} 12' 10.0''$ (LT)
D = 6' 23' 53.1"
L = 102.94'
T = 57.41'
R = 93.32'

-Y3-
PI Sta 11+74.38
 $\Delta = 50^{\circ} 35' 12.0''$ (RT)
D = 38' 11' 49.9"
L = 52.55'
T = 26.55'
R = 150.00'



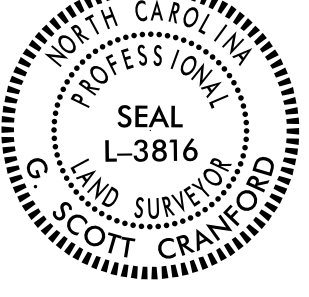
NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED JUNE 2025 TO JULY 2025 .

I, G. SCOTT CRANFORD, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from June 30, 2025 to July 11, 2025, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 16th day of JULY, 2025.

G. Scott Cranford
Professional Land Surveyor L-3816

PROJECT REFERENCE NO.	SHEET NO.
HL-00081	RW07
Location and Surveys	
NVS NVS ENGINEERS & CONSULTANTS, INC. 3300 REGENCY PARKWAY, SUITE 100 CARY, NC 27518 P: 919.851.1912 F: 919.851.1913 www.NVS.com NC License # 13307 Surveying Civil Engineers & Consultants	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	