

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5930	RW01	22

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

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

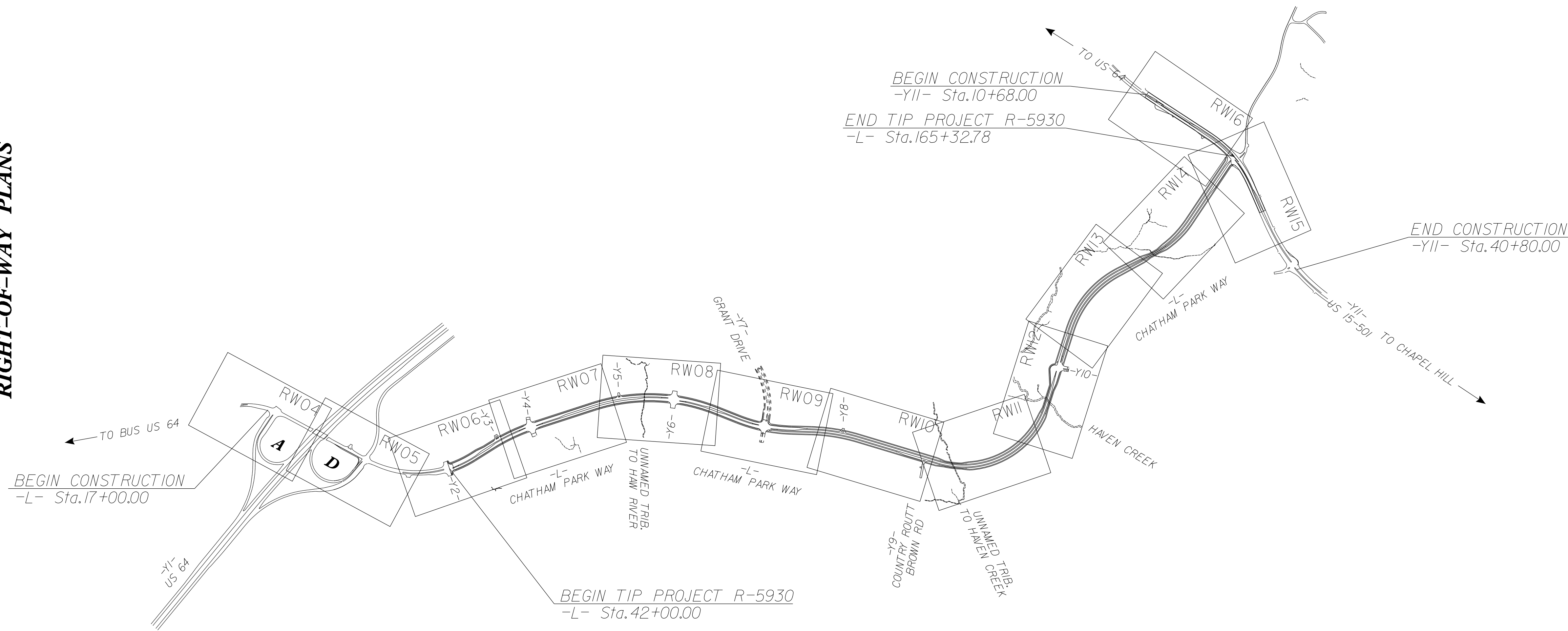
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**CHATHAM COUNTY**

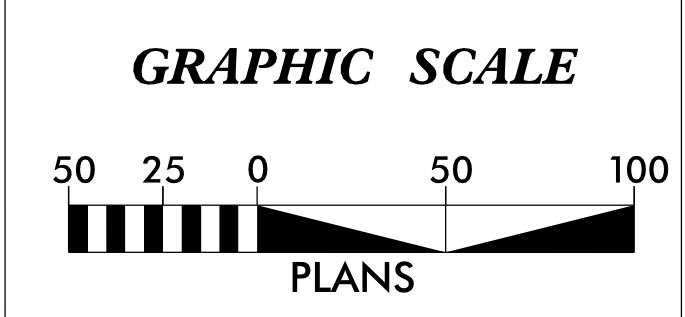
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**TIP PROJECT: R-5930**

**RIGHT-OF-WAY PLANS**



**REVISION NOTE:**  
THIS DRAWING WAS ORIGINALLY SIGNED AND SEALED ON 2/17/2023. THIS DRAWING HAS BEEN REVISED TO CHANGE THE LETTING DATE FROM 6/18/2024 TO 3/18/2025.



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "R-5930-1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 721,723.517(ft) EASTING: 1,956,011.320(ft) ELEVATION: 539.764(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998868290

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R-5930-1" TO -L- STATION 17+00.00 IS S 22° 04'12"W - 554.16(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 CALLIX Engineers & Consultants

2018 STANDARD SPECIFICATIONS

**RIGHT OF WAY DATE:**  
**11/30/2022**

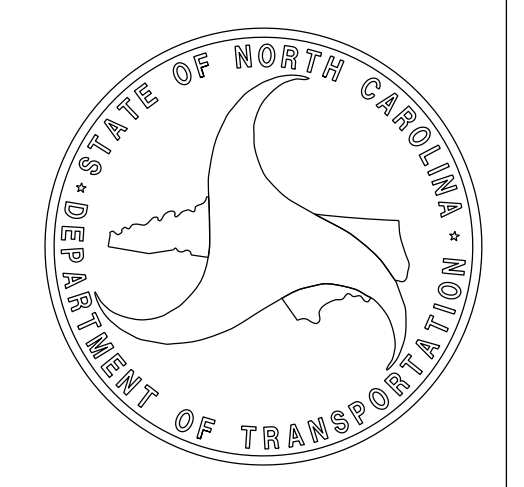
**LETTING DATE:**  
**3/18/2025**

**PROFESSIONAL LAND SURVEYOR**



DocuSigned by:  
**C. Andrew Heath Jr.**  
SIGNATURE:

Date:  
1/29/2025



29-JAN-2025 15:42 G:\Project\2024\1330724-2024014\_94\SUR\rv\_sheets\5930\_ls\_rw01.dgn Andy.Heath AT NCCAR-HEAT\AI

# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

I, C. Andrew Heath, Jr., PLS, certify that the Project Control was performed 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: RTN  
Dates of survey: 3/01/2020 - 3/09/2020  
Datum/Epoch: nad83 (2011)  
Published/Fixed-control use: N/A  
Localized around: R5930-1  
Northing: 721,723.517  
Easting: 1,956,011.32  
Combined grid factor: 0.999868290  
Geoid model: 12B (Conus)  
Units: US Survey Feet

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 3/11/2020 to 4/22/2020, 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 Sheet was originally submitted to NCDOT on 5/12/2020 without this certification as which was not required or requested at that time. This certification is to the date of original submittal of 5/12/2020.

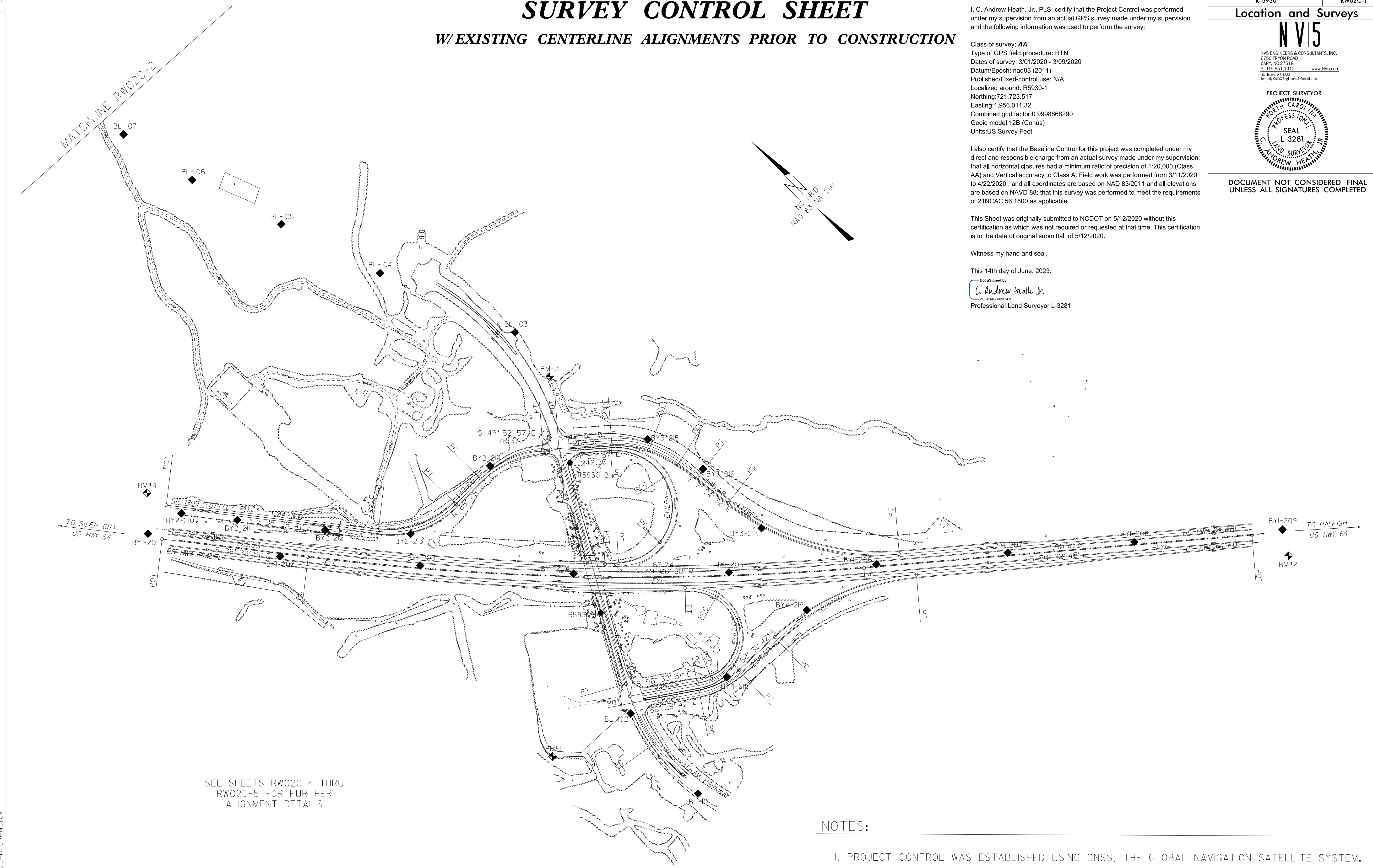
Witness my hand and seal,

This 14th day of June, 2023.

DocuSigned by:  
*C. Andrew Heath Jr.*  
2CC31483920747F  
Professional Land Surveyor L-3281

PROJECT REFERENCE NO. R-5930	SHEET NO. RW02C-1
<b>Location and Surveys</b>	
<b>NV5</b>	
<small>NV5 ENGINEERS &amp; CONSULTANTS, INC. 6750 TRYON ROAD CARY, NC 27513 P: 919.851.1912 www.NV5.com NC License # F 1333 Formerly: CVX Engineers &amp; Consultants</small>	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

REVISIONS



SEE SHEETS RW02C-4 THRU RW02C-5 FOR FURTHER ALIGNMENT DETAILS

### 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.

# SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

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Dates of survey: 3/01/2020 - 3/09/2020  
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Published/Fixed-control use: N/A  
Localized around: R5930-1  
Northing: 721,723.517  
Easting: 1,956,011.32  
Combined grid factor: 0.9998868290  
Geoid model: 12B (Conus)  
Units: US Survey Feet


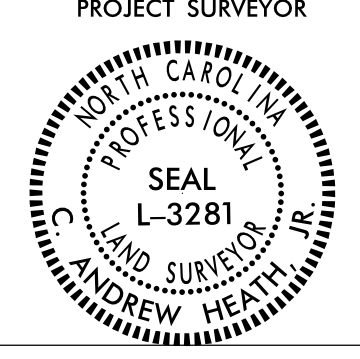
I also certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and vertical accuracy to Class A. Field work was performed from 3/11/2020 to 4/22/2020, 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.

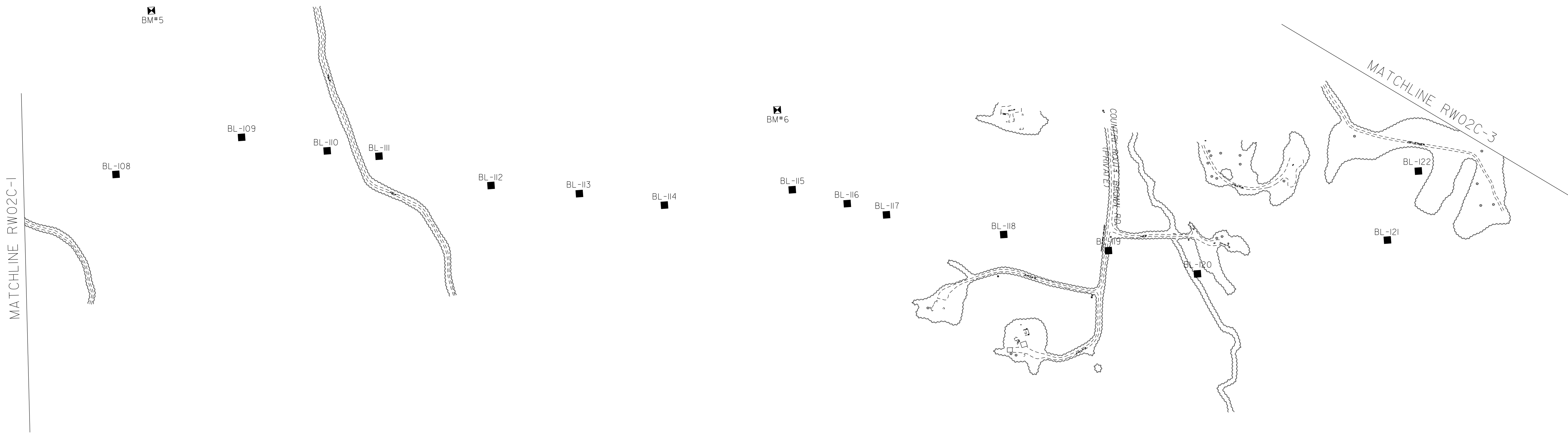
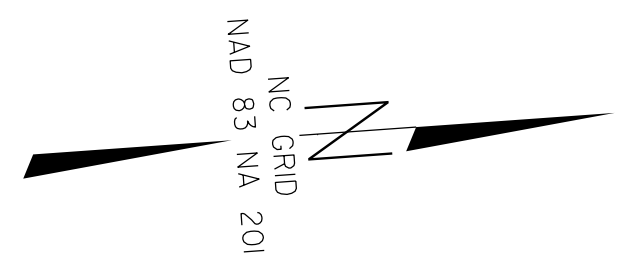
This Sheet was originally submitted to NCDOT on 5/12/2020 without this certification as which was not required or requested at that time. This certification is to the date of original submittal of 5/12/2020.

Witness my hand and seal,

This 14th day of June, 2023.

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

PROJECT REFERENCE NO.	SHEET NO.
R-5930	RW02C-2
<b>Location and Surveys</b>	
 NV5 ENGINEERS & CONSULTANTS, INC. 6750 TRYON ROAD CARY, NC 27516 P: 919.851.1912 www.NV5.com <small>NC License # F-1333 Formerly CA/TS Engineers &amp; Consultants</small>	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



SEE SHEETS RW02C-4 THRU RW02C-5 FOR FURTHER ALIGNMENT DETAILS

### 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

I4: JUN-2023 10:01  
C:\Projects\2023\20230615\_98\SUR\Control\_Sheets\45930-1s-rw02c-2.dgn  
at NCCAR-CRANS10V  
andjheath

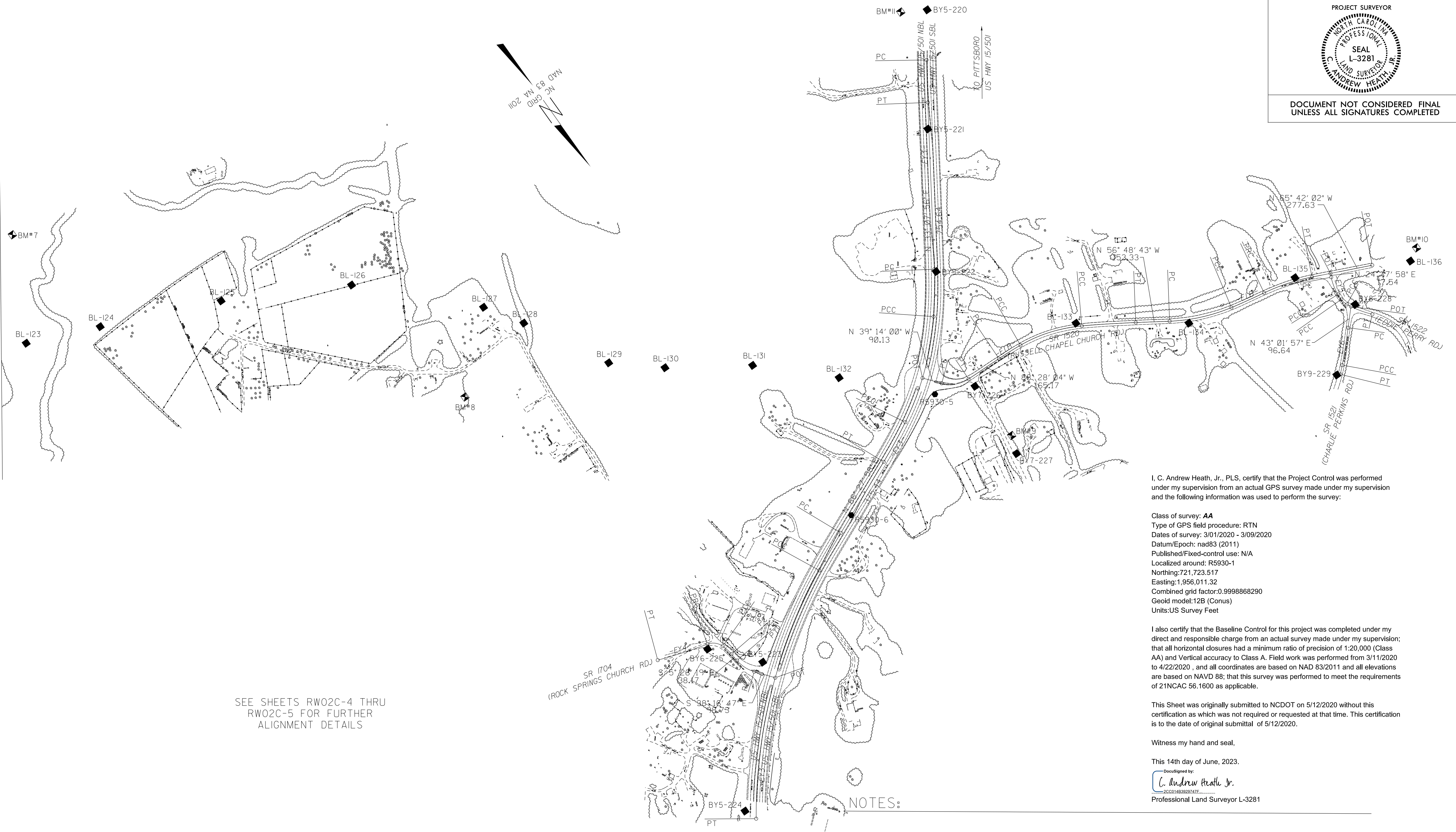
# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. R-5930	SHEET NO. RW02C-3
<b>Location and Surveys</b>	
<b>NV5</b>	
<small>NV5 ENGINEERS &amp; CONSULTANTS, INC. 6750 TRYON ROAD CARY, NC 27518 P: 919.851.1912 www.NV5.com NC License # F-1333 Formerly C&amp;A/S Engineers &amp; Consultants</small>	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

MATCHLINE RW02C-2



SEE SHEETS RW02C-4 THRU RW02C-5 FOR FURTHER ALIGNMENT DETAILS

I, C. Andrew Heath, Jr., PLS, certify that the Project Control was performed 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: RTN  
 Dates of survey: 3/01/2020 - 3/09/2020  
 Datum/Epoch: nad83 (2011)  
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 Localized around: R5930-1  
 Northing: 721,723.517  
 Easting: 1,956,011.32  
 Combined grid factor: 0.9998868290  
 Geoid model: 12B (Conus)  
 Units: US Survey Feet

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Witness my hand and seal,

This 14th day of June, 2023.  
 DocuSigned by:  
  
 20001483828747E...  
 Professional Land Surveyor L-3281

### NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
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SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. R-5930 SHEET NO. RW02C-4 Location and Surveys NV5 NV5 ENGINEERS & CONSULTANTS, INC. PROJECT SURVEYOR SEAL L-3281 ANDREW HEATH, JR. DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BL 101, 102, 1, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY5 220, 221, 222, A5, 6, 223, 224.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY6 A223, 225.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY7 B5, 226, 227.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY8 A135, 228.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY9 A228, 229.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY1 201, 202, 203, 204, EE0BY1 205, 206, 207, 208, 209.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY2 210, 211, 212, 213, 214, A2.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY3 B2, 215, 216, 217, A206.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BY4 A102, 218, 219, B206.

Table with columns: POINT, DESC., NORTH, EAST, ELEVATION. Rows include BM1, BM2, BM3, BM4, BM5, BM6, BM7.

I, C. Andrew Heath, Jr., PLS, certify that the Project Control was performed 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: RTN Dates of survey: 3/01/2020 - 3/09/2020 Datum/Epoch: nad83 (2011) Published/Fixed-control use: N/A Localized around: R5930-1 Northing: 721,723.517 Easting: 1,956,011.32 Combined grid factor: 0.999868290 Geoid model: 12B (Conus) Units: US Survey Feet

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Witness my hand and seal.

This 14th day of June, 2023.

C. Andrew Heath, Jr. Professional Land Surveyor L-3281

NOTES:

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# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. R-5930 SHEET NO. RW02C-5

### Location and Surveys



NV5 ENGINEERS & CONSULTANTS, INC.  
6750 TRYON ROAD  
DURHAM, NC 27715  
P: 919.851.1912 www.nv5.com  
NC License # P-1203  
Formerly C&A Engineers & Consultants

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, C. Andrew Heath, Jr., PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

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Published/Fixed-control use: N/A  
Localized around: R5930-1  
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Easting: 1,956,011.32  
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Geoid model: 12B (Conus)  
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Witness my hand and seal.

This 14th day of June, 2023.

DocuSign by: C. Andrew Heath, Jr.

Professional Land Surveyor L-3281

Table ELA: Survey points PC, CURVE, PT, LINE, POT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table ELB: Survey points POT, LINE, PC, CURVE, PT, LINE, PC, CURVE, PCC, CURVE, PCC, CURVE, PT, LINE, PC, CURVE, PCC, CURVE, PT, LINE, PC, CURVE, PCC, CURVE, PT, LINE, POT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY1: Survey points POT, LINE, PC, CURVE, PT, LINE, POT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY1LPA: Survey points POT, LINE, PC, CURVE, PCC, CURVE, PCC, CURVE, PT, LINE, POT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY1RPA: Survey points POT, LINE, PC, CURVE, PCC, CURVE, PCC, CURVE, PT, LINE, PC, CURVE, PT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY1LPD: Survey points POT, LINE, PC, CURVE, PCC, CURVE, PCC, CURVE, PT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY1RPD: Survey points POT, LINE, PC, CURVE, PCC, CURVE, PT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY2: Survey points POT, LINE, PC, CURVE, PT, LINE, PC, CURVE, PT, LINE, POT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY3: Survey points PC, CURVE, PT, LINE, PC, CURVE, PCC, CURVE, PCC, CURVE, PT, LINE, PC, CURVE, PCC, CURVE, PT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY4: Survey points POT, LINE, PC, CURVE, PT, LINE, PC, CURVE, PCC, CURVE, PCC, CURVE, PT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

Table EY5: Survey points POT, LINE, PC, CURVE, PCC, CURVE, PCC, CURVE, PT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.


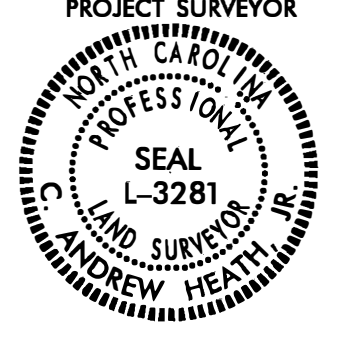
Table EY6: Survey points POT, LINE, PC, CURVE, PCC, CURVE, PT with columns for N, E, BEARING, DIST, DELTA, D, L, T, R.

### NOTES:

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- 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

# PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO. R-5930	SHEET NO. RW02D-1
<b>Location and Surveys</b>	
 <small>NIV5 ENGINEERS &amp; CONSULTANTS, INC. 3300 REGENCY PARKWAY, SUITE 100 CARY, NC 27518 P: 919.851.1912 www.NIV5.com NC License # 14389 Formerly CIVIL Engineers &amp; Consultants</small>	
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

I, C. Andrew Heath, Lr., 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 29th day of January, 2025.

DocuSigned by:  
*C. Andrew Heath Jr.*  
20250128100247E  
Professional Land Surveyor L-3281

L			
TYPE	STATION	NORTH	EAST
PC	10+00.00	720524.8438	1955833.5398
PT	18+89.96	721384.6186	1955877.0625
PC	30+96.25	722445.8013	1956450.6802
PT	45+32.70	723815.6765	1956406.0757
PC	48+31.86	724069.0439	1956246.9960
PT	53+99.25	724581.7305	1956007.3155
PC	61+99.21	725342.5870	1955760.2605
PT	77+88.39	726899.5749	1955809.3355
PC	80+89.72	727179.7422	1955920.2593
PT	87+86.66	727858.9597	1956059.8880
PC	90+40.07	728112.2621	1956067.1123
PT	96+46.12	728708.8223	1956163.5466
PC	107+12.24	729729.8079	1956470.4642
PT	124+25.31	731095.5540	1955747.8525
PC	134+32.29	731398.3983	1954787.4936
PT	144+21.54	732017.9929	1954048.9401
PC	149+03.57	732445.5093	1953826.2580
PT	155+34.93	732910.7659	1953409.2653
POT	165+32.78	733465.5198	1952579.8439

Y3			
TYPE	STATION	NORTH	EAST
POT	10+00.00	723947.4498	1955853.5131
POT	14+00.00	724144.5591	1956201.5762

Y4			
TYPE	STATION	NORTH	EAST
POT	10+00.00	724490.7881	1955552.2423
PC	13+60.47	724520.5335	1955911.4796
PT	14+34.40	724537.3628	1955983.1986
PC	17+67.12	724660.2682	1956292.3867
PT	18+39.32	724684.4926	1956360.3787
POT	19+00.00	724702.7824	1956418.2391

Y5			
TYPE	STATION	NORTH	EAST
POT	10+00.00	725654.2342	1955380.4365
POT	13+00.00	725669.1721	1955680.0644

Y1			
TYPE	STATION	NORTH	EAST
PC	10+00.00	722147.8766	1955843.7537
PT	19+00.00	721512.3693	1956480.7893

Y6			
TYPE	STATION	NORTH	EAST
POT	10+00.00	726423.3256	1955245.8246
POT	19+00.00	726301.0866	1956137.4846

Y1LPA			
TYPE	STATION	NORTH	EAST
POT	10+00.00	722406.2320	1956429.2912
PC	12+21.72	722263.3670	1956598.8436
PT	15+00.00	722015.8259	1956700.8325

Y7			
TYPE	STATION	NORTH	EAST
PC	10+00.00	727510.0090	1955449.2453
PT	14+96.60	727533.3250	1955940.2083
POT	20+00.00	727432.8977	1956433.4855

Y1LPD			
TYPE	STATION	NORTH	EAST
POT	10+00.00	721320.3635	1955845.2515
POT	13+30.00	721138.5330	1956120.6379

Y8			
TYPE	STATION	NORTH	EAST
POT	10+00.00	728479.6754	1955498.0035
PC	13+24.21	728522.4049	1955819.3826
PT	15+73.75	728513.9171	1956067.6274
POT	16+19.30	728504.8425	1956112.2703

Y1RPA			
TYPE	STATION	NORTH	EAST
PC	10+00.00	722603.6177	1956117.0615
PT	12+76.07	722495.2207	1956366.7431
PC	16+13.61	722277.7201	1956624.8731
PT	18+00.00	722130.6750	1956736.9670

Y9			
TYPE	STATION	NORTH	EAST
POT	10+00.00	729547.1665	1956415.5606
PC	11+59.30	729517.7293	1956572.1130
PT	12+09.97	729510.8524	1956622.2980
POT	12+70.00	729505.6662	1956682.1027

Y1RPD			
TYPE	STATION	NORTH	EAST
POT	10+00.00	721287.4776	1955831.1166
PC	13+11.03	721115.5568	1956090.3188
PT	15+30.00	721049.9254	1956296.2874

Y10			
TYPE	STATION	NORTH	EAST
POT	10+00.00	731248.6229	1955262.4511
POT	14+00.00	731640.7815	1955341.2647

Y2			
TYPE	STATION	NORTH	EAST
PC	10+00.00	723196.5057	1955931.1276
PT	15+99.78	723464.1713	1956466.8845
PC	16+60.03	723485.9370	1956523.0656
PT	17+27.35	723508.1286	1956586.6178
PC	17+71.37	723521.2324	1956628.6383
PT	20+01.29	723537.7108	1956855.9384

Y11			
TYPE	STATION	NORTH	EAST
PC	10+00.00	732313.7235	1951759.7845
PT	12+35.04	732508.6183	1951891.1397
PC	20+25.93	733170.9195	1952323.4194
PT	28+52.06	733696.6760	1952945.5499
PC	33+77.45	733906.4584	1953427.2369
PT	45+00.00	734581.1340	1954310.7756

REVISIONS

07-Jan-2025 16:18  
 C:\Proje\2025\1330724-2024014\_94\SURV\w.sheets\5930-1.s-rw02d-1.dgn  
 AT NCCAF-CRANS100  
 scott@cransford

### NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE PROPOSED ALIGNMENT 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.





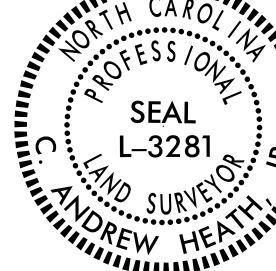


Location and Surveys

NV5

NVS ENGINEERS & CONSULTANTS, INC.  
3300 REGENCY PARKWAY, SUITE 100  
CARY, NC 27518  
P: 919.851.1912 www.NV5.com  
NC License # 12333 Formerly C&H Engineers & Consultants

PROJECT SURVEYOR

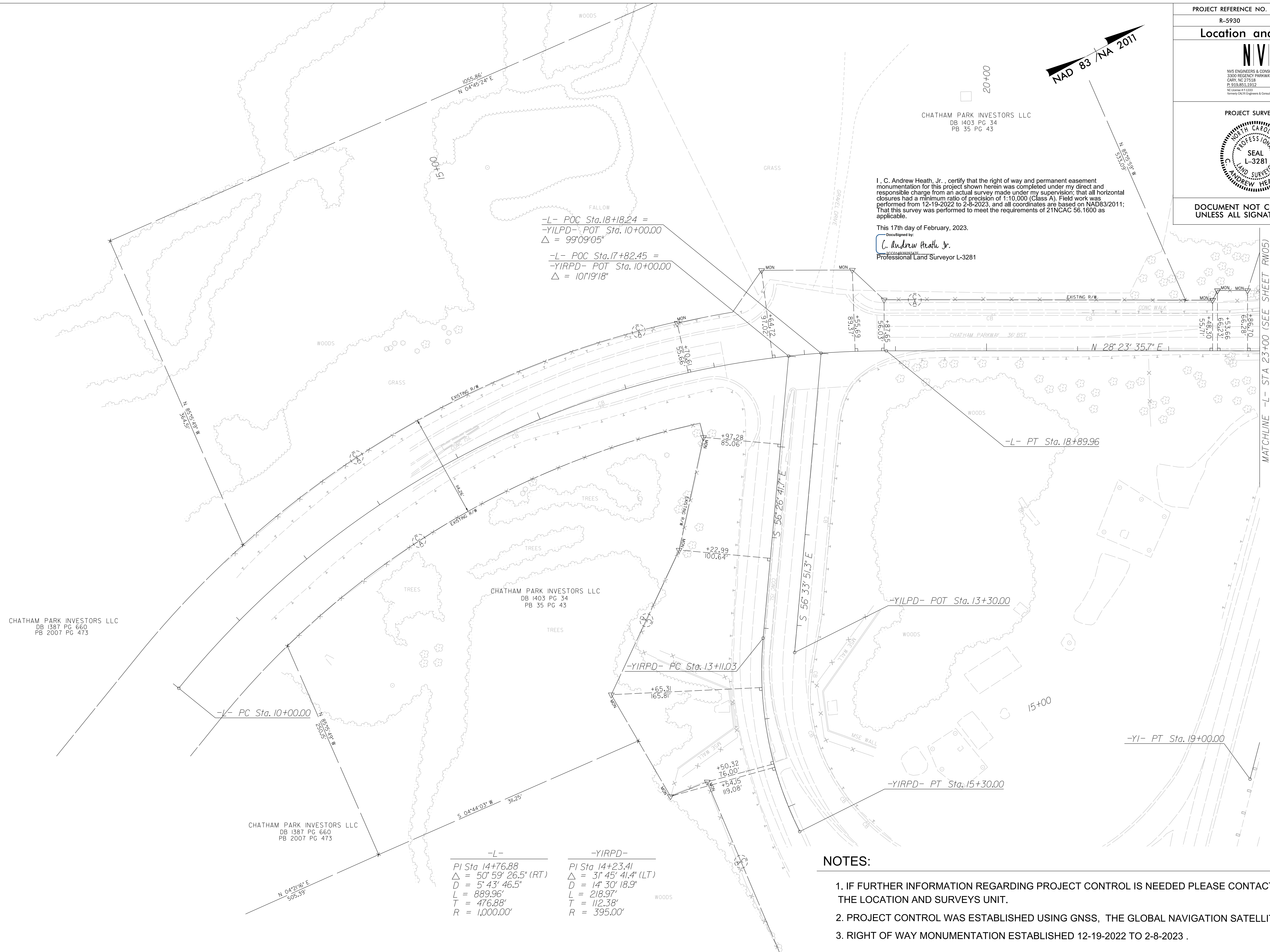
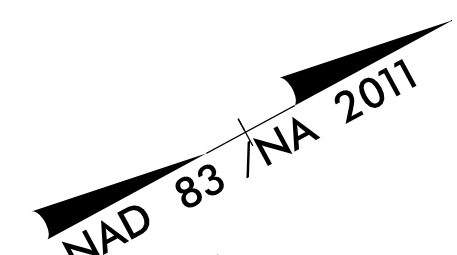


DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

I, C. Andrew Heath, Jr., 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 12-19-2022 to 2-8-2023, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 17th day of February, 2023.

Designed by  
**C. Andrew Heath, Jr.**  
Professional Land Surveyor L-3281



-L- POC Sta. 18+18.24 =  
-YILPD- POT Sta. 10+00.00  
Δ = 99°09'05"  
  
-L- POC Sta. 17+82.45 =  
-YIRPD- POT Sta. 10+00.00  
Δ = 10°19'18"

-L-  
PI Sta 14+76.88  
Δ = 50° 59' 26.5" (RT)  
D = 5' 43' 46.5"  
L = 889.96'  
T = 476.88'  
R = 1,000.00'  
  
-YIRPD-  
PI Sta 14+23.41  
Δ = 31° 45' 41.4" (LT)  
D = 14' 30' 18.9"  
L = 218.97'  
T = 112.38'  
R = 395.00'

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 12-19-2022 TO 2-8-2023 .

REVISIONS


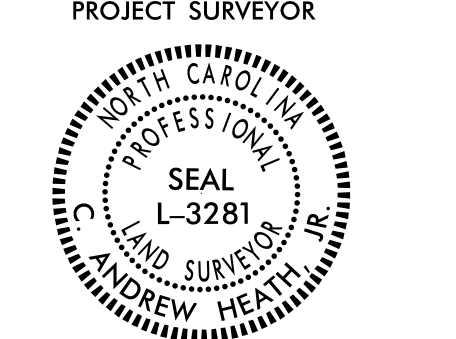
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AT NCCAR-CRANSTON  
andy.heath

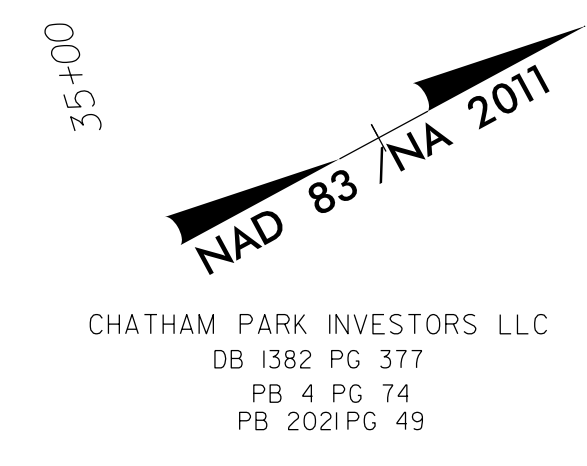
CHATHAM PARK INVESTORS LLC  
DB 1387 PG 660  
PB 2007 PG 473

CHATHAM PARK INVESTORS LLC  
DB 1387 PG 660  
PB 2007 PG 473

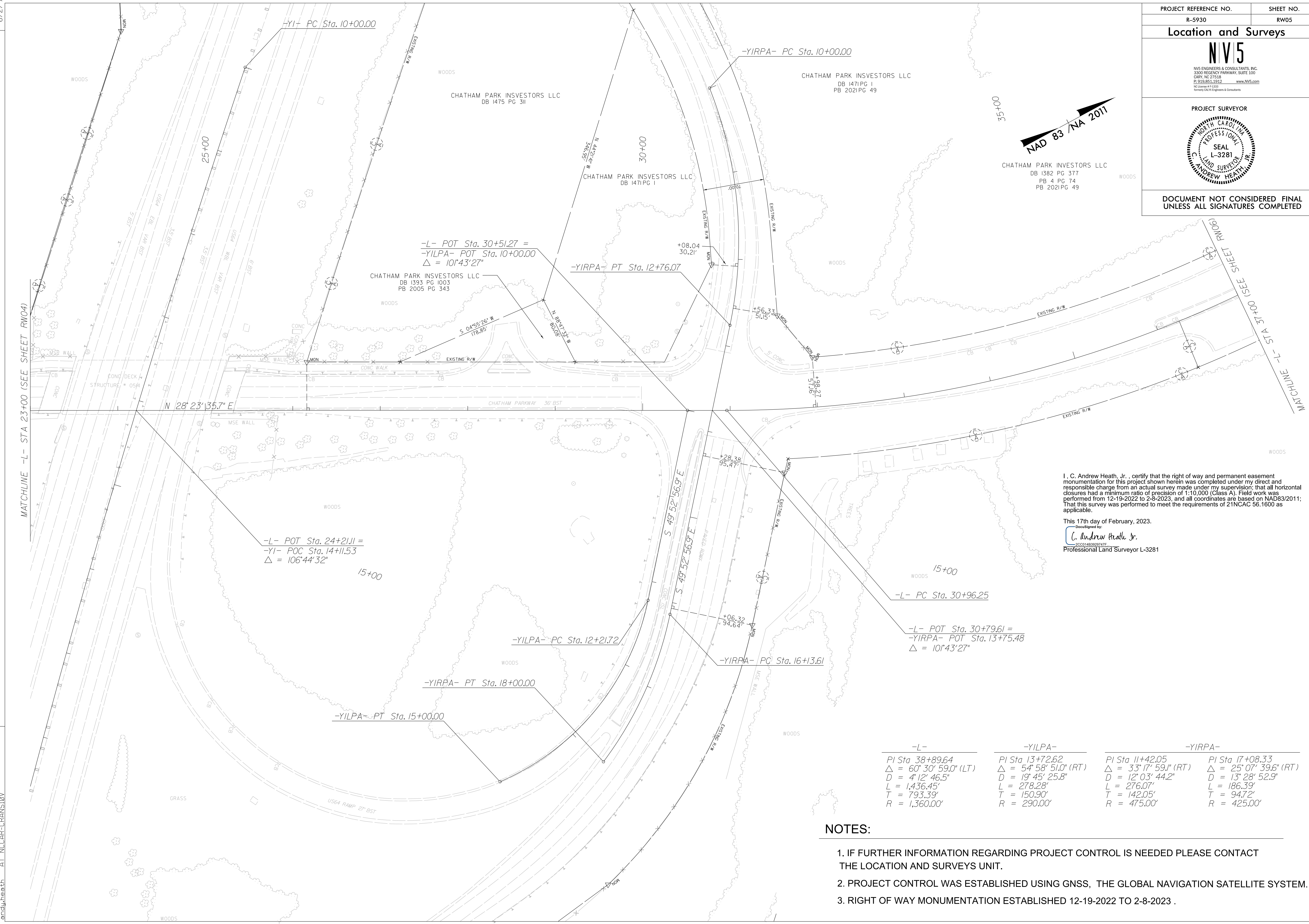
CHATHAM PARK INVESTORS LLC  
DB 1403 PG 34  
PB 35 PG 43

CHATHAM PARK INVESTORS LLC  
DB 1403 PG 34  
PB 35 PG 43

PROJECT REFERENCE NO. R-5930	SHEET NO. RW05
<b>Location and Surveys</b>	
 <small>NV5 ENGINEERS &amp; CONSULTANTS, INC. 3300 REGENCY PARKWAY, SUITE 100 CARY, NC 27518 P: 919.851.1912 www.nv5.com</small>	
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



REVISIONS



MATCHLINE -L- STA 23+00 (SEE SHEET RMO4)

MATCHLINE -L- STA 37+00 (SEE SHEET RMO6)

-L- POT Sta. 24+21.11 =  
-YI- POC Sta. 14+11.53  
Δ = 106°44'32"

-L- POT Sta. 30+51.27 =  
-YILPA- POT Sta. 10+00.00  
Δ = 101°43'27"

-L- POT Sta. 30+79.61 =  
-YIRPA- POT Sta. 13+75.48  
Δ = 101°43'27"

-L-	-YILPA-	-YIRPA-
PI Sta. 38+89.64	PI Sta. 13+72.62	PI Sta. 11+42.05
Δ = 60° 30' 59.0" (LT)	Δ = 54° 58' 51.0" (RT)	Δ = 33° 17' 59.1" (RT)
D = 4' 12" 46.5"	D = 19' 45" 25.8"	D = 12' 03" 44.2"
L = 1,436.45'	L = 278.28'	L = 276.07'
T = 793.39'	T = 150.90'	T = 142.05'
R = 1,360.00'	R = 290.00'	R = 475.00'

I, C. Andrew Heath, Jr., 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 12-19-2022 to 2-8-2023, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 17th day of February, 2023.  
 Signed by:  
  
 C. Andrew Heath, Jr.  
 20001483202941E  
 Professional Land Surveyor L-3281

**NOTES:**

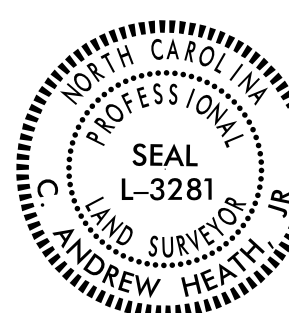
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 12-19-2022 TO 2-8-2023 .

Location and Surveys

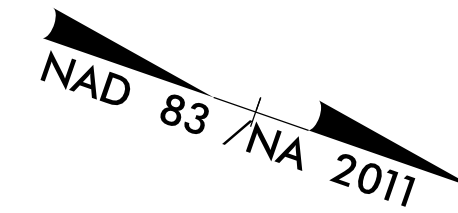
NV5

NVS ENGINEERS & CONSULTANTS, INC.  
3300 REGENCY PARKWAY, SUITE 100  
CARY, NC 27518  
P: 919.851.1912 www.NV5.com  
NC License # 1339 Formerly CAVI Engineers & Consultants

PROJECT SURVEYOR



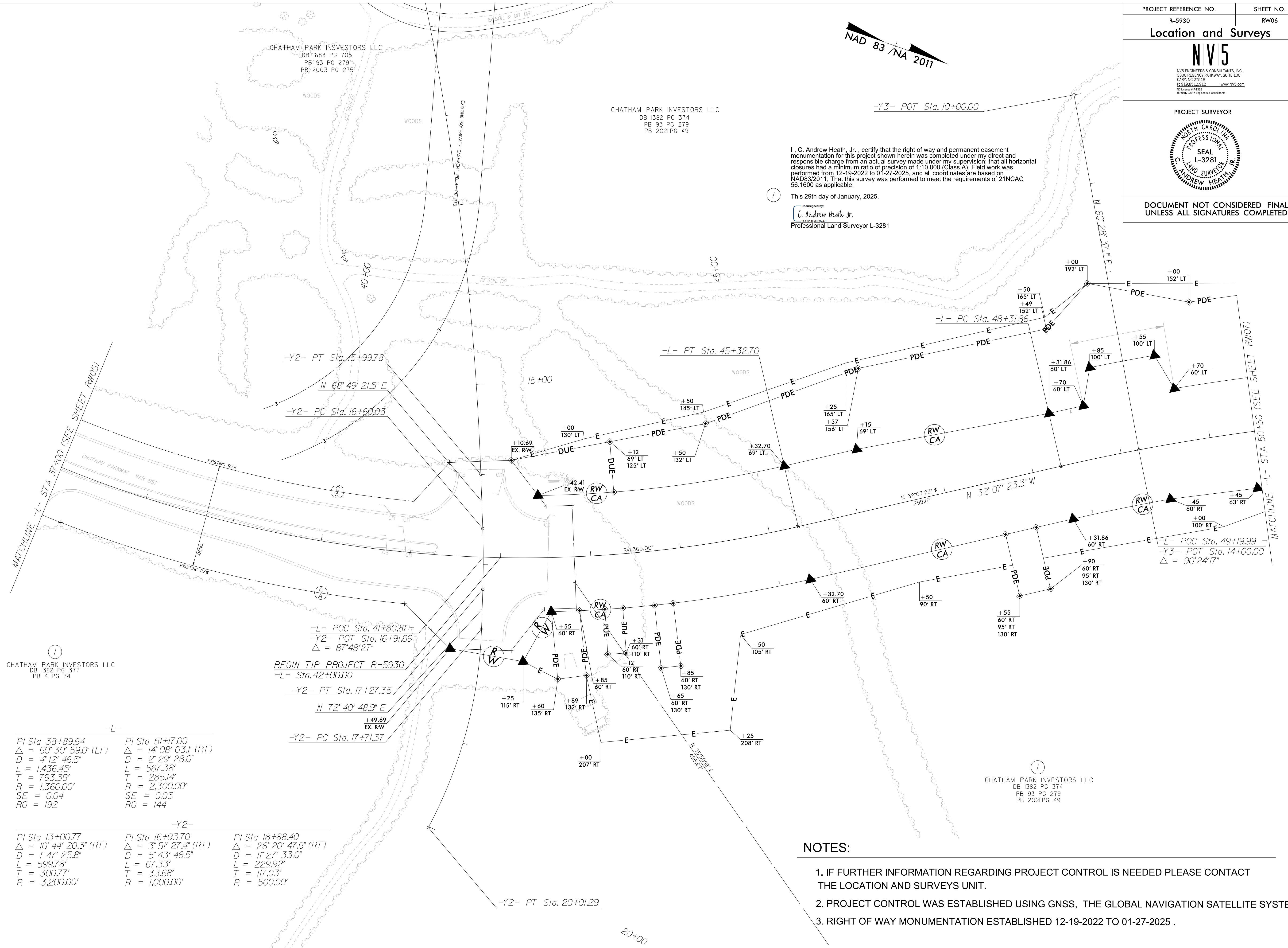
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 58.1600 as applicable.

This 29th day of January, 2025.

Designed by: I. C. Andrew Heath, Jr.  
Professional Land Surveyor L-3281



REVISIONS

7 JAN 2025 15:21:13 30724-20250114 94\SUR\p-w\_sheets\5930-1.s\_rw06.dgn  
AT: NCCART-CRANF100 scott@cranford.com

CHATHAM PARK INVESTORS LLC  
DB 1382 PG 377  
PB 4 PG 74

-L-  
PI Sta 38+89.64 Δ = 60° 30' 59.0" (LT)  
D = 4' 12' 46.5"  
L = 1,436.45'  
T = 793.39'  
R = 1,360.00'  
SE = 0.04  
RO = 192



-Y2-  
PI Sta 13+00.77 Δ = 10° 44' 20.3" (RT)  
D = 1' 47' 25.8"  
L = 599.78'  
T = 300.77'  
R = 3,200.00'

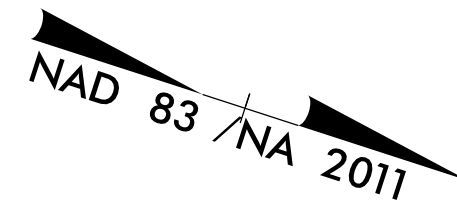
-L- POC Sta. 41+80.81 =  
-Y2- POT Sta. 16+91.69  
Δ = 87° 48' 27"

BEGIN TIP PROJECT R-5930  
-L- Sta. 42+00.00

-Y2- PT Sta. 17+27.35  
N 72° 40' 48.9" E  
+49.69 EX. RW  
-Y2- PC Sta. 17+71.37

- 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 12-19-2022 TO 01-27-2025 .

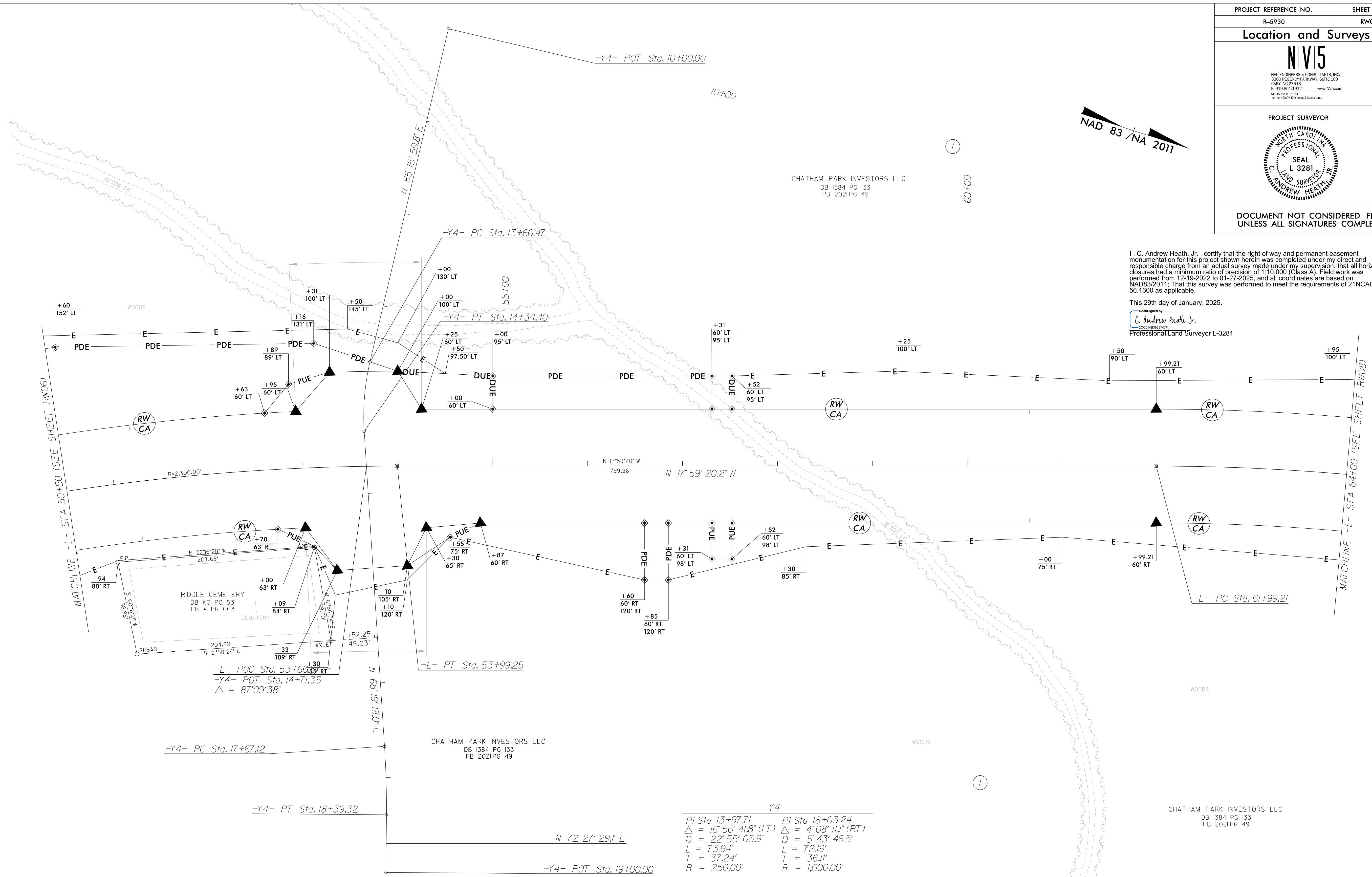
PROJECT REFERENCE NO. R-5930	SHEET NO. RW07
<b>Location and Surveys</b>	
 <small>NIV5 ENGINEERS &amp; CONSULTANTS, INC. 3300 REGENCY PARKWAY, SUITE 100 CARY, NC 27518 P: 919.851.1912 www.NIV5.com NC License # 13818 formerly CA71 Engineers &amp; Consultants</small>	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.  
 C. Andrew Heath, Jr.  
 Professional Land Surveyor L-3281

REVISIONS



-Y4-	-Y4-
PI Sta 13+97.71	PI Sta 18+03.24
Δ = 16' 56' 41.8" (LT)	Δ = 4' 08' 11.1" (RT)
D = 22' 55' 05.9"	D = 5' 43' 46.5"
L = 73.94'	L = 72.19'
T = 37.24'	T = 36.11'
R = 250.00'	R = 1,000.00'

-L-	-L-
PI Sta 51+17.00	PI Sta 70+27.00
Δ = 14' 08' 03.1" (RT)	Δ = 39' 35' 18.7" (RT)
D = 2' 29' 28.0"	D = 2' 29' 28.0"
L = 567.38'	L = 1,589.19'
T = 285.14'	T = 827.79'
R = 2,300.00'	R = 2,300.00'
SE = 0.03	SE = 0.03
RO = 144	RO = 144

**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 12-19-2022 TO 01-27-2025 .

07 JAN 2025 15:55 1330724-2024014 94 SURV-rw.sheets v=5930-1.s\_rw07.dgn  
 AT: N:\CARP-CRANS\100

6/2/09

### Location and Surveys

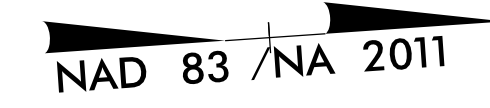
# NIV5

NIV5 ENGINEERS & CONSULTANTS, INC.  
 3300 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27518  
 P: 919.851.1912 www.NIV5.com  
 NC License # 1339 Formerly CA/N Engineers & Consultants

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

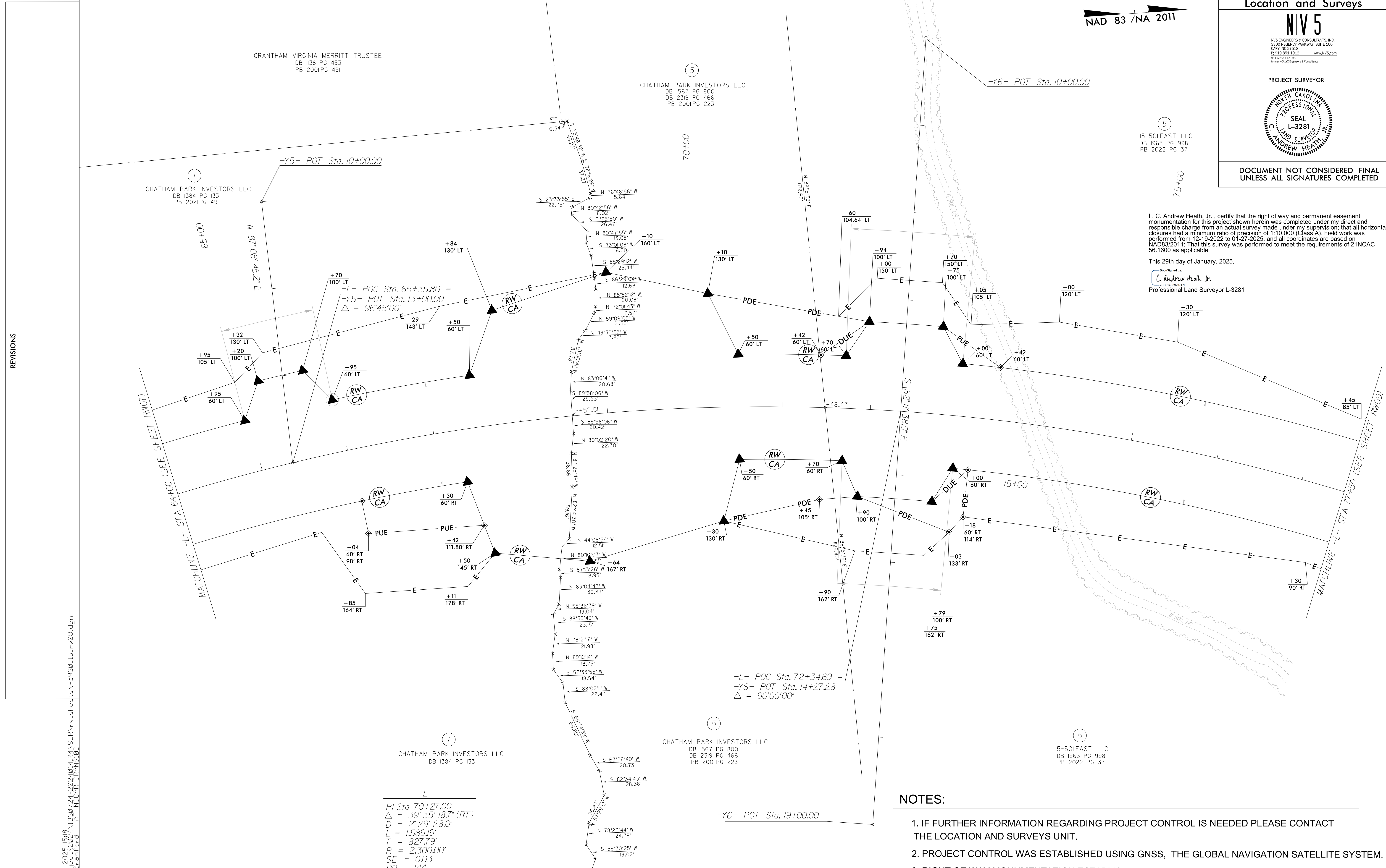


⑤  
 15-501 EAST LLC  
 DB 1963 PG 99B  
 PB 2022 PG 37

I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCA 56.1600 as applicable.

This 29th day of January, 2025.

Designed by:  
 C. Andrew Heath, Jr.  
 20014683001478  
 Professional Land Surveyor L-3281



REVISIONS

07 JAN 2025 15:58  
 C:\PAN\2025\1558\1330724-2024014\_94\SUR\rw\_sheets\5930\_1s\_rw08.dgn  
 AT NCCAF-CRANS100  
 scott@panford

### 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 12-19-2022 TO 01-27-2025 .

Location and Surveys

NV5

NVS ENGINEERS & CONSULTANTS, INC.  
3300 REGENCY PARKWAY, SUITE 100  
CARY, NC 27518  
P: 919.851.1912 www.NV5.com  
NC License # 4389  
Formerly CAVI Engineers & Consultants

PROJECT SURVEYOR

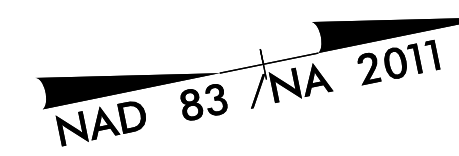


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.

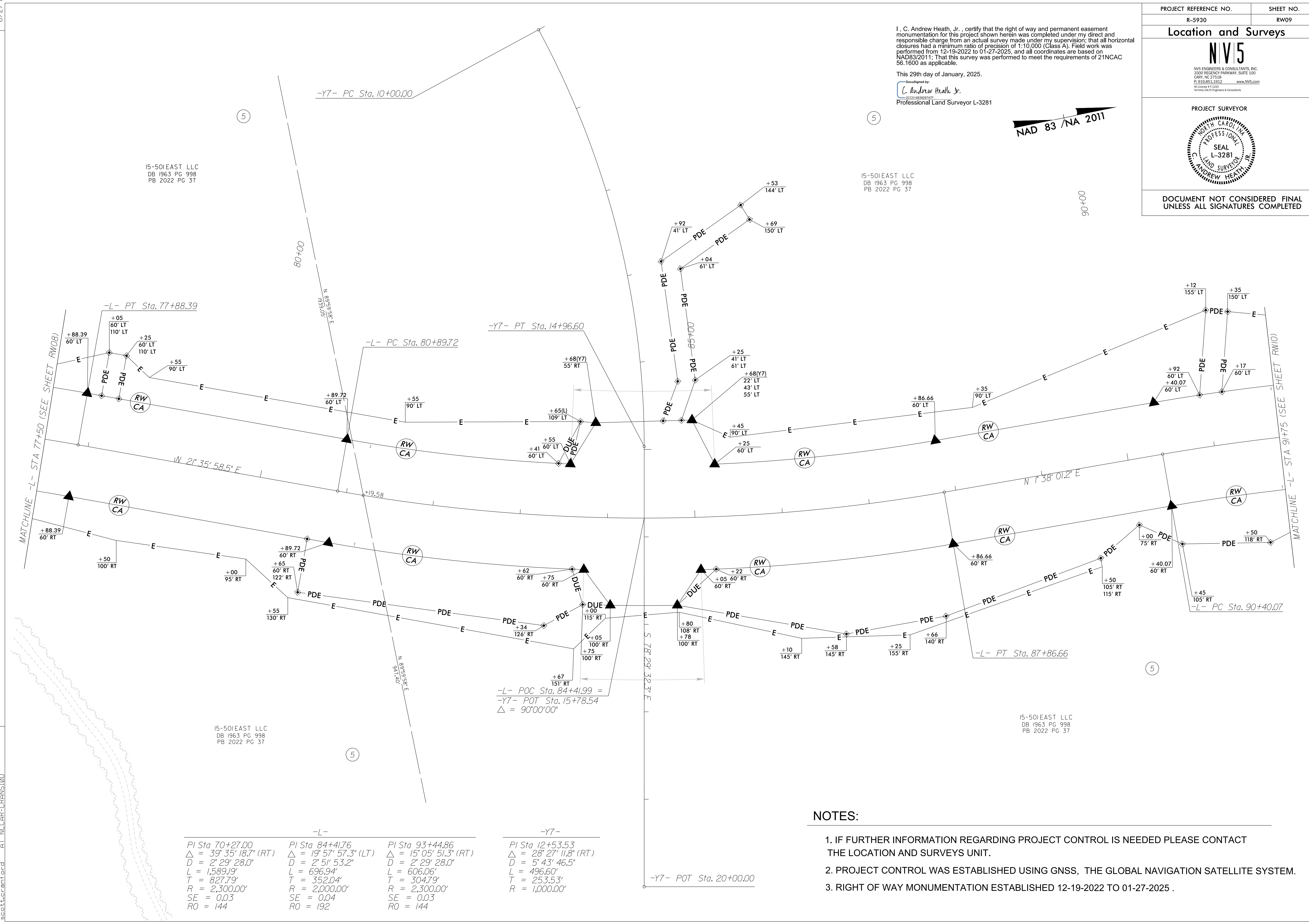
DocuSigned by:  
C. Andrew Heath Jr.  
2025011403020747  
Professional Land Surveyor L-3281



15-501 EAST LLC  
DB 1963 PG 998  
PB 2022 PG 37

15-501 EAST LLC  
DB 1963 PG 998  
PB 2022 PG 37

15-501 EAST LLC  
DB 1963 PG 998  
PB 2022 PG 37



REVISIONS

07 JAN 2025 15:21  
G:\PLAN\2025\15-501 EAST LLC\1330724-2024\014 94\SUR\p-w\_sheets\5930-1.s\_rw09.dgn  
AT N:\CAH-CRANS\100  
scott@carroll.com

-L-			-Y7-		
PI Sta. 70+27.00	PI Sta. 84+41.76	PI Sta. 93+44.86	PI Sta. 12+53.53		
$\Delta = 39^\circ 35' 18.7''$ (RT)	$\Delta = 19^\circ 57' 57.3''$ (LT)	$\Delta = 15^\circ 05' 51.3''$ (RT)	$\Delta = 28^\circ 27' 11.8''$ (RT)		
D = 2' 29' 28.0"	D = 2' 51' 53.2"	D = 2' 29' 28.0"	D = 5' 43' 46.5"		
L = 1,589.19'	L = 696.94'	L = 606.06'	L = 496.60'		
T = 827.79'	T = 352.04'	T = 304.79'	T = 253.53'		
R = 2,300.00'	R = 2,000.00'	R = 2,300.00'	R = 1,000.00'		
SE = 0.03	SE = 0.04	SE = 0.03			
RO = 144	RO = 192	RO = 144			

-L- POC Sta. 84+41.99 =  
-Y7- POT Sta. 15+78.54  
 $\Delta = 90^\circ 00' 00''$

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 12-19-2022 TO 01-27-2025 .

-Y7- POT Sta. 20+00.00

Location and Surveys

NV5

NVS ENGINEERS & CONSULTANTS, INC.  
3300 REGENCY PARKWAY, SUITE 100  
CARY, NC 27518  
P: 919.851.1912 www.NV5.com  
NC License # 1338 Formerly CA/N Engineers & Consultants

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

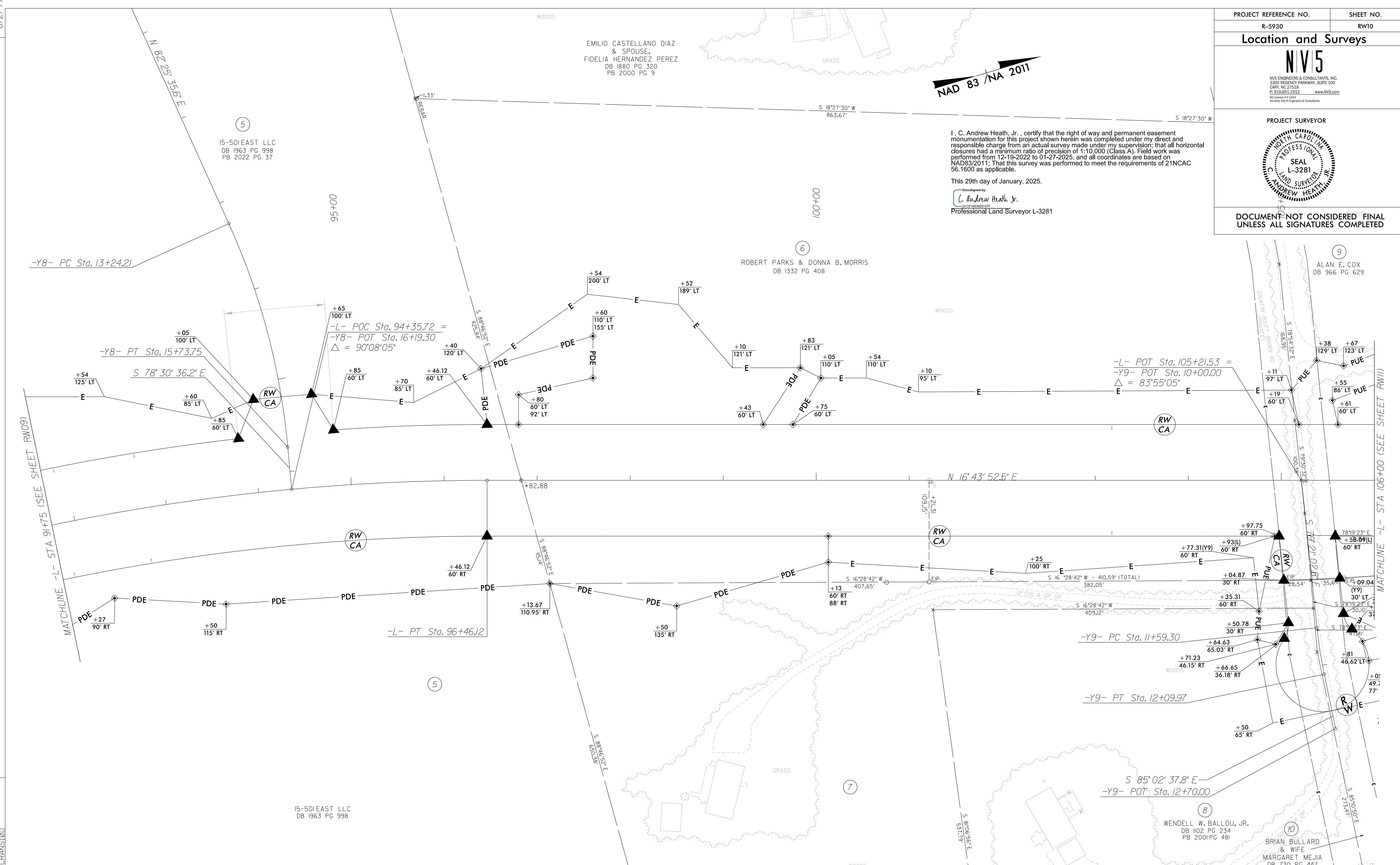
NAD 83 /NA 2011

I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.

Designed by:  
C. Andrew Heath, Jr.  
Professional Land Surveyor L-3281

REVISIONS



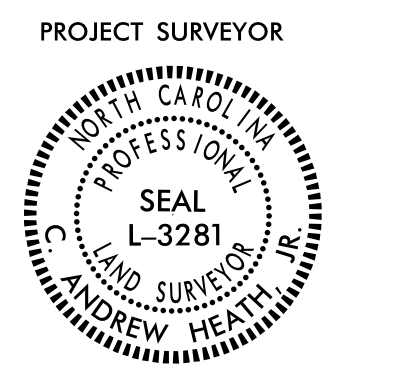
-L-	-Y8-	-Y9-	-CULDESAC-
PI Sta 93+44.86	PI Sta 14+50.14	PI Sta 11+84.66	PI Sta 10+30.54
$\Delta = 15^{\circ} 05' 51.3''$ (RT)	$\Delta = 19^{\circ} 03' 48.2''$ (RT)	$\Delta = 5^{\circ} 41' 35.0''$ (LT)	$\Delta = 277^{\circ} 47' 16.7''$ (LT)
D = 2' 29' 28.0"	D = 7' 38' 22.0"	D = 11' 14' 04.1"	D = 163' 42' 08.0"
L = 606.06'	L = 249.54'	L = 50.67'	L = 169.69'
T = 304.79'	T = 125.93'	T = 25.36'	T = 30.54'
R = 2,300.00'	R = 750.00'	R = 510.00'	R = 35.00'
SE = 0.03			
RO = 144			

- 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 12-19-2022 TO 01-27-2025 .

7: PLAN 2025 15:24  
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AT NCCAF-CRANS100  
scott@cranford



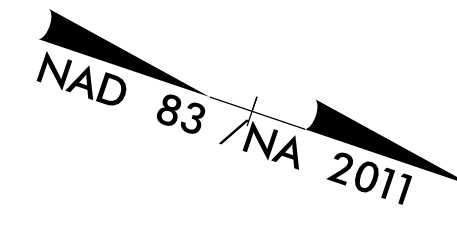
Location and Surveys



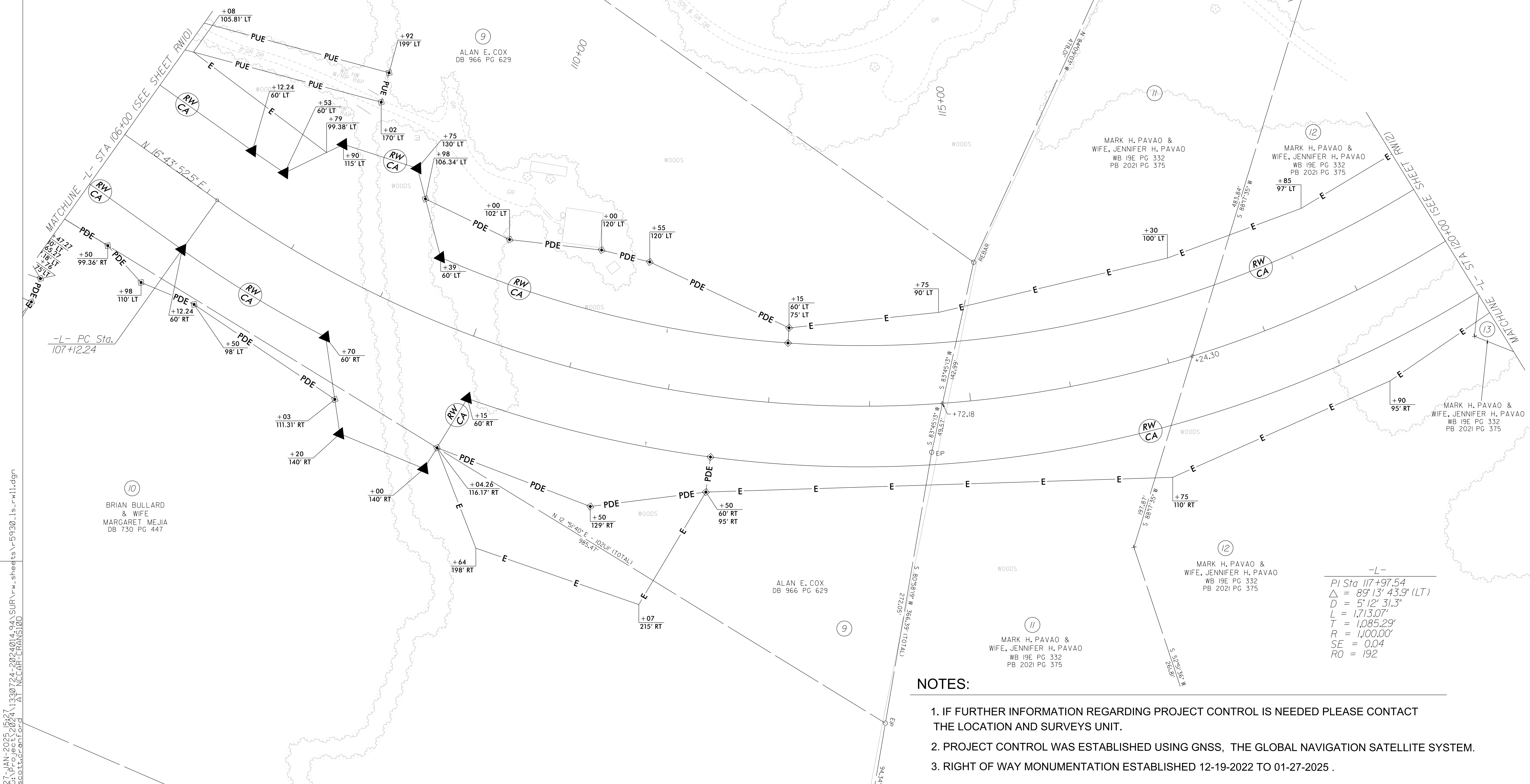
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.  
 C. Andrew Heath, Jr.  
 Professional Land Surveyor L-3281



REVISIONS



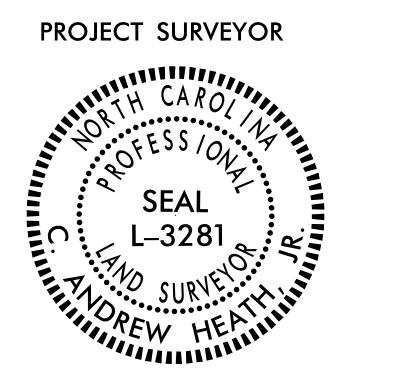
-L-  
 PI Sta 117+97.54  
 $\Delta = 89^{\circ}13'43.9''$  (LT)  
 $D = 5^{\circ}12'31.3''$   
 $L = 1,713.07'$   
 $T = 1,085.29'$   
 $R = 1,000.00'$   
 $SE = 0.04$   
 $RO = 192$

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 12-19-2022 TO 01-27-2025 .

07 JAN 2025 15:27  
 C:\PLAN\2025\1330724-2024014\94\SURV\w.sheets\5930-1.s.rw11.dgn  
 AT: NCCAF-CRANS100  
 scott.coffman

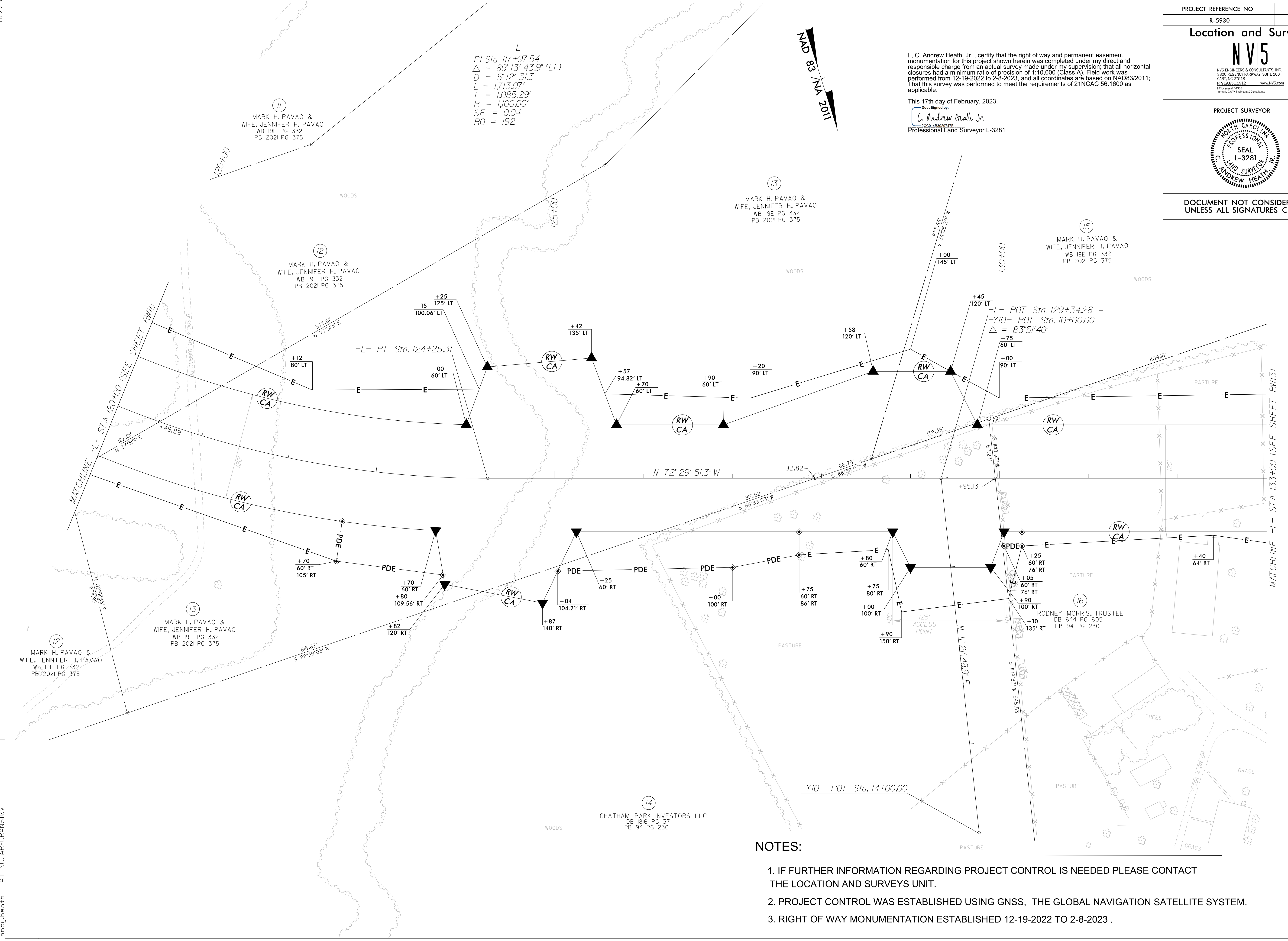
Location and Surveys



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, C. Andrew Heath, Jr., 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 12-19-2022 to 2-8-2023, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 17th day of February, 2023.  
 Documented by:  
 C. Andrew Heath, Jr.  
 Professional Land Surveyor L-3281



REVISIONS

17-FEB-2023 10:44  
 C:\Users\c1022\OneDrive\Work\2022\014\_95\SUR\RDW\_Sheets\5930\_1s\_r.w12.dgn  
 AT NCCAR-CRANSTON  
 andy.heath

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 12-19-2022 TO 2-8-2023 .

6/2/199

15  
LEE M. PAVAO &  
MARK H. PAVAO & WIFE,  
JENNIFER H. PAVAO  
DB 723 PG 944  
PB 97 PG 241  
PB 30 PG 8

16  
RODNEY MORRIS, TRUSTEE  
DB 644 PG 605  
PB 94 PG 230


16  
RODNEY MORRIS, TRUSTEE  
DB 644 PG 605  
PB 94 PG 230

RODNEY MORRIS  
DB 492 PG 93

KATIE B. COOPER  
DB 388 PG 241

17

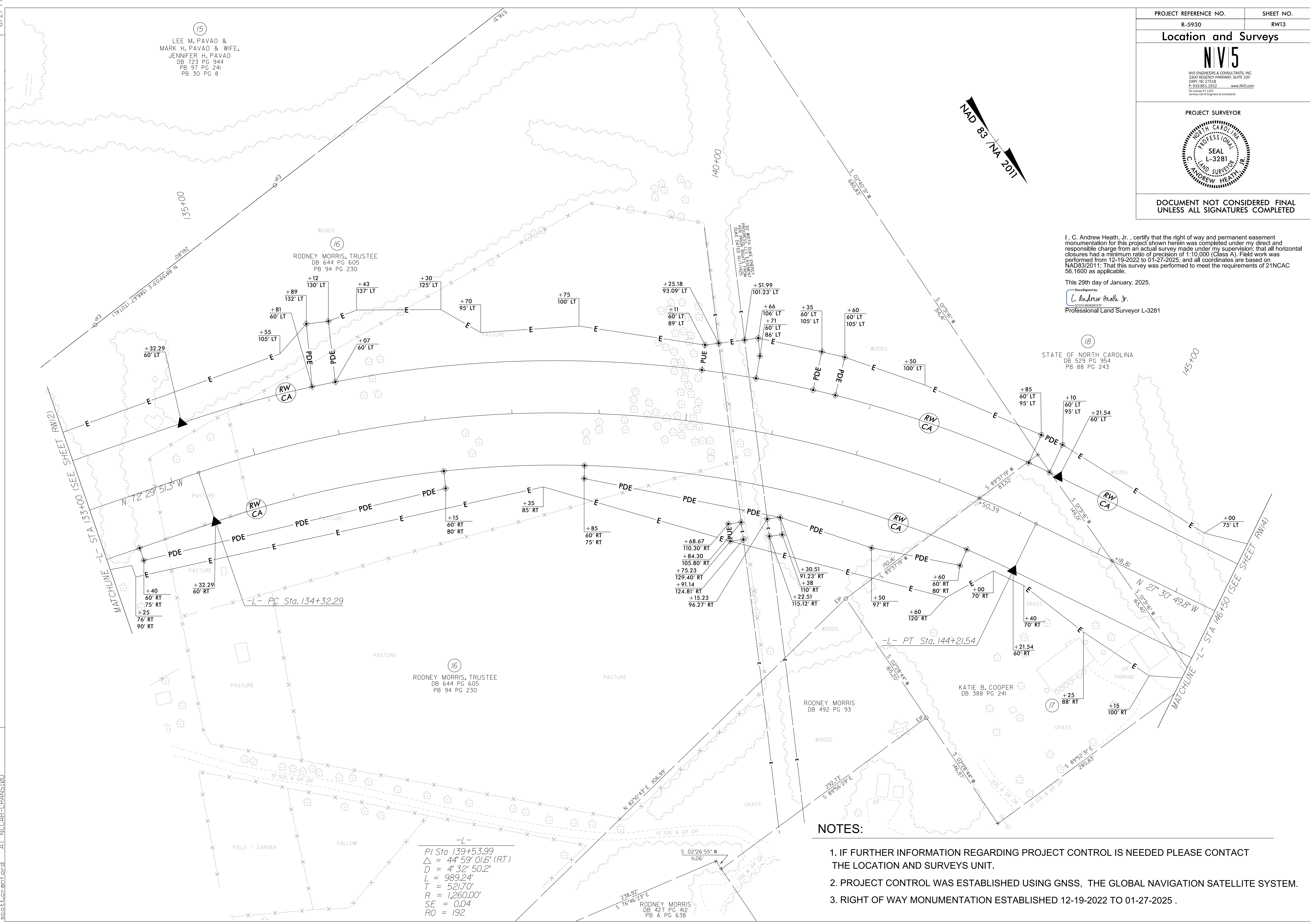
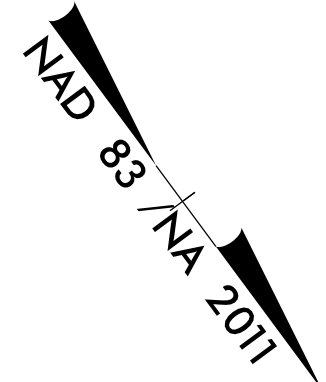
18  
STATE OF NORTH CAROLINA  
DB 529 PG 954  
PB 88 PG 243

PROJECT REFERENCE NO.	R-5930
SHEET NO.	RW13
<b>Location and Surveys</b>	
<b>NIV5</b>	
<small>NIV5 ENGINEERS &amp; CONSULTANTS, INC. 3300 REGENCY PARKWAY, SUITE 100 CARY, NC 27518 P: 919.851.1912 www.NIV5.com NC License # 1281 Formerly CAW Engineers &amp; Consultants</small>	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.  
C. Andrew Heath, Jr.  
Professional Land Surveyor L-3281

REVISIONS



**NOTES:**


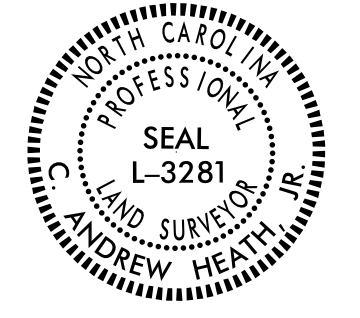
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 12-19-2022 TO 01-27-2025 .

-L-  
 PI Sta 139+53.99  
 $\Delta = 44^{\circ} 59' 01.6''$  (RT)  
 $D = 4' 32'' 50.2''$   
 $L = 989.24'$   
 $T = 521.70'$   
 $R = 1,260.00'$   
 $SE = 0.04$   
 $RO = 192$

RODNEY MORRIS  
 DB 427 PG 412  
 PB A PG 638

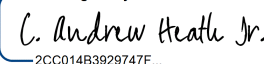
07 JAN 2025 15:43  
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 AT NCCAF-CRANS100  
 scott@cranford.com

6/2/2019

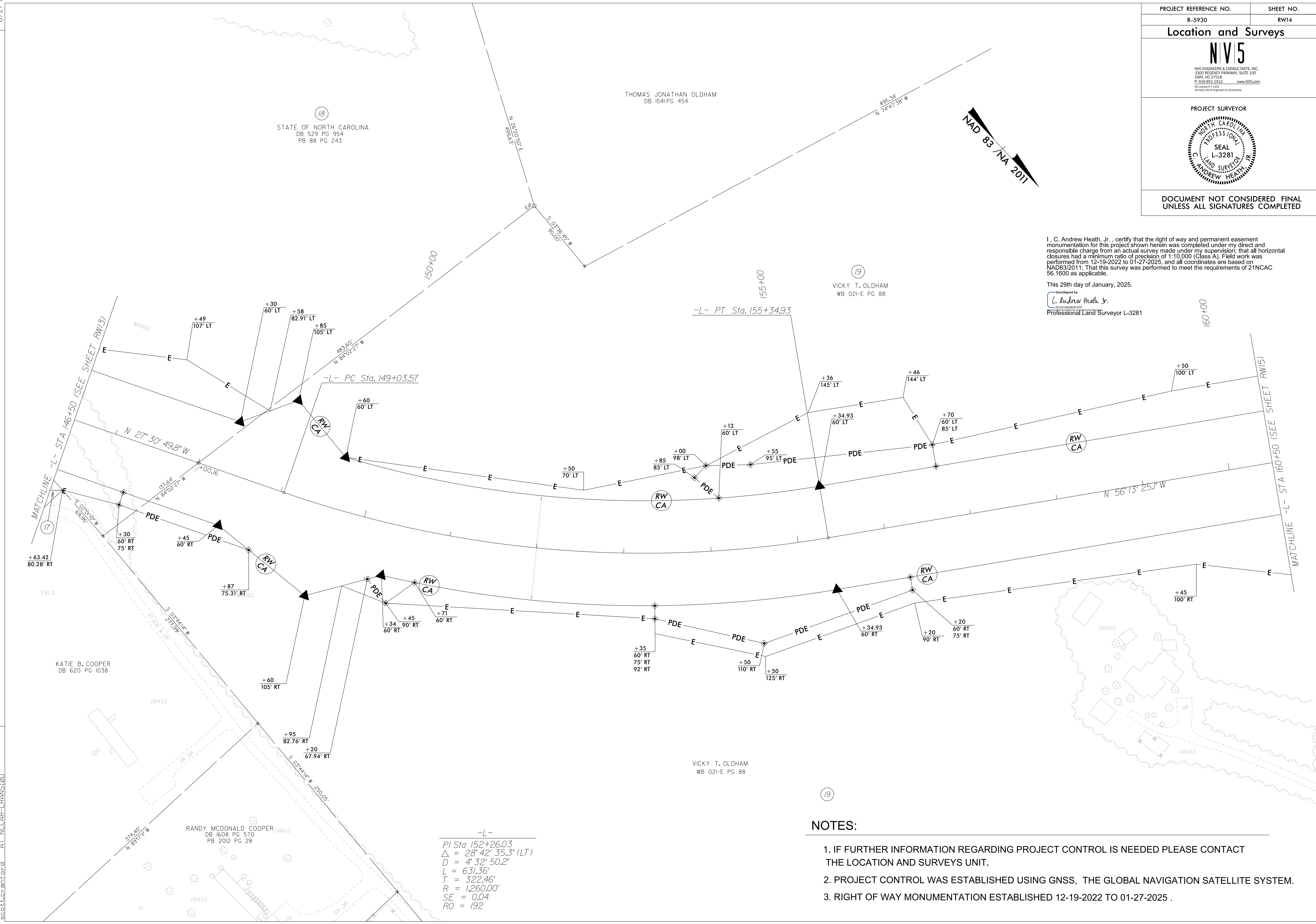
PROJECT REFERENCE NO.	SHEET NO.
R-5930	RW14
<b>Location and Surveys</b>	
 <b>NVIS</b> <small>NVIS ENGINEERS &amp; CONSULTANTS, INC.        3300 REGENCY PARKWAY, SUITE 100        CARY, NC 27518        P: 919.851.1912 www.nvis.com        NC License # 12012 formerly CAVI Engineers &amp; Consultants</small>	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.

Designed by:  
  
 C. Andrew Heath, Jr.  
 Professional Land Surveyor L-3281

REVISIONS



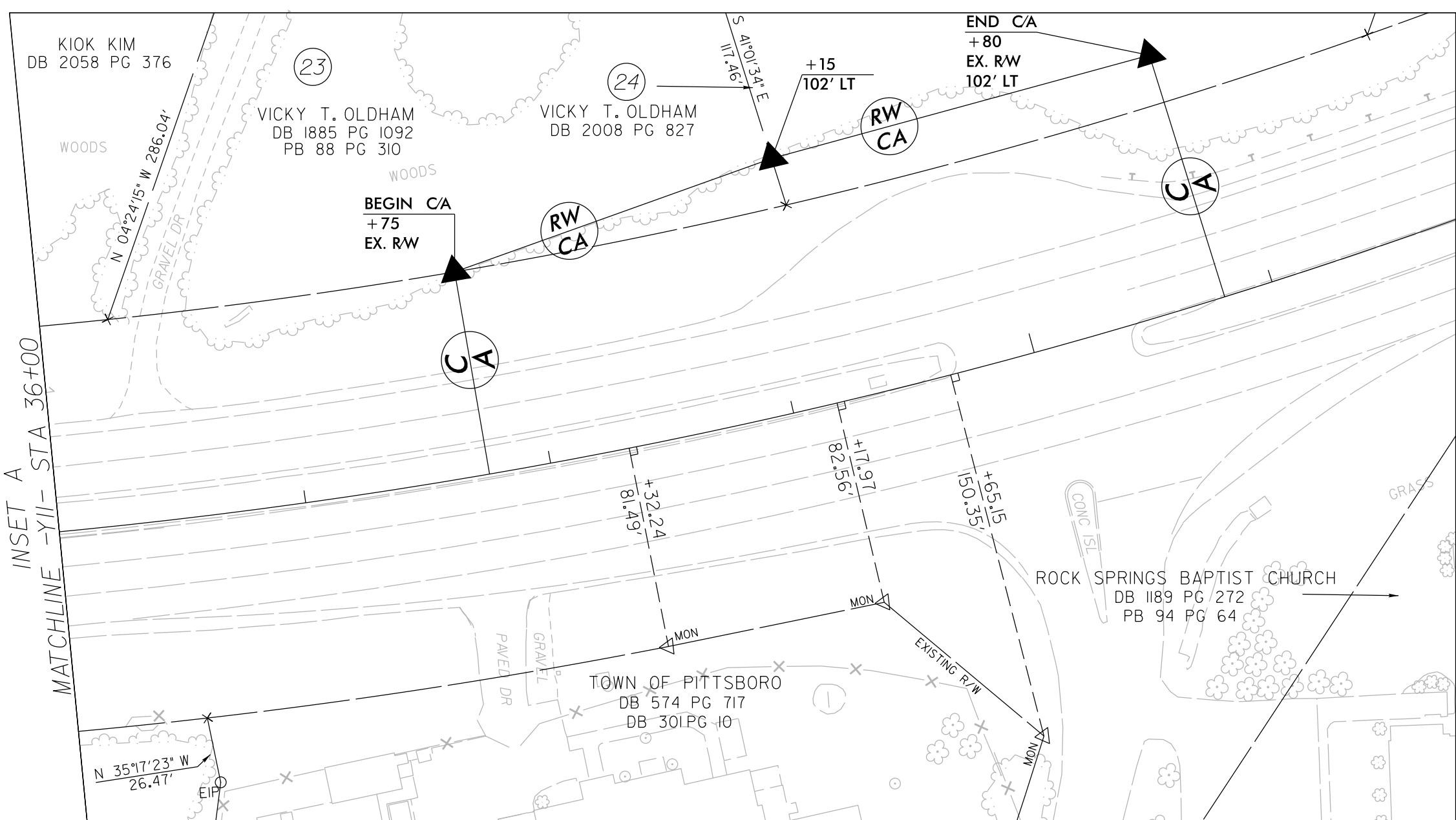
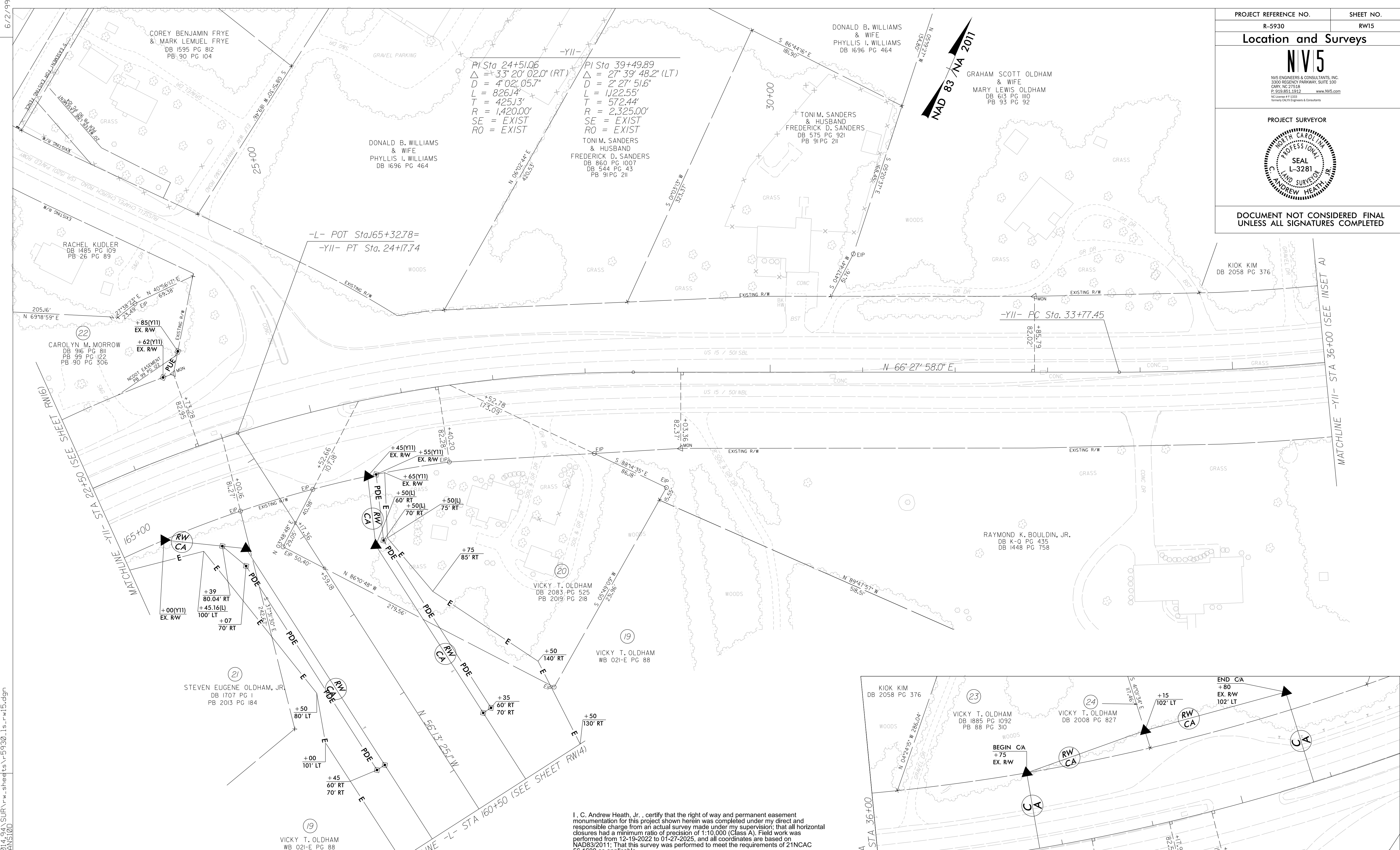
-L-

$PI\ Sta\ 152+26.03$   
 $\Delta = 28^{\circ}42'35.3'' (LT)$   
 $D = 4'32'50.2''$   
 $L = 631.36'$   
 $T = 322.46'$   
 $R = 1,260.00'$   
 $SE = 0.04$   
 $RO = 192$

**NOTES:**

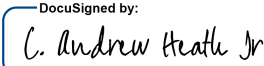
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 12-19-2022 TO 01-27-2025 .

07 JAN 2025 15:46  
 C:\PLAN\2025\1546\1330724-20240114\_94\SUR\p-w\_sheets\5930-1s\_rw14.dgn  
 AT: NCCAF-CRANS100  
 scott@cranford.com



I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.

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

- NOTES:**
- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
  - PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
  - RIGHT OF WAY MONUMENTATION ESTABLISHED 12-19-2022 TO 01-27-2025.

6/2/2019  
 27 JAN 2025 15:49  
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 AT NCCAF-CRANS10D  
 scott@cranford.com

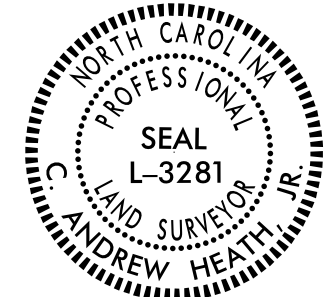
REVISIONS

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 # 4282 Formerly C&S Engineers & Consultants

PROJECT SURVEYOR

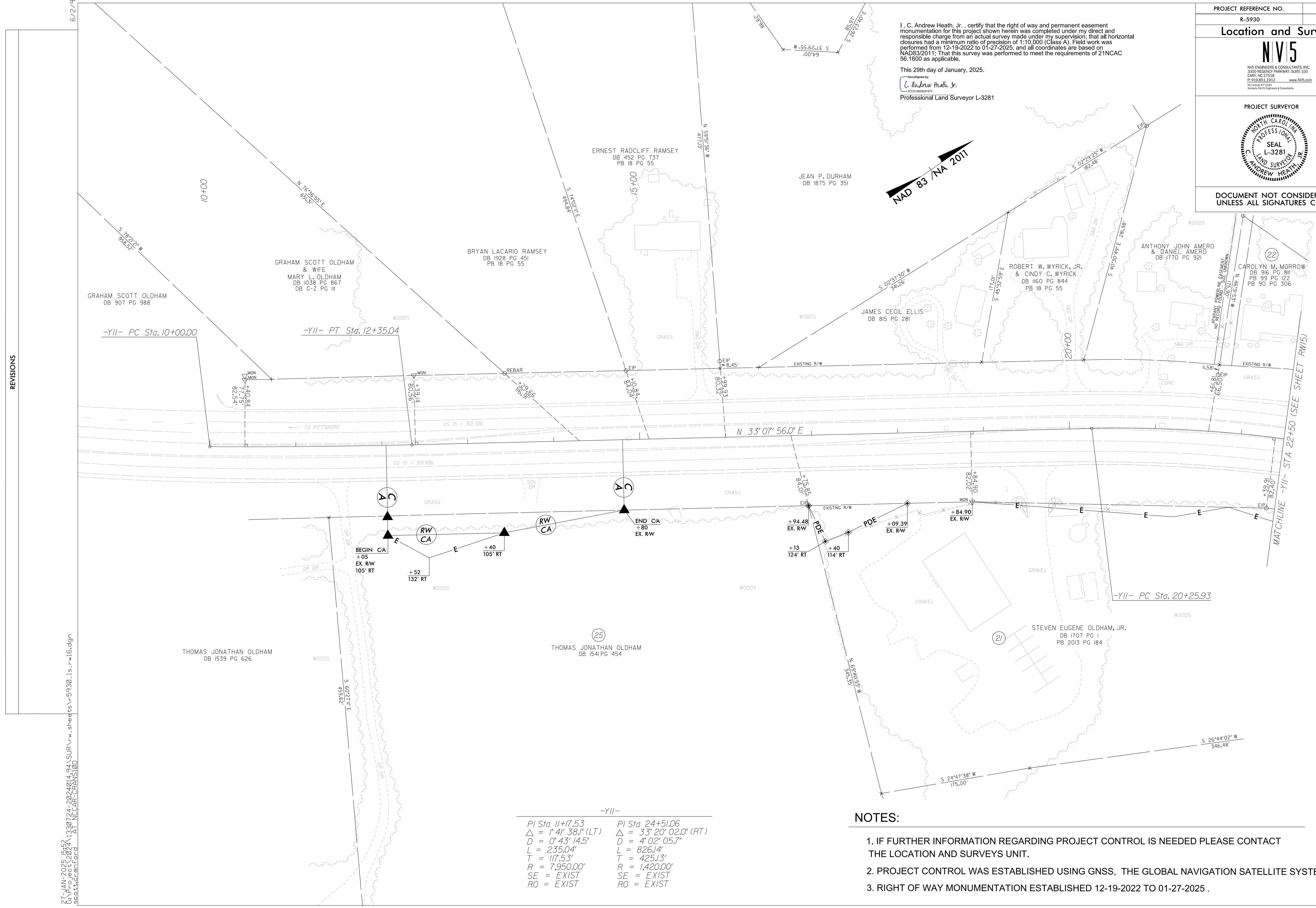
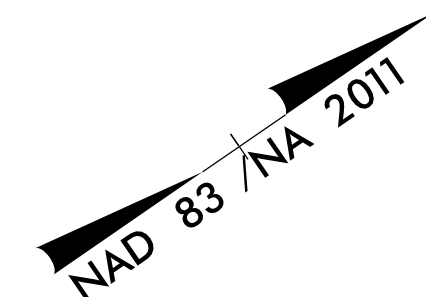


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, C. Andrew Heath, Jr., 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 12-19-2022 to 01-27-2025, 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 January, 2025.

Designed by:  
 I. C. Andrew Heath, Jr.  
 Professional Land Surveyor L-3281



REVISIONS

07 JAN 2025 15:52 C:\330724-2024014 94\SUR\16.rw.sheets\5930\_16.rw16.dgn  
 AT NCCAF-CRANS100 scott.scott@niv5.com

-YII-

PI Sta 11+17.53	PI Sta 24+51.06
$\Delta = 1^{\circ} 41' 38.1''$ (LT)	$\Delta = 33^{\circ} 20' 02.0''$ (RT)
$D = 0^{\circ} 43' 14.5''$	$D = 4^{\circ} 02' 05.7''$
$L = 235.04'$	$L = 826.14'$
$T = 117.53'$	$T = 425.13'$
$R = 7,950.00'$	$R = 1,420.00'$
SE = EXIST	SE = EXIST
RO = EXIST	RO = EXIST

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
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