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09/06/19

TIP PROJECT: U-4405A

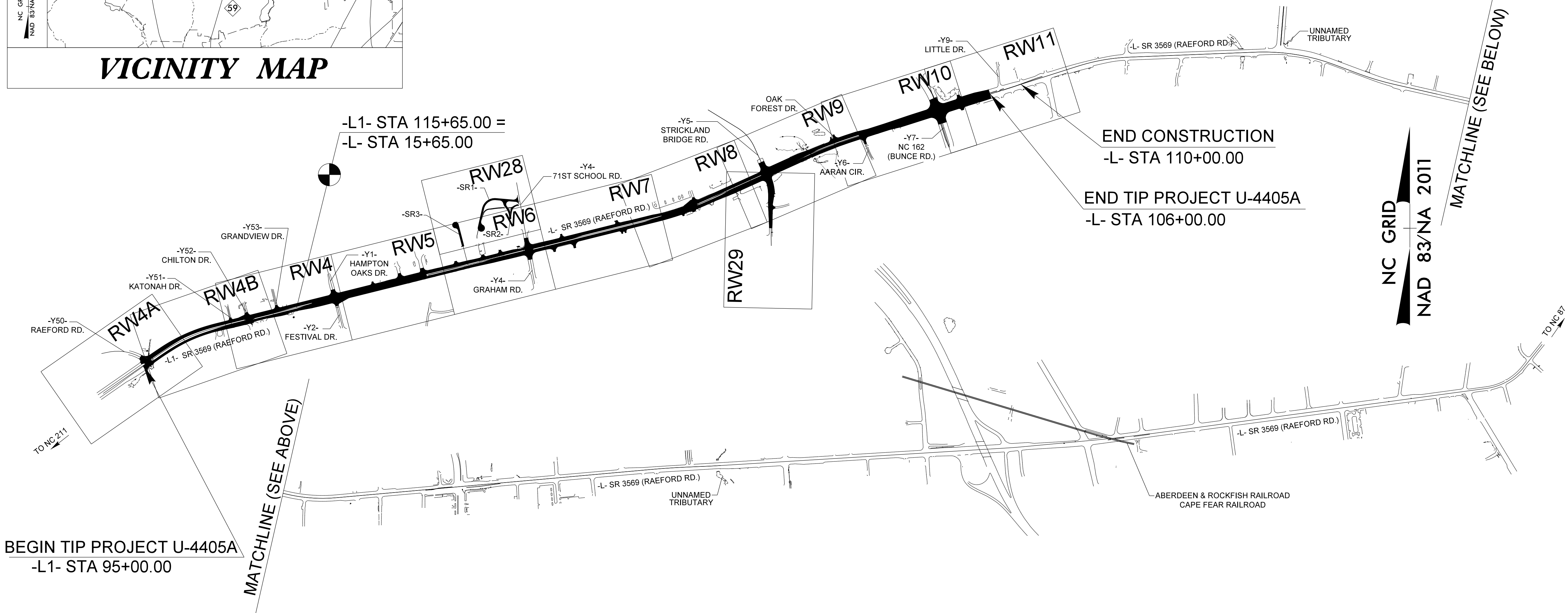
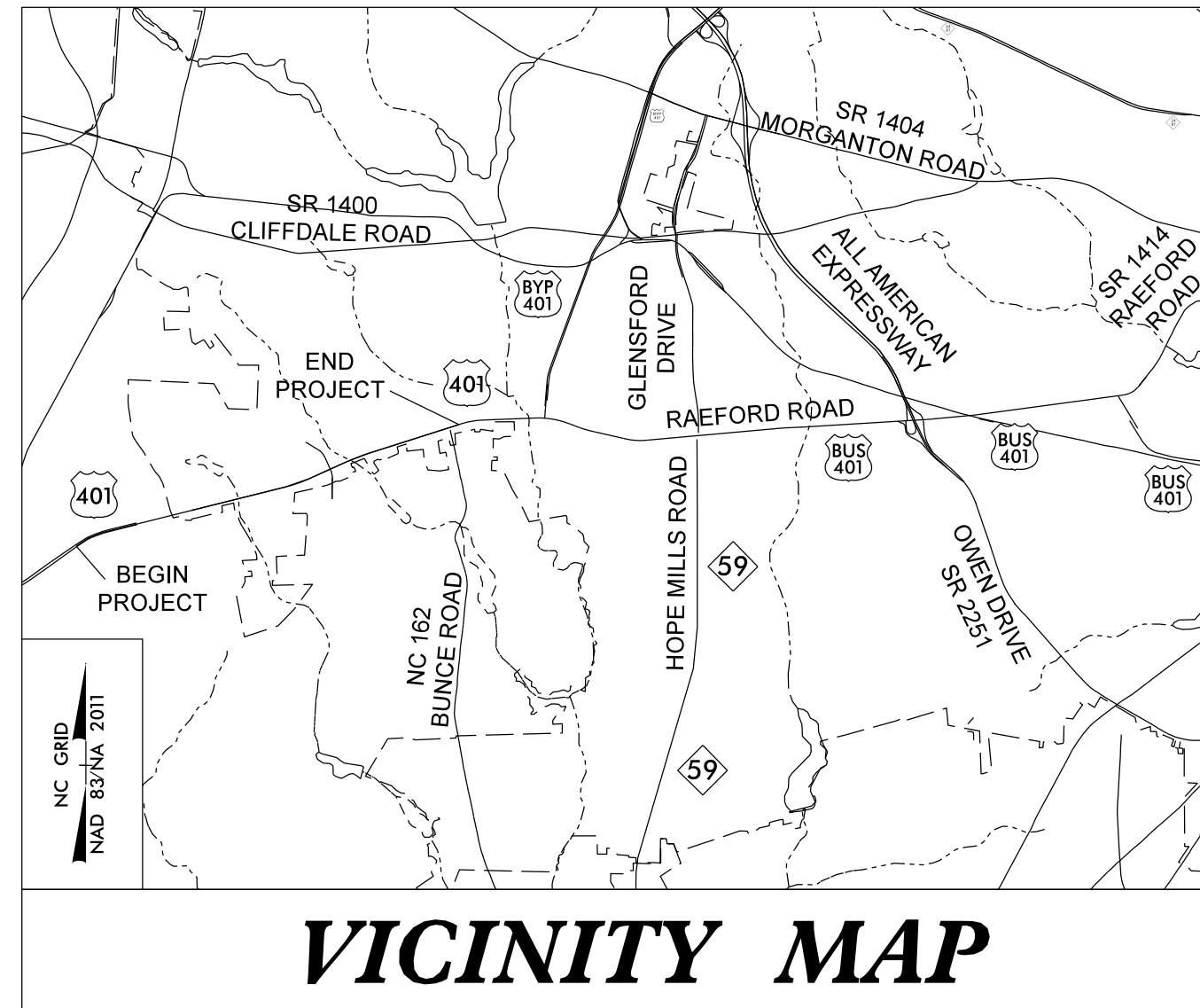
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

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

**CUMBERLAND COUNTY**

LOCATION: US 401 FROM OLD RAEFORD ROAD TO EAST OF NC 162  
(BUNCE RD) IN FAYETTEVILLE

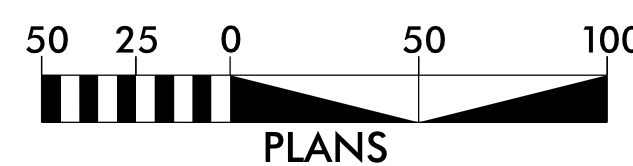
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4405A	RW01	21
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
39049.2.2	STPDA-0401(300)	RW	
39049.2.4	STPDA-0401(300)	UTIL	



BEGIN TIP PROJECT U-4405A  
-L1- STA 95+00.00

★ PROPOSED SIGNAL

GRAPHIC SCALE



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U-3424-1" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 470729.9010(ft) EASTING: 2,003,980.0510(ft) ELEVATION: 211.690(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987500

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GRID DISTANCE FROM "U-3424-1" TO -L- STATION 10+00.00 IS S 72°-34'45.67" W 9496.53(ft)

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

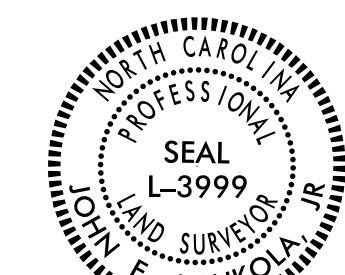
NCDOT DIVISION 6  
LOCATION & SURVEYS  
4834 US HWY 301 S  
HOPE MILLS, NC 28348

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
JULY 29, 2016

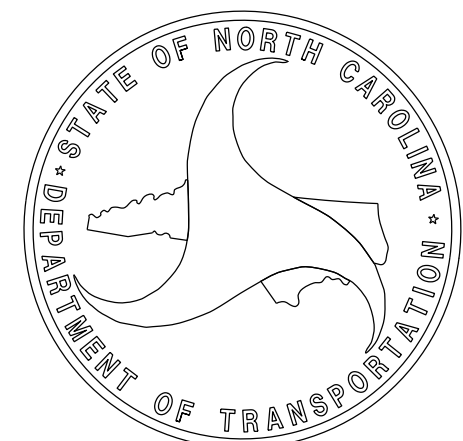
LETTING DATE:  
OCTOBER 19, 2021

PROFESSIONAL LAND SURVEYOR



DocuSigned by:  
John E. Kankola, Jr.  
SIGNATURE

8/5/2021  
Date:



\$\$\$\$\$ SYSTEM TIME\$\$\$\$\$  
\$\$\$\$\$ DGN\$\$\$\$\$  
\$\$\$\$\$ USERNAME\$\$\$\$\$

# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

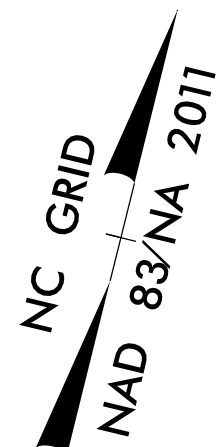
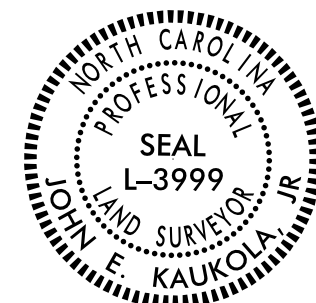
I, John E. Kaukola Jr., PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

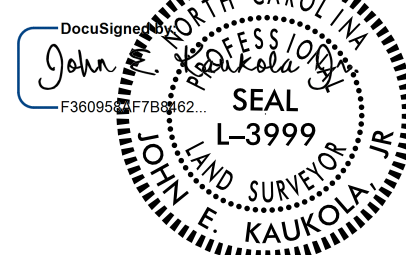
Class of survey: AA  
Type of GPS field procedure: RTN  
Dates of survey: Sept. 2013  
Datum/Epoch: NAD 83/2011  
Published/Fixed-control use: N/A  
Localized around: U3424-1  
Northing: 470729.901  
Easting: 2003980.051  
Combined grid factor: 0.99987500  
Geoid model: G12  
Units: US Survey Feet

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 began in September 2013, 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.

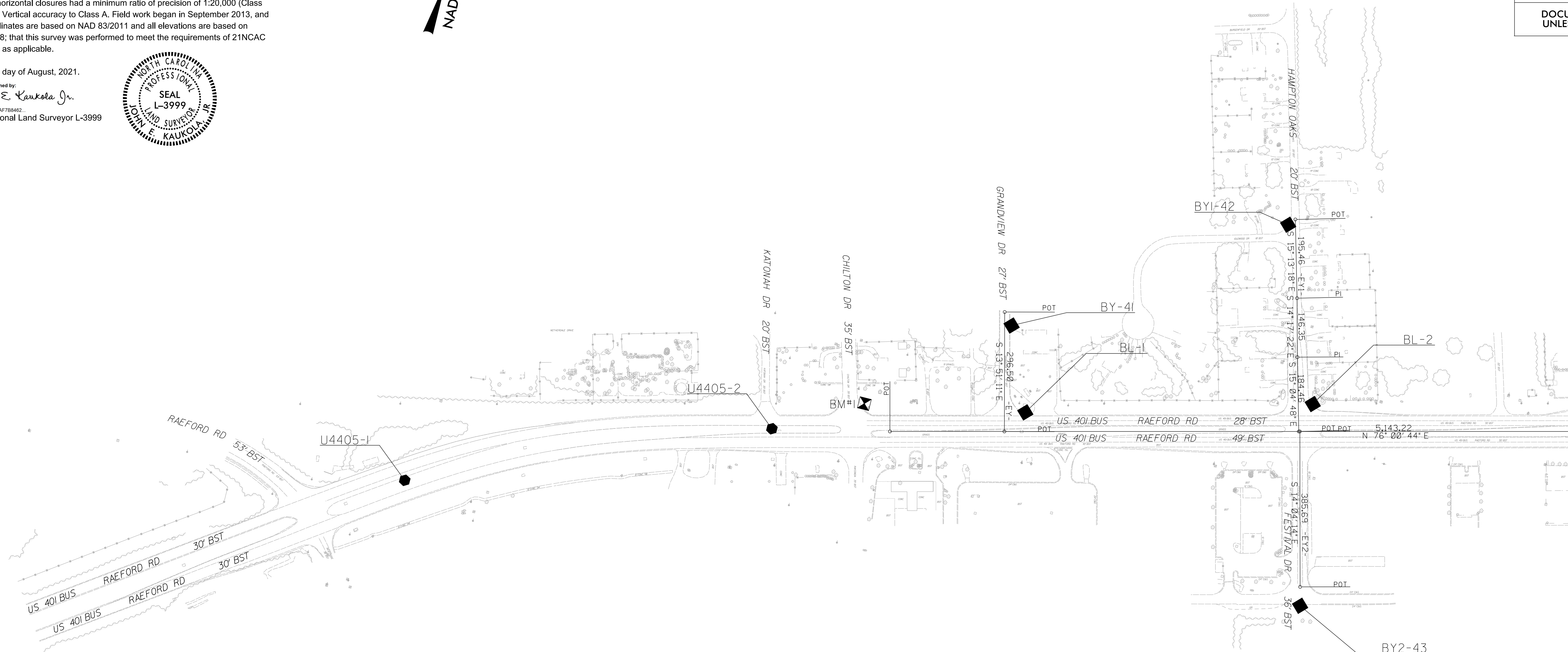
This 3rd day of August, 2021.

DocuSigned by:  
*John E. Kaukola Jr.*  
Professional Land Surveyor L-3999



PROJECT REFERENCE NO. U-4405A	SHEET NO. RW02C-1
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION AND SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS



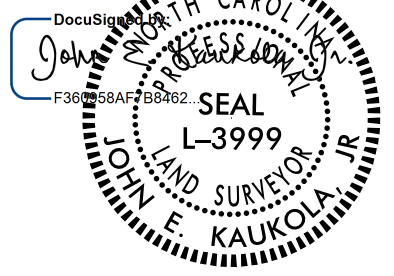
MATCH LINE SHEET RW02C-2

### NOTES:

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.

# SURVEY CONTROL SHEET

## W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW02C-2
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION AND SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

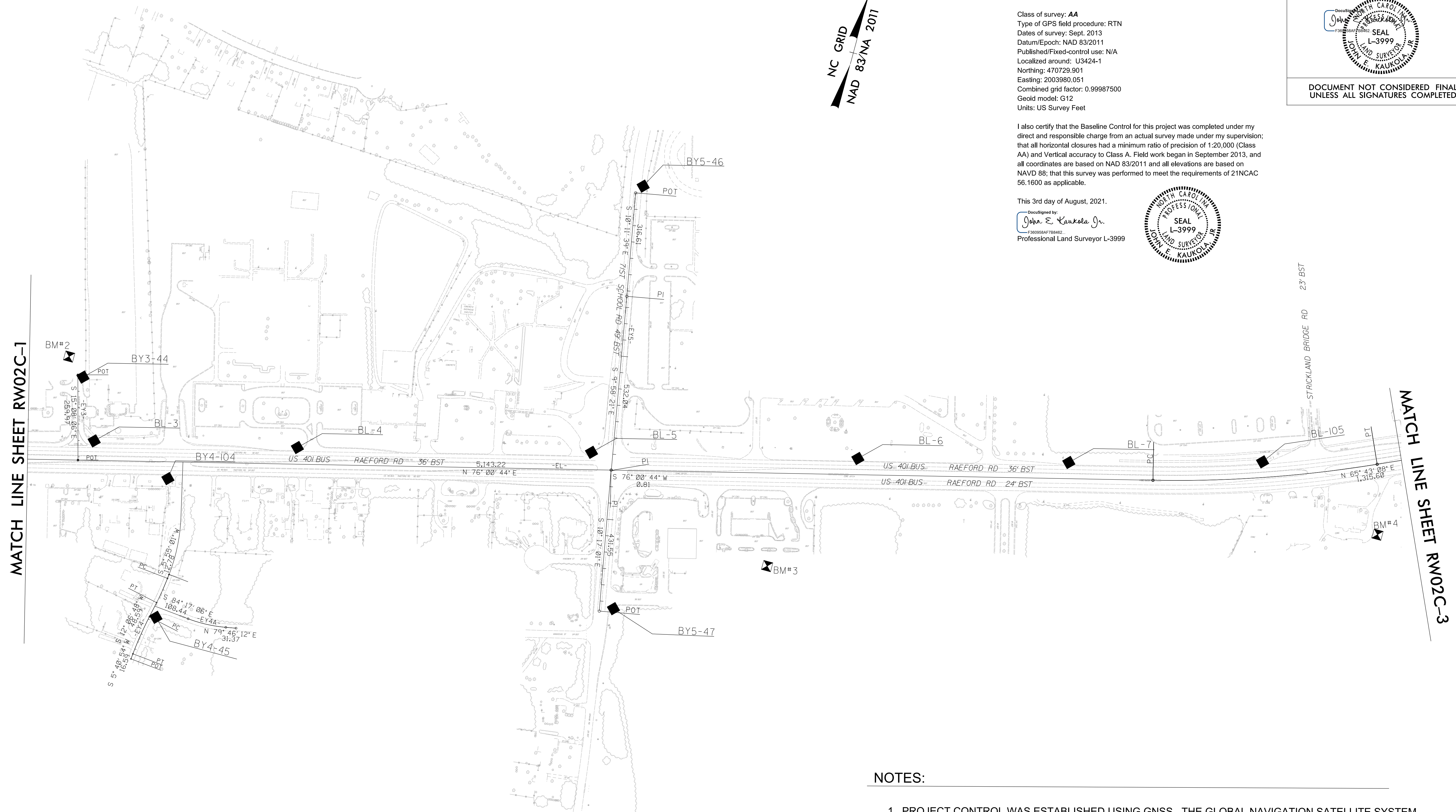
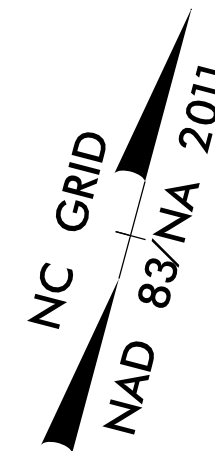
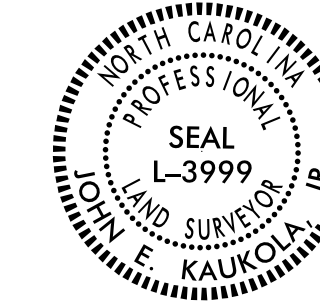
I, John E. Kaukola Jr., PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**  
 Type of GPS field procedure: RTN  
 Dates of survey: Sept. 2013  
 Datum/Epoch: NAD 83/2011  
 Published/Fixed-control use: N/A  
 Localized around: U3424-1  
 Northing: 470729.901  
 Easting: 2003980.051  
 Combined grid factor: 0.99987500  
 Geoid model: G12  
 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 began in September 2013, 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 3rd day of August, 2021.

DocuSigned by:  
**John E. Kaukola Jr.**  
 F36098AF7B842  
 Professional Land Surveyor L-3999



REVISIONS

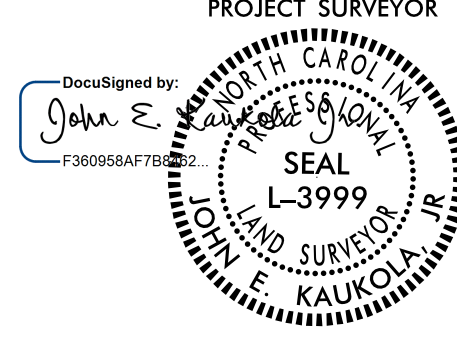
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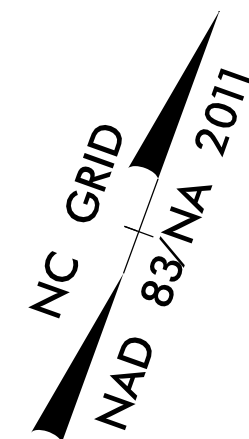
### NOTES:

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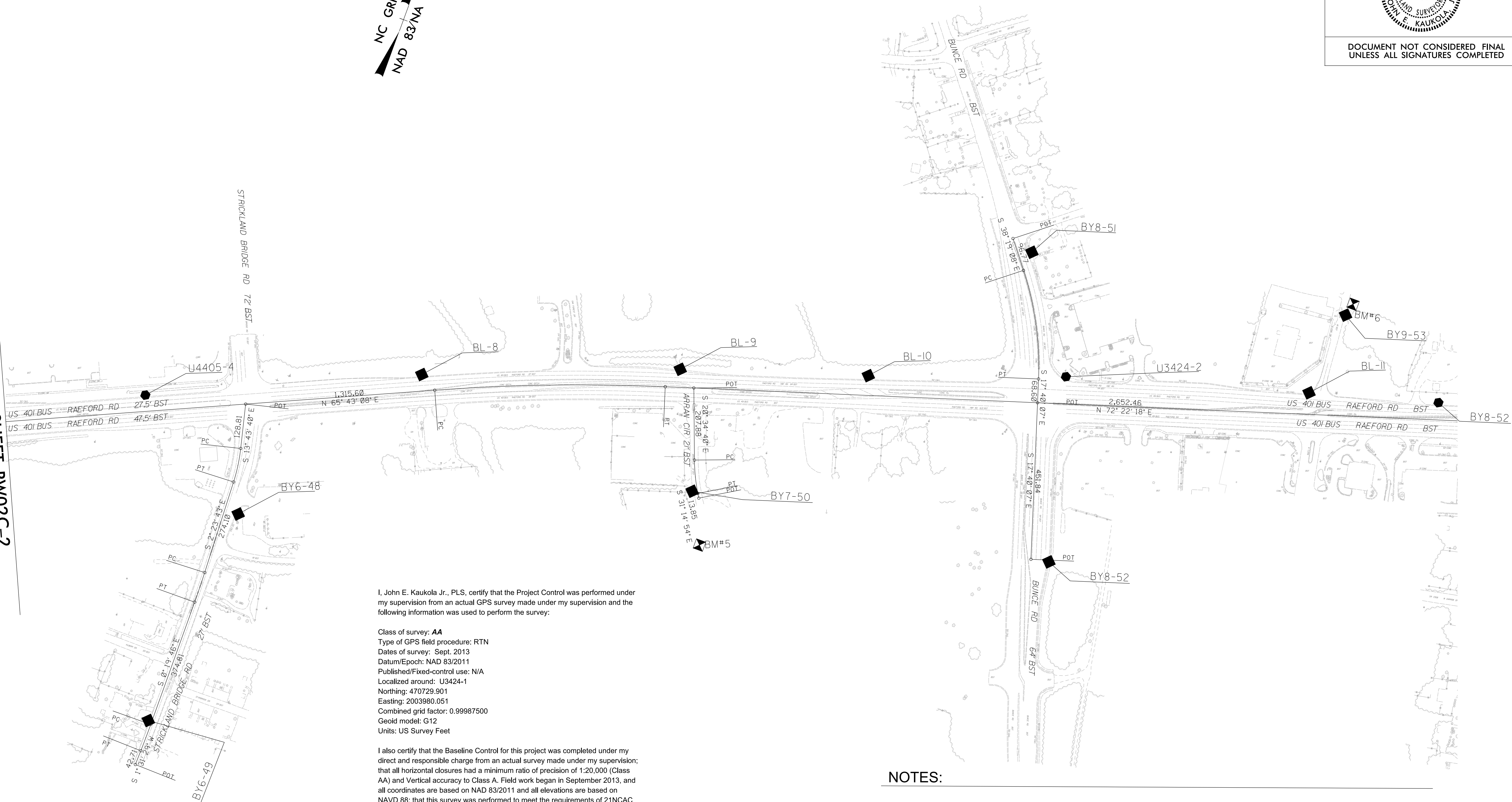
# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. U-4405A	SHEET NO. RW02C-3
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION AND SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



MATCH LINE SHEET RW02C-2

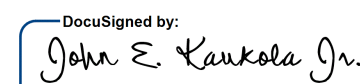


I, John E. Kaukola Jr., PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**  
 Type of GPS field procedure: RTN  
 Dates of survey: Sept. 2013  
 Datum/Epoch: NAD 83/2011  
 Published/Fixed-control use: N/A  
 Localized around: U3424-1  
 Northing: 470729.901  
 Easting: 2003980.051  
 Combined grid factor: 0.99987500  
 Geoid model: G12  
 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 began in September 2013, 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 3rd day of August, 2021.

DocuSigned by:  
  
 Professional Land Surveyor L-3999



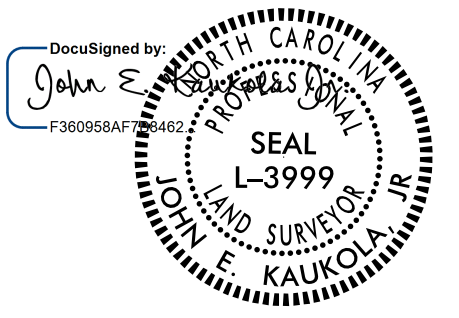
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REVISIONS

# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. U-4405A	SHEET NO. RW02C-4
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION AND SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR 	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

BL	POINT	DESC.	NORTH	EAST	ELEVATION
501		U4405-1	467351.7800	1993272.0230	199.08
502		U4405-2	467696.1290	1994125.5870	215.27
1		BL-1	467887.2854	1994725.4320	217.33
2		BL-2	468079.7036	1995412.1340	219.49
3		BL-3	468280.4685	1996253.3870	220.64
4		BL-4	468421.9013	1996856.9330	219.16
5		BL-5	468640.7760	1997726.6330	215.23
6		BL-6	468833.6921	1998515.7050	216.67
7		BL-7	468989.0442	1999139.8600	216.70
105		BL-105	469144.4040	1999709.7660	211.29
504		U4405-4	469468.9590	2000469.4370	203.29
8		BL-8	469798.5445	2001197.6680	192.13
9		BL-9	470068.8519	2001892.6950	197.99
10		BL-10	470237.9987	2002408.5410	210.02
402		U3424-2	470430.9535	2002945.1840	216.09
11		BL-11	470628.3125	2003619.4020	213.95

BY6	POINT	DESC.	NORTH	EAST	ELEVATION
E504			469468.9590	2000469.4370	203.29
48		BY6-48	469239.0238	2000838.2870	201.50
49		BY6-49	468590.8906	2000799.4900	215.43

BY7	POINT	DESC.	NORTH	EAST	ELEVATION
E9			470068.8519	2001892.6950	197.99
50		BY7-50	469750.4980	2002045.6110	184.15

BY8	POINT	DESC.	NORTH	EAST	ELEVATION
51		BY8-51	470734.2451	2002729.3742	216.13
E402			470430.9535	2002945.1840	216.11
52		BY8-52	469912.6522	2003082.1780	209.52

BY	POINT	DESC.	NORTH	EAST	ELEVATION
41		BY-41	468088.2809	1994640.2850	216.92
E1			467887.2854	1994725.4320	217.33

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
42		BY1-42	468496.8835	1995245.3730	219.97
E2			468079.7036	1995412.1340	219.49

BY2	POINT	DESC.	NORTH	EAST	ELEVATION
EE2			468079.7036	1995412.1340	219.49
43		BY2-43	467586.3115	1995502.7460	218.61

BY3	POINT	DESC.	NORTH	EAST	ELEVATION
44		BY3-44	468459.4648	1996169.8610	219.71
E3			468280.4685	1996253.3870	220.64

BY4	POINT	DESC.	NORTH	EAST	ELEVATION
EE3			468280.4685	1996253.3870	220.64
104		BY4-104	468227.7832	1996500.2970	219.71
45		BY4-45	467809.8736	1996575.0490	216.90

BY5	POINT	DESC.	NORTH	EAST	ELEVATION
46		BY5-46	469465.6282	1997667.7480	215.71
E5			468640.7760	1997726.6330	215.23
47		BY5-47	468197.7928	1997915.1380	208.81

\*\*\*\*\*  
 BM1 ELEVATION = 217.39  
 N 467812 E 1994333  
 R/R SPIKE SET IN 8" PINE  
 \*\*\*\*\*

\*\*\*\*\*  
 BM5 ELEVATION = 180.47  
 N 469612 E 2002119  
 BENCH TIE IN POWER POLE  
 \*\*\*\*\*

\*\*\*\*\*  
 BM2 ELEVATION = 221.46  
 N 468509 E 1996113  
 BENCH TIE SET IN TREE  
 \*\*\*\*\*

\*\*\*\*\*  
 BM6 ELEVATION = 207.85  
 N 470887 E 2003652  
 BENCH TIE IN POWER POLE  
 \*\*\*\*\*

\*\*\*\*\*  
 BM3 ELEVATION = 217.46  
 N 468445 E 1998334  
 BENCH TIE SET IN TREE  
 \*\*\*\*\*

\*\*\*\*\*  
 BM7 ELEVATION = 192.81  
 N 470648 E 2005724  
 BENCH TIE IN POWER POLE  
 \*\*\*\*\*

\*\*\*\*\*  
 BM4 ELEVATION = 213.77  
 N 469021 E 2000106  
 BENCH TIE IN LIGHT POLE  
 \*\*\*\*\*

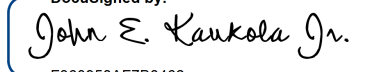
\*\*\*\*\*  
 BM8 ELEVATION = 171.28  
 N 470724 E 2007625  
 BENCH TIE IN LIGHT POLE  
 \*\*\*\*\*

I, John E. Kaukola, 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**  
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This 3rd day of August, 2021.

DocuSigned by:  
  
 Professional Land Surveyor L-3999



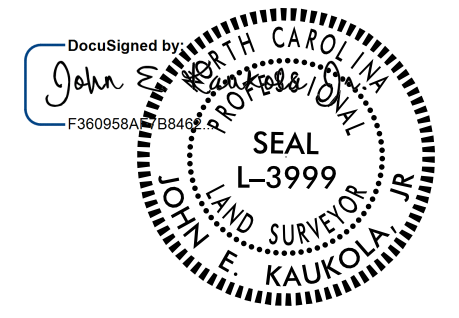
REVISIONS

### NOTES:

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- 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

PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW02C-5
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION AND SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR 	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	467760.243	1994411.104							
LINE			N 76°00'44.3" E	5143.22					
PC	469003.429	1999401.815	N 70°51'56.0" E	685.31	10°17'36.6"(LT)	01°30'00.0"	686.23	344.04	3819.72
CURVE									
PT	469228.064	2000049.264	N 65°43'07.7" E	1315.60					
LINE									
PC	469769.059	2001248.484	N 69°02'42.9" E	664.92	06°39'10.5"(RT)	01°00'00.0"	665.29	333.02	5729.58
CURVE									
PT	470006.854	2001869.426	N 72°22'18.2" E	2652.46					
LINE									
PC	470810.125	2004397.326	N 75°42'28.3" E	666.85	06°40'20.3"(RT)	01°00'00.0"	667.23	333.99	5729.58
CURVE									
PT	470974.748	2005043.540	S 79°02'38.5" W	0.00					
LINE									
PC	470974.748	2005043.540	N 83°22'54.5" E	157.38	08°40'32.1"(RT)	05°30'26.0"	157.53	78.92	1040.37
CURVE									
PT	470992.887	2005199.872	N 87°43'10.6" E	1808.41					
LINE									
PC	471064.843	2007006.846	S 80°56'48.6" E	750.65	22°40'01.7"(RT)	03°00'00.0"	755.57	382.79	1909.86
CURVE									
PT	470946.727	2007748.148	S 69°36'47.7" E	563.39					
LINE									
PC	470750.468	2008276.245	S 73°24'07.2" E	432.68	07°34'39.0"(LT)	01°45'00.0"	433.00	216.82	3274.04
CURVE									
PT	470626.870	2008690.901	S 77°11'26.7" E	878.71					
LINE									
PC	470432.055	2009547.743	S 86°07'26.1" E	593.13	17°51'58.8"(LT)	03°00'00.0"	595.54	300.21	1909.86
CURVE									
PT	470391.960	2010139.520	N 84°56'34.5" E	3744.65					
LINE									
PC	470722.044	2013869.595	N 85°42'39.2" E	307.18	01°32'09.4"(RT)	00°30'00.0"	307.19	153.60	11459.16
CURVE									
PT	470745.018	2014175.914	N 86°28'43.9" E	5050.95					
LINE									
PC	471055.231	2019217.332	N 84°23'22.4" E	208.88	04°10'42.9"(LT)	02°00'00.0"	208.93	104.51	2864.79
CURVE									
PT	471075.653	2019425.215	N 82°18'00.9" E	4068.40					
LINE									
POT	471620.744	2023456.938	N 84°09'30.1" E	222.44					
LINE									
POT	471643.384	2023678.224	N 82°18'36.0" E	763.38					
LINE									
PC	471745.535	2024434.738	N 60°31'38.7" E	531.54	43°33'54.7"(LT)	00°00'00.0"	544.56	286.21	716.20
CURVE									
PT	472007.057	2024897.493	N 38°44'41.3" E	371.12					
LINE									
POT	472296.511	2025129.762							

EY POINT	N	E	BEARING	DIST
POT	468116.756	1994615.665		
LINE			S 13°51'11.0" E	296.50
POT	467828.883	1994686.656		

EY1 POINT	N	E	BEARING	DIST
POT	468513.909	1995259.709		
LINE			S 15°13'18.3" E	195.46
POT	468325.305	1995311.029		
LINE			S 14°17'21.6" E	146.35
POT	468183.478	1995347.152		
LINE			S 15°04'48.0" E	184.46
POT	468005.367	1995395.143		

EY2 POINT	N	E	BEARING	DIST
POT	468006.025	1995397.782		
LINE			S 14°04'14.0" E	385.69
POT	467631.902	1995491.551		

EY3 POINT	N	E	BEARING	DIST
POT	468462.052	1996153.179		
LINE			S 15°08'06.0" E	259.97
POT	468211.102	1996221.055		

EY5 POINT	N	E	BEARING	DIST
POT	469439.832	1997651.012		
LINE			S 10°11'39.0" E	316.61
POT	469128.218	1997707.047		
LINE			S 09°58'21.0" E	532.04
POT	468604.213	1997799.184		
LINE			S 76°00'44.3" W	0.81
POT	468604.018	1997798.398		
LINE			S 10°17'01.0" E	431.55
POT	468179.398	1997875.438		

EY7 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	470031.869	2001948.149							
LINE			S 20°34'40.0" E	207.88					
PC	469837.248	2002021.216							
CURVE			S 25°54'47.1" E	96.70	10°40'14.2"(LT)	11°01'06.3"	96.84	48.56	520.00
PT	469750.267	2002063.476							
LINE			S 31°14'54.2" E	13.85					
POT	469738.429	2002070.660							

EY8 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	470752.701	2002654.805							
LINE			S 38°19'07.8" E	96.77					
PC	470676.780	2002724.804							
CURVE			S 27°59'37.5" E	315.98	20°39'00.6"(RT)	06°30'00.0"	317.69	160.59	881.47
PT	470397.772	2002873.116							
LINE			S 17°40'07.2" E	68.60					
POT	470332.405	2002893.938							
LINE			S 17°40'07.2" E	451.84					
POT	469901.874	2003031.079							

EY4 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	467946.426	1996579.621							
LINE			S 05°55'01.5" W	12.78					
PC	467933.710	1996578.303							
CURVE			S 09°00'54.8" W	81.07	06°11'46.7"(RT)	07°38'22.0"	81.11	40.59	750.00
PT	467853.642	1996565.599							
LINE			S 12°06'48.1" W	48.59					
PC	467806.133	1996555.403							
CURVE			S 08°53'51.0" W	123.42	06°25'54.3"(LT)	05°12'31.3"	123.48	61.81	1100.00
PT	467684.202	1996536.314							
LINE			S 05°40'53.8" W	16.59					
POT	467667.697	1996534.672							

EY4A POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	467841.946	1996563.089							
LINE			S 84°17'06.0" E	108.44					
PC	467831.148	1996670.988							
CURVE			N 87°44'33.1" E	117.89	15°56'41.8"(LT)	13°28'52.9"	118.27	59.52	425.00
PT	467835.792	1996788.789							
LINE			N 79°46'12.2" E	31.37					
POT	467841.363	1996819.663							

EY6 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	469544.126	2000749.877							
LINE			S 13°43'40.0" E	128.81					
PC	469418.998	2000780.444							
CURVE			S 08°03'41.5" E	98.73	11°19'57.0"(RT)	11°27'33.0"	98.89	49.61	500.00
PT	469321.240	2000794.290							
LINE			S 02°23'43.0" E	274.10					
PC	469047.385	2000805.745							
CURVE			S 01°21'44.5" E	90.13	02°03'57.0"(RT)	02°17'30.6"	90.14	45.07	2500.00
PT	468957.276	2000807.888							
LINE			S 00°19'46.0" E	374.81					
PC	468582.471	2000810.043							
CURVE			S 00°35'51.6" W	80.90	01°51'15.2"(RT)	02°17'30.6"	80.91	40.46	2500.00
PT	468501.573	2000809.199							
LINE			S 01°31'29.1" W	42.71					
POT	468458.878	2000808.063							

I, John E. Kaukola, 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: **Sept. 2013**  
 Datum/Epoch: **NAD 83/2011**  
 Published/Fixed-control use: **N/A**  
 Localized around: **U3424-1**  
 Northing: **470729.901**  
 Easting: **2003980.051**  
 Combined grid factor: **0.99987500**  
 Geoid model: **G12**  
 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 began in September 2013, 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 21NCA 56.1600 as applicable.

This 3rd day of August, 2021.

DocuSigned by:  
**John E. Kaukola, Jr.**  
 Professional Land Surveyor L-3999



REVISIONS

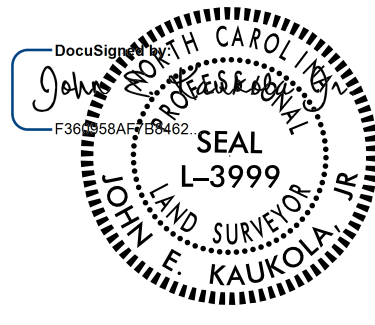
### NOTES:

- 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.





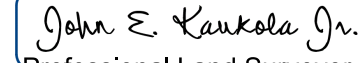
# RIGHT OF WAY CONTROL SHEET

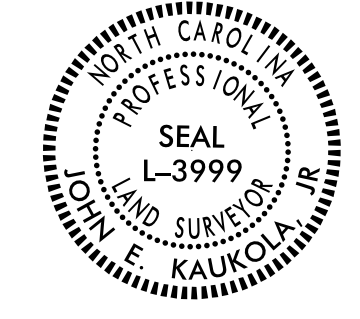
PROJECT REFERENCE NO. U-4405A	SHEET NO. RW02E-1
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION AND SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	28+45.00	-76.43	468270.3468	1996142.6713
L	28+79.21	-120.00	468320.8905	1996165.3412
L	29+29.44	-110.00	468323.3276	1996216.4961
L	29+65.00	-82.24	468304.9827	1996257.7106
L	47+60.96	77.40	468584.1876	1998039.0020
L	48+00.00	108.00	468563.9309	1998084.2814
L	48+00.00	83.01	468568.1771	1998078.2416
L	48+80.00	108.00	468583.2679	1998161.9092
L	49+11.00	77.33	468620.5213	1998184.5767
L	66+00.00	-77.76	469200.4996	1999770.6218
L	66+76.82	-105.00	469252.9117	1999830.7542
L	76+93.83	-102.00	469663.5603	2000755.8209
L	77+43.00	-71.39	469655.9342	2000813.2315
L	101+78.00	-83.03	470488.3061	2003108.0522
L	101+85.00	-97.00	470503.7438	2003110.4848
L	102+50.00	-97.00	470523.4655	2003172.4207
L	102+65.00	-88.00	470519.4409	2003189.4443
L	104+19.00	-86.00	470564.2604	2003336.7915
L	104+54.00	-82.50	470571.5412	2003371.2047

I, John E. Kaukola Jr., PLS, 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 11/01/2016 to 8/01/2021, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of August, 2021.  
 Decided by:  
  
 Professional Land Surveyor L-3999



ROW MARKER IRON PIN AND CAP-E

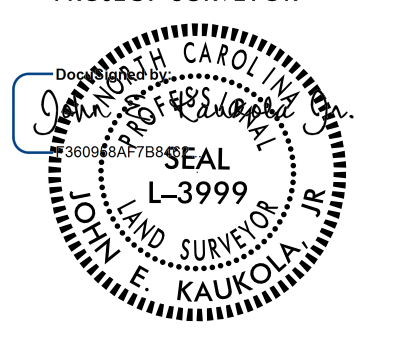
ALIGN	STATION	OFFSET	NORTH	EAST
Y5	21+94.68	-70.55	469500.6379	2000852.7407
Y5	22+14.00	-48.00	469472.7979	2000838.8144
Y5	22+50.72	59.32	469406.9850	2000746.6601
Y5	23+40.00	55.79	469329.2771	2000764.0095
Y5	23+57.00	-48.00	469320.3008	2000868.7679
Y5	25+01.00	-25.23	469173.0404	2000845.2189
Y5	25+72.33	-42.00	469101.4416	2000860.7817
Y5	27+24.00	-47.00	468949.7049	2000863.2223
Y5	27+69.41	32.14	468905.6359	2000783.3320
Y5	27+69.49	47.00	468905.8038	2000768.4682
Y5	27+99.04	-29.06	468874.9757	2000844.0220

**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 11/01/16 TO 8/01/21 .

REVISIONS

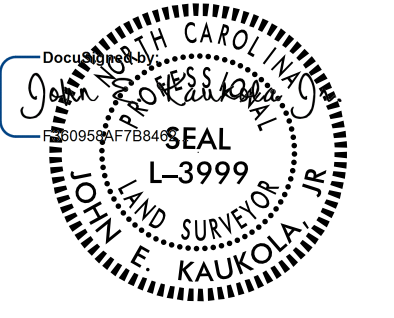
# PERMANENT EASEMENT CONTROL SHEET

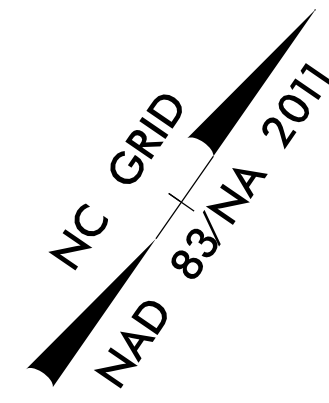
PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW02E-2
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION AND SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

ALIGN	STATION	OFFSET	NORTH	EAST
L	15+88.00	88.12	467814.5985	1994960.7862
L	16+27.00	100.00	467799.9826	1994984.0275
L	18+20.00	100.00	467851.3876	1995190.7116
L	18+70.00	98.00	467865.4139	1995238.7455
L	19+74.00	-77.04	468060.3999	1995297.3526
L	19+88.52	-77.06	468063.9296	1995311.4331
L	20+06.59	98.00	467898.4295	1995371.2851
L	20+93.59	116.00	467901.9924	1995460.0564
L	21+29.00	116.00	467910.5515	1995494.4164
L	21+39.00	106.00	467922.6721	1995501.7028
L	23+41.00	-76.77	468148.8533	1995653.5339
L	23+41.00	-92.00	468163.6270	1995649.3030
L	24+56.00	106.00	467999.2952	1995809.3030
L	24+82.00	80.15	468030.6641	1995828.2835
L	25+05.00	-76.64	468207.7030	1995890.3307
L	25+05.00	-92.00	468222.6051	1995886.6186
L	31+33.00	-81.87	468345.2378	1996420.8168
L	31+33.00	-115.00	468377.3821	1996412.8097
L	32+68.00	76.92	468223.7879	1996590.1954
L	32+71.00	-81.33	468378.0700	1996554.8554
L	32+71.00	-115.00	468410.7385	1996546.7177
L	32+92.00	84.00	468222.7153	1996615.1960
L	32+92.00	76.93	468229.5765	1996613.4868
L	33+20.00	76.94	468236.3298	1996640.6682
L	33+20.00	84.00	468229.4833	1996642.3657
L	40+37.00	73.31	468413.1616	1997335.5219
L	40+60.00	97.00	468395.7367	1997363.5652
L	44+17.00	-96.00	468669.3055	1997663.3287
L	44+17.00	-76.72	468650.5973	1997667.9889
L	44+34.84	97.00	468486.3413	1997727.2930
L	44+37.00	-96.00	468674.1398	1997682.7356
L	44+74.00	-133.00	468718.9861	1997709.6951
L	44+94.37	-133.00	468723.9101	1997729.4624
L	45+71.56	-112.00	468722.1909	1997809.4405
L	45+72.86	-129.00	468739.0005	1997806.5905
L	47+24.00	-68.65	468716.9701	1997967.8369
L	47+24.00	-118.00	468764.8592	1997955.9077
L	47+32.00	-129.00	468777.4667	1997961.0116
L	47+64.00	-97.00	468754.1505	1997999.7976
L	48+20.00	108.00	468568.7651	1998103.6883
L	48+55.00	143.00	468543.2629	1998146.1105
L	48+71.00	149.00	468541.3083	1998163.0863
L	48+72.00	117.00	468572.6011	1998156.3218
L	49+83.00	-121.00	468830.3740	1998206.5026
L	49+83.00	-97.00	468807.0857	1998212.3037
L	49+88.00	-86.00	468797.6204	1998219.8143
L	49+88.00	-76.43	468782.5088	1998223.5786
L	50+00.00	-121.00	468834.4832	1998222.9985
L	50+12.00	-97.00	468814.0954	1998240.4438
L	50+44.00	-70.80	468796.4110	1998277.8269
L	50+44.00	-86.00	468811.1564	1998274.1538
L	52+51.00	-88.00	468863.1318	1998474.5323
L	52+51.00	-72.20	468847.7993	1998478.3516
L	52+79.00	-88.00	468869.8998	1998501.7021
L	52+79.00	-72.39	468854.7504	1998505.4750
L	53+96.00	-73.18	468883.7960	1998618.8159
L	53+96.00	-97.50	468907.3985	1998612.9355
L	54+35.00	93.00	468731.9741	1998696.8264
L	54+35.00	77.09	468747.4128	1998692.9807
L	54+47.00	-97.50	468919.7259	1998662.4242
L	54+47.00	-73.52	468936.4569	1998668.2205
L	54+65.00	93.00	468739.2255	1998725.9389
L	54+65.00	77.08	468754.6775	1998722.0878
L	57+92.00	-88.00	468983.8988	1998959.4904
L	57+92.00	-75.84	468982.1041	1998982.4285
L	58+20.00	-76.03	468989.0551	1999029.5526
L	58+20.00	-88.00	469000.6667	1999026.6602
L	60+55.00	-98.00	469067.1729	1999252.2747
L	61+03.00	-95.00	469075.8641	1999299.5766
L	61+03.00	-75.52	469056.9614	1999304.2852
L	61+25.00	-75.46	469062.2151	1999325.6411
L	61+25.00	-65.00	469071.4765	1999323.3331
L	61+39.00	-138.00	469126.2730	1999324.0234
L	61+39.00	-196.00	469182.5437	1999309.9659
L	61+45.23	-138.00	469127.7705	1999330.0122
L	61+45.48	-196.00	469184.0945	1999316.1674
L	61+53.00	-75.62	469069.1359	1999352.6424
L	61+53.00	-95.00	469078.2308	1999350.3597
L	62+39.00	98.00	468922.7105	1999479.8101
L	62+39.00	77.37	468942.6337	1999474.4405
L	64+19.00	98.00	468974.9638	1999656.0862
L	64+75.17	96.20	468994.6809	1999711.0396
L	64+83.68	78.77	469013.9823	1999713.6940
L	70+83.00	80.77	469245.3019	2000274.5893
L	71+08.00	105.00	469233.5304	2000307.3517
L	73+38.00	98.00	469334.6924	2000514.0284

ALIGN	STATION	OFFSET	NORTH	EAST
L	73+38.00	81.33	469349.8836	2000507.1575
L	73+66.00	81.42	469361.3407	2000532.7063
L	73+66.00	97.00	469347.1424	2000539.1281
L	75+48.00	105.00	469414.8563	2000708.2519
L	75+51.48	100.00	469420.8460	2000709.3619
L	76+93.91	-141.00	469699.1249	2000739.8157
L	77+11.00	114.00	469473.8290	2000860.4761
L	77+65.00	97.00	469511.5719	2000902.6717
L	78+20.00	96.00	469535.1488	2000952.3721
L	78+30.00	92.00	469542.9144	2000959.8351
L	78+53.00	-71.22	469701.1123	2000913.5259
L	78+53.00	-113.00	469739.1758	2000896.3099
L	78+60.10	92.00	469555.3170	2000987.2565
L	78+74.00	85.46	469567.0097	2000997.2282
L	78+87.00	-71.17	469715.0764	2000944.5260
L	78+87.00	-113.00	469753.1874	2000927.2885
L	79+26.00	-161.00	469812.9940	2000943.0419
L	79+26.00	-141.00	469794.7713	2000951.2839
L	79+38.00	-142.00	469800.6276	2000961.8055
L	79+38.00	-162.00	469818.8504	2000953.5634
L	80+15.50	-141.05	469831.6992	2001032.8105
L	80+15.50	-70.98	469767.8525	2001061.6882
L	80+85.00	-70.88	469796.4180	2001125.1030
L	80+85.00	-140.20	469859.6042	2001096.5795
L	81+03.00	-159.00	469884.2080	2001105.4177
L	81+03.00	-140.00	469866.8819	2001113.2156
L	81+14.00	-140.00	469871.4459	2001123.3684
L	81+14.00	-159.00	469888.7774	2001115.5827
L	81+36.00	-140.00	469880.5732	2001143.7627
L	81+36.00	-70.93	469817.4956	2001171.8951
L	81+36.00	-181.00	469918.0179	2001127.0626
L	81+78.00	99.00	469679.0309	2001278.9447
L	81+98.98	118.28	469669.6093	2001305.5480
L	82+20.00	-187.79	469958.9223	2001203.4768
L	82+34.00	81.98	469716.5795	2001322.8327
L	82+35.11	98.61	469701.7200	2001330.3755
L	82+36.43	118.40	469684.0383	2001339.3499
L	82+40.00	171.00	469637.0322	2001363.2120
L	82+53.10	-141.00	469929.2445	2001253.0912
L	83+03.48	-71.40	469884.8791	2001327.2596
L	83+18.72	167.80	469669.6055	2001432.6173
L	83+27.50	230.00	469615.3112	2001464.1357
L	83+32.50	230.00	469617.1383	2001468.5932
L	83+40.00	-71.60	469899.1169	2001361.3400
L	83+40.00	-106.00	469930.9709	2001348.3424
L	83+49.00	82.84	469759.4728	2001427.9126
L	83+51.88	123.00	469723.3318	2001445.6444
L	83+55.00	166.00	469684.6307	2001464.6322
L	83+71.00	-144.00	469978.0617	2001363.3741
L	83+71.00	-157.00	469990.1223	2001368.5220
L	83+81.00	-157.00	469993.9401	2001368.0336
L	83+81.00	-140.00	469978.1586	2001374.3536
L	84+58.00	-132.00	469977.5395	2001394.3974
L	84+58.00	-72.63	469944.1321	2001471.8791
L	84+58.00	-98.00	469967.7956	2001462.7366
L	85+37.00	-139.00	470034.6664	2001523.4584
L	86+00.00	-94.00	470014.4839	2001599.1863
L	86+00.00	-75.46	469997.0447	2001605.4761
L	86+35.00	-141.00	470070.7430	2001616.9349
L	86+51.00	-76.35	470015.2242	2001653.7917
L	86+51.00	-97.00	470034.6780	2001646.9520
L	86+61.00	-114.00	470054.0848	2001650.9222
L	86+92.00	76.89	469883.9360	2001742.8744
L	86+92.00	87.00	469874.3775	2001746.1649
L	87+02.00	110.00	469855.8209	2001762.9444
L	87+21.00	76.76	469893.3201	2001769.9404
L	87+21.00	88.00	469882.6774	2001773.5495
L	88+49.00	-118.00	470118.3368	2001830.9573
L	88+60.00	110.00	469904.4984	2001910.8215
L	88+64.00	-125.00	470129.5963	2001843.2853
L	88+75.00	122.00	469897.6843	2001928.7026
L	88+87.00	-126.00	470137.5496	2001864.8735
L	88+94.24	122.00	469903.4361	2001947.0153
L	89+25.00	-120.00	470143.3621	2001902.9029
L	89+70.44	120.00	469928.4617	2002019.0163
L	89+92.00	99.00	469955.0143	2002033.1915
L	91+34.00	-100.00	470187.7177	2002108.1189
L	92+21.00	-86.00	470200.7744	2002195.2654
L	92+21.00	-76.77	470191.9765	2002198.0669
L	92+42.00	-86.00	470207.1460	2002215.2754
L	92+42.00	-76.76	470198.3371	2002218.0804
L	95+03.00	99.00	470110.0572	2002520.1029
L	95+26.00	75.65	470139.2860	2002534.9337
L	95+36.00	-76.59	470287.3849	2002498.2706
L	95+36.00	-89.00	470299.2074	2002494.5060
L	95+65.00	-89.00	470308.0063	2002522.1390
L	95+65.00	-76.58	470296.1685	2002525.9084

ALIGN	STATION	OFFSET	NORTH	EAST
L	96+13.00	-105.00	470337.8179	2002563.0252
L	96+13.00	-134.00	470365.4487	2002554.2227
L	96+24.00	-134.00	470368.78	

PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW4A
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION & SURVEYS 4824 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

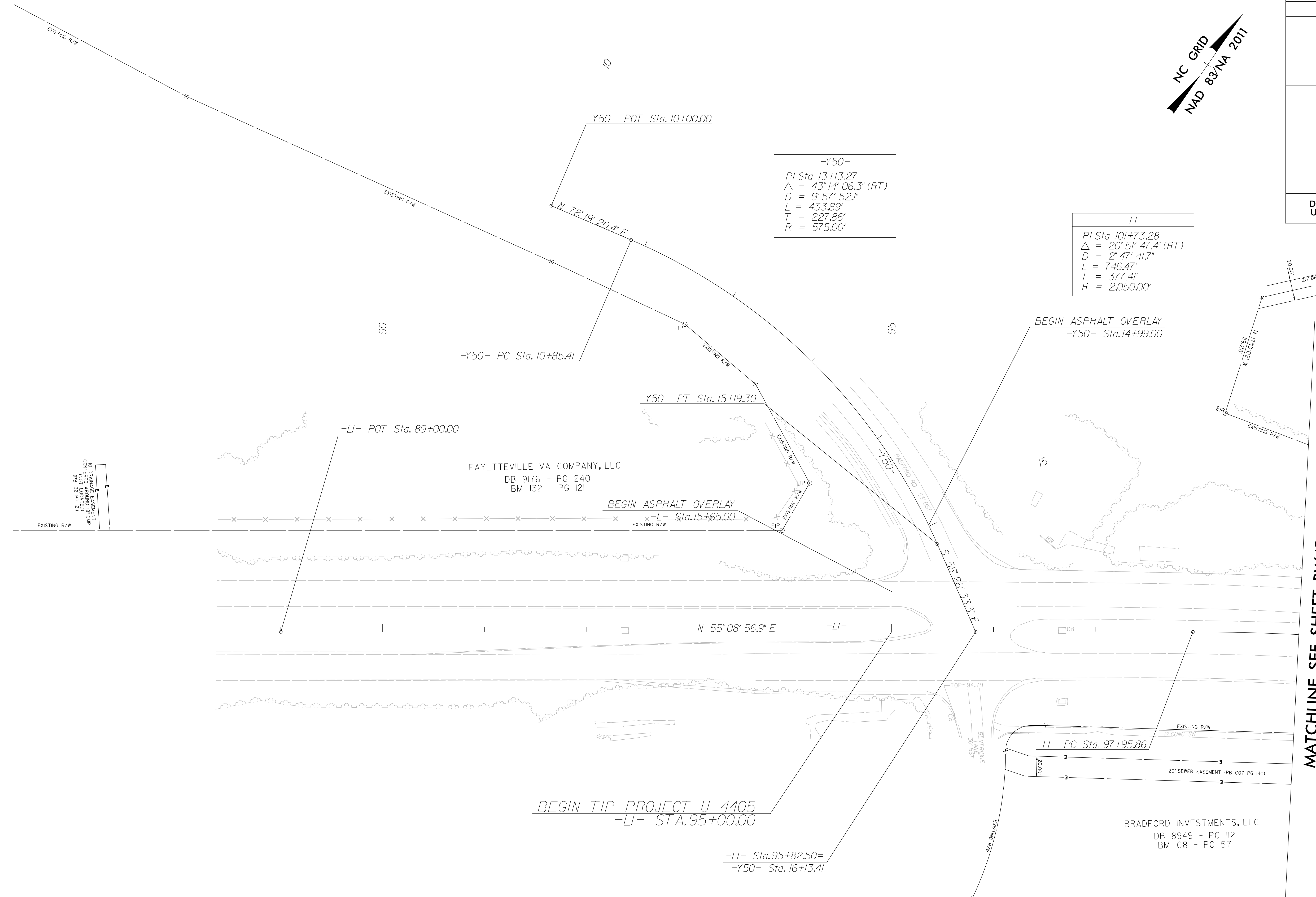


-Y50-

PI Sta 13+13.27  
 $\Delta = 43^{\circ}14'06.3''$  (RT)  
 D = 9' 57" 52.1"  
 L = 433.89'  
 T = 227.86'  
 R = 575.00'

-LI-

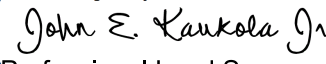
PI Sta 101+73.28  
 $\Delta = 20^{\circ}51'47.4''$  (RT)  
 D = 2' 47" 41.7"  
 L = 746.47'  
 T = 377.41'  
 R = 2,050.00'



REVISIONS

MATCHLINE SEE SHEET RW4B -LI- STA 99+00

I, John E. Kaukola, 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 11/01/2016 to 08/01/2021, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of August, 2021.  
 Designed by:  
  
 Professional Land Surveyor L-3999



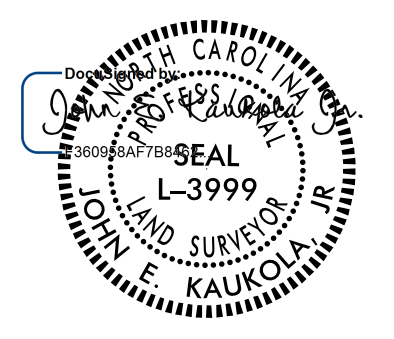
**NOTES:**

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 11/01/2016 TO 08/01/2021.

C:\Users\jkaukola\Documents\Projects\Control Sheets\U4405A\A-F\me1.210719\work\U4405A\_rdu\_psh\_04A.dgn  
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 embleskmon

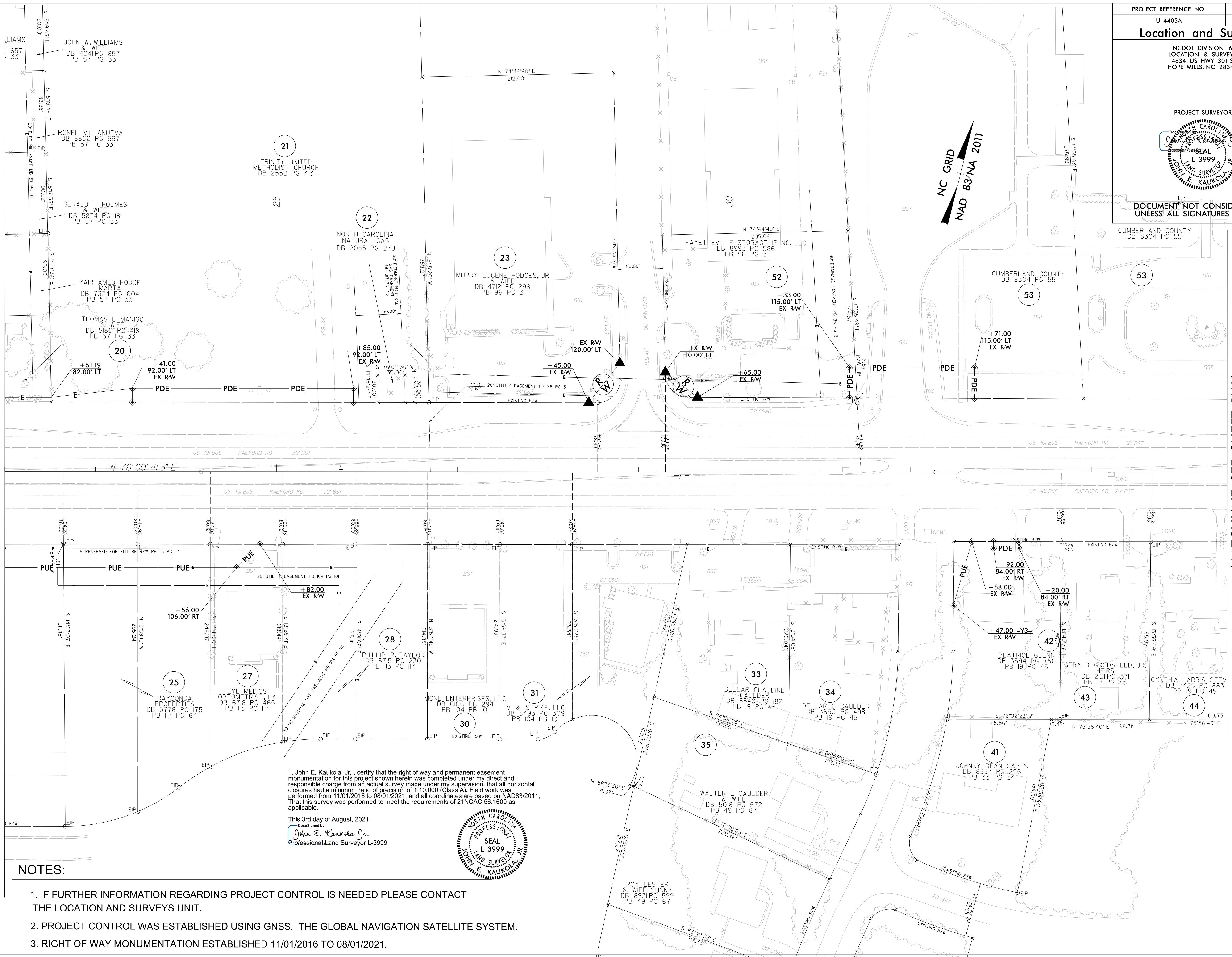




PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW5
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION & SURVEYS 4824 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
CUMBERLAND COUNTY DB 8304 PG 55	

MATCHLINE SEE SHEET RW4  
-L- STA 22+00

MATCHLINE SEE SHEET RW6  
-L- STA 35+00



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 11/01/2016 TO 08/01/2021.

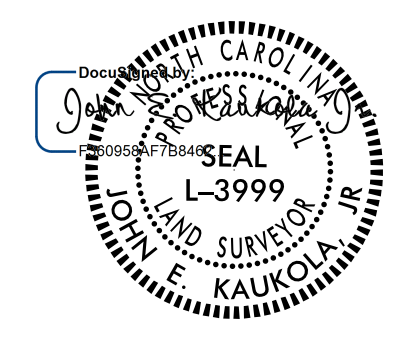
I, John E. Kaukola, Jr., certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 11/01/2016 to 08/01/2021, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56-1800 as applicable.

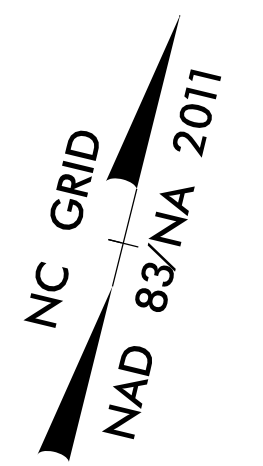
This 3rd day of August, 2021.

*John E. Kaukola, Jr.*  
Professional Land Surveyor L-3999



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 AT: 01106-312634

PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW6
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION & SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



I, John E. Kaukola, 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 11/01/2016 to 08/01/2021, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of August, 2021.  
 —Designed by—  
 John E. Kaukola, Jr.  
 Professional Land Surveyor L-3999  
 4834 US HWY 301 S  
 HOPE MILLS, NC 28348

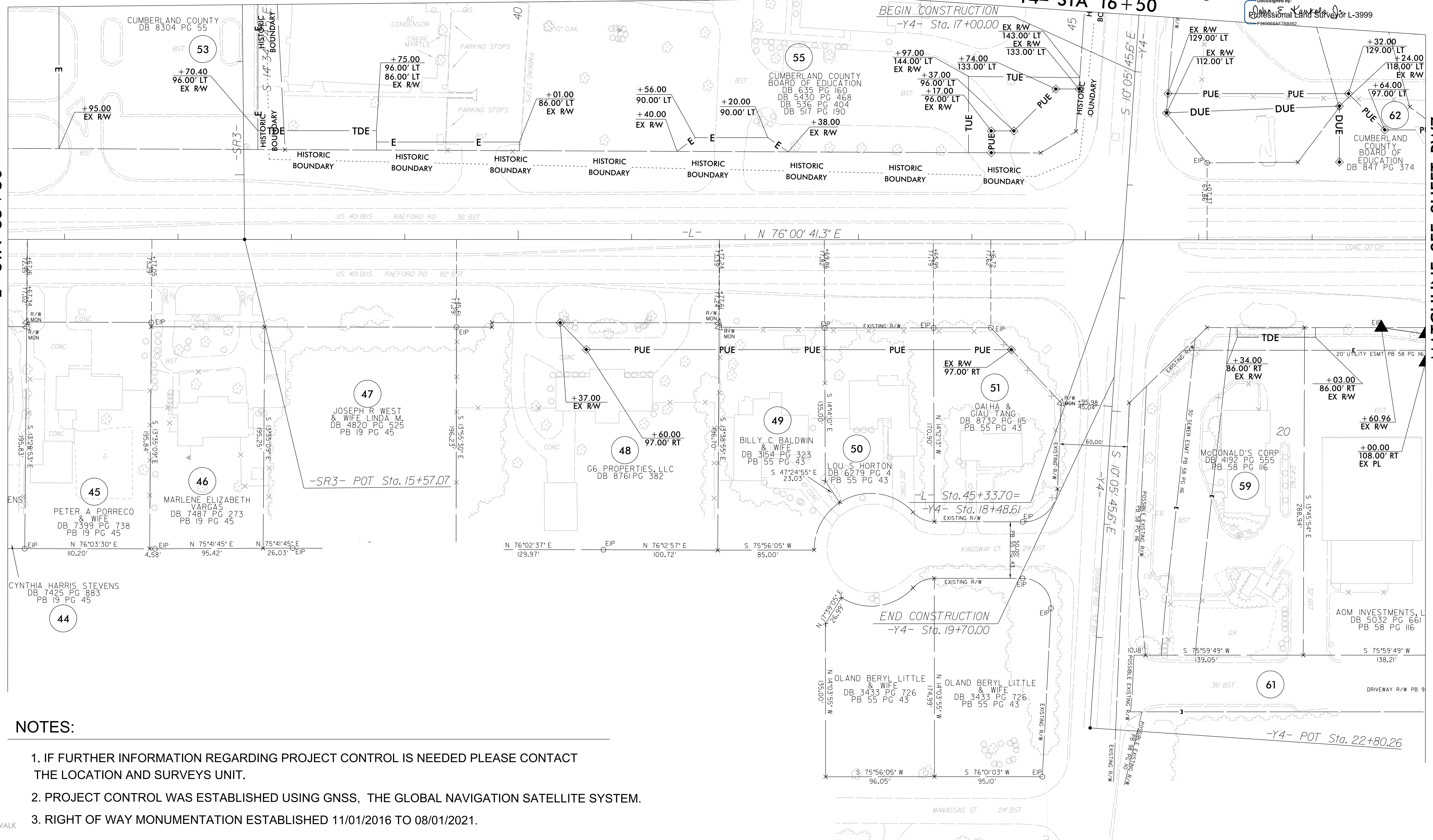


MATCHLINE SEE SHEET RW28  
 -SR3- STA 13+50

MATCHLINE SEE SHEET RW28  
 -Y4- STA 16+50

MATCHLINE SEE SHEET RW5  
 -L- STA 35+50

MATCHLINE SEE SHEET RW7  
 -L- STA 48+00



**NOTES:**

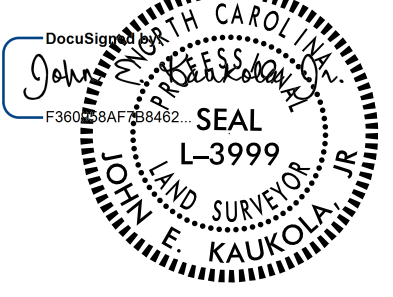
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 11/01/2016 TO 08/01/2021.

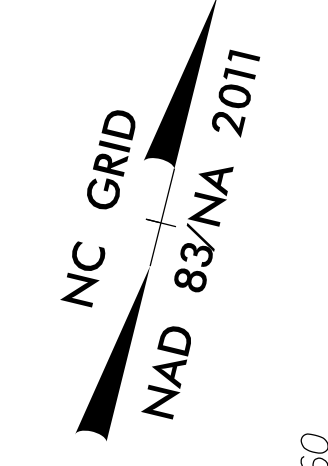


PROP CONC SIDEWALK

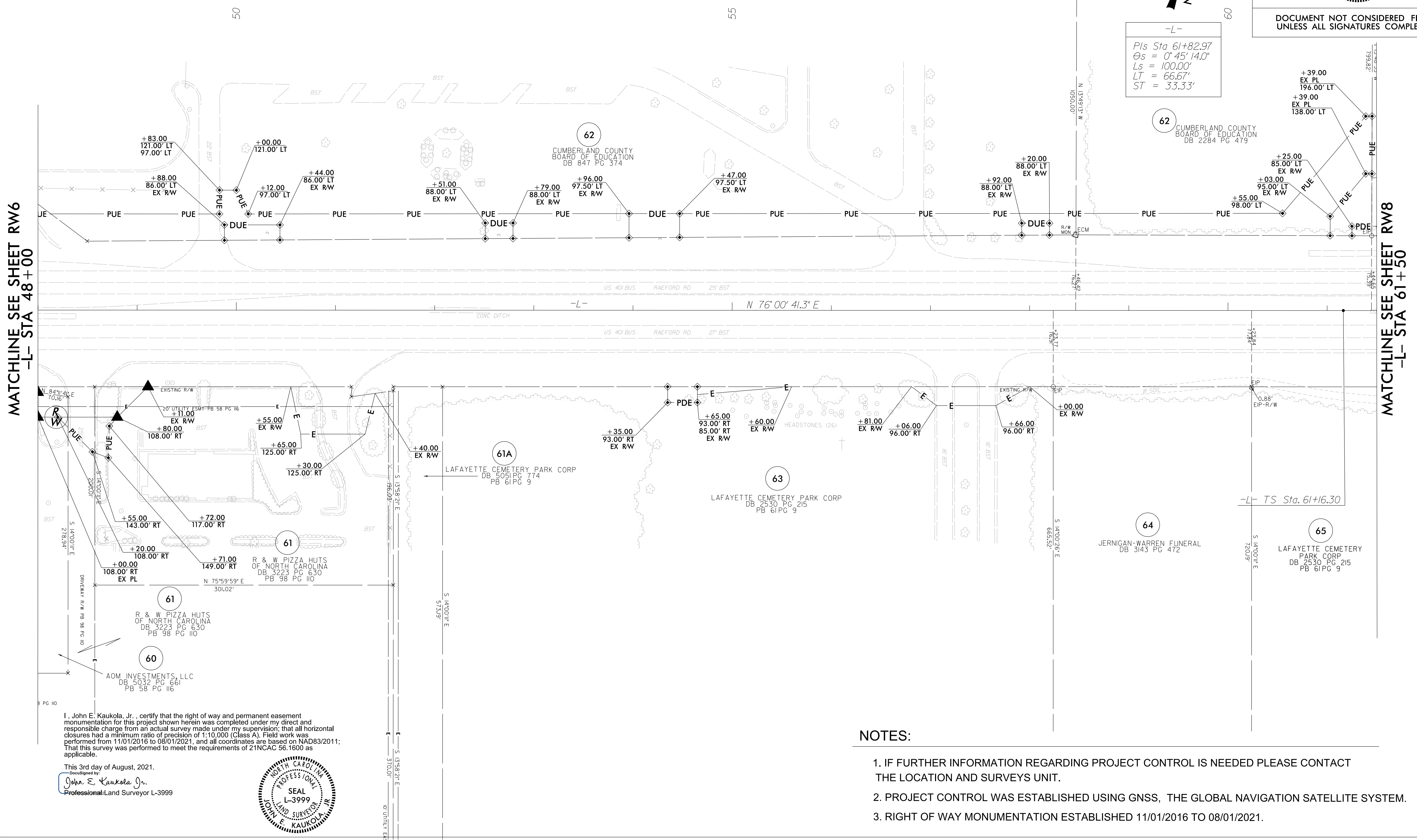
REVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW7
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION & SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



-L-  
 Pls Sta 61+82.97  
 Θs = 0° 45' 14.0"  
 Ls = 100.00'  
 LT = 66.67'  
 ST = 33.33'



MATCHLINE SEE SHEET RW6  
-L- STA 48+00

MATCHLINE SEE SHEET RW8  
-L- STA 61+50

REVISIONS

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I, John E. Kaukola, 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 11/01/2016 to 08/01/2021, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

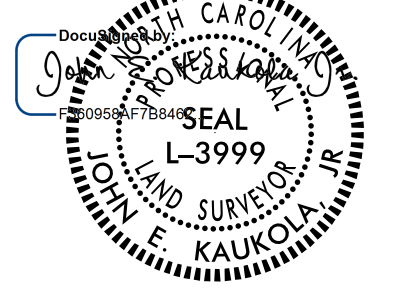
This 3rd day of August, 2021.  
 Documented by  
 John E. Kaukola, Jr.  
 Professional Land Surveyor L-3999



**NOTES:**

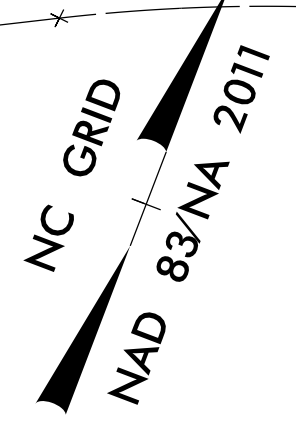
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 11/01/2016 TO 08/01/2021.



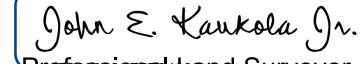
PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW8
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION & SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L-

Pls Sta 61+82.97 Cs = 0° 45' 14.0" Ls = 100.00' LT = 66.67' ST = 33.33'	Pls Sta 65+10.09 Δ = 8° 50' 29.8" (LT) D = 1° 30' 28.0" L = 586.40' T = 293.78' R = 3,800.00' SE = 0.025	Pls Sta 68+36.04 Cs = 0° 45' 14.0" Ls = 100.00' LT = 66.67' ST = 33.33'
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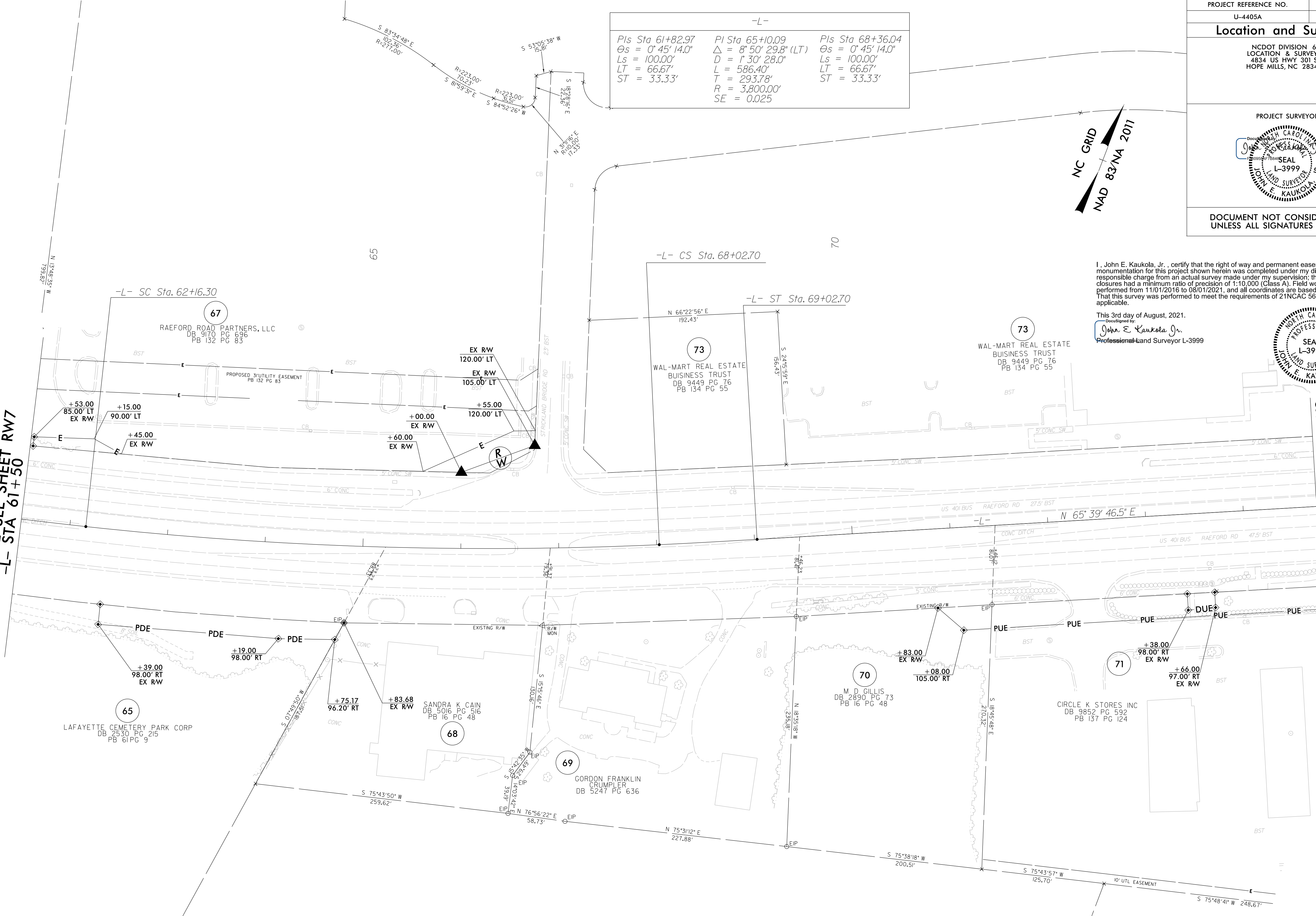
I, John E. Kaukola, Jr., certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 11/01/2016 to 08/01/2021, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 58.1600 as applicable.

This 3rd day of August, 2021.  
 Designed by:  
  
 Professional Land Surveyor L-3999



MATCHLINE SEE SHEET RW7  
-L- STA 61+50

MATCHLINE SEE SHEET RW9  
-L- STA 74+75



**NOTES:**

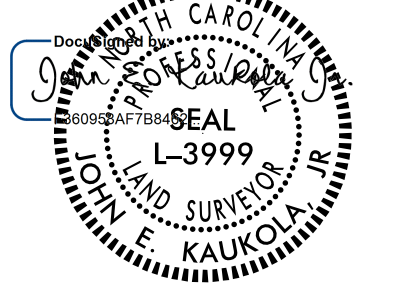
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
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3. RIGHT OF WAY MONUMENTATION ESTABLISHED 11/01/2016 TO 08/01/2021.

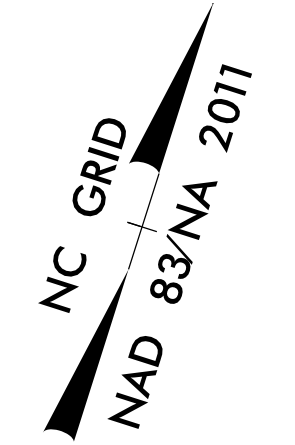
REVISIONS

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 embkmon





PROJECT REFERENCE NO.	SHEET NO.
U-4405A	RW11
<b>Location and Surveys</b>	
NCDOT DIVISION 6 LOCATION & SURVEYS 4834 US HWY 301 S HOPE MILLS, NC 28348	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
SARA WILLIAMS TOLLISON DB 4300 PG 509 PB 31 PG 18 PB 22 PG 28	

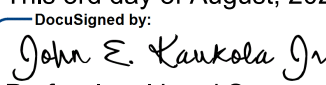


MATCHLINE SEE SHEET RW10  
 -L- STA 101+50



REVISIONS

I, John E. Kaukola, 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 11/01/2016 to 08/01/2021, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of August, 2021.  
 Signed by:  
  
 Professional Land Surveyor L-3999



**NOTES:**

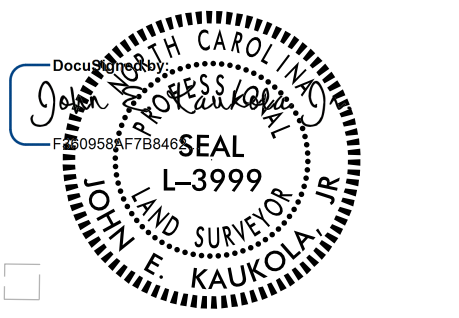
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 11/01/2016 TO 08/01/2021.

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**Location and Surveys**

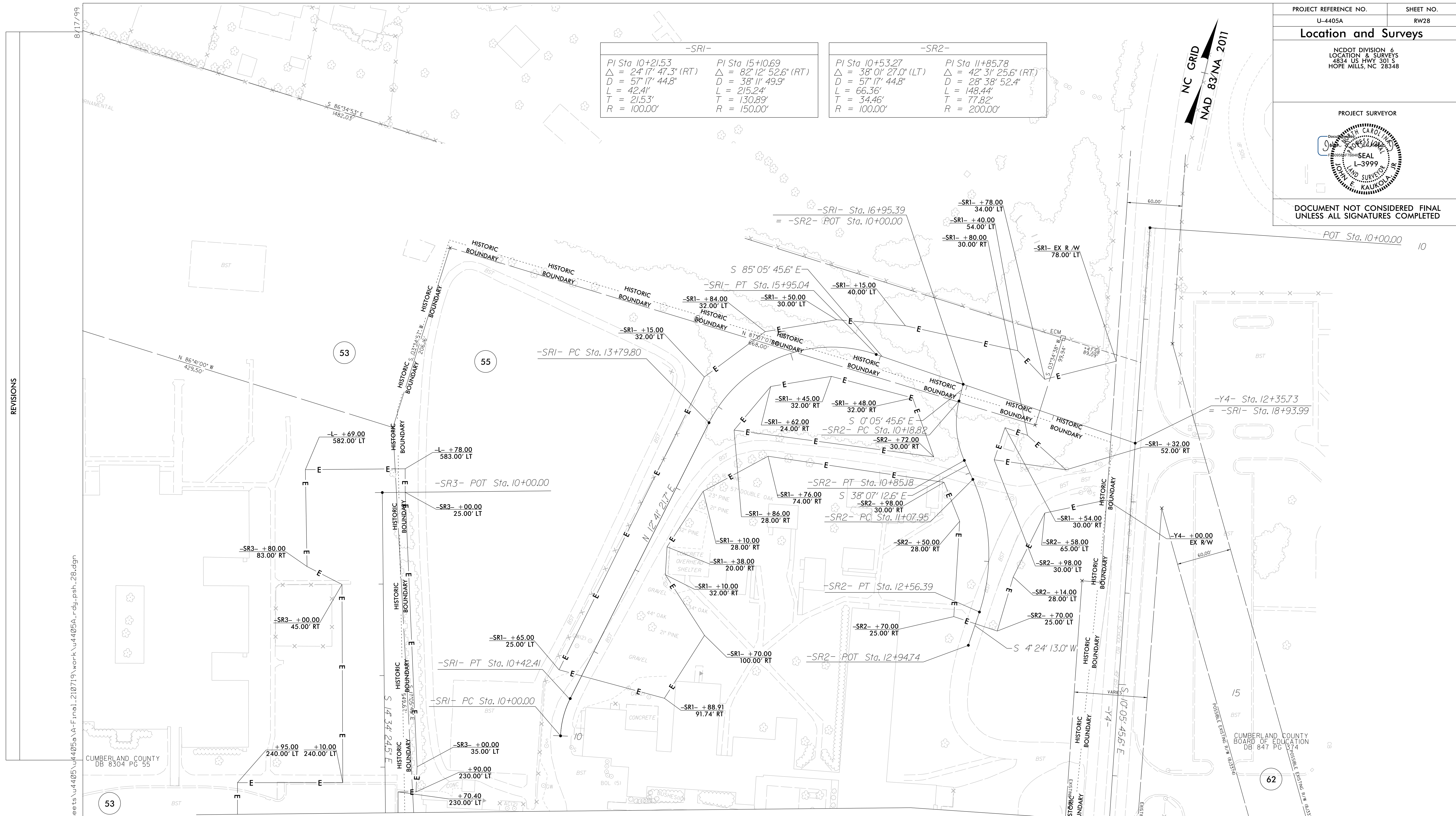
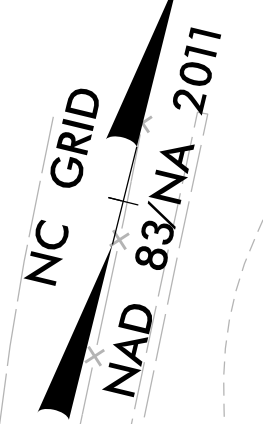
NCDOT DIVISION 6  
LOCATION & SURVEYS  
4834 US HWY 301 S  
HOPE MILLS, NC 28348

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

-SRI-		-SR2-	
PI Sta 10+21.53	PI Sta 15+10.69	PI Sta 10+53.27	PI Sta 11+85.78
$\Delta = 24' 17'' 47.3''$ (RT)	$\Delta = 82' 12'' 52.6''$ (RT)	$\Delta = 38' 01'' 27.0''$ (LT)	$\Delta = 42' 31'' 25.6''$ (RT)
D = 57' 17' 44.8"	D = 38' 11' 49.9"	D = 57' 17' 44.8"	D = 28' 38' 52.4"
L = 42.4'	L = 215.24'	L = 66.36'	L = 148.44'
T = 21.53'	T = 130.89'	T = 34.46'	T = 77.82'
R = 100.00'	R = 150.00'	R = 100.00'	R = 200.00'



MATCHLINE SEE SHEET RW6  
-SR3- STA 13+50

MATCHLINE SEE SHEET RW6  
-Y4- STA 16+50

I, John E. Kaukola, 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 11/01/2016 to 08/01/2021, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of August, 2021.  
 Discovered by  
**John E. Kaukola, Jr.**  
 Professional Land Surveyor L-3999



**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 11/01/2016 TO 08/01/2021.

REVISIONS

8/17/99  
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 AT 01V06-312634  
 emblockmon

CUMBERLAND COUNTY  
DB 8304 PG 55

CUMBERLAND COUNTY  
BOARD OF EDUCATION  
DB 847 PG 574

