

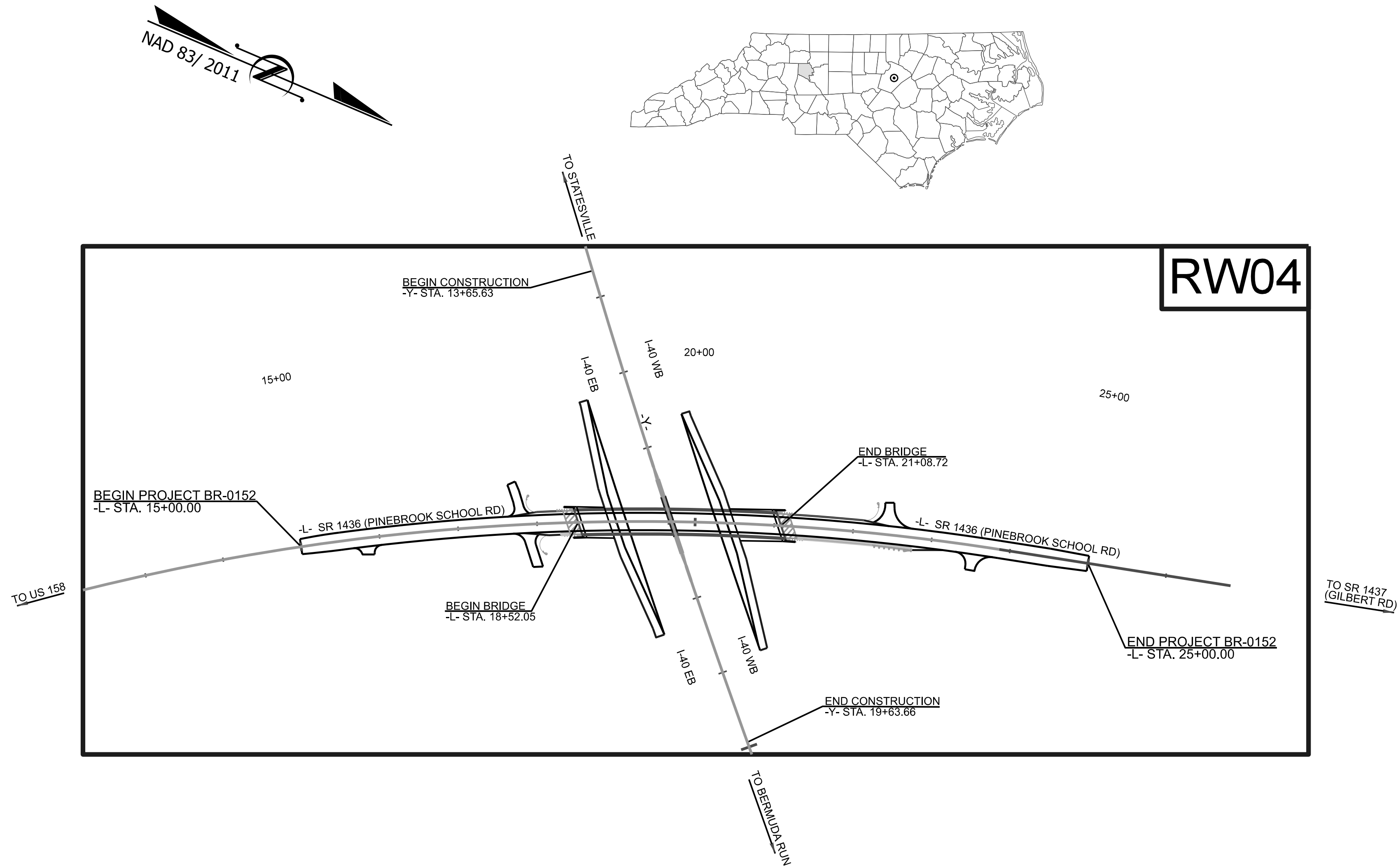
# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE N.C.	STATE PROJECT REFERENCE NO. BR-0152	SHEET NO. RW01	TOTAL SHEETS 5
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SURVEY CONTROL, EXISTING CENTERLINES,  
RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

## DAVIE COUNTY

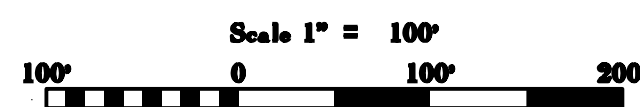
TIP PROJECT: BR-0152



RW04

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**GRAPHIC SCALES**



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BR-0152-1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 810864.7500 EASTING: 1551763.7179 ELEVATION: 739.655 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99992044873 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:  
LOCATION AND SURVEYS  
DIVISION 9  
403 POLO ROAD  
WINSTON-SALEM, NC 27105

2024 STANDARD SPECIFICATIONS

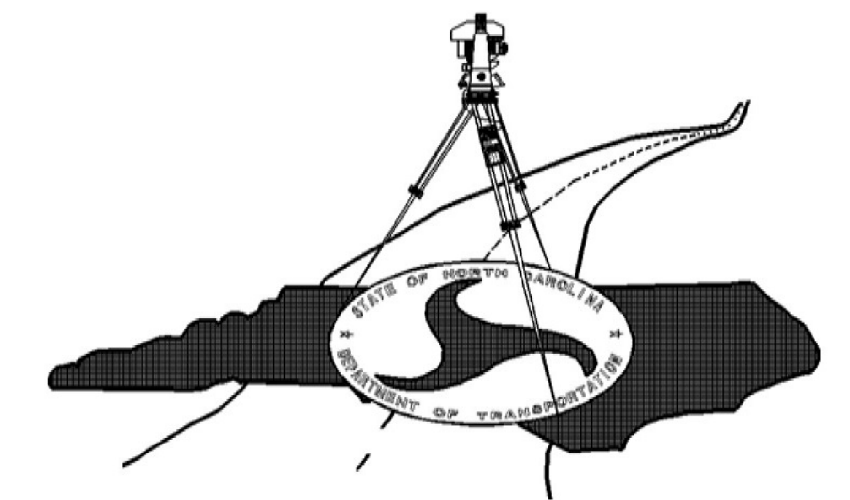
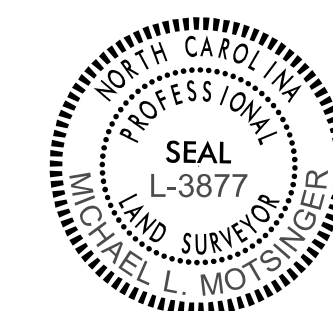
RIGHT OF WAY DATE:  
12-19-2024

LETTING DATE:  
02-18-2025

PROFESSIONAL LAND  
SURVEYOR

DocuSigned by:  
*Michael L. Motzinger*  
MICHAEL L. MOTZINGER

10/07/2024  
DATE:

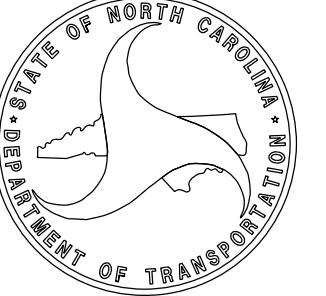


# PRIMARY SURVEY CONTROL SHEET

BR-0152

R/W 02G-1

NORTH CAROLINA  
DEPARTMENT  
OF TRANSPORTATION



PROFESSIONAL LAND  
SURVEYOR



DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL SIGNATURES  
ARE COMPLETED

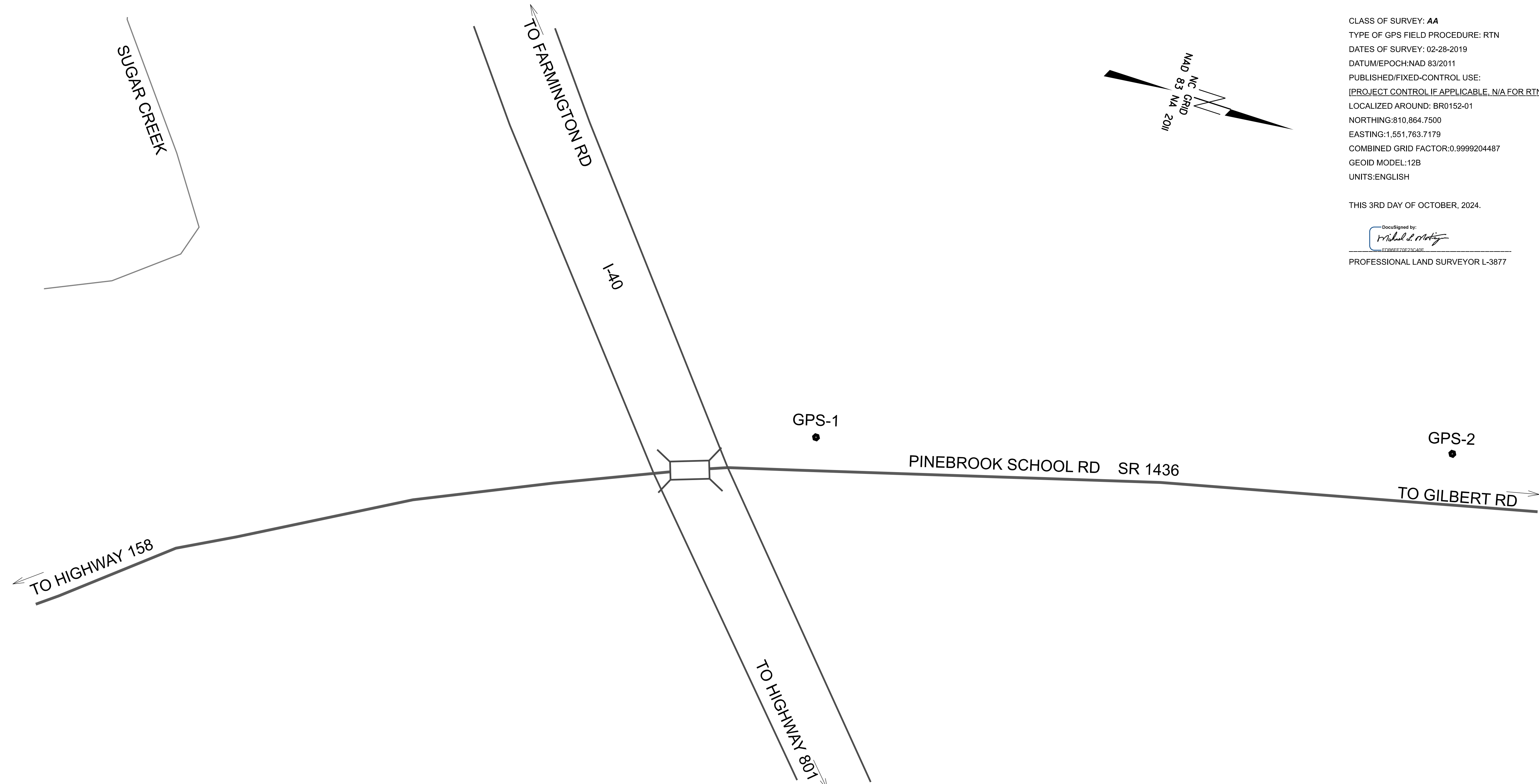
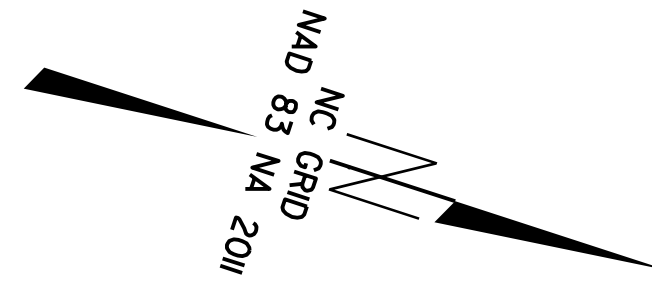
2024 STANDARD  
SPECIFICATIONS

I, Michael L. Motsinger, PLS, CERTIFY THAT THE PRIMARY PROJECT CONTROL WAS [PERFORMED/VERIFIED] UNDER MY SUPERVISION FROM AN ACTUAL GPS SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:

CLASS OF SURVEY: AA  
 TYPE OF GPS FIELD PROCEDURE: RTN  
 DATES OF SURVEY: 02-28-2019  
 DATUM/EPOCH: NAD 83/2011  
 PUBLISHED/FIXED-CONTROL USE:  
 [PROJECT CONTROL IF APPLICABLE, N/A FOR RTN]  
 LOCALIZED AROUND: BR0152-01  
 NORTHING: 810,864.7500  
 EASTING: 1,551,763.7179  
 COMBINED GRID FACTOR: 0.9999204487  
 GEOID MODEL: 12B  
 UNITS: ENGLISH

THIS 3RD DAY OF OCTOBER, 2024.

DocuSigned by:  
  
 PROFESSIONAL LAND SURVEYOR L-3877



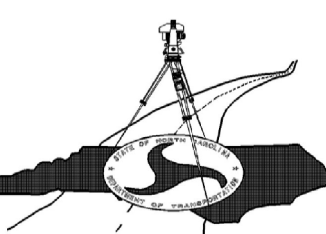
PRIMARY CONTROL TABLE				
Benchmark	Description	Northing	Easting	Elevation
1	GPS-1	810864.7500	1551763.7179	739.655
2	GPS-2	811583.9179	1551550.4333	753.164

NOTES:

1. 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.

**TIP PROJECT: BR-0152**  
 County: Davie

PREPARED FOR

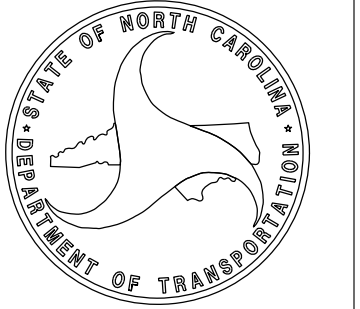


LOCATION AND SURVEYS UNIT

PREPARED BY:  
 LOCATION AND SURVEYS  
 DIVISION 9  
 403 POLO RD  
 WINSTON-SALEM, NC 27105

# SECONDARY SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



PROFESSIONAL LAND SURVEYOR



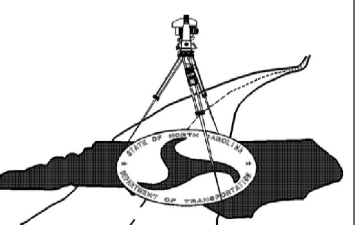
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES ARE COMPLETED

2024 STANDARD SPECIFICATIONS

## TIP PROJECT: BR-0152

### County: Davie

PREPARED FOR



LOCATION AND SURVEYS UNIT

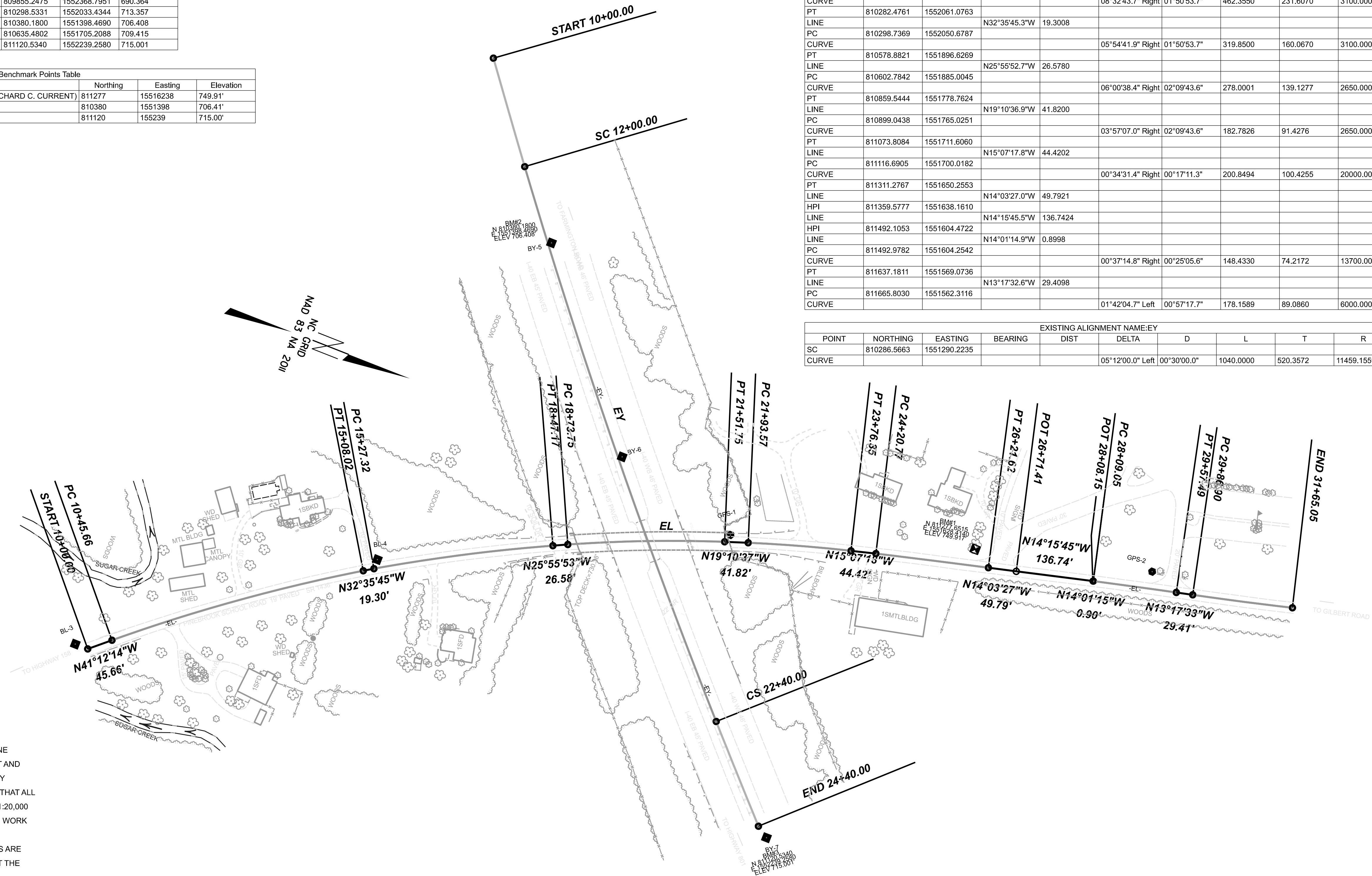
PREPARED BY:  
LOCATION AND SURVEYS  
DIVISION 9  
403 POLO RD  
WINSTON-SALEM, NC 27105

Baseline Points Table				
Benchmark	Description	Northing	Easting	Elevation
3	BL-3	809855.2475	1552368.7951	690.364
4	BL-4	810298.5331	1552033.4344	713.357
5	BY-5	810380.1800	1551398.4690	706.408
6	BY-6	810635.4802	1551705.2088	709.415
7	BY-7	811120.5340	1552239.2580	715.001

Benchmark Points Table				
Benchmark	Description	Northing	Easting	Elevation
BM1	GRANITE SURVEY MARKER (RICHARD C. CURRENT)	811277	15516238	749.91'
BM2	REBAR CAP (BY-5)	810380	1551398	706.41'
BM3	REBAR CAP (BY-7)	811120	155239	715.00'

POINT	NORTHING	EASTING	BEARING	DIST	EXISTING ALIGNMENT NAME:EL					
					DELTA	D	L	T	R	
START	809878.8765	1552368.7059								
LINE			N41°12'13.8"W	45.6616						
PC	809913.2310	1552338.6267								
CURVE					08°32'43.7" Right	01°50'53.7"	462.3550	231.6070	3100.0000	
PT	810282.4761	1552061.0763								
LINE			N32°35'45.3"W	19.3008						
PC	810298.7369	1552050.6787								
CURVE					05°54'41.9" Right	01°50'53.7"	319.8500	160.0670	3100.0000	
PT	810578.8821	1551896.6269								
LINE			N25°55'52.7"W	26.5780						
PC	810602.7842	1551885.0045								
CURVE					06°00'38.4" Right	02°09'43.6"	278.0001	139.1277	2650.0000	
PT	810859.5444	1551778.7624								
LINE			N19°10'36.9"W	41.8200						
PC	810899.0438	1551765.0251								
CURVE					03°57'07.0" Right	02°09'43.6"	182.7826	91.4276	2650.0000	
PT	811073.8084	1551711.6060								
LINE			N15°07'17.8"W	44.4202						
PC	811116.6905	1551700.0182								
CURVE					00°34'31.4" Right	00°17'11.3"	200.8494	100.4255	20000.0000	
PT	811311.2767	1551650.2553								
LINE			N14°03'27.0"W	49.7921						
HPI	811359.5777	1551638.1610								
LINE			N14°15'45.5"W	136.7424						
HPI	811492.1053	1551604.4722								
LINE			N14°01'14.9"W	0.8998						
PC	811492.9782	1551604.2542								
CURVE					00°37'14.8" Right	00°25'05.6"	148.4330	74.2172	13700.0000	
PT	811637.1811	1551569.0736								
LINE			N13°17'32.6"W	29.4098						
PC	811665.8030	1551562.3116								
CURVE					01°42'04.7" Left	00°57'17.7"	178.1589	89.0860	6000.0000	

POINT	NORTHING	EASTING	BEARING	DIST	EXISTING ALIGNMENT NAME:EY					
					DELTA	D	L	T	R	
SC	810286.5663	1551290.2235								
CURVE					05°12'00.0" Left	00°30'00.0"	1040.0000	520.3572	11459.1559	

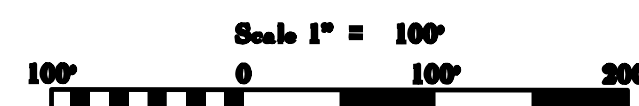


I, Michael L. Motsinger, PLS, CERTIFY THAT THE SECONDARY BASELINE CONTROL FOR THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION UTILIZING PRIMARY GPS CONTROL SET BY OTHERS; THAT ALL HORIZONTAL CLOSURES HAD A MINIMUM RATIO OF PRECISION OF 1:20,000 (CLASS AA) AND VERTICAL ACCURACY TO 1:10,000 (CLASS A). FIELD WORK WAS PERFORMED FROM APRIL 2022 TO OCTOBER 2022, AND ALL COORDINATES ARE BASED ON NAD 83/NA 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 OCTOBER, 2024.

DocuSigned by:  
*Michael L. Motsinger*  
F0B9F7E70E23C40E

PROFESSIONAL LAND SURVEYOR L-3877



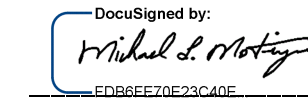
#### NOTES:

1. 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.

# PROPOSED ALIGNMENT CONTROL SHEET

I, Michael L. Molsinger, 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 3RD DAY OF OCTOBER, 2024.

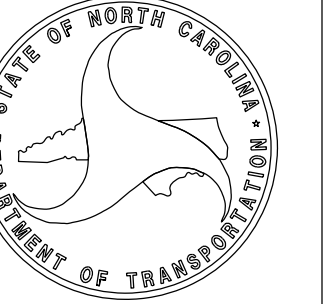
DocuSigned by:  


PROFESSIONAL LAND SURVEYOR L-3877

BR-0152

R/W 020-1

NORTH CAROLINA  
DEPARTMENT  
OF TRANSPORTATION



PROFESSIONAL LAND  
SURVEYOR



DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL SIGNATURES  
ARE COMPLETED

2024 STANDARD  
SPECIFICATIONS

PROPOSED ALIGNMENT: L												
POINT	STATION	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R	LT	ST
PC	10+00.00	809913.2306	1552338.6263	N27°51'29.1"W	1373.4981	27°14'02.2"	01°57'51.1"	1386.5136	706.6109	2917.0000		
PT	23+86.51	811127.5508	1551696.8137	N14°14'28.0"W	296.1382							
END	26+82.65	811414.5885	1551623.9628									

PROPOSED ALIGNMENT: Y												
POINT	STATION	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R	LT	ST
PC	10+00.00	810286.5663	1551290.224	N49°27'59.0"E	1039.6431	05°12'00.0"	00°30'00.0"	1040	520.3572	11459.1559		
CS	20+40.00	810962.2242	1552080.378			00°30'00.0"		200			133.3339	66.6672
END	22+40.00	811099.8109	1552225.532									

**NOTES:**

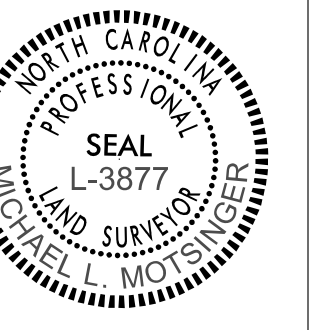
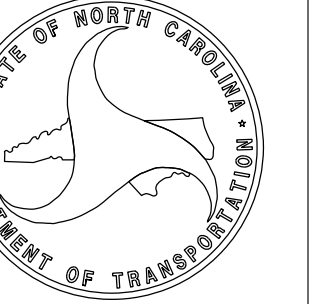
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**TIP PROJECT: BR-0152**  
 County: Davie

PREPARED FOR

LOCATION AND  
SURVEYS UNIT

PREPARED BY:  
 LOCATION AND SURVEYS  
 DIVISION 8  
 403 POLO RD  
 WINSTON-SALEM, NC 27105

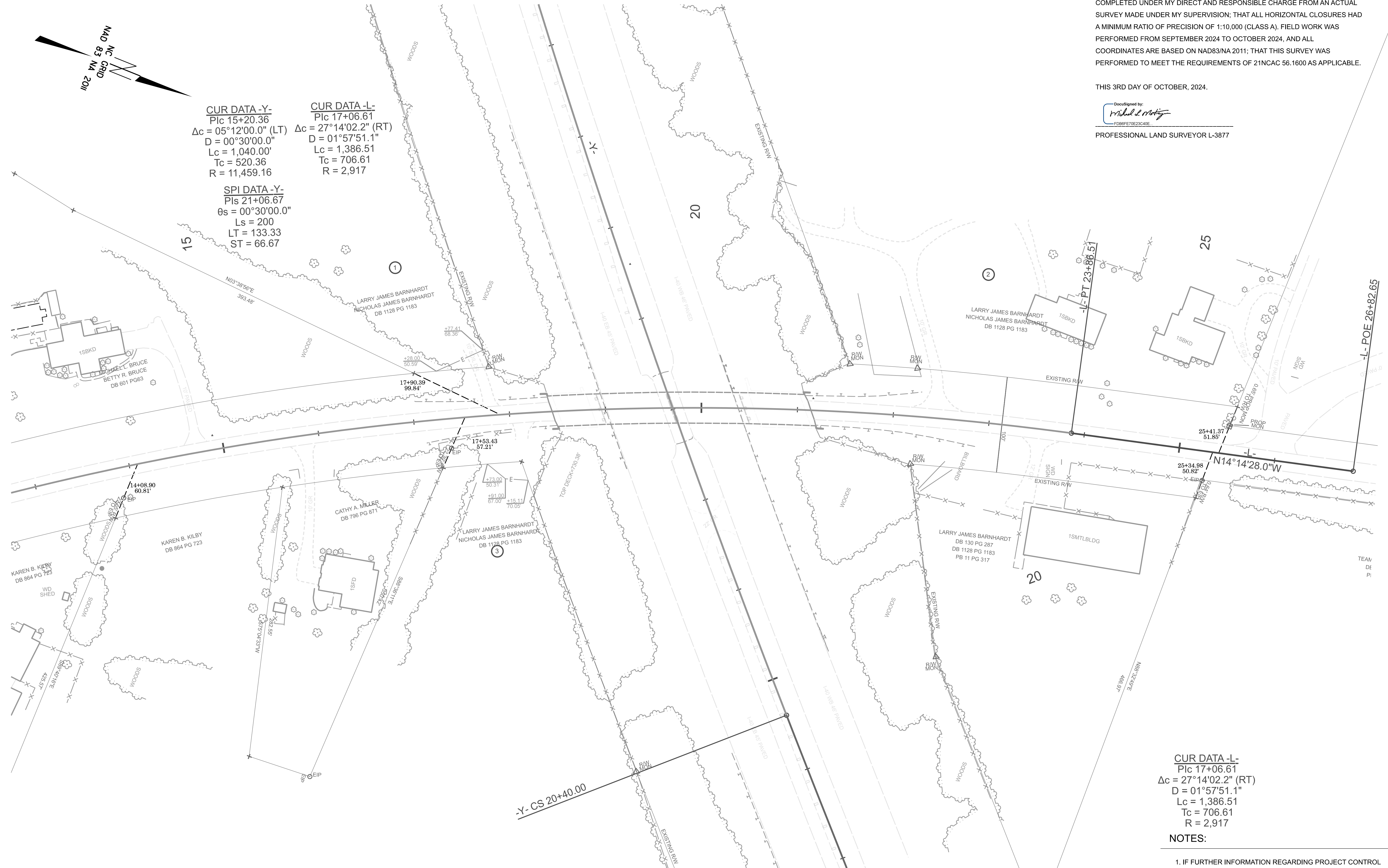


I, Michael L. Motsinger, PLS, CERTIFY THAT THE RIGHT OF WAY AND PERMANENT EASEMENT MONUMENTATION FOR THIS PROJECT SHOWN HEREIN WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT ALL HORIZONTAL CLOSURES HAD A MINIMUM RATIO OF PRECISION OF 1:10,000 (CLASS A). FIELD WORK WAS PERFORMED FROM SEPTEMBER 2024 TO OCTOBER 2024, AND ALL COORDINATES ARE BASED ON NAD83/NA 2011; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS OF 21NCAC 56.1600 AS APPLICABLE.

THIS 3RD DAY OF OCTOBER, 2024.

DocuSigned by:  
*Michael L. Motsinger*  
FDB8FE70E23C40E

PROFESSIONAL LAND SURVEYOR L-3877



**CUR DATA -Y-**  
P/c 15+20.36  
 $\Delta c = 05^\circ 12'00.0''$  (LT)  
D = 00°30'00.0"  
Lc = 1,040.00'  
Tc = 520.36  
R = 11,459.16

**CUR DATA -L-**  
P/c 17+06.61  
 $\Delta c = 27^\circ 14'02.2''$  (RT)  
D = 01°57'51.1"  
Lc = 1,386.51  
Tc = 706.61  
R = 2,917

**SPI DATA -Y-**  
P/s 21+06.67  
 $\theta s = 00^\circ 30'00.0''$   
Ls = 200  
LT = 133.33  
ST = 66.67

**CUR DATA -L-**  
P/c 17+06.61  
 $\Delta c = 27^\circ 14'02.2''$  (RT)  
D = 01°57'51.1"  
Lc = 1,386.51  
Tc = 706.61  
R = 2,917

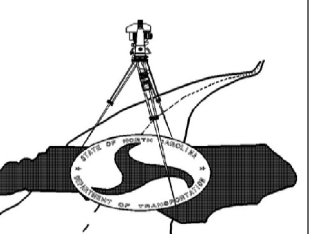
**NOTES:**

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

# TIP PROJECT: BR-0152

## County: Davie

PREPARED FOR



LOCATION AND SURVEYS UNIT

PREPARED BY:  
LOCATION AND SURVEYS  
DIVISION 9  
403 POLO RD  
WINSTON-SALEM, NC 27105