

09/06/99

**TIP PROJECT: BR-0069**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0069	RW01	04

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

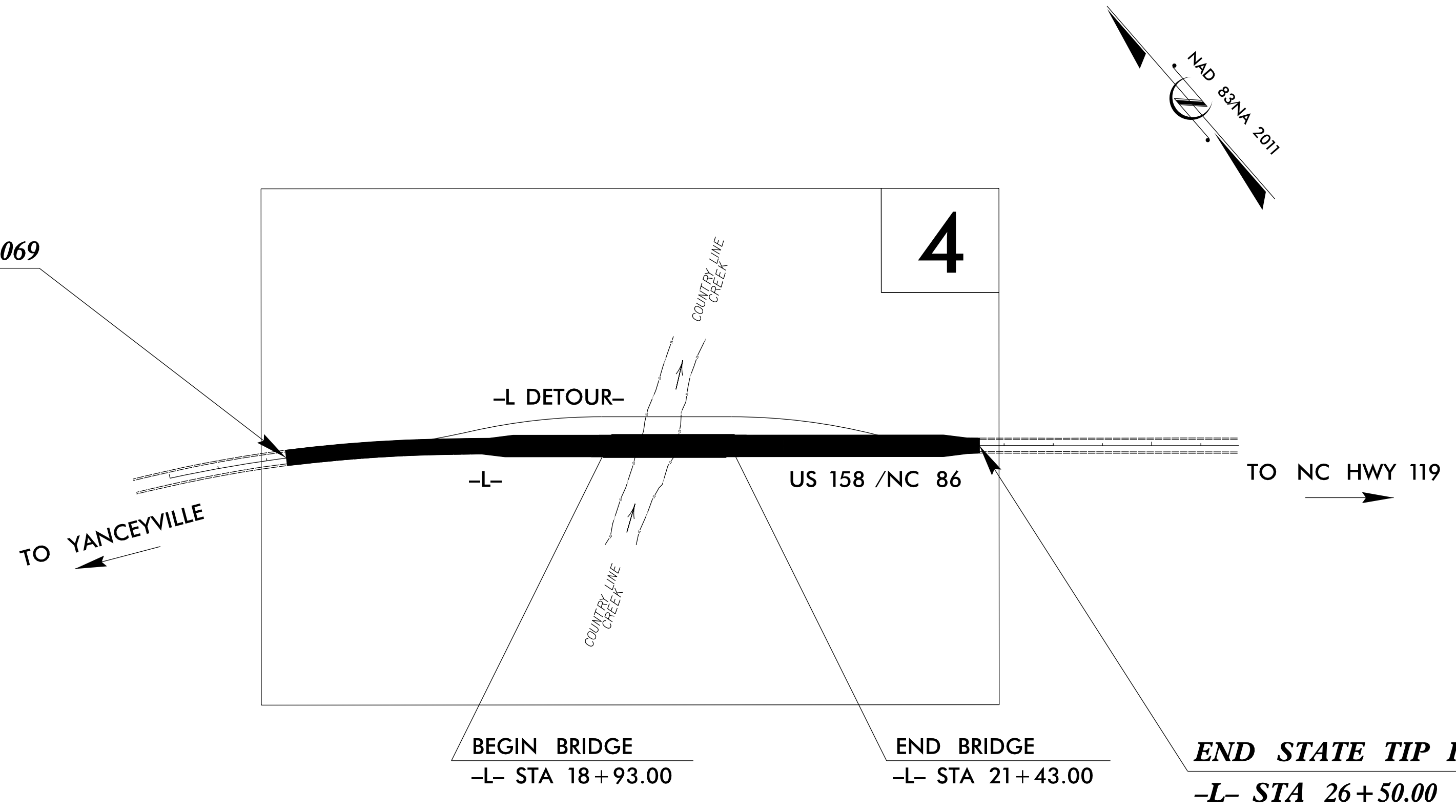
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SURVEY CONTROL, EXISTING CENTERLINES,  
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

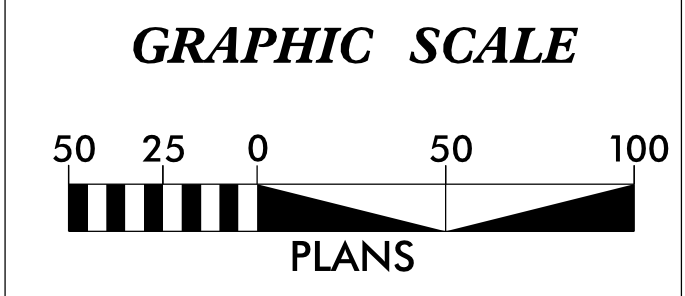
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**CASWELL COUNTY**

**BEGIN STATE TIP PROJECT BR-0069**  
 -L- STA 12+40.00



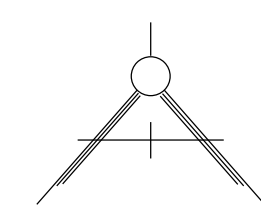
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 Owner AT OWNER-PC



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "160117 GPS-1" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 965741.568(ft) EASTING: 1912943.535(ft) ELEVATION: 427.375(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.0000589820 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "160117 GPS-1" TO -L- STATION 10+00.00 IS N 51°44'18.8" W 1768.58'(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD88

Prepared in the Office of:



**ALLIED ASSOCIATES, P.A.**  
 4720 KESTER MILL ROAD  
 WINSTON SALEM, NC 27103  
 WWW.ALLIEDAPA.COM C-2198  
 (336)765-2377

2018 STANDARD SPECIFICATIONS

**RIGHT OF WAY DATE:**  
 MARCH 15, 2023

**LETTING DATE:**  
 FEBRUARY 20, 2024

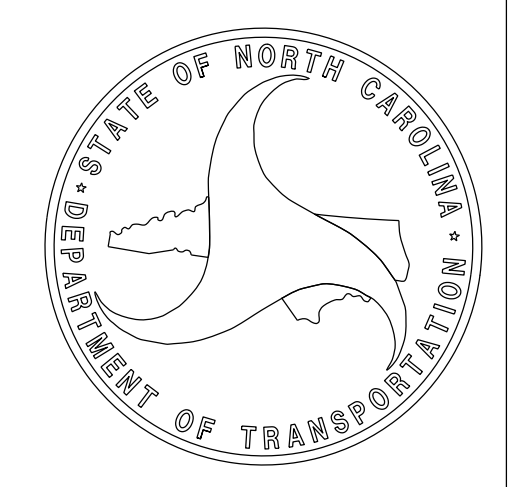
**PROFESSIONAL LAND SURVEYOR**



DocuSigned by:  
 Clinton B. Osborne  
 0A6FB085F6449B...

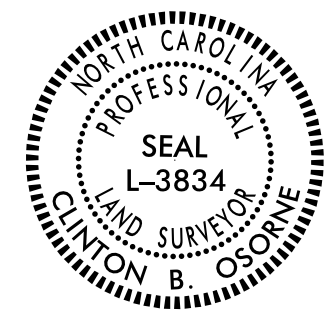
5/1/2023

SIGNATURE: \_\_\_\_\_ Date: \_\_\_\_\_



# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. 67069.1.1	SHEET NO. RW2C-1
<b>Location and Surveys</b>	
ALLIED ASSOCIATES, P.A. 4720 KESTER MILL ROAD WINSTON SALEM, NC 27103 (336) 765-2377 C-2198	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

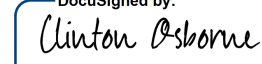


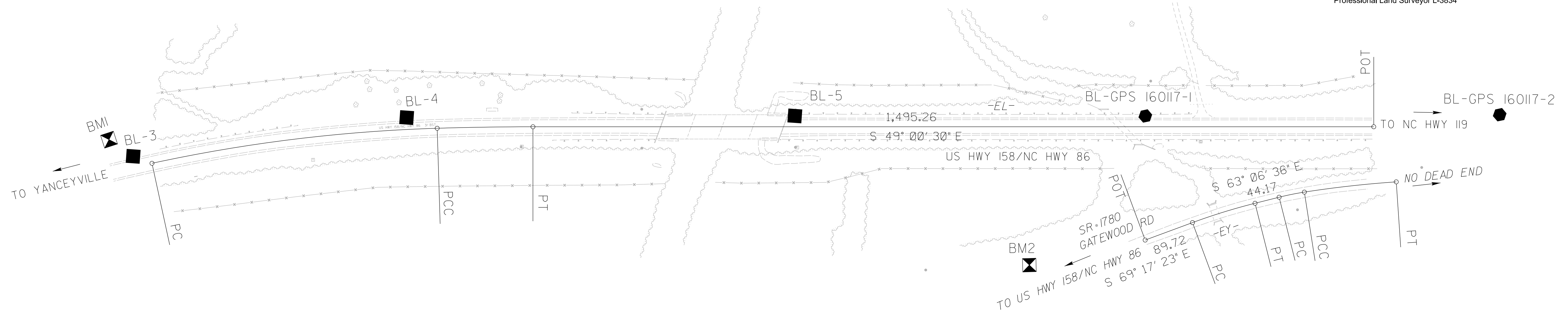
I, Clinton B. Osborne, PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**  
 Type of GPS field procedure: RTN  
 Dates of survey: 10/02/2018  
 Datum/Epoch: NAD83-2011  
 Published/Fixed-control use: NCGS VRS-RTN  
 Localized around: GPS 160117-1  
 Northing: 965741.568  
 Easting: 1912943.535  
 Combined grid factor: 1.0000589820  
 Geoid model: 12A  
 Units: US Survey Foot

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 4/7/2021 to 4/8/2021, 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 26th day of May, 2021.

Documented by:  
  
 Professional Land Surveyor L-3834



SEE SHEET RW2C-3  
FOR FURTHER ALIGNMENT DETAIL


**NOTES:**

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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. 67069.1.1	SHEET NO. RW2C-2
<b>Location and Surveys</b>	
ALLIED ASSOCIATES, P.A. 4720 KESTER MILL ROAD WINSTON SALEM, NC 27103 (336) 765-2377 C-2198	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

DocuSigned by:  
  
 0A8F6B085F8449B...  
 5/26/2021

BL	POINT	DESC.	NORTH	EAST	ELEVATION
3		BL -3	966868.0264	1911537.6163	463.53
4		BL -4	966601.0409	1911950.0123	455.31
5		BL -5	966150.4643	1912473.0195	434.25
1		160117-GPS1	965741.5680	1912943.5350	427.38
2		160117-GPS2	965329.8805	1913420.6990	436.59

.....  
 BM1 ELEVATION = 455.91  
 N 966919 E 1911525  
 BL STATION 5+00.00  
 N 14°11'25.8" W DIST 52.20  
 RR SPIKE IN 18" GUM  
 .....


.....  
 BM2 ELEVATION = 418.82  
 N 965676 E 1912614  
 BL STATION 20+99.00 265 RIGHT  
 RR SPIKE IN 16" OAK  
 .....

### 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. 67069.1.1	SHEET NO. RW2C-3
Location and Surveys	
ALLIED ASSOCIATES, P.A. 4720 KESTER MILL ROAD WINSTON SALEM, NC 27103 (336) 765-2377 C-2198	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

DocuSigned by:  
*Clinton Osborne*  
CMBF0008F0440B

5/19/2021

EL

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	966836.764	1911554.856							
CURVE			S 56°01'06.7" E	511.03	10°28'18.0"(RT)	02°02'46.6"	511.74	256.59	2800.00
PCC	966551.137	1911978.612							
CURVE			S 49°53'43.9" E	170.32	01°46'27.7"(RT)	01°02'30.3"	170.33	85.17	5500.00
PT	966441.419	1912108.885							
LINE			S 49°00'30.0" E	1495.26					
POT	965460.606	1913237.514							

EY

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	965575.011	1912798.382							
LINE			S 69°17'23.3" E	89.72					
PC	965543.282	1912882.305							
CURVE			S 66°11'59.5" E	116.43	06°10'47.7"(RT)	05°18'18.6"	116.49	58.30	1080.00
PT	965496.297	1912988.835							
LINE			S 63°06'35.6" E	44.17					
PC	965476.322	1913028.225							
CURVE			S 60°29'07.5" E	45.79	05°14'56.4"(RT)	11°27'33.0"	45.81	22.92	500.00
PCC	965453.763	1913068.073							
CURVE			S 55°22'50.9" E	164.43	04°57'36.7"(RT)	03°00'56.0"	164.49	82.29	1900.00
PT	965360.345	1913203.394							

**NOTES:**

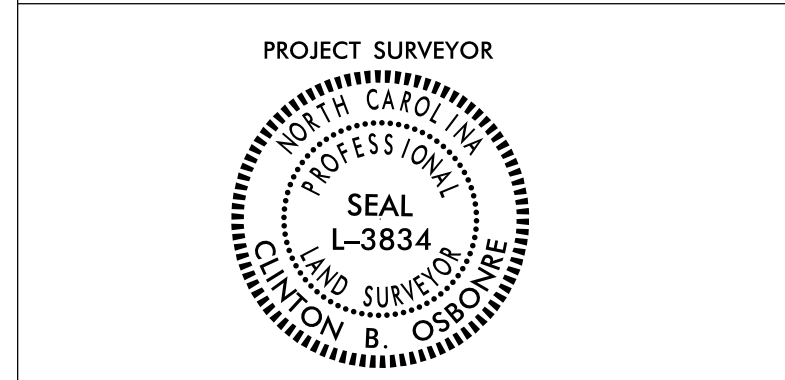
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

# PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
BR-0069	RW02D-1

### Location and Surveys


 ALLIED ASSOCIATES P.A.  
 4720 KESTER MILL ROAD  
 WINSTON SALEM, NC 27103  
 WWW.ALLIEDAPA.COM C-2198  
 (336)765-2377



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, Clinton b. Osborne, 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 1st day of May, 2023.

DocuSigned by:  
  
CAAFED065F6449B

Professional Land Surveyor L-3834

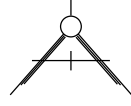
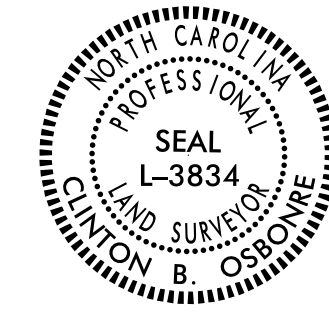
TYPE	STATION	L	
		NORTH	EAST
PC	10+00.00	966836.7644	1911554.8560
PCC	15+11.74	966551.1368	1911978.6120
PT	16+82.07	966441.4192	1912108.8852
POT	31+77.33	965460.6056	1913237.5137

### 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.


6/2/2023

# RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. BR-0069	SHEET NO. RW03E-1
<b>Location and Surveys</b>	
 ALLIED ASSOCIATES, P.A. 4720 KESTER MILL ROAD WINSTON SALEM, NC 27103 WWW.ALLIEDAPA.COM C-2198 (336)765-2377	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Clinton B. Osborne, 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 on 4/17/23, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 1st day of May, 2023.

DocuSigned by:  
  
 Clinton B. Osborne  
0A6F6B08F6449B  
 Professional Land Surveyor L-3834

ROW MARKER IRON PIN AND CAP - E

ALIGN	STATION	OFFSET	NORTH	EAST
L	15+49.94	-98.40	966602.6850	1912070.8601
L	18+00.00	-103.00	966441.8075	1912265.4627
L	19+81.21	-102.95	966322.9032	1912402.2070

ROW MARKER PERMANENT EASEMENT - E

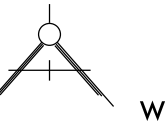

ALIGN	STATION	OFFSET	NORTH	EAST
L	16+30.00	105.66	966394.9840	1912000.8734
L	16+60.00	177.00	966321.7971	1911976.6318
L	16+80.00	105.46	966363.1474	1912038.1750
L	16+90.00	170.00	966307.9005	1912003.3596

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 ON 4/17/2023.

01 MAY 2023 15:35  
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 Owner: AT OMNIFLEX

6/2/19

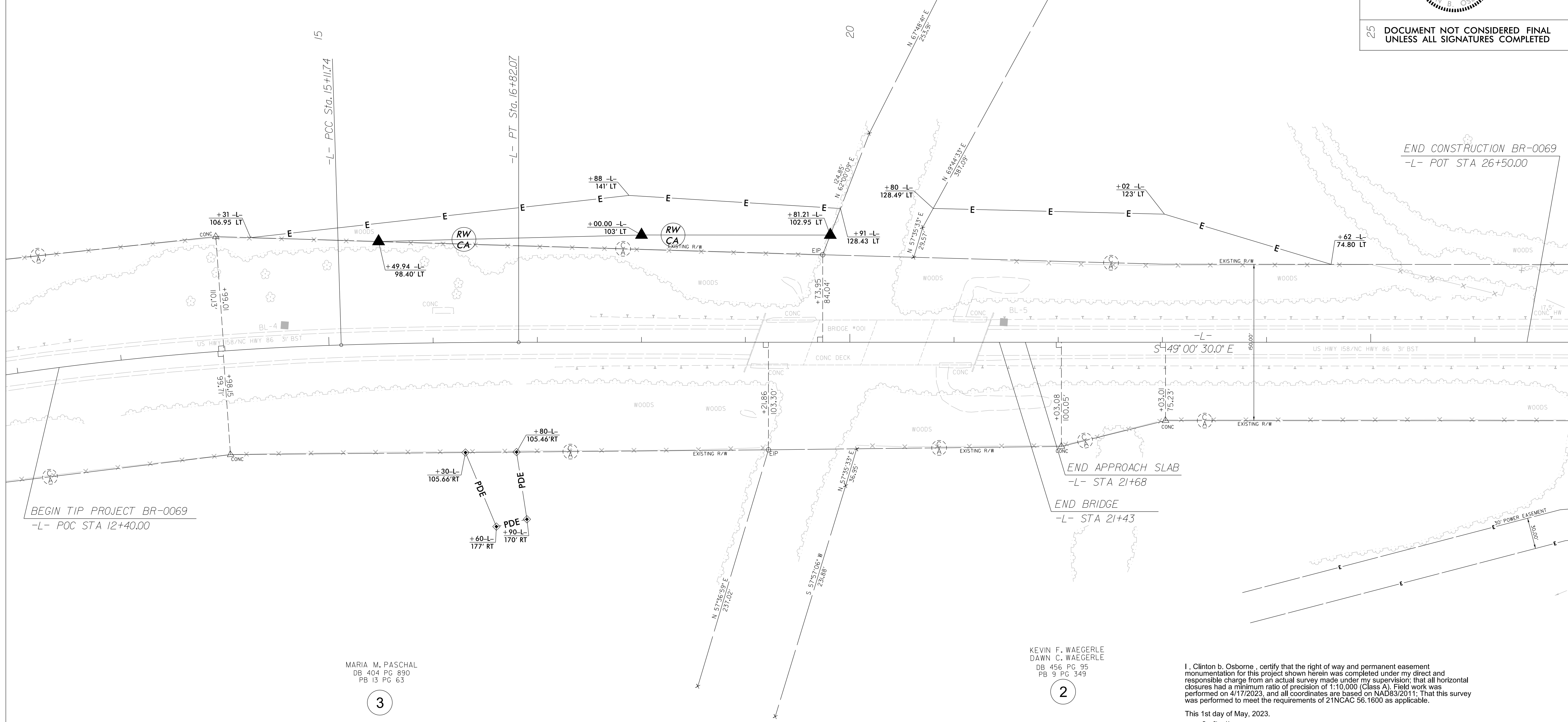
PROJECT REFERENCE NO. BR-0069	SHEET NO. RW04
<b>Location and Surveys</b>	
 ALLIED ASSOCIATES, P.A. 4720 KESTER MILL ROAD WINSTON SALEM, NC 27103 WWW.ALLIEDAPA.COM C-2198 (336)765-2377	
PROJECT SURVEYOR 	
25 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L-

PI Sta 12+56.59 Δ = 10° 28' 18.0" (RT) D = 2' 02' 46.6" L = 511.74' T = 256.59' R = 2,800.00' DS = 60 MPH Runoff = 144' SE = 06	PI Sta 15+96.91 Δ = 1° 46' 27.7" (RT) D = 1' 02' 30.3" L = 170.33' T = 85.17' R = 5,500.00' DS = 60 MPH Runoff = 72' SE = 03
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W MAYNARD GREGORY REVOCABLE TRUST  
 OF 2014 DATED JANUARY 16, 2014  
 DB 636 PG 650  
 PB 13 PG 63

KEVIN F. WAEGERLE  
 DAWN C. WAEGERLE  
 DB 456 PG 95  
 PB 9 PG 349

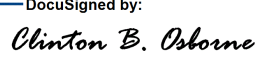


BEGIN TIP PROJECT BR-0069  
 -L- POC STA 12+40.00

KEVIN F. WAEGERLE  
 DAWN C. WAEGERLE  
 DB 456 PG 95  
 PB 9 PG 349

MARIA M. PASCHAL  
 DB 404 PG 890  
 PB 13 PG 63

I, Clinton B. Osborne, 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 on 4/17/2023, and all coordinates are based on NAD83/2011; That this survey  
 was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 1st day of May, 2023.  
 DocuSigned by:  
  
 048F808F8446D  
 Professional Land Surveyor L-3834

**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 4/17/2023.

01 MAY 2023 14:35  
 C:\Users\pasc\OneDrive\Documents\br-0069\br-0069.dgn  
 Owner: AT\_OWNERS-PC