

09/06/19

TIP PROJECT: B-5534

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5534	RW01	

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

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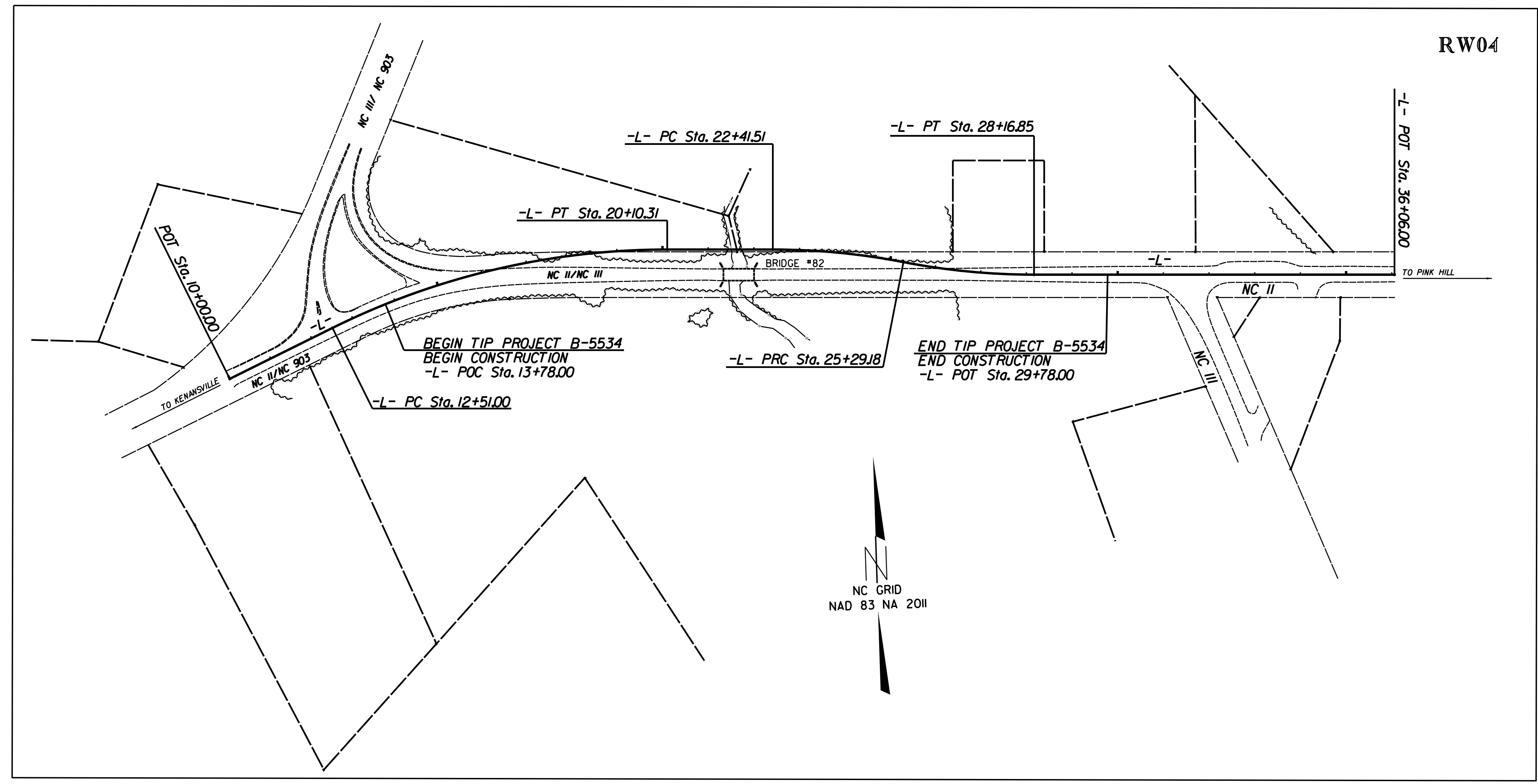
SURVEY CONTROL, EXISTING CENTERLINES,  
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

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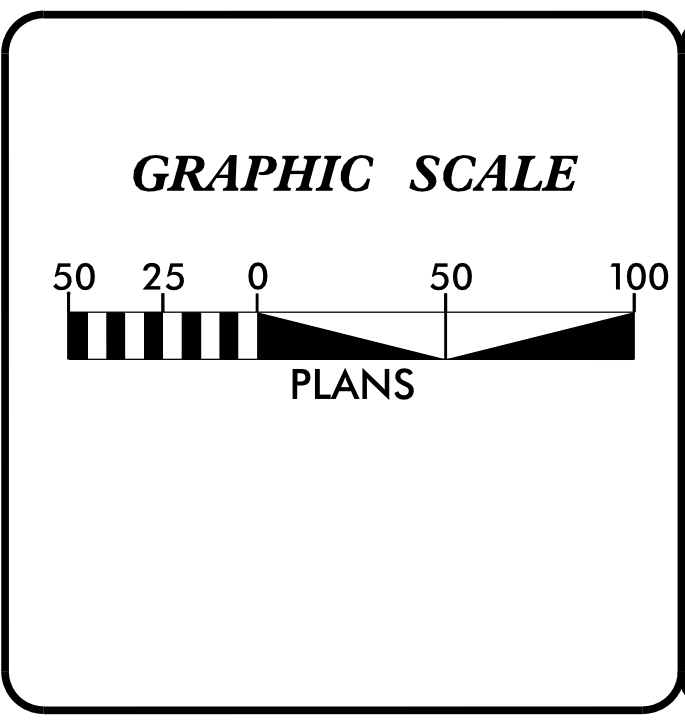
**DUPLIN COUNTY**

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BRIDGE 82 OVER BURNT CREEK ON NC 111



RW04



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "B5534-2" WITH NAD 83/NSRS XXXX STATE PLANE GRID COORDINATES OF NORTHING: 477,849.677(ft) EASTING: 2,351,410.745(ft) ELEVATION: 72.902(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998801414

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B5534-2" TO -L- STATION 10+00.00 IS S 52°28'23.0" W 100.23'(ft)

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

Prepared in the Office of:

**LOCATION & SURVEYS**  
 5310 BARBADOS BLVD., SUITE 102  
 CASTLE HAYNE, NC 28429

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2018 STANDARD SPECIFICATIONS

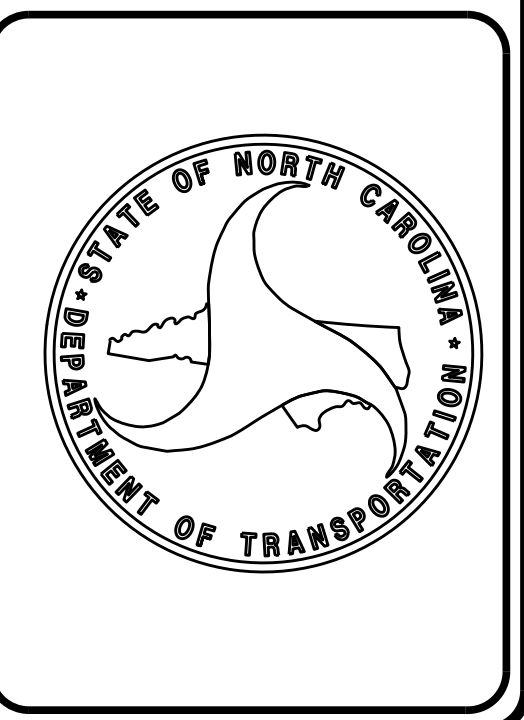
**RIGHT OF WAY DATE:** AUGUST 8, 2019

**LETTING DATE:** JUNE 16, 2020

**PROFESSIONAL LAND SURVEYOR**

DocuSigned by:  
 Christopher J. Sawyer  
 3/5/2020

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



\$\$\$\$\$ SYSTEM \$\$\$\$\$\$ DDN\$\$\$\$\$ \$\$\$\$\$\$ USERNAME\$\$\$\$\$

6/2/09

# SURVEY CONTROL SHEET B-5534

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

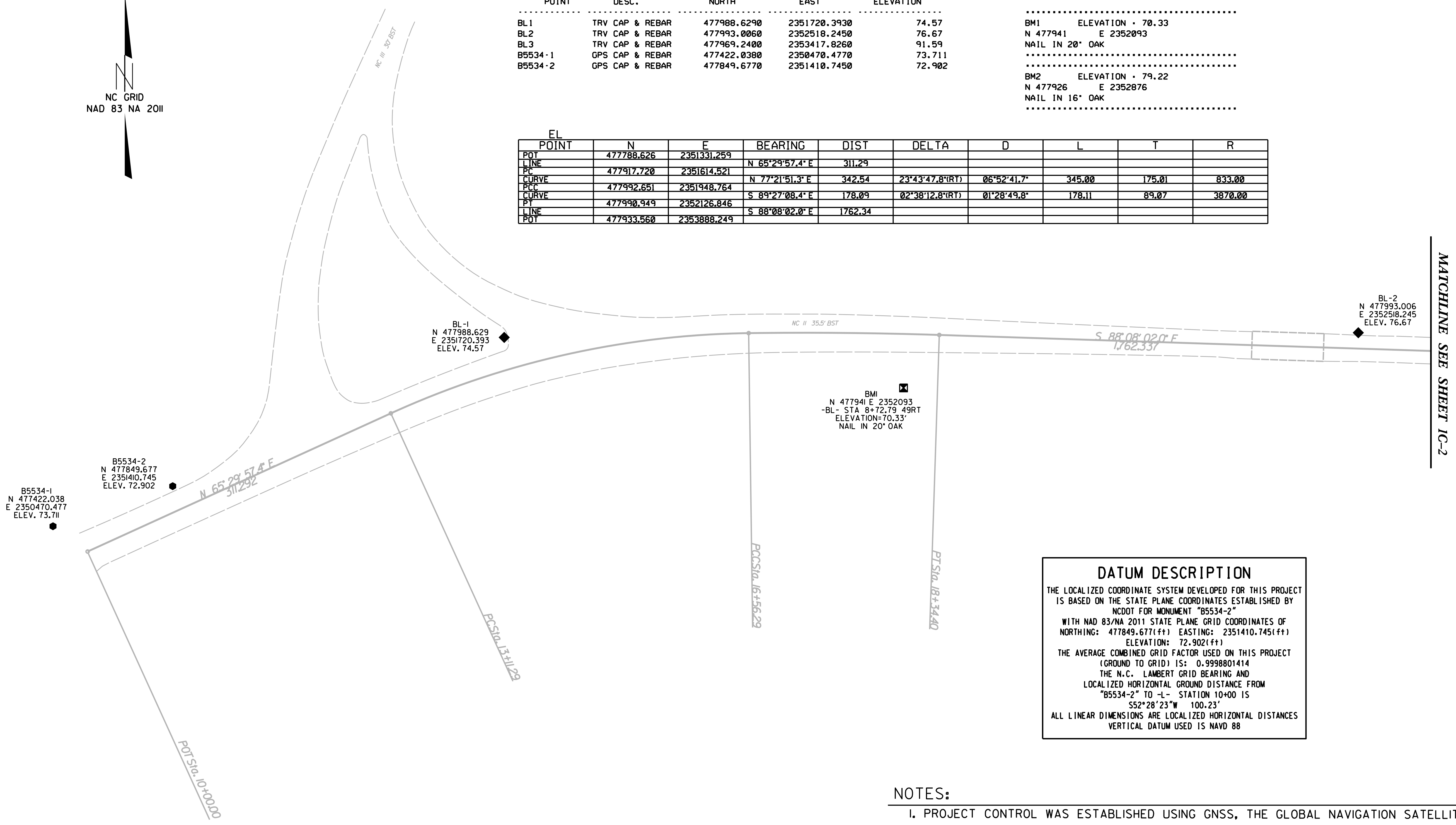
PROJECT REFERENCE NO.	SHEET NO.
B-5534	RW02C-1
<b>Location and Surveys</b>	
5310 BARBADOS BLVD., SUITE 102 CASTLE HAYNE, NC 28429	



BL	POINT	DESC.	NORTH	EAST	ELEVATION
BL1	TRV CAP & REBAR	477988.6290	2351720.3930	74.57	
BL2	TRV CAP & REBAR	477993.0060	2352518.2450	76.67	
BL3	TRV CAP & REBAR	477969.2400	2353417.8260	91.59	
B5534-1	GPS CAP & REBAR	477422.0380	2350470.4770	73.711	
B5534-2	GPS CAP & REBAR	477849.6770	2351410.7450	72.902	

.....  
 BM1 ELEVATION = 70.33  
 N 477941 E 2352093  
 NAIL IN 20' OAK  
 .....  
 BM2 ELEVATION = 79.22  
 N 477926 E 2352876  
 NAIL IN 16' OAK  
 .....

EL	POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	47788.626	2351331.259								
L	477917.720	2351614.521		N 65°29'57.4" E	311.29					
PC	477992.651	2351948.764		N 77°21'51.3" E	342.54	23°43'47.8" (RT)	06°52'41.7"	345.00	175.01	833.00
PCC	477990.949	2352126.846		S 89°27'08.4" E	178.09	02°38'12.8" (RT)	01°28'49.8"	178.11	89.07	3870.00
PT	477933.560	2353888.249		S 88°08'02.0" E	1762.34					



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B5534-2"

WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF  
 NORTHING: 477849.677 (ft) EASTING: 2351410.745 (ft)  
 ELEVATION: 72.902 (ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998801414

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B5534-2" TO -L- STATION 10+00 IS  
 S52°28'23"W 100.23'

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

- 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

MATCHLINE SEE SHEET IC-2

16-DEC-2018 10:37 H:\Dwg\In\B5534\_0082\Final\Control\_Sheets\b5534\_1s\_rw02c-1\_191216.dgn C:\isowier\AT\_LS-299904

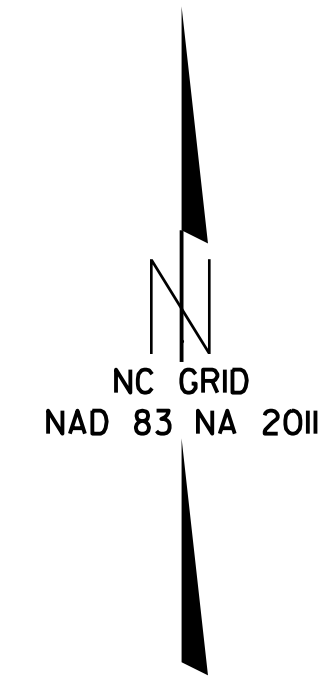
# SURVEY CONTROL SHEET B-5534

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. B-5534	SHEET NO. RW02C-2
Location and Surveys	
5310 BARBADOS BLVD., SUITE 102 CASTLE HAYNE, NC 28429	

BL	POINT	DESC.	NORTH	EAST	ELEVATION	
BL1	TRV CAP & REBAR		477988.6290	2351720.3930	74.57	.....
BL2	TRV CAP & REBAR		477993.0060	2352518.2450	76.67	BM1 ELEVATION = 70.33
BL3	TRV CAP & REBAR		477969.2400	2353417.8260	91.59	N 477941 E 2352093
B5534-1	GPS CAP & REBAR		477422.0380	2350470.4770	73.711	NAIL IN 20" OAK
B5534-2	GPS CAP & REBAR		477849.6770	2351410.7450	72.902	.....
						BM2 ELEVATION = 79.22
						N 477926 E 2352876
						NAIL IN 16" OAK
						.....

EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	477788.626	2351331.259							
LINE			N 65°29'57.4" E	311.29					
PC	477917.720	2351614.521							
CURVE			N 77°21'51.3" E	342.54	23°43'47.8"(RT)	06°52'41.7"	345.00	175.01	833.00
PCC	477992.651	2351948.764							
CURVE			S 89°27'08.4" E	178.09	02°38'12.8"(RT)	01°28'49.8"	178.11	89.07	3870.00
PT	477990.949	2352126.846							
LINE			S 88°08'02.0" E	1762.34					
POT	477933.560	2353888.249							



MATCHLINE SEE SHEET IC-1

NC II 35.5' BST  
S 88°08'02.0" E  
1762.337

BM2  
N 477925 E 2352875  
-BL- STA 16+57.58RT  
ELEVATION=79.22'  
NAIL IN 16" OAK

BL-3  
N 477969.240  
E 2353417.826  
ELEV. 91.59

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B5534-2" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 477849.677(±ft) EASTING: 2351410.745(±ft) ELEVATION: 72.902(±ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998801414

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B5534-2" TO -L- STATION 10+00 IS 552°28'23"W 100.23'

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

**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.

REVISIONS

I6-DEC-2018 10:41 H:\Dwg\In\B5534\_0082\Final\Control\_Sheets\b5534\_1s-rw02c-2\_191216.dgn c:\isowier AT LS-299904

POT Sta. 35+96.73

6/2/19

PROJECT REFERENCE NO.	SHEET NO.
B-5534	RW02D-1
<b>Location and Surveys</b>	
5310 BARBADOS BLVD., SUITE 102 CASTLE HAYNE, NC 28429	

# PROPOSED ALIGNMENT CONTROL SHEET

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	477788.6260	2351331.2589
PC	12+51.00	477892.7159	2351559.6558
PT	20+10.31	478040.4133	2352297.6491
PC	22+41.51	478032.8844	2352528.7272
PRC	25+29.18	477996.0887	2352813.5887
PT	28+16.85	477959.2929	2353098.4502
POT	36+06.00	477933.5949	2353887.1856

REVISIONS

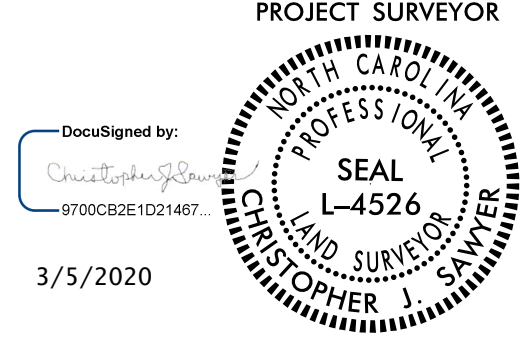
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6/2/19

**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.

6/2/20

# RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. B-5534	SHEET NO. RW02E-1
Location and Surveys	
5310 BARBADOS BLVD., SUITE 102 CASTLE HAYNE, NC 28429	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

## ROW MARKER IRON PIN AND CAP E

ALIGN	STATION	OFFSET	NORTH	EAST
L	15+53.78	-50.00	478040.88641	2351833.03384
L	20+10.31	-50.00	478090.38673	2352299.27728
L	22+41.51	-50.00	478082.85791	2352530.35541
L	25+29.18	-50.00	478044.83564	2352824.71230
L	26+30.00	-38.68	478015.17867	2352918.61678

REVISIONS

I, Christopher J. Sawyer, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 5th day of March, 2020.


 Professional Land Surveyor      PLS # L-4526

**NOTES:**

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

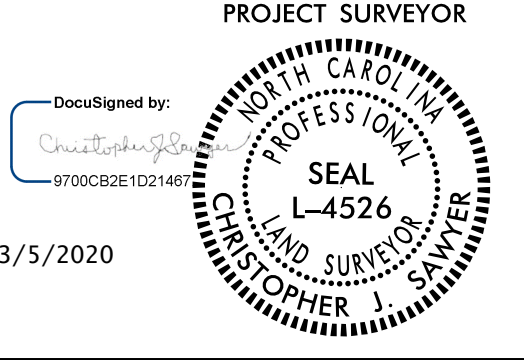
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

05-MAR-2020 15:52  
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 Christopher J. Sawyer



6/2/19

# RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. B-5534	SHEET NO. RW03E-2
<b>Location and Surveys</b>	
5310 BARBADOS BLVD., SUITE 102 CASTLE HAYNE, NC 28429	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

## ROW MARKER PERMANENT EASEMENT E

ALIGN	STATION	OFFSET	NORTH	EAST
L	16+44.00	77.00	477936.14860	2351947.71626
L	16+47.00	70.92	477942.65523	2351949.39206
L	16+63.00	85.00	477931.58320	2351966.94066
L	16+68.00	74.38	477942.87519	2351969.76131
L	25+56.00	73.74	477918.18634	2352824.67515
L	25+58.00	84.00	477907.70798	2352824.63827
L	25+75.00	70.37	477917.52870	2352844.85981
L	25+77.00	80.00	477907.67164	2352845.07208
L	26+57.00	58.84	477914.71864	2352931.10753
L	26+59.00	67.00	477906.35175	2352932.04556
L	26+77.00	56.76	477914.03888	2352951.97106
L	26+78.00	63.00	477907.71855	2352952.22204
L	29+01.00	-62.00	478018.51966	2353184.57842
L	29+02.00	-50.00	478006.49346	2353185.18712
L	29+20.00	-64.00	478019.89988	2353203.63347
L	29+22.00	-50.00	478005.84218	2353205.17652

I, Christopher J. Sawyer, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work items (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

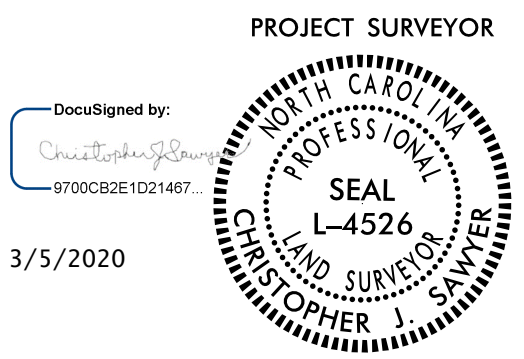
Witness my original signature, registration number and seal this 5th day of March, 2020.


 Professional Land Surveyor      PLS ▪ L-4526

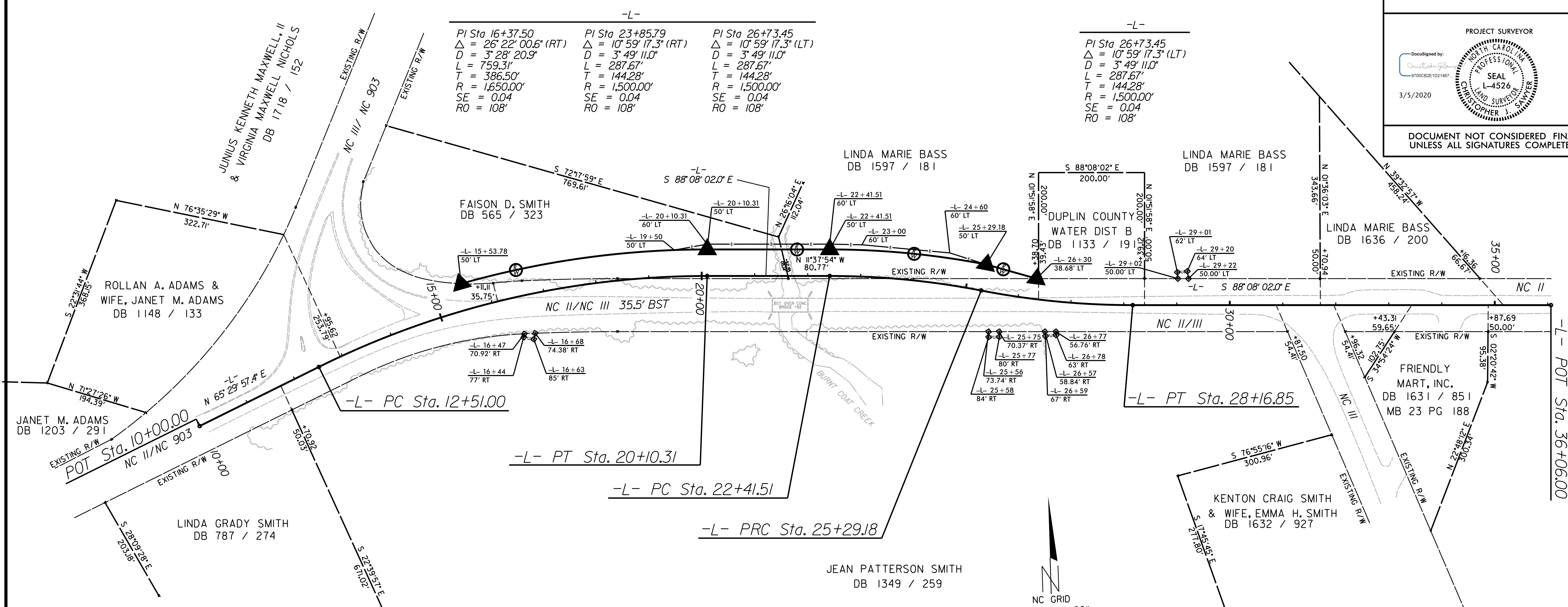
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05-MAR-2020 15:50  
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 Christopher J. Sawyer

PROJECT REFERENCE NO. B-5534	SHEET NO. RW04
<b>Location and Surveys</b>	
5310 BARBADOS BOULEVARD, SUITE 102 CASTLE HAYNE, NC 28429	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS



I, Christopher J. Sawyer, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (Base map Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further 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.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 5th day of March 2020.


 Professional Land Surveyor      PLS #      L-4526

- 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.

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