## SURVEY CONTROL SHEET R-2915A

Longitude	81°31'55.59073"W	Elevation	3078.5171sft	Easting	1254245.9770sf
Height	2976.0465sft	Horz error	0.015sfl	Elevation	3078.5190sf
		Vert error	0.002sfl	Utilized	Horz and Ver
		3D error	0.016sft	Quality	Survey quality
Point	R2915-15 WGS84	Northing	954880.7882sft	Point R2915-15 Local	
Latitude	36°20'50.57260''N	Easting	1254012.3126sft	Northing	954880.7810sf
Longitude	81°31'59.23136"W	Elevation	3097.5370sfl	Easting	1254012.2870sf
Height	2995.1423sft	Horz error	0.027sft	Elevation	3097.5210sf
		Vert error	0.016sft	Utilized	Horz and Ver
		3D error	0.031sft	Quality	Survey quality
Point	R2915-16 WGS84	Northing	955689.2599sft	Point R2915	16 Local
	36°20'58.40190''N		1253372.2604sft		955689.2700sf
Latitude Langitude	81°32'07.30385"W	Easting Elevation	3139.7336sft	Northing Easting	1253372.2370sf
Longitude Height	3037.3781sft	Horz error	0.025sft	Elevation	3139.6930sf
neight	3037.3761811	Vert error	0.023sfi	Utilized	Horz and Ver
			0.048sfi		
		3D error	V.U408II	Quality	Survey quality
Point	R2915-17 WGS84	Northing	960732.3214sft	Point R2915	-17 Local
Latitude	36°21'50.14423"N	Easting	1260924.8880sfl	Northing	960732.3040sf
Longitude	81°30'36.58112"W	Elevation	3355.9956sfl	Easting	1260924.8760sf
Height	3253.5217sft	Horz error	0.021sft	Elevation	3356.0160sf
		Vert error	0.020sfi	Utilized	Horz and Ver
		3D error	0.029sft	Quality	Survey quality
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Point	R2915-18_WGS84	Northing	959689.5169sfl	Point R2915	-18_Local
Latitude	36°21'39.95242"N	Easting	1261385.6028sft	Northing	959689.4970sf
Longitude	81°30'30.62882"W	Elevation	3396.5313sft	Easting	1261385.5910sf
Height	3294.0193sft	Horz error	0.023sfl	Elevation	3396.5580sf
		Vert error	0.027sfl	Utilized	Horz and Ver
		3D error	0.035sfl	Quality	Survey quality
Point	D2015 10 WCC04	N	967060.7220sft	Point R2915-19 Local	
Latitude	R2915-19_WGS84 36°22'54.39872''N	Northing	1267779.1405sft	Northing	967060.7040sf
Lautude	81°29'14.75578"W	Easting Elevation	3005.2191sft	Easting	1267779.1370sf
Height	2902.6651sft	Horz error	0.018sfi	Elevation	3005.2590sf
neight	2902.0031311	Vert error	0.040sfi	Utilized	Horz and Ver
		3D error	0.044sft	Quality	Survey quality
		SD error	0.011811	Quanty	Jul vey quant
Point	R2915-20 WGS84	Northing	966821.8373sfl	Point R2915	-20 Local
Latitude	36°22'52.19547"N	Easting	1268416.6439sfl	Northing	966821.8150sf
Longitude	81°29'06.89021"W	Elevation	3001.8897sft	Easting	1268416.6390sf
Height	2899.3121sft	Horz error	0.023sfl	Elevation	3001.9300sf
		Vert error	0.040sfl	Utilized	Horz and Ver
		3D error	0.046sft	Quality	Survey quality
Point	R2915-21 WGS84	Northing	972084.6876sft	Point R2915	
Latitude	36°23'44.52005''N	Easting	1269660.6108sfl	Northing	972084.6700sf
Longitude	81°28'53.29316"W	Elevation	3132.4940sfl	Easting	1269660.6140sf
Height	3029.9808sft	Horz error	0.018sfi	Elevation	3132.5390sf
		Vert error	0.045sft	Utilized	Horz and Ver
		3D error	0.048sft	Quality	Survey quality
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Point	R2915-22_WGS84	Northing	973156.5253sft	Point R2915	
Latitude	36°23'55.25041"N	Easting	1270213.4941sft	Northing	973156.5140sf

Longitude	81°28'46.86125"W	Elevation	3163.2767sft	Easting	1270213.5010sft			
Height	3060.7659sft	Horz error	0.013sft	Elevation	3163.3260sft			
		Vert error	0.049sft	Utilized	Horz and Vert			
		3D error	0.051sfl	Quality	Survey quality			
Point	R2915-23 WGS84	Northing	981712.8608sft	Point R2915-23 Local				
Latitude	36°25'21.32188"N	Easting	1276325.1593sft	Northing	981712.8790sft			
Longitude	81°27'34.73217"W	Elevation	2903.7232sfl	Easting	1276325.1910sft			
Height	2801.1821sft	Horz error	0.037sft	Elevation	2903.6430sft			
		Vert error	0.080sft	Utilized	Horz and Vert			
		3D error	0.088sft	Quality	Survey quality			
Point	R2915-24_WGS84	Northing	980994.0668sft	Point R2915-24_Local				
Latitude	36°25'14.17430"N	Easting	1276148.6155sft	Northing	980994.0780sft			
Longitude	81°27'36.67335"W	Elevation	2878.9461sft	Easting	1276148.6390sft			
Height	2776.3983sft	Horz error	0.026sft	Elevation	2878.8920sft			
		Vert error	0.054sft	Utilized	Horz and Vert			
		3D error	0.060sfl	Quality	Survey quality			
		3D error	0.060sfl	Quality	Survey quality			

## DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "R2915-15"

WITH NAD 83/CORS STATE PLANE GRID COORDINATES OF NORTHING: 954880.7810(f+) EASTING: 1254012.2870(f+) ELEVATION: 3097.5210(f+)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99991292

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R2915-15" TO -L- STATION 10+00.00 IS S 08°37'17" E 41208.6602

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES

VERTICAL DATUM USED IS NAVD 88

## NOTES:

- 1. THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN (HIGH ACCURACY REFERENCE NETWORK) NAD 83/95 ADJUSTMENT. THIS CALIBRATION WILL ALLOW THE END USER TO WORK WITHIN THE SAME COORDINATE SYSTEM WHEN USING RTK (REAL TIME KINEMATIC) GPS AND A LOCAL BASE STATION. IF ANOTHER SYSTEM SUCH AS VRS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES MAY BE NEEDED TO REDUCE POSSIBLE ERRORS, OR BIASES.
- 2. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
  HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/

THE FILES TO BE FOUND ARE AS FOLLOWS:

R2915A\_LS\_GPSCALIB.HTML

R2915A\_LS\_WGS84.TXT

R2915A\_LS\_LOCAL.TXT

R2915A\_LS\_CONTROL.TXT

THE WGS84 AND LOCAL FILES ARE COMMA DELIMITED AND CAN BE USED TO REPRODUCE THE SITE CALIBRATION FOR THE END USER'S GPS EQUIPMENT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

© INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.

PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.