

# SURVEY CONTROL SHEET R-2915D

<b>Longitude</b>	81°31'55.59073"W	<b>Elevation</b>	3078.5171sft	<b>Easting</b>	1254245.9770sft
<b>Height</b>	2976.0465sft	<b>Horz error</b>	0.015sft	<b>Elevation</b>	3078.5190sft
		<b>Vert error</b>	0.002sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.016sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-15 WGS84	<b>Northing</b>	954880.7882sft	<b>Point R2915-15 Local</b>	
<b>Latitude</b>	36°20'50.57260"N	<b>Easting</b>	1254012.3126sft	<b>Northing</b>	954880.7810sft
<b>Longitude</b>	81°31'59.23136"W	<b>Elevation</b>	3097.5370sft	<b>Easting</b>	1254012.2870sft
<b>Height</b>	2995.1423sft	<b>Horz error</b>	0.027sft	<b>Elevation</b>	3097.5210sft
		<b>Vert error</b>	0.016sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.031sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-16 WGS84	<b>Northing</b>	955689.2599sft	<b>Point R2915-16 Local</b>	
<b>Latitude</b>	36°20'58.40190"N	<b>Easting</b>	1253372.2604sft	<b>Northing</b>	955689.2700sft
<b>Longitude</b>	81°32'07.30385"W	<b>Elevation</b>	3139.7336sft	<b>Easting</b>	1253372.2370sft
<b>Height</b>	3037.3781sft	<b>Horz error</b>	0.025sft	<b>Elevation</b>	3139.6930sft
		<b>Vert error</b>	0.041sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.048sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-17 WGS84	<b>Northing</b>	960732.3214sft	<b>Point R2915-17 Local</b>	
<b>Latitude</b>	36°21'50.14423"N	<b>Easting</b>	1260924.8880sft	<b>Northing</b>	960732.3040sft
<b>Longitude</b>	81°30'36.58112"W	<b>Elevation</b>	3355.9956sft	<b>Easting</b>	1260924.8760sft
<b>Height</b>	3253.5217sft	<b>Horz error</b>	0.021sft	<b>Elevation</b>	3356.0160sft
		<b>Vert error</b>	0.020sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.029sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-18 WGS84	<b>Northing</b>	959689.5169sft	<b>Point R2915-18 Local</b>	
<b>Latitude</b>	36°21'39.95242"N	<b>Easting</b>	1261385.6028sft	<b>Northing</b>	959689.4970sft
<b>Longitude</b>	81°30'30.62882"W	<b>Elevation</b>	3396.5313sft	<b>Easting</b>	1261385.5910sft
<b>Height</b>	3294.0193sft	<b>Horz error</b>	0.023sft	<b>Elevation</b>	3396.5580sft
		<b>Vert error</b>	0.027sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.035sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-19 WGS84	<b>Northing</b>	967060.7220sft	<b>Point R2915-19 Local</b>	
<b>Latitude</b>	36°22'54.39872"N	<b>Easting</b>	1267779.1405sft	<b>Northing</b>	967060.7040sft
<b>Longitude</b>	81°29'14.75578"W	<b>Elevation</b>	3005.2191sft	<b>Easting</b>	1267779.1370sft
<b>Height</b>	2902.6651sft	<b>Horz error</b>	0.018sft	<b>Elevation</b>	3005.2590sft
		<b>Vert error</b>	0.040sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.044sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-20 WGS84	<b>Northing</b>	966821.8373sft	<b>Point R2915-20 Local</b>	
<b>Latitude</b>	36°22'52.19547"N	<b>Easting</b>	1268416.6439sft	<b>Northing</b>	966821.8150sft
<b>Longitude</b>	81°29'06.89021"W	<b>Elevation</b>	3001.8897sft	<b>Easting</b>	1268416.6390sft
<b>Height</b>	2899.3121sft	<b>Horz error</b>	0.023sft	<b>Elevation</b>	3001.9300sft
		<b>Vert error</b>	0.040sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.046sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-21 WGS84	<b>Northing</b>	972084.6876sft	<b>Point R2915-21 Local</b>	
<b>Latitude</b>	36°23'44.52005"N	<b>Easting</b>	1269660.6108sft	<b>Northing</b>	972084.6700sft
<b>Longitude</b>	81°28'53.29316"W	<b>Elevation</b>	3132.4940sft	<b>Easting</b>	1269660.6140sft
<b>Height</b>	3029.9808sft	<b>Horz error</b>	0.018sft	<b>Elevation</b>	3132.5390sft
		<b>Vert error</b>	0.045sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.048sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-22 WGS84	<b>Northing</b>	973156.5253sft	<b>Point R2915-22 Local</b>	
<b>Latitude</b>	36°23'55.25041"N	<b>Easting</b>	1270213.4941sft	<b>Northing</b>	973156.5140sft

<b>Longitude</b>	81°28'46.86125"W	<b>Elevation</b>	3163.2767sft	<b>Easting</b>	1270213.5010sft
<b>Height</b>	3060.7659sft	<b>Horz error</b>	0.013sft	<b>Elevation</b>	3163.3260sft
		<b>Vert error</b>	0.049sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.051sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-23 WGS84	<b>Northing</b>	981712.8608sft	<b>Point R2915-23 Local</b>	
<b>Latitude</b>	36°25'21.32188"N	<b>Easting</b>	1276325.1593sft	<b>Northing</b>	981712.8790sft
<b>Longitude</b>	81°27'34.73217"W	<b>Elevation</b>	2903.7232sft	<b>Easting</b>	1276325.1910sft
<b>Height</b>	2801.1821sft	<b>Horz error</b>	0.037sft	<b>Elevation</b>	2903.6430sft
		<b>Vert error</b>	0.080sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.088sft	<b>Quality</b>	Survey quality
<b>Point</b>	R2915-24 WGS84	<b>Northing</b>	980994.0668sft	<b>Point R2915-24 Local</b>	
<b>Latitude</b>	36°25'14.17430"N	<b>Easting</b>	1276148.6155sft	<b>Northing</b>	980994.0780sft
<b>Longitude</b>	81°27'36.67335"W	<b>Elevation</b>	2878.9461sft	<b>Easting</b>	1276148.6390sft
<b>Height</b>	2776.3983sft	<b>Horz error</b>	0.026sft	<b>Elevation</b>	2878.8920sft
		<b>Vert error</b>	0.054sft	<b>Utilized</b>	Horz and Vert
		<b>3D error</b>	0.060sft	<b>Quality</b>	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(±) EASTING: 1254012.2870(±)  
 ELEVATION: 3097.5210(±)

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 453+03.05 IS  
 S 14°52'00" E 2311.2917

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

**NOTES:**

- THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN (HIGH ACCURACY REFERENCE NETWORK) NAD 83/85 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 VBS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES MAY BE NEEDED TO REDUCE POSSIBLE ERRORS, OR BIASES.
- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:  
[HTTP://WWW.NCDOT.ORG/DOHPRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/dohpreconstruct/highway/location/project/)  
 THE FILES TO BE FOUND ARE AS FOLLOWS:  
 R2915D\_LS\_GPSCALIB.HTML  
 R2915D\_LS\_WGS84.TXT  
 R2915D\_LS\_LOCAL.TXT  
 R2915D\_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.  
 NETWORK ESTABLISHED FROM EXISTING HARN MONUMENTATION.  
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

NOTE: DRAWING NOT TO SCALE

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